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BRITISH MEDICAL JOURNAL:

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Hospital Reports.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

ENTROPIUM OR INVERSION OF THE EYELID: SYMPTOMS OF THE DISEASE, AND ITS EFFECTS: THE PATHOLOGY AND THE TREATMENT.

Under the care of HAYNES WALTON, Esq., Senior Surgeon to the Hospital.

[*Reported by* MAURICE DAVIS, M.D.]

IT has been remarked, that ophthalmic surgery owes no advancement to the mere oculist. Now, although our knowledge of ancient medical literature is too defective to be applied, we can give proof of the correctness of the statement in modern times in Great Britain. All the treatises, and all the monographs of any worth on ophthalmology, have been produced by men who have had extended medical educations, and who besides, we believe without an exception, have practised for some period of their lives as surgeons or as physicians. Then, nearly all have been attached to general hospitals. We do not hesitate to assert, that he alone can treat diseases of the eye successfully, who understands the derangements of the body, as the greater part of them arise from constitutional causes. It is to the modern surgeon that humanity is much indebted for the relief of many of the diseases of the appendages of the eye that call for practical surgery, and which had been neglected or improperly treated. Entropium is prominent among these.

A middle aged female was brought into the operating room, on December 11th, 1856 (Thursday, the usual operating day), with entropium of the left eye. The nature of the disease was not readily recognised; this was shewn by the circumstance, that Mr. Walton asked some of his class to mention the malady, and, not receiving a satisfactory answer, pointed out the peculiarities of the affection, and stated that many cases of the kind were overlooked even by surgeons in practice, and supposed to be something else, and incorrectly treated. Hence the rule in every case of redness of the eye—and redness was the prominent symptom here—was to examine the organ carefully, and to endeavour to ascertain the true cause, as the redness was a symptom common to many diseases.

The surface of the eyeball was very red, and the cornea partly vascular and partly opaque. There was much intolerance of light, with lachrymation. A close inspection discovered the eyelashes resting on the eyeball; and this was produced by inversion of the tarsal margin. Here were then displayed all the symptoms of entropium,—those of the disease, simple inversion of the edge of the lid, and those resulting from it, which are met with in different degrees of severity in different cases.

We will state very cursorily the pathology of entropium, because, by so doing, the nature of the slight operation which was followed will be better appreciated.

The inversion has been attributed to relaxation of the skin of the eyelid, thickening of the palpebral conjunctiva, shrinking of the tarsal cartilage, and other ingeniously advocated causes. Mr. Walton regards its immediate cause as the unnatural action of that portion of the orbicularis palpebrarum muscle which covers the edges of the tarsal cartilages, and which is thicker, redder, stronger, and more marked than any other part. Among the evidences he advances of the power of the ciliary portions of the muscle to produce entropium, is the very strong one, that a colleague of his can, by the influence of the will alone, invert his eyelids. He has made out some interesting points in the anatomy of the orbicularis palpebrarum not hitherto investigated, and which bear materially on the matter. In the sixth chapter of his work on Ophthalmic Surgery, Mr. Walton says: "I have founded the treatment on what appears to me to be the pathological interpretation of the affection, and of which the indications are, to overcome the means of this inversion by dissecting away the thick marginal portion of the orbicularis, supposing that part of the muscle to be entirely or nearly all that is at fault; and also, to remove as much of the skin of the lid as may be necessary to produce such tension as shall overcome the deformity which other tissues of the lid may have acquired, from the irregular position into which they have been thrown by the muscle, and which has been made more or less permanent by the changes induced by inflammation." (p. 165.)

The operation was performed in the following manner. An assistant stood behind the patient, and made the lid tense by drawing it outwards, and raising the brow. Mr. Walton then made two incisions through the skin and muscle; one along the edge of the tarsus, and close to its cuticular margin, from one angle of the lid to the other; the second parallel to it, about three lines above, and joining it at the extremities. The flap thus isolated was drawn forwards, and slowly dissected off by vertical strokes of the knife from one side to the other. The edges were carefully brought together by four sutures, which were removed on the fourth day. In this and in other operations on the eyelid by which we have seen Mr. Walton remove skin—for instance, ptosis and trichiasis—there has not been any trace of the dissection after a few weeks, or sometimes months. This is doubtless due to careful operating with a small scalpel, the incisions being made to match each other, and the skin cut through vertically, besides the equally important essential of accurate and complete adjustment by suture. In the present instance, a week after—that is, on the next Thursday—when this patient was examined, it was impossible to say that the eyelid had been operated on. Literally there was no mark of the operation, and this was the sentiment expressed by all who examined the patient even closely—and several inspected her. The desired effect was completely accomplished in the eversion of the tarsal margin, and the removal of the eyelashes from the eyeball. The lachrymation had disappeared, and the condition of the cornea was much improved. With regard to this latter, Mr. Walton said that in due time it would quite recover itself, there having been no greater mischief done than was reparable by the natural powers. To use lotions, he said, would be to irritate, and therefore to interfere with repair. This is an important fact.

In our next report, we intend to give cases of entropium of the lower eyelid, and to speak of other matters connected with the affection which could not conveniently be introduced here.

Original Communications.

MEDICAL NOTES ON THE MILITIA.*

By J. I. IKIN, Esq., Leeds.

No. III.

HOSPITAL REGULATIONS OF THE PUBLIC SERVICE.

THE great number of returns and forms required by the Medical Department and War Office from regimental surgeons has often been commented upon, but, as yet, without any effect in diminishing their number, and simplifying the business arrangements of military hospitals. I wish prominently to recall the attention of the authorities and of the profession to the working of the present system; for even my limited experience in the public service has been quite sufficient to prove to me that many improvements are required, and might easily be accomplished, without any serious dislocation in the working of the medical

* Continued from the ASSOCIATION MEDICAL JOURNAL, December 20th 1856, p. 1074.

department, though this might render useless some of its present complicated machinery. I quite admit that innovations and alterations may give temporary trouble to officials, but no reason of this kind should be allowed to retard reforms, when experience has painfully proved how much they are needed. I never yet met with a regimental surgeon who did not admit the inutility of such diversified forms as are at present required, and who was not an advocate for reconstructing the regulations of the Medical Department. In referring to this question, I merely allude to the *system* itself, and not to the able and indefatigable men whose duty it is to see it carried out, and whom long official habits and experience in the service may, most naturally, have wedded and attached them to a system of which they have, for such a length of time, been the active administrators. Surgeons who have risen under this system from the bottom to the top of the ladder of promotion, will naturally feel loath to encourage new and amended regulations, having simplicity and despatch for their characteristics; but agreeably or otherwise to those in authority, the medical department cannot escape the sifting eye of public opinion, and ordinary foresight and wisdom should teach those in office the necessity and prudence of effecting an early and efficient reform. It may be asked, what can a militia surgeon, a mere semi-military medical man know of these matters? I answer, that the regulations and discipline of an embodied militia are just the same as those of the line, and that no man of ordinary intelligence and average experience of public business of any kind, could remain a single month in the service without being able to point out and feel the absurdities of much of its tedious routine; and as I am no longer a chicken, and have had my share of experience, during the last twenty years, of the management of both public and private business, and have done my best during this time to inculcate and diffuse, by lectures and publications, sound sanitary principles, I hope it cannot be considered presumptuous in me to express my opinion to my medical brethren through their own organ, and to attempt to keep alive the now, alas! almost moribund question of departmental medical reform. My object is to promote the good of the service and give an honest opinion as an observer, not to attack or speak disrespectfully of the heads of the department or of my superior officers, from whom I have always received the greatest consideration and courtesy, when the rules of the service rendered it necessary for me to put myself in direct communication with them.

I have alluded to the number and variety of official returns, etc., required from the regimental surgeon. I will now enumerate them, commencing with the purely medical ones, including hospital books, etc.

No. 1. A *Letter Book*, in which all official letters, either written or received by the medical officer in charge, are to be entered, for the inspection of the commanding officer, the director-general, or any other superior medical officer.

No. 2. A *Monthly Sick Return* on the 1st of each month to the director-general, specifying the total number of sick, distinguishing those at head-quarters from those on detachment or furlough, or in general hospital, giving the nomenclature of their diseases according to Cullen (and arranged according to a vague, obsolete, and irregular classification). This return is arranged under no fewer than twenty heads, which space forbids my here giving.*

No. 3. A *Yearly Return* and *Report of Sick and Medical Transactions* on 31st of March, together with a return of phthisis pulmonalis. This return must contain a table of the number of cases of every separate disease treated out of an official table of one hundred and thirty-three distinct diseases; total admitted, treated, discharged, died, remaining, and diseases of men discharged the service; average strength; average sick; monthly abstract of admissions and deaths; recapitulation of treated, discharged, died, invalided, under the heads of fever, pulmonic, hepatic, bowel complaints, variola, wounds, fractures, accidents, and other diseases. Also in this return, meteorological observations for each month, prevailing winds, moisture and dryness of atmosphere, variations in the weather, etc. A separate table and classification for diseases of the eye. Separate table and return of diseases of the skin. Separate table and return of contractions, nature, treatment, present state, etc. Return of maniacal patients, species, cause, treatment, result, and destination. Return of registers and records. Return of anatomical preparations. Return of officers, women and children, strength, diseases, etc. Return of vaccination. Return of cases of variola. Annual report of sick, under heads as described in my previous paper. Return of cases of phthisis pulmonalis. Return of recruits approved, rejected (causes of rejection), total inspected.

No. 4. *Half-yearly Return of Medicines* to the director-general, in duplicate, of one hundred and forty ingredients in the *Pharmacopœia*, with return of *precise* quantities expended, remaining, and required, under distinct heads, with remarks. Return of about forty surgical materials besides drugs.

No. 5. *Half-yearly Return*, in duplicate, of books and forms under fourteen distinct heads.

No. 6. An *Annual Report* on the qualities of the medicines and surgical stores, etc., referring to their age, adulteration, chemical defects, losses, casualties of them by bad packing, leakage, or accident, etc.

No. 7. A *Register Book* for cases of vaccination, small-pox, and reports on recruits.

No. 8. A *Historical Register* for copies of the yearly returns (enumerated under head No. 3) and reports of the surgeon and his assistant, in order to complete the medical history of the corps, "in a connected and consecutive form."

No. 9. A *Medical Register*, to contain "A DETAILED HISTORY OF EVERY CASE OF DISEASE (itch excepted), with the treatment employed, and a *daily* entry of diets and extras." Regimental surgeons are held responsible for the accuracy of these registers, and every case is, according to the wording of the regulations, "to be fully, legibly, and scientifically entered therein." The junior medical officer to be accustomed to conduct the register under the superintendence of the surgeon. Long detailed instructions are given in the regulations as to the mode of keeping this register.

No. 10. A *Defaulter Book*, to be kept under eight distinct heads, viz.: troop or company; date of crime; crime; by whom reported; punishment; by whom ordered; remarks of surgeon when punishment has to be altered on account of sickness, etc.

No. 11. A *Guard Book*, for keeping in regular lines duplicate accounts, returns, and other documents.

No. 12. *Forms of Diet Rolls*, daily, monthly, quarterly, and daily for extras. Quantities to be written out in full by the surgeon, in *figures* by the hospital sergeant (who can generally afford the surgeon much assistance in those very numerous returns, not here enumerated, viz., the weekly, monthly, and quarterly, required by the purveyor of the district). Returns of exact quantities expended of each separate article (even to salt), have to be made. A cheque-book signed daily, for diets of the days and for extras. Returns of hospital washing bills, wages, contingent expenses; number of days each man has been in hospital, and separate returns for different regiments. Certificates for change of bedding, or chloride of lime, fresh straw, or articles of bedding, etc., etc.

No. 13. A *Daily Sick Report* to the commanding officer, as early as possible each morning, of diseases, admissions, discharges, and remaining. Certificates of state of health of every prisoner committed to cells, or to be tried by court martial.

No. 14. *Special Medical Reports* on prevalent epidemics or contagious diseases, state of barracks, drainage, etc.

I may add to the above formidable list, separate requisitions for steel trusses, for instruments allowed, and for leeches. Each regimental surgeon has to furnish himself with a complete set of between forty and fifty instruments, at his own expense. The surgeon is answerable also, whilst in charge, for all hospital furniture and utensils, and has to take an inventory of them, and give them over to his successor on quitting the station, or to the barrack-master.

The surgeon cannot order any drugs deficient, even for immediate use, beyond the expenditure of a pound per quarter; every article has to be obtained *through the medical department in London* by requisition, in duplicate, even Epsom salts, spirits of turpentine, plaster, or the most common drug or article. It took me several weeks to obtain some dusters, floor-cloths, and a few door-mats, as I had to correspond with the Ordnance and War Office to obtain permission to make the purchases. Happening to exceed the pound a quarter in purchase on the spot, of extra copaiba, spirits of nitre, and magnesia, etc., for *immediate* use, I had a long official correspondence, and almost reprimand, with the warning that if the local drug account was again exceeded, it would not be allowed. For all extra as well as ordinary fuel, special returns and certificates are weekly required. I once had a correspondence about the purchase of a frying-pan; this, of course, was with the barrack department (not the medical), but I could not get one allowed, as it is not enumerated in the *official* list of hospital utensils supplied. I bought on

* I am bound to add that, recently, a more scientific classification of diseases has been adopted, grounded on anatomical regions.

myself, and gave it to one of the hospital staff on quitting the station. It is a pity the queen cannot afford to allow her servants the use of a *frying-pan!!* I was told the *pan lids* are intended to answer the purpose; a very *cleanly* substitute it must be admitted. Indeed, official correspondence often took place about the most ridiculous and trifling matters, the surgeon not having the power to purchase requisite articles, save strictly according to "regulation and routine", instead of his being made a responsible and comparatively *independent* officer in all matters of hospital arrangement, detail, and expenditure. The medical department has never yet had sufficient *independent* authority, the War Office stepping in and interfering in matters purely medical: *e. g.*, had the director-general's suggestions and wishes been attended to, at the breaking out of the late war, how much misery, neglect, and mortality might have been avoided! Military hygiene should surely be exclusively under the control of the heads of the medical department, and every regimental surgeon should be in a position to act at once, without consultation and correspondence with any one, when sickness and emergencies arise. Contracted and hampered on every side, talent and skill, however great, cannot be adequately and effectively developed. There are numbers of superior medical men in the service who have allowed their talents to slumber, or have quitted the service without regret, merely for the want of a fair field for the exercise of their powers and adequate remuneration. Give responsibility to, and place confidence in men, and in nine cases out of ten they will serve you better than if you cripple them with strict rules, and tie them down to a tedious undeviating routine. Economy, method, control, and concise official returns, I do not dispute for a moment, must be exercised and required in *all* branches of the public service; but we may fairly question the necessity and utility (for effecting these objects) of the formidable array of returns and reports just enumerated. They might be consolidated, simplified, and abridged, without any detriment to the public service, and with much relief to the surgeon. An anecdote is told of a superior inspecting medical officer in our sister isle, which well illustrates the practical inutility of these numerous forms and returns, and shews how little they touch in practice what ought to be the principal object to be attained, viz., skilful treatment of and proper attention to the sick; he is said to have remarked, when referred to on hospital matters and management, "Only give me my official returns correctly and punctually, and you may *kill* as many patients as you like."

I have a few other remarks to make on these regulations, and on topics connected with the medical department and the public service, before bringing these observations to a close.

CASE OF ACUTE LITHIASIS.

By H. Payne, jun., M.D.Edin., Barnsley.

Mrs. W., a widow, aged 65 years, had for some time been the victim of homœopathic quackery in this town, under a person who also followed the profession of minister of the Gospel. He undertook to heal her of that natural sort of indisposition, the infallible consequence of riper years, and of the waning of that resiliency so refreshing in earlier life. About the time of the late severe frost, a pain seized her in the back, which soon defied the feeble efforts of her little homœopathic *bonbons* to remove. Finding no relief, she was constrained to apply to a regular practitioner. She persists in stating that she should not be now alive but for these globules. There is generally to be found in the victims of the homœopathic delusion a degree of candour sufficient to lead them to a ready confession of its insufficiency to meet cases of serious illness; so that, after patiently hearing the prelection on their experience in this line with more of gravity than credulity, no difficulty is found in inducing such to abandon the practice in favour of legitimate medicine: indeed, it is commonly no tardy act of discrimination on their part.

My patient was stout, of irritable temperament and dark complexion, thick-lipped, and a hearty liver. The pain was most acute at night, and prevented motion in bed. There was numbness and pain down each thigh. There was no sickness; the appetite was unimpaired; eructations troublesome; the tongue was clean and moist. She had some headache; the skin was dry, but not hot. She complained of chilliness and cold feet. There was not any cough, dyspnœa, nor palpitation. Pulse 84 beats per minute, full, and incompressible. The bowels were open; the urine was passed frequently, and in proper quantity. The following was ordered.

℞ Liquoris opii sedativi ℥xxv; vini colchici seminum ʒiss; misturæ acac. ʒj; misturæ camph. ʒv. M. Fiat mistura cujus sumatur cochleare amplum 4tâ quâque horâ.

A blister was objected to. She was ordered to foment the loins.

The medicine was regularly taken, but not repeated. There was no decided relief. The effects of the colchicum were marked. I ordered the following.

℞ Hydrargyri chloridi gr. j; pulveris antimonialis gr. iv; sacchari puri gr. v. M. Fiat pulvis horâ somni ex conservâ sumendus.

This was on the Saturday; and, feeling persuaded that, as she had not sent, she was better, I did not call till the Monday following, when, as I was prepared to expect, all symptoms had vanished. But what did surprise me, was the large quantity of dark lumpy fæces which the powder had brought away; and I considered whether there had not been united in this case a degree of lumbago, which sometimes arises from collections of fæcal matter pressing on the lumbar plexus of nerves. However that may be, all symptoms vanished with the discharge of a quantity of deposit in the urine of lithic acid, which is in some a natural periodical deposit.

My motive in bringing this case under the notice of the readers of this Journal is to show the incompetency of the homœopathic scheme, and to let its readers know that there are men of education tampering with the lives of the public who know nothing of medicine, and assuming responsibilities which would make some of the wisest of us, under the same circumstances, tremble in our shoes. It is in a question of active disease that its follies cry out, shaming the most unlettered, and arousing the most unwary.

LITHOTOMY: MEDIAN OPERATION.

By J. Seaton Smyth, Esq., Liverpool.

The subject of the following case, a boy, four years old, was brought to me from Cheshire, with symptoms of stone in the bladder. Difficulty in micturition, and dragging at the prepuce, were the earliest indications, and were first noticed in July; latterly his sufferings in voiding urine had been extreme, and attended with protrusion of the bowel. Some of his father's brothers had been similarly afflicted.

The patient, who had of late become very stout, was of strumous habit. His urethra was so small that I was obliged to sound with a long probe; and, after satisfying myself as to the disease, I had to order a staff two sizes less than that which I had previously used in others about his age. On December 11th the operation was performed under the influence of chloroform. The patient being properly placed and the staff introduced, I passed the left index finger up the rectum, and, resting it as nearly as possible in the position of the prostate (which could not be distinguished), readily entered the groove with a long bistoury: violent straining and protrusion of the bowel occurring at the moment somewhat inconvenienced me in completing the incision. Two calculi were in succession removed; one resembled an almond, the other a large pea in size and shape; both were of the lithate character. Urine was passed naturally within eighteen hours. The patient was able to walk about on the second day, and recovered without a bad symptom.

There were in this case a very contracted urethra, a short deep perinæum, the prostate so ill defined as to be unimportant as a guide, besides constant straining, causing protrusion of the rectum and displacement of the finger which ought to guard it from injury and direct the knife. I shall, however, from the safety and rapidity of the operation and recovery, adopt in future Allarton's method with the following modification, which might obviate the difficulties above referred to; viz., I should, before using the long bistoury, thrust a double-edged scalpel parallel with and to the depth of the sphincter, which, compressed by the left thumb, would steady that hand, protect the rectum, and be an additional guide towards the prostatic portion of the bladder when the gland itself, as in this instance, is deficient; if, on the other hand, it be much enlarged, as in elderly persons, and retrude very considerably behind the sphincter, depression of the latter must materially assist the operator.

ON THE TREATMENT OF ULCERS OF THE LEG WITHOUT REST.

By Thomas Hunt, Esq., F.R.C.S., Surgeon to the Western Dispensary for Diseases of the Skin.

[*Read before the Medical Society of London, Dec. 13th*, 1856.]

The ulcers of which I am about to speak, are chiefly confined to the labouring classes. They are by far the most frequently met with in women, and still more commonly in those who have borne children. They are, for the most part, disposed to heal when the patient is confined to the recumbent posture, the wounds being treated with simple dressing. Hence, with a few rare exceptions, these cases recover sooner or later under hospital treatment; but as soon as the patient is discharged, and again pursues her daily toil, especially if she be a laundress, or otherwise occupied in a standing posture, the wound breaks out afresh, and is seldom healed until she re-enters the hospital, or otherwise obtains rest in the horizontal posture.

In this way, thousands of poor women in this country, as well as many hundreds of poor men, are rendered comparatively useless to their families, and often reduced to extreme poverty and distress, spending half their days in crippled helplessness, and often suffering great pain, which, by destroying the rest at night, breaks down the health. Much misery and destitution would doubtless be prevented if a method could be devised of healing these ulcers while the patient is allowed the free use of the lower limbs. That this may generally be accomplished, I have had ample practical proof; and my object in this communication is not to introduce any new method of treatment, but rather to shew why the established and approved methods so frequently fail.

But it will be necessary first that I should define the character of the ulcers to which I allude.

The lower extremity is subject to three kinds of ulcer—the strumous, the syphilitic, and the venous or varicose. There are other kinds, but they are far less common. The *strumous* ulcer occurs frequently in children and young persons: rarely in the mature or aged. Its character is that of suppurative inflammation, terminating in a languid looking sore on a livid ground, frequently presenting tumid and flabby granulations. The *syphilitic* ulcer of the leg is always secondary or tertiary, and will break out afresh years after all suspicion of the infection of lues has gone by. It is a deep irregular sore, surrounded by a reddish brown blush, and often burrowing under the dermis, sometimes leaving between two sores a band or bridge of copper-coloured integument, which overlies a slough. Mercury is the remedy for this kind of sore; and cod-liver oil is the best remedy for the strumous sore. But I merely allude to these specific ulcers in order that I may not be supposed to confound them with, or include them in, my description of the *chronic venous*, or *varicose ulcer of the leg*. This latter is a purely local affection, and depends in every instance upon some interruption in the venous circulation. From some imperfection or inaction of the valves, the venous blood is thrown back upon the capillaries, the nutrient process is vitiated, and an ulcer results. The varicose state of the veins is often seen in the prodigious distension and serpentine course and thickened investments of the external veins of the leg, and sometimes of the thigh. In other cases, it is not observable externally; but the disease still appears to arise from interrupted circulation, probably in the deep-seated veins. The ulcer may vary a good deal (in different cases) in extent, in depth, and in character. It may be as small as a split-pea, or it may extend all round the leg, or even occupy one-half or three-fourths of the entire limb: it may be superficial and cutaneous, or it may extend to the bone: it may be phagedenic and gangrenous, or inflammatory and irritable, or indolent and stationary; but it is always deficient in granulations, and more or less unhealthy. It is frequently surrounded by a feeble or disorganised dermis, assuming the form of a scaly, papular, erythematous, or vesicular eruption; or the limb may in one case be wasted and scarred; in another, swollen, hypertrophied, or œdematous; and in a third, the cellular membrane may be infiltrated with adhesive exudation, and the joint more or less anchylosed. The constitutional disturbance varies with the character of the ulcer. The system is often severely affected when there is active phagedena or an extensive destruction of parts; or when, as often happens, the pain is so severe as to disturb or destroy he patient's rest: but, in the majority of cases, the general health is very good, and the disease has the character of a local affection arising from local causes. Indeed, many patients believe that the ulcer is salutary, and that it could not be healed without the risk of damage to the general health. And it is well if the practitioner does not in some degree sanction, silently or otherwise, this unfounded, and now nearly obsolete prejudice.

Constitutional Treatment. When the ulcer is connected with well marked disease of the surrounding skin, the case may require alterative treatment; and if acute inflammation be present, leeches and purgatives; when it is sloughy or gangrenous, tonics and stimulants may be necessary; but when the health is good, and there is no strumous or syphilitic taint, internal medical treatment is rarely required for the healing of the sore, although purgatives may be necessary afterwards; and if the discharge has been copious, and the ulcer of long standing, it is a safe and useful plan to accompany the surgical treatment with a course of moderately active purgatives or diuretics.

Surgical Treatment. I may assume that the Fellows of the society are all well acquainted with the plans of treatment proposed severally by Messrs. Whately, Baynton, Scott, Spender, and many other writers of more recent date. These are all founded on the simple principle of giving due artificial support to the limb, by the application of plaster or bandages; the practice of each differing only in unimportant details—Mr. Whately dressing the ulcers with pledgets of cerate; Mr. Baynton and Mr. Scott using adhesive plaster; and Mr. Spender chalk dressing. In the hands of all these surgeons, I do not hesitate to say that equable pressure is the chief agent in the cure; and the extraordinary success attending the practice of each one consisted mainly in the skill and adroitness, attained only by long practice, in applying the bandage or plaster so as to make it press equally on every portion of the irregular surface of the limb. The usual hospital practice is the same in principle. The German poultice is a convenient dressing; and while by the recumbent posture the vessels are relieved of the distension occasioned by the gravitating fluids, the atmospheric pressure on the limb itself forms a sufficiently powerful, as well as an elastic bandage, affording a constant and equable pressure on every portion of the surface. It is not necessary that I should comment on the very ingenious device introduced by our intelligent associate, Mr. Gay, consisting of an incision into the integuments surrounding the ulcer, where the healing process is prevented by the tight and contracted condition of the neighbouring skin. To this I have no objection to offer; but it does not apply to the great majority of cases under consideration, if, indeed, to any of them.

Modern surgery, therefore, is competent to the treatment of ulcerative diseases of the leg. There is, I believe, no essential defect in it, no necessity for anything new. Why then is it so notoriously unsuccessful? Mainly because the application of a bandage is looked upon as an easy and simple operation, which may safely be intrusted to the patient, the nurse, or the dresser; whereas I know of few operations in surgery more difficult to perform, or requiring more painstaking practice, than the application of a bandage to the human leg in such a manner as that every portion of the limb, from the toes to the knees (including especially the hollow between the heel and the inner and outer malleolus) shall receive equal and abiding support. In the careless manner in which a bandage is commonly applied, it often does more harm than good. If it be at all tighter round the leg, for instance, than round the foot, the foot and ankle will become swollen and œdematous; and on removing the bandage there will be seen deep fissures where one edge of the bandage has been unduly tight, and a puffiness in other parts, which adds to the interruption of the circulation. And it is extremely difficult wholly to avoid this unequal pressure. There are also other impediments to success; and at the risk of being tediously minute, I must beg attention to several important details.

First, the *dressing* of the ulcer is a point of little moment as regards the ultimate success of the bandage; but time will be gained by a proper dressing, the treatment will be more speedily successful, and the patient will have much less to suffer. Certainly there is no dressing which deserves the name of a panacea. The appearance of the ulcer, not very easily described, always suggests to the practised eye what will best suit it.

Offensive ulcers, especially if they are disposed to gangrene, are easily and readily convertible into healthy sores, by simply filling them with a powder consisting of equal parts of finely pulverised vegetable charcoal and prepared chalk. Over this a poultice may be applied if the sore be very irritable; but it is

generally sufficient to apply over the charcoal a piece of dry lint and bandage. On dressing it the next day, the wound is seldom offensive; and on the third or fourth day, if the patient's health be duly attended to, it is commonly converted into a healthy looking sore.

Very painful and irritable ulcers, disinclined to heal, I usually dress with a dossil of lint dipped in chloric ether, and then apply the bandage. This gives severe pain for a few minutes, but the patient will get a good night's rest, and never objects to its repetition.

Sanious ulcers, having no defined edge or depth, require a free application of nitrate of silver or a solution of sulphate of copper, as also do those sores in which the granulations are excessive.

Sluggish ulcers, covered with a tenacious yellow coat of muco-pus, are often roused into healthy action by the application of a little finely powdered nitric oxide of mercury, or an ointment of the same material—two drachms to the ounce.

Ulcers with hardened cartilaginous edges require severe pressure. A dossil of dry lint should be applied to the surface of the sore, and then the edges of the ulcer should be very tightly drawn together with strips of adhesive plaster; over this should be laid a piece of tow or wadding, and the whole supported by a flannel bandage applied as tightly as possible. Under this treatment, the absorbents are awakened into activity, and the sore becomes very manageable.

Sores of the more *ordinary character* I generally fill with dossils of soft dry lint, placing over this a pledget of spermaceti ointment, and a bandage applied with gradually increasing tightness, *i. e.*, more and more tightly every day.

All these ulcers require daily dressing for the first fortnight or more, until the discharge has nearly ceased; and then forty-eight hours may be allowed to elapse between each dressing. As the granulations arise, they sometimes require a touch with the sulphate of copper, or lint dissolved in the solution.

Bandages. *Calico and linen bandages* are generally inefficient, and often useless. They do not yield sufficiently to the motion of the limb; consequently, they cut the leg on one edge, and become loose on the other. The elastic cotton bandage sold at the shops is a very stupid affair. The two edges are stitched together, and form a cord, which cuts the leg if the bandage is tightly applied; and, if not tightly applied, it is useless. If the ulcer is disinclined to heal, a *flannel bandage* is essential to its permanent cure. This bandage should be made of moderately fine Welsh flannel, from seven to eight yards long, according to the size of the limb, without a single joining, and exactly two and a half inches wide. The flannel should not be coarse, for then it is too rigid and rough for the tender skin; neither should it be very fine, otherwise it will fall into folds or become loose. If the breadth be more than two and a half inches, it is impossible that it should lie smoothly about the foot; if less than two and a half inches, the portion enveloping the calf will slip out of place as the patient walks. But, as the flannel shrinks in washing, if the patient have a large leg, two and three-quarter inches may be allowed for new and unwashed flannel to commence with. So long as there is any discharge from the wound, it will be necessary to have a clean bandage daily. The patient should therefore be supplied with two bandages, and be admonished not to have them washed in very hot water, as they will shrink, and become thick and unyielding.

Application of the bandage. Before applying the bandage, it should be rolled up very tightly and evenly, otherwise it will slip on being applied. The wound being dressed, the patient should sit in one chair, and place the heel on the *corner* of another chair, so as to give room to apply the bandage to the heel. The first turn or two should be taken round the foot close to the little toe, taking care that every turn is even, so that one edge of the flannel does not cut while the other is loose. The next turn should be round the ankle, just as far from the heel as is requisite to lay the bandage even and tight; next round the foot again, nearer the heel than before; then round the point of the heel, and over the instep; then under the foot, and, slantingly inclosing the hollow of the inner malleolus, it should be brought again round the leg, and afterwards round the hollow of the outer malleolus; then round the point of the heel a second time, and round the foot a fourth time; then round the leg, and carried spirally over the calf up to the knee, allowing the bandage to take a turn on itself just as often as it fails to lie even and flat without such a turn. Care should be taken that the bandage is rather tighter round the foot and instep than round the small of the leg and calf. The bandage should reach to the knee, where it should be pinned, not tied, and the stocking should be pulled over it, no garter being allowed on any account. If the patient complains that the bandage *cuts* any where, it should be taken off, and reapplied with additional care. It is very often requisite to apply a compress of tow or cotton wadding to the hollow of the ankle, to secure sufficient pressure there, especially if that be the seat of the ulcer, which often happens.

In the method of applying the bandage recommended in books on surgery, and even by Whately himself, this part is left altogether unsupported, and the pressure is applied to every part of the leg except where it is most wanted. It requires some practice to adjust this matter nicely without putting too many folds round the foot; but it may be done, and is worth the trouble, inasmuch as without it we may fail.

The advantage of a flannel bandage over a cotton one is threefold. First, it is a bad conductor of heat, so that the wound is preserved in a uniform temperature. This is very important. Frequent changes of temperature present a great impediment to granulation. Mr. Crompton of Manchester has shown that the great advantage of dressing burns and scalds with flour, wadding, or wool, consists not in excluding the air, as is commonly supposed, but in preserving an equable temperature. Thus I have found ulcers of the leg, in cold weather, heal rapidly under a flannel bandage, which refused to heal under a cotton one. Another advantage of flannel is, that it yields a little (not too much) to the motion of the leg. I have had patients who have walked miles to be dressed, without complaining, with a flannel bandage, who could not endure the pain of standing in a cotton one. Thirdly, the flannel, having a rough surface, adheres to its own folds, and does not slip down the leg. A well applied flannel bandage will keep its place a week, night and day. A cotton or calico bandage will scarcely remain in place an hour.

Covering the whole foot and leg with adhesive plaster, as recommended by Mr. Baynton, and practised by Mr. Scott, is open to many objections. 1. Unless it be removed daily, it confines the discharge too much, whereas this readily escapes through the pores of the flannel. 2. As it requires daily removal, it is apt to irritate the skin, often already irritable from disease; and, in male subjects, it adheres painfully to the hair on the legs. 3. It confines the muscles too much, and is a great hindrance in walking. When wounds require adhesive plaster, two or three small strips are sufficient with a bandage. 4. It is expensive and troublesome, and is much missed when the patient leaves it off. Notwithstanding these objections, it succeeded marvellously in the hands of Messrs. Baynton and Scott.

It often happens that, on the first application of the bandage, the leg becomes more painful, the discharge from the wound more copious, and the wound looks irritable and foul. This is particularly the case where the limb is œdematous, and the fluid is forced through the wound; but the second or third dressing finds the swelling reduced, the wound less painful, and disposed to heal. It is very important that the bandage be applied in the early part of the day.

It has been proposed to relieve the venous pressure which originates these ulcers by cutting out the portion of the vein containing the diseased valves. This is very uncertain in its results, and by no means a safe operation. A better plan is to bind a small piece of nitrate of silver on the vein; but I have reason to believe that, as the varicose veins often disappear after the bandage has been worn for a few months, the valves recover themselves, and resume their proper office, without any operation for their destruction.

When an ulcer is situated on the sharp edge of the tibia, just on the shin, a tight bandage is not admissible; but a piece of spongio-piline or wadding may be placed on the sore, and a well adjusted bandage applied loosely over it.

Under the careful management now described, a very large majority of ulcerated legs may be soundly healed, even while the patient is pursuing his or her ordinary avocation; and I have frequently succeeded with patients in the country who actually walked six or eight miles to be dressed, and then walked back again. There are a few cases, however, in which I have been obliged to insist upon the patient resting for the first week or two; but if the sore be thus *healed*, it invariably breaks out again, and does not prove to be soundly cured; whereas but few of the patients who are allowed to walk ever return for after treatment.

This is one of a few neglected subjects in which, at the present moment, the profession is most deeply interested. This branch of practice is known to be very much monopolised

by old women and quacks; and we are apt to forget, in our zeal for medical reform, and amidst our earnest appeals to the legislature for a legal separation between the qualified and unqualified practitioner, that quackery thrives as easily on our own neglects as on the ignorance of the public; and that there are public men who know how to throw this in our teeth. So long as there are certain classes of disease which are thought unworthy of the attention of the hospital teacher and college examiner, so long will the profession itself prepare a fruitful soil in which quackery will grow and thrive. And my object on this occasion has been, not to discuss the comparative merits of different kinds of ointment, plasters, dressings, and other minor details, but to exhibit in a disencumbered form the *principle* on which all practical men agree—that of giving firm, and constant, and equable support to the whole surface of the limb, from the toes to the knee. If this principle were universally understood and carefully acted out, we should hear of no more incurable bad legs healed by Holloway's ointment —no more amputations for mere ulceration—no more ankylosed joints from mere inaction of the joint induced by the tenderness of the skin or the presence of an old and irritable ulcer.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS BY PHYSICIANS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture I.

BASES OF MEDICAL KNOWLEDGE. TUBERCLE IN THE LUNGS IS NOT ESSENTIALLY DUE TO THE SCROFULOUS DIATHESIS, BLOOD-DISEASE, OR HEREDITARY INFLUENCES. RESEARCHES AS TO THE QUANTITY OF THE INGESTA AND EGESTA, SHOWING THAT PHTHISIS IS NOT ESSENTIALLY DUE TO DEFICIENCY OF FOOD, DEFECT IN DIGESTION, OR WASTE OF FOOD.

All the knowledge which the medical profession possesses must be based upon demonstration, personal experience, or reasoning. The second, conjoined more or less with the third, constitutes what is known by the term authority, and acquires its value in our judgment from some supposed or real superiority in the author, as to the extent of his field of observation, or his habits and power of observation and reflection. Of these two bases, viz., demonstration and authority, this age has exhibited a decided preference for the former; and it is evident that a demonstration must be more conclusive than an assertion. The only objection that can be raised, is the liability to error which must ever exist in all the inquiries which are required to constitute demonstration; and hence even a demonstration may be held to be truth in one age and falsehood in another. But in how much higher a degree must authority be exposed to error, when men are so liable to be deceived by the imperfection of their senses and the appliances employed to aid the senses, by the prevalent opinions of their day, by the imperfection of their judgment, and by the uncontrollable influences of prejudice. And such sources of fallacy are apt to be more open at a late period of life; that is, at the period when authority is naturally claimed and allowed. Hence authority in general knowledge during the middle ages, and in medical knowledge in the persons of Hippocrates and Galen, at first gave stability to knowledge, and then fixedness to error: and so it must ever be. With the increase of medical knowledge during the last two centuries, and particularly in our own time, authorities have vastly multiplied, and each has held the sceptre for a limited period, with the result of losing it in all, and of regaining it in a few instances. Thus our profession is continually changing its so called truths; and in a few instances, as that of the doctrine of the humoralists, this continued movement has completed its circle, and has returned to the point whence it started centuries ago.

In a profession which is so much based upon personal knowledge, there must always be a deference paid to authority; and those who have few opportunities and small powers of obtaining truth must be content to sit at the feet of others; but it would be only in accord with the spirit of the times if they ever looked with some degree of dissatisfaction upon authority, and demanded demonstration. Whilst, therefore, I hold the opinions of the many eminent men of this day in the greatest esteem, I shall not be thought presumptuous if I ask for their facts and weigh their arguments; and if, by the aid of demonstrative inquiry, I should vary the opinions which now prevail. As it is the inherent right of a man to use well his mental powers, and to cherish freedom of thought, so it is the right of our profession to multiply its points of inquiry after truth, and to avoid rather than seek for the shackles of mere authority. Our profession, and especially that department of it with which we are here more particularly engaged, is likely to add to its influence for the good of mankind, as it permits and gives due weight to both demonstration and authority, looking, however, to the latter as a fertile source of false theories, and the former of false facts.

I have for some time been closely engaged in inquiries of a demonstrative character in reference to phthisis, and have obtained facts and opinions which to my own mind have called for a modification in the received view of the nature of that disease. To authority I do not appeal; but I venture to hope that the facts which the inquiries have elicited may be received as a sufficient ground for the opinions which I shall now venture to bring forward.

On inquiring into the nature of phthisis, we can seize upon two circumstances, viz.:—1st. The morbid condition which it leaves behind it; and 2nd. The changes in the working of the system which attend it. The former has of late years been more particularly brought under notice, probably on account of the constancy with which tubercle is found associated with it in the lung, and the readiness with which its appearance, at least so far as the naked eye may guide us, is recognised. Thus tubercle has been elevated to the dignity of the essential part of phthisis, without our having agreed as to what it is, whence it is derived, or how it is deposited in the lung as we find it. Now, it must be evident that this tubercle is the effect of anterior conditions, and consequently an effect instead of, or in addition to its being, a cause; and if that may be admitted, it is equally clear that it may be an accident, and not an essence; and that the condition of the system or the organ in which it is produced, is that to which attention is primarily due, and which may prove phthisis to be one manifestation of a state which, with equal readiness, may exhibit, under other circumstances, other evidences and other so called separate diseases. To regard the tubercle as the essence is to limit greatly the range of our observation; but to look upon it as an effect or an accident, opens a wide field for study and investigation.

If we start, then, from this point, we may search for its cause either in the immediate spot in which it is found, and thus regard it as a local disease, and a general disease only so far as every part must be influenced by the general system; or we may consider it as proceeding essentially from a general cause, and found locally only so far as every entity must have a location. We will now enter on this part of the discussion.

It is abundantly evident that the disease has a local habitation in the lung, and also that, as it progresses, the system in general exhibits many conditions opposed to those of health; but it would not thence follow that the tubercle resulted from any state of the general health, but rather that the increasingly diseased condition of the general system resulted from the deposit of the tubercle and the interference which it must effect in the action of an organ so essential to health; or, perhaps more likely still, from a condition which may have been anterior to and causative of both.

Now, there is much to support these latter views of the disease; for so little is the general system affected in the earliest moments of the deposition, that of common agreement we affirm that the exact period of first deposit cannot in any case be determined with certainty. Nay, so insidious is its march, even locally, and so gently are its effects there and upon the general system developed, that we often find the deposit most abundant, and the destruction of the organ considerable, when the patient's own attention is first called to it. Surely this is far opposed to any theory which would attribute the deposition

of the tubercle to a state of system which, by any ordinary test of health, may be distinguished from other conditions of ordinary health. Then, if we add to this that, in the experience of all of us, the first evidences of the disease have in not a few cases been observed to follow some other local condition of the lung, as that of inflammation, and may therefore possibly, if not probably, be fairly attributable to that preceding local disease, we cannot summarily reject the argument under consideration.

The chief objection which has been raised against this view of the case is, that in many instances the same matter is deposited in other organs, both distant from and in structure unlike to the lungs. Now this fact is indisputable, except on the ground that, as we cannot agree as to the intimate nature of tubercle in the lung, we cannot fairly contrast that deposit with other deposits elsewhere. There is so close a resemblance between the so called tubercle-cell, as it changes through its various stages, and various corpuscular elements found naturally in the body, and even the still disputable epithelium of the air-cells of the lung, that, in the present state of our knowledge, we dare not affirm this or that to be tubercle, except when fortified by the circumstance of locality, quantity, or other adventitious aid. It is quite certain that the naked eye is unable to help us in this difficulty, or to be a guide which would satisfy a microscopist, or be a firm basis on which to establish an hypothesis; and it is equally clear that chemistry, even when the observer is capable of fairly employing it, leaves the matter much where it found it. Then the argument stands thus:—There is in all cases of advanced phthisis a large deposition in one organ, which we agree to call tubercle; and, in a limited number of these cases, there are lesser deposits in other distant structures, which, to the naked eye, and also to some microscopists, bear some resemblance to the deposit in the first mentioned organ; and hence the inference is, that, in this limited number of cases, there was tubercle in various places; and that, whenever tubercle is found in one organ, there is a probability that it will be found in some or many others. Now this is not induction, but assumption, until the identity of the two deposits has been so proved as to satisfy the mass of scientific inquirers. Let us, therefore, regard it as an assumption which has some show of truthfulness; but let us not forget that the fact of the diversity of structure in which the tubercle is said to be deposited is a *primâ facie* argument against the identity of the deposit; for, with the exception of another unknown disease which we call cancer, with its subdivisions, diseased actions of one kind appearing in different parts of the body at the same time commonly select the same structures. But, passing on, if we admit for a moment that the deposits are one and the same, we now know perfectly well that, in many of the localities in which they appear, the structures are in fact identical. I have no doubt that there is an epithelial lining to the air-cells of the lung, any more than I have that there is an epithelial covering to the serous membranes of the abdomen and the head; and by common consent we now believe that the deposit of tubercle usually, if not exclusively, takes place upon the free surface of the membranes. Now the free surface is the layer of epithelium; and therefore, whether the earliest point of deposit be in the air-cells of the lung, or on the peritoneum, or on the arachnoid, it is in one and the same structure, viz., the epithelial cell. The argument, it must be remembered, has reference only to the first point of the deposit on any particular spot, and not necessarily to subsequent deposits; for by subsequent deposition the relations of parts become changed by pressure and by altered structure. If, then, we admit that true tubercle may be deposited, not only in the lungs, but on the serous and mucous membranes, we have nearly embraced all the localities in which it is said to be found when so generally deposited, except in the structures of the glands; and, although the anatomy of these latter organs is very ill understood, we know that they chiefly consist of corpuscular elements. Thus the argument opposed to the theory before mentioned is reduced almost entirely to this, that, in similar organs apart from the lungs, a matter is simultaneously deposited which resembles or is tubercle. But this does not prove it to be a general disease of the system; it only affirms that, at the same time, in the same structures, there is the same or a similar local change proceeding. If from any cause the epithelium of the air-cells may become or may produce tubercle, there is a high probability that the same local power or sufferance of change may exist in the epithelium of other parts, either to a greater or a less extent. Hence, for aught this argument can furnish, the deposition of tubercle may be a purely local disease. This being granted, there is no insuperable difficulty in accounting for the more abundant and frequent deposition in the lungs, when we remember how infinitely multiplied are the epithelial cells in the lung, in comparison with those of any other part of the body; and more particularly if we add to this the incessant action of the lungs, and consequently the necessity for the constant renewal and removal of the epithelial cells. It is, however, right to notice that, if an obstruction could exist in any part of the body to the free exit of effete epithelium, thereby causing an accumulation of effete matter, it might occur in the air-cells of the lung; for, at the termination of the minutest bronchus, the canal dilates and forms its cavities or air-cells, which are arranged in a spiral manner around the central line of the tube, and hence the area occupied by the cells is vastly greater than the area of the termination of the bronchus. Thus, at this point of constriction of the return current, the matter discharged might accumulate, and offer a peculiarity in the lung which does not exist elsewhere. And further, the epithelium of the air-cells is tesselated, whilst that of the minutest bronchus is ciliated; and thus any substance once placed within the area of the bronchus is almost sure to be passed on by the vibration of the cilia. This is not so in the air-cells; and as, in the so called tubercular mass found within the lobular membrane in acute phthisis, there are not any (or at the most only few) ciliated epithelia, we may prove the limitation of the disease to the air-cells, as well as the accumulation of epithelium in those cavities. There is no necessity, as it appears to me, to assume any especial liability in the lungs to this deposit, except upon these palpable grounds; and consequently, so far, none to modify the argument of a local origin for the deposit in phthisis.

Now, having carried the inquiry to this point, and shown that there are probabilities in favour of a local origin, I do not consider that it by any means excludes the idea of a change in the general system which may facilitate that deposition either in the lungs only, or in those organs as a part of the general system. Whatever may vary the action of the lungs may surely vary the degree in which this deposition may be facilitated.

But another objection has been raised to the idea of a local origin, and an explanation given of the supposed general origin of tubercle, by promulgating what is known as the blood theory. It is assumed that, at the moment of earliest deposition of tubercle, the blood is diseased, and that at the points of tubercular deposit it gets rid of its morbid material. This of course implies a morbid condition of the blood both anterior to and causative of tubercle, and not resulting from or simply coincident with the deposit of tubercle; and it is presumed that the elimination of the tubercle from the blood is not either the result of morbid action in the elementary organs, or of secondary changes in the matter which the blood may directly or indirectly deposit, *as due simply to local causes*. Now, if we grant, as we may readily do, that the blood must vary in each individual, and at every hour of the day and period of existence, from a variety of causes which influence the quantity and quality of food and its elaboration, as also the excretion of effete material; and further, if we admit that a deposit of a like nature, appearing in the course of a disease in various parts of the body, is presumptive evidence of the deposition of this material from a common and general source, we are far from having prôved that tubercle results from any specific condition of the blood. To presume that tubercle is deposited directly from the blood implies that it had previously existed in that fluid. Yet Lehmann has affirmed that he could not detect any change in the blood which could be ascribed to phthisis, much less that is causative of phthisis; and that any change, as, for example, an excess of fibrine at one period or of water at another, is due to such accidental circumstances as inflammation and profuse sweats. Hence the theory which ascribes tubercle to a fibrinous crasis is a theory built upon an effect or an accident, seeing that, when tubercle is first deposited, no such crasis exists; and if it did exist, it would be an assumption, and not an induction, which should state that the fibrine being effused into the air-cells is converted into tubercle. There is no proof that fibrine is effused into the air-cells as an essential condition precedent to tubercle.

Rokitansky, the high priest of the idol-worship of the present day, appears to me to treat this subject in an unphilosophical manner—a circumstance which, with such a man, must imply a defective subject and a preoccupied mind. He ranges tubercle under the head of fibrinous crasis, and

begins by asserting that it will not account for tubercle universally; and then goes on to say, with great precision, that the fibrine may be either in excess or defect, inasmuch as both conditions are found in the course of the disease. So far, then, he is clearly illogical; for it is not presumed that tubercle can arise from the existence of fibrine absolutely: and if it may exist without any change in the fibrine, and also with the great diversity of both excess and defect, is it likely that the fibrine can be causative source of the tubercle? He meets this difficulty by assuming that the change is in quality, and not in quantity. But how does he attempt to prove this? Simply by taking the two conditions of "surpassing proneness to deposition" and "high grade of coagulability" which mark tubercle, and affirming that such are evidences that the fibrine is changed in quality. It is evident that this is mere assertion on two different subjects. If tubercle were due essentially to a condition of the fibrine, that condition must have existed at the moment of earliest deposition; but, on the showing of this great authority, it may exist without any change, and that change may be either an excess or deficiency of quantity; and, as to quality, no proof of any essential change at that period has been discovered: and finally, to sum up the whole, he gives the remarkable opinion contained in the following words: "*Still these said causes by no means serve to throw much light upon the nature of tuberculosis.*" (*Pathological Anatomy*, Sydenham Society, vol. i, p. 377, *et seq.*)

But, to return, it is true that our having failed to detect tubercle, or indeed any essential change in the blood, except on some questionable occasions, is no proof that it does not exist there; but it is presumptive evidence in the highest degree that it does not exist, and it is for those who maintain this theory to prove its existence. Then, again, as we have already considered, it is certain that generally, if not always, tubercular matter is found with secreting organs; and if it be a secretion or excretion at all, it is probably due to the eliminating function of those secreting organs. Thus, in this point of view, the *fons et origo mali* may be at least as probably in the secreting organs as in the blood whence they obtain their material. One statement is as probable as the other; but if there be a preference, it ought rather to be taken from the blood, and ascribed to the secreting organs as a cause, seeing that, in the earliest moment of deposition of tubercle, the general system does not necessarily appear implicated; and that, even in the latest period, the tubercle cannot be shown to exist in the blood. But it has not even been proved to be a secretion or an excretion at all in its earliest moments. Schrœder Van der Kolk, Dr. Addison, and others, have advanced the theory that it is essentially a mass of epithelial cells (that is, of natural organs) which have undergone certain changes; and the great similarity of the structures with their almost invariable association, added to other arguments for a local origin, seem to lend great support to this doctrine. Hence, so far from tubercle being necessarily due to a specific change in the blood, there is no evidence that it is even a secretion or an excretion, much less that it exists in its proper form in the blood.

At this point, then, we might arrest the discussion. But if it might be admitted, for the sake of argument, that it is due to the blood (without admitting that it exists in the blood), it is evident that we gain no available information by calling it a blood-disease. There is a probability against any disease (not accident) being a purely local disease, and there is a certainty that all local parts are supported by the blood; and hence it may with much truth be affirmed that every disease is a blood-disease, however varied its manifestations may be: but what have we gained if we stop short at this point of the inquiry? When we have said this, we seem to have got to the *ultima Thule* of our knowledge; whereas, if we could trace the disease to that source, we should then be only on the threshold of the inquiry.

But, failing any knowledge in this direction, it is assumed by the advocates of the blood theory that the argument is sustained by referring to the organisation of the individual, and showing that, in the same family, more than one member has been afflicted with it, or that even the parents or the grandparents of the patients were its victims; and hence has arisen the notion of its being an hereditary blood-disease; and further, that, in one member of the family, phthisis appears, whilst others present evidences of scrofula; and hence the further notion that there is a diathesis or system which affects others than consumptive patients, and may be described by a generic term as that of the tubercular diathesis.

Now, it may be readily admitted that there is a sort of community of organisation in families, and that the parents communicate a part of themselves to the child; and hence, that there may be a parity in the parents and the children, *inter se*, as to the degree and kind of health which they may have, and consequently as to the predisposition to disease which may attach to them. But surely it is a speculative refinement which assumes that there is a standard type of health with which individual systems may be compared, but which is yet incapable either of exhibition or definition, and which centres changes from the type of health in the blood, and gives to them the broad term of diseases. There is no blood communicated from the parent to the child; but there is something which carries with it and subsequently obtains the vital principle or the combination of actions which together form what is denominated the living organism. It is manifest that, in the development of the embryo, parts of the organisation are formed anterior to anything which can be correctly called blood, and that the blood and its nature must be due to the vital principle acting through the more early formed organisation; and hence the blood of the child is due directly to the child itself, and only indirectly to its parent. If this be admitted, it would be more logical to refer any general state of the system to the whole organism, rather than to a specific part of it which may seem to play a more prominent, but yet, in fact, a very subordinate part, in it. The expression "blood-disease", from its indefiniteness, may be a convenient one for common parlance, so long as our knowledge is so limited; but it adds nothing to our knowledge, and must not be literally construed to mean a state of the blood which necessarily implies a deposition of a specific morbid matter.

But, in truth, it is more than probable that this notion of hereditary taint, as evidence of parity of disease in parent and children, is much exaggerated in its special application to phthisis. That, on a large scale, any number of individuals should be afflicted with the same or similar diseases, is surely nothing marvellous, when we remember how like men are the one to the other, and how identical they are in the means by which their bodies must be nourished. If it were not for the different circumstances in which men are placed as respects poverty, vice, and their attendant evils, it would rather be a marvel that all had not the same diseases. We do not single out men who may have indigestion, derangement of the liver or other organ constantly in action in the vital processes of the system, or who even may have what is a more general condition of the system—some inflammatory disease. We know that it is highly probable that their fathers and their brethren had similar complants; and we are satisfied, without ascribing any peculiar hereditary state of the blood to them. But in phthisis —a disease afflicting so many persons, that one-tenth of those living die from it alone—cancer, and a few other unknown diseases, we are not content with seeking for their causes in the systems in which the diseases are found, but must attach an essential (not accidental) importance to the blood of their progenitors. I am convinced, from an inquiry which, however, is not yet complete, and also from the investigations of our distinguished colleague, Dr. Walshe (*Report on Phthisis*, pp. 16 *et seq.*), that the notion of hereditary taint, as being especially applicable to phthisis, has been far too highly magnified, and that but in a proportion of cases has there been phthisis or any other of the so called tuberculous or scrofulous diseases in their families. No doubt, in many instances, the parents or the brethren had the disease referred to; and such a fact is apt to impress itself upon the mind, and, in the absence of any clue to unravel the origin of the disease, we may be too apt to attach undue importance to this. Hence I submit that the doctrine of blood-disease has done very little to prove phthisis to be due essentially and chiefly to general causes, as opposed to local conditions; and that, at the most, the term may be permitted to express a certain peculiarity of the general organisation, and not a direct morbid matter obtained from the parent, or held in common by members of the same family. We cannot but attach considerable importance to this question, for a belief in this theory of blood-disease has done much to induce the profession to distrust any instance of the origin of phthisis from temporary and local causes—a distrust which I believe to be unjustifiable, and inimical to the right study of the disease.

So far, then, we may sum up the argument by affirming that the weight of evidence is in favour of a local origin of phthisis, but one probably associated with a condition of the general system, which may either be original or acquired.

[*To be continued.*]

Reviews and Notices.

A MANUAL OF PHYSIOLOGY, INCLUDING PHYSIOLOGICAL ANATOMY. By W. B. CARPENTER, M.D., F.R.S., F.G.S. Third edition, with two hundred illustrations. London: Churchill. 1856.

A MANUAL OF ELEMENTARY CHEMISTRY, THEORETICAL AND PRACTICAL. By GEORGE FOWNES, F.R.S. Sixth edition. Edited by H. BENCE JONES, M.D., F.R.S., and A. W. HOFMANN, Ph.D. London: Churchill. 1856.

A MANUAL OF MATERIA MEDICA AND THERAPEUTICS, including the Preparations of the Pharmacopœias of London, Edinburgh, and Dublin, with other approved Medicines. By J. FORBES ROYLE, M.D., F.R.S. Third edition, revised and enlarged by F. W. HEADLAND, M.D., B.A., F.L.S. London: Churchill. 1856.

PROFESSOR BABBAGE has very philosophically remarked, that the immediate physical prosperity of England is owing to the perfection to which her tools have arrived. Our whole manufacturing and agricultural superiority over other nations lies in this secret. If the ability to turn out good work is dependent upon the suitableness of the instrument to construct, the power of teaching, in the same manner, is in a great measure dependent upon the qualities of the books used for that purpose. Mr. Churchill's Manuals are the tools with which the medical student works; and it must be admitted that more admirable specimens of their kind have never been published. It is no mean thing to produce a good manual: it should treat fully, yet concisely and somewhat familiarly, of its subject; it should not be too large or too small; its type should be clear, and its paper good; and, above all things, as students are not generally too rich, it should be low in price. The manuals before us, forming a portion of Mr. Churchill's celebrated series, more or less combine all these good qualities; and future quidnuncs in medical literature, when they happen, sometime in the middle of the next century, to turn over the pages of Fownes' *Chemistry* or Carpenter's *Physiology*, most certainly will not feel ashamed of the medical authors or publishers of the past.

The *Manual of Physiology*, with its two hundred beautifully printed illustrations, introduces the student into a new world of knowledge. The chain of life, from the highest to the lowest living creatures, is sounded, in order to throw more light upon the highest link of the series—human life. The philosophy of the healthy action of creation should be known by every man who presumes to deal with the ailments of that most complex machine, man. Dr. CARPENTER, in his admirable manual, has treated this subject with great clearness and ability, and in the present edition has added some valuable woodcuts from Professor Ecker's *Icones Physiologicæ*.

FOWNES' *Manual of Chemistry* has been so long a favourite with the schools, that, like good wine, it needs no bush. When we say that the present edition has been revised by Dr. Bence Jones and Professor Hofmann, the medical public will feel assured that it is up to "the last word of science" in this particular branch. In organic chemistry, the latest investigations have been noticed, and such changes in the classification as have been necessitated by the progress of science have been made.

Dr. ROYLE'S *Manual of Materia Medica and Therapeutics* has been revised by Dr. Frederick Headland, a gentleman who has distinguished himself in this branch of medicine. The student will find the new edition an improvement on the last, inasmuch as the history of the cinchona barks and the therapeutical summary have been entirely rewritten.

We heartily trust the sale of these beautiful manuals will repay Mr. Churchill for the great expense he must have incurred in bringing them out. They deserve most thoroughly a great success.

British Medical Journal.

SATURDAY, JANUARY 3RD, 1857.

THE BRITISH MEDICAL JOURNAL.

IN accordance with the vote of the Association, its organ this day assumes the title of the "BRITISH MEDICAL JOURNAL: BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION." With a more comprehensive name, we trust to be able to present to the Associates a Journal more comprehensive than it has hitherto been possible to furnish. We hope that in a few months the many friends of the Association will enable us to carry on with more vigour than before several of the departments of the Journal. As it is not at present thought advisable by the Council to extend the paper every week to the full thirty-two pages, we have done the next best thing in our power, by printing the whole of the Journal in a small type, which enables between two and three pages to be added to its capacity without increasing the number of pages, and, we think it may be added, with benefit to its appearance. The number and variety of the Hospital Reports have proved not the least of the new and interesting features presented to the Associates. It is trusted that this department of the Journal may be made still richer with the help of the hundreds of our Associates allocated to hospitals and dispensaries, whom we would earnestly beg to remember that the strength of the Journal lies in the practical contributions which they only can supply.

OUR WHITE SLAVES.

A LETTER in *The Times* of January 1st, from Jane D. Le Plastrier, a humane milliner of Bond Street, draws timely attention to an evil inflicted upon helpless and sensitive women, for which the fashionable portion of the female world is chiefly to blame. All of our associates who have had any experience among the out-patients of hospitals and dispensaries, must be familiar with the dismal troop of poor young creatures, with an appearance and bearing far superior to the general class of patients who apply at such places for relief. They flow on from year to year with a steady if not an increasing stream, and year by year the medical man sees scores of them drop into eternity, as Mirza, in the Eastern Allegory, watches the travellers drop through the bridge and disappear in the swiftly running stream. Familiarity with suffering, it is true, deadens the public sense to any particular evil, and in course of time we are led to believe that cruelties which occur day by day without remonstrance, must be unavoidable. This patience of wrong is a great misfortune. If we ask ourselves the question, "What is the cause of this ceaseless waste of life? what immutable necessity consigns thousands of young women in this country year by year to the grave?"—the shocking answer is returned, "The dire necessity that a furbelow or a flounce shall be finished at a few hours notice, in order that some old dowager may appear fine at an assembly, or that a blooming belle may appear in her battle field—the ball room—decked in becoming war paint!" We have legislated for the poor women who for centuries were employed in drawing corves of

coal in the deep mines; we have taken the children of the factory workers under our control; and we have justified the interference with free trade in labour, under the plea that parliament should protect those who cannot protect themselves. We say, without fear of contradiction, that the woman who worked like a beast of burden in the deep mine, or the child who sapped its young life plying spindles in the mill when it should have been asleep, were not more to be pitied than the poor milliner working sixteen hours, nay, sometimes, in the height of the season, twenty hours a-day, in the foul workroom; and that the former did not require the interference of the legislature against the hardness of the world one whit more than the latter.

We should be unjust were we to pass a sweeping condemnation upon all women for their inhumanity to one another; but we must confess our experience teaches us that they are much less considerate to their own sex than men are. We do not believe that any miner would work young girls twenty hours a day for weeks, seeing them day by day fading and drooping under such treatment; yet this the fashionable milliners of the metropolis and of all large towns do, apparently without being aware that by so acting they are guilty of manslaughter. These persons *see* the havoc they are committing, and therefore are perhaps the more culpable for allowing it to go on unchecked. They are not, however, the *cause* of it; the cause lies in the supposed exigencies of fashion, which will allow life to be sacrificed rather than appear twice at a dinner party in the same dress; the cause is to be found in the imperious necessities of the boudoir, which command elaborate dresses to be made almost at the clapping of the hands, as in fairy stories, regardless of everything but the gratification of vanity. If the lady saw with her own eyes the misery caused by the tired labour employed upon her charming robe, perhaps she would be thoughtful upon the subject, and would for a season desist; but as she does not, as the milliner interposes between her and the cruel thing to be done, she does not trouble herself more about the matter than to sing, perhaps, amid a crowd of admirers, in the most pathetic and moving manner, Hood's *Song of a Shirt:*

"With fingers weary and worn,
With eyeballs heavy and red,
A woman sat in unwomanly rags
Plying her needle and thread,
Stitch! stitch! stitch!
In poverty, hunger, and dirt,
And still with a voice of dolorous pitch,
Would that its tone could reach the rich!
She sang the Song of the Shirt."

And thus, with an expression of sentiment, but too many of the fair sex, we fear, plaster a wounded conscience, and go on allowing the evil to be done as before. It is one thing, however, to denounce an evil, and another to find a remedy for it. The evil is so great, that we feel the liveliest pleasure in giving publicity to that part of Jane D. Le Plastrier's letter, which aims at the root of it. She says:

"Fashionable milliners and dressmakers are, of course, wholly supported by the ladies of the fashionable world, without whose patronage they could not continue their business. These very ladies, then, who have so much power in their own hands, should pledge themselves to withdraw their patronage from all houses that would not fall into the twelve-hour system—this fact to be ascertained, not from the employer, but by a letter, or form, signed by all the young people, and forwarded (say monthly), either to the Early Closing or Dressmakers' Association. The form might run thus:—

"'To the Committee of, etc.

"'Gentlemen,—We have much pleasure in informing you that our duties during the past month have not exceeded twelve hours per day. We are, etc.'"

This appeal, be it observed, confines itself to asking that poor young creatures shall not be employed in a reeking atmosphere *more* than twelve hours a day—or two above that time which a strong man is asked to labour in the invigorating and fresh air!

The old cry of the impolicy of interfering with the "labour market" will, we know, be raised; but what are the alternatives placed before the delicate girl in her teens? If she does not submit to the hours of the taskmistress, what chance has she of a honest meal? Let the answer come from Jane D. Le Plastrier, who speaks with a knowledge of the business.

"The applications I constantly have from young people leaving these 'workhouses', and the harrowing tales I hear from them, are distressing in the extreme. Two days since, one presented herself in a state of fearful distress, begging me to give her employment. She had lately been dismissed her situation, because, suffering severely in health, she refused to work after 10 P.M.; she sought employment elsewhere, and was engaged, provided her reference suited; but when, in answer to the usual inquiry, 'What was her reason for leaving?' the answer was, 'Because she refused to work our hours,' the unfortunate girl's doom was at once sealed; nor would her employer give her a second reference. Thus was she left to wander the streets almost houseless, and, after her scanty purse was exhausted, quite hungry."

To talk of free trade in labour as applicable to such poor creatures as these, is indeed a shocking mockery. Free trade, indeed! Yes, a free trade which allows its poor victims only one alternative from the most grinding slavery—and that is pollution! It is well known that the milliners and dressmakers are the fertile sources which feed prostitution in all large towns, and can we wonder at it, when we see the horrible straits they are subjected to before submitting to further degradation. We know full well that—

"Sorrow is wrought by want of thought,
As well as by want of heart;"

and for that reason we trust that the medical portion of the public will do its best to indoctrinate the female portion of the community with the magnitude of the evil they are working by shutting their eyes to the commonest dictates of humanity. We must endeavour to awaken dormant consciences to a consideration of the diseases engendered, and of the deformity produced, by the demands of fashion—unshackled by consideration or pity. Few ladies would, we think, be so thoughtless of the health of the poor slaving milliners, if they clearly saw, as poor Hood did, that in their hard night labours in producing finery they are—

"Sewing at once with a double thread,
A shroud as well as a '*gown*.'"

THE WEEK.

Among the last of those occupying a distinguished place in our profession, who were removed by death during the past year, was Dr. John Ayrton Paris, the respected President of the Royal College of Physicians. Dr. Paris had held the office during twelve years, having been elected to it in the year 1844, on the death of Sir Henry Halford; and it is not too much to say, even at this early period, that his conduct was uniformly that

of a gentleman, mindful alike of his own responsibility and of the honour and interests of the learned body at whose head he was placed. He appears to have been less known as the practical than as the learned physician: for, while his only public appointment was that of physician to the Westminster Hospital for a short period about half a century ago, and while many names stand before his as men of practice, his classical knowledge was well known, and the several works which he put forth bear strong testimony to his erudition. Beyond the usually recognised limits of the profession, too, Dr. Paris was not unknown. He was the founder, while residing in the early part of his career at Penzance, of the Geological Society of Cornwall; he also invented the "tamping bar", an instrument which has doubtless saved the life of many a Cornish miner. And his desire for the general diffusion of scientific knowledge has since his death received abundant proof, in the announcement of the fact that he was the author of the popular work, *Philosophy in Sport*. The *incognito* which he preserved with respect to this work is not very explicable; yet an explanation may occur to the minds of those who know how slow the public are in recognising the fact, that the duties of the physician and of the promoter of general knowledge are other than incompatible. A longer interval than has already passed must elapse before the biographer of Dr. Paris shall be able to perform his task with justice and impartiality; but when that task is undertaken, there is little fear but that, while there will be doubtless events to be recorded which will require the exercise of charity, his reputation will stand well, as of one whose life has not been unprofitable to mankind, and whose conduct may be safely held up as an example to his successors.

The somewhat sudden death of Dr. Paris leaves the College of Physicians under rather peculiar circumstances. The new President must be selected from the body of the Elects. The Elects are self-elected, and they are also the electors of the President. The election of a Doge or Pope is the only analogous proceeding we have ever heard of. No addition can be made to the number of the Elects until after the election of a new President; and, at present, we believe the number has dwindled down to seven only. Of these, some are octogenarians or nonagenarians, and others have retired altogether from professional life. The candidates spoken of as likely to succeed Dr. Paris are, Dr. Alderson the Treasurer of the College, and Dr. F. Hawkins the Registrar, who are both Elects. Dr. Paris himself, before his decease, selected Dr. Alderson to officiate as President during his short illness, and in this capacity he received the Reform deputation of our Association. This accomplished physician will probably be the new President.

The police reports in the *Times* of Wednesday last contain an account of a case heard before Mr. Hammill at the Worship Street Court, in which Dr. J. M. Winn, a well known physician, residing in Finsbury Square, was charged, in conjunction with his servant, Thompson Finley, with committing a violent assault on Mr. Mark Benjamin Benham, a gentleman residing in the same house with the defendants. Dr. Winn appeared in court with one of his eyes much contused; and Mr. Benham's head was bandaged, he having received two wounds. The charge made was, that Dr. Winn had, on the previous night, rushed upon and struck Mr. Benham while the latter gentleman was retiring to bed; and that he had called to his aid his servant, who followed up the assault by striking Mr. Benham several blows on the head with a poker. The magistrate sent the case to the sessions, admitting Dr. Winn to bail, himself in £500, and two sureties in £250 each. It came out in evidence, on the admission of the prosecutor himself, that he had applied the epithet "swindler" to Dr. Winn. If this be the fact, Dr. Winn received an amount of provocation which no man could be expected to bear quietly; but we fear that his indignation must have been too strong for his prudence, when he permitted his servant to chastise his adversary with a poker. As all the circumstances attending the case are probably not yet known, further comment would be premature.

Another case of Poisoning by Mistake has occurred this week. On Tuesday last, Mr. Wakley commenced an inquiry respecting the death of Mr. William Marcooly, aged 36, a master tailor, residing in Brompton, who died on Saturday morning, shortly after having taken a dose of what had been sold as castor oil at the shop of Mr. Budd, a chemist. From the evidence of the servants of the deceased, it appeared that he had sent for an ounce of castor oil. Through some error on the part of the assistant who furnished the oil, which has not yet been clearly explained, a quantity of hydrocyanic acid (about two drachms) was mixed with the castor oil. The only circumstance which can as yet throw any light on the matter is, that the prescription, entered on Mr. Budd's book immediately after the sale of the castor oil, contained hydrocyanic acid; but whether the assistant was attempting to fill the two bottles at once, and thus committed the fatal mistake, is not clear. The inquest was adjourned.

The Suicide of Mr. Hugh Miller, of Edinburgh, in the midst of his literary labours, should have engaged our attention this week, but we are obliged for want of space to defer our remarks upon the subject until the next number.

Association Intelligence.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of the Birmingham and Midland Counties Branch was held at Dee's Royal Hotel, Birmingham, on December 11th, 1856. S. J. Jeaffreson, M.B., President, in the Chair.

There were also present:—A. Alcock, Esq. (Smethwick); Edwin Bartleet, Esq. (Birmingham); Pye Chavasse, Esq., (Birmingham); E. H. Coleman, Esq. (Wolverhampton); J. Davies, Esq. (Dudley Port); J. Fraser, M.D. (Wolverhampton); Dr. Fraser (10th Hussars); H. Hancox, M.D. (Wolverhampton); J. H. Houghton, Esq. (Dudley); W. Hinds, M.D. (Birmingham); E. Jackson, M.D. (Handsworth); G. Jones, Esq. (Birmingham); J. W. Keyworth, M.D. (Birmingham); W. J. Kite, Esq. (West Bromwich); C. T. Male, Esq. (West Bromwich); J. B. Melson, M.D. (Birmingham); G. H. Marshall, Esq. (Birmingham); W. C. Orford, Esq. (Birmingham); Oliver Pemberton, Esq. (Birmingham); A. B. Rye, Esq. (Banbury); J. Simons, Esq. (Birmingham); J. V. Solomon, Esq. (Birmingham); W. H. Sproston, Esq. (Birmingham); T. Swain, Esq. (Birmingham); Spencer Thomson, M.D. (Burton-on-Trent); C. Warden, M.D. (Birmingham); W. Willington, M.D. (Handsworth); Watkin Williams, Esq. (Birmingham); and George Yates, Esq. (Birmingham).

NEW MEMBERS.

Dr. Fraser of the 10th Hussars, and Mr. Hopkins of Handsworth, were unanimously elected members of the Branch.

TREASURER'S REPORT.

Mr. W. Williams read the report of the Treasurer of the Entertainment Fund for the recent meeting of the Association in Birmingham. It was resolved:—

"That the same be received, adopted, and entered on the minutes."

THE METHODUS MEDENDI OF THE ANCIENTS. BY A. B. RYE, ESQ.

Dr. Melson regretted that the author of the paper had not favoured the meeting by a more particular reference to the views of the ancient authorities in medicine, as well as in surgery; especially in regard to what might be termed natural medicine; for the ancients paid more attention to sanitary influences than was even paid in the present day. He trusted that a subject so interesting might be resumed at a future period.

Mr. Rye stated that his object in bringing the subject forward was rather to elicit the remarks of the meeting in regard to the question generally. He was pleased to find it one likely to prove still more interesting; and he would hope to renew the discussion on another occasion.

DISEASE OF THE SUPRARENAL CAPSULES. BY S. J. JEAFFRESON, M.B.

[This paper will be published in the Journal.]

Dr. Spencer Thomson remarked that it was important to notice the states of the conjunctiva and urine in disease of the suprarenal capsules accompanied by bronzed skin. He was not aware of any case of icterus having occurred without discoloration of the urine. In the *post mortem* examination of these cases, he believed that very frequent adhesions of the serous membranes were noticed.

Mr. Solomon said that the state of the conjunctiva, as described by Dr. Addison, was borne out by the narration of its appearance in Dr. Jeaffreson's cases. He should like to know whether the ordinary anæmic murmurs were audible in these cases.

Mr. Yates alluded to the fact of its being affirmed that there may be disease of the suprarenal capsules without any discoloration of the skin. In a case under his own observation, the suprarenal capsule in a diseased state weighed many pounds, yet there was no discoloration of the skin.

Dr. Hinds considered that Dr. Jeaffreson's cases failed to connect bronzing of the skin with disease of the suprarenal capsules. The mere fact of a change in colour of the skin amounted to nothing, as it was so frequent an accompaniment of organic disease.

Dr. Melson narrated a case in which a tumour was removed, in connexion with a diseased state of the suprarenal capsule, weighing upwards of two pounds. During life, there had been observed a pearly colour of the skin and conjunctiva. The family of the patient were eminently scrofulous.

Mr. Oliver Pemberton drew attention to the peculiar discolorations of the skin that were so constantly observable in certain forms of malignant disease, especially the melanotic variety, which not only affected the patient by its special deposits, but by a characteristic tinging of the entire surface. He had possessed the opportunity of observing the remarkable colour of the skin—a pearly white—which was present, accompanied also by anæmia, in cases where the *post mortem* examination revealed alterations in the size and character of the pancreas. This colour of the skin and the presence of anæmia were, in his experience, always present in pancreatic disease.

Mr. Houghton observed that, in our investigations for the further elucidation of the subject, it must be always borne in mind that an anæmic condition, with the peculiar discoloration of the skin described, were the two points said to be connected with disease of the suprarenal capsules by Dr. Addison.

Dr. Jeaffreson, in reply, said that his only object in bringing forward these cases was to show that he had observed their peculiarities previous to Dr. Addison's publication. This disease must always be studied in connexion with anæmia as well as colour. He had not heard any anæmic murmurs in his cases.

CASE OF BLIGHTED FŒTUS. BY J. SIMONS, ESQ.

Mr. Simons exhibited a remarkable specimen of a blighted fœtus, and narrated the following history of the patient from whom it had been passed.

Mrs. B., aged 25, a pale and delicate looking woman, was first confined on August 3rd, 1854, and again on August 24th, 1855, on the latter occasion of twins, prematurely, about the eighth month. The third confinement came on very suddenly when at her work, and again prematurely, about the eighth month, on December 5th, 1856. The labour was natural, quick, and nothing remarkable occurred. Upon making a final examination after the expulsion of the placenta, a hard solid mass, feeling like a tumour, was found engaged in the mouth of the uterus. Upon pressing the uterus externally, this substance was expelled; it proved to be a blighted fœtus, with the placenta and membranes entire, appearing to have been separated about the third month. The whole mass was blanched and flattened. Upon opening the membranes, they contained about one ounce of liquor amnii, and a perfectly formed fœtus (a female), which was quite flat, of about the thickness of a pennypiece, and, like the rest of the mass, quite blanched. It was attached to the placenta by the funis. The placenta was of a cartilaginous hardness, and compressed into an uniform thickness of about half an inch. Though the whole mass had been compressed for the last five months of pregnancy between the living contents of the uterus and the uterine walls, there was no evidence of any decomposition either in appearance or smell. The child born, was weakly, and lived two days. The mother, who assists her husband in a pork shop, has been actively engaged during her pregnancy, and in the habit of lifting heavy weights, and resting them against the abdomen. She recollects that when gone about three months, she one day felt a sudden pain in the belly; she applied to Mr. Simons' assistant, Mr. Dawson, who gave her some medicines. She continued in pain, more or less (fearing a miscarriage), for a week, when it went off, and she followed her usual occupation, without anything further remarkable, until taken in labour on December 5th, 1856.

Reports of Societies.

ROYAL INSTITUTION, MANCHESTER.

Medical Section.

OPERATION IN A CASE OF IMPERFORATE ANUS. BY JAMES MILLER, ESQ.

Summary.—*Operation for imperforate anus in a case in which the rectum terminated in the bladder, and the meconium passed by the urethra. Subsequent formation of a very large alvo-urinary calculus in the rectum: its removal and chemical analysis. The patient, now nearly 36 years of age, is perfectly free from every inconvenience, except the occasional passage of some urine per anum, there being no difficulty in controlling the fæces, etc.*

Mr. Miller, of Manchester, drew the attention of the Medical Section to the case of T. M., upon whom he operated in 1821 for imperforate anus. Some of the particulars of this case were communicated by Mr. Miller (through Mr. Liston) in 1829 to the *Edinburgh Medical and Surgical Journal;* he has obtained additional particulars of importance, bringing the history of the patient down to the present time. He delivered a Mrs. M. of a healthy looking male infant in January 1821. In thirty hours after birth it was discovered that the child had neither an anus nor the slightest mark of its situation. The meconium was passing *per urethram.* Mr. Miller made an incision in the usual situation of the anus, about an inch in length and as much in depth, and then he thrust in a large trocar (used for paracentesis abdominis), with which, at the second attempt, the rectum was penetrated, and a free passage given to the fæces. The trocar had to be passed up to its hilt. The usual difficulties were experienced in keeping open the aperture, and it had to be reopened with a bistoury ten times before the child was eight months old. When he began to walk, he had a strange propensity to eat cinders, which stuck in the rectum and rendered frequent operations necessary. In the last operation for that purpose, it was requisite to turn the edge of the bistoury forwards to divide the stricture, and in doing this the bladder was slightly wounded, and ever since a portion of the urine has been discharged by the anus, though the greater part has come regularly by the urethra. Under the use of laxatives and frequent purgative clysters he throve as other boys. When he was about four years old, his mother was sensible of some hard substance occasionally opposing the introduction of the clyster pipe, but, through fear of further operations being necessary, she concealed this knowledge from Mr. Miller, and allowed the difficulty to increase during the three following years, till at length there was complete obstruction of the bowels with exces-

sive suffering. It was then discovered that a calculous concretion of very large size was impacted in the rectum. The anus being so small as to admit of a goose-quill only, Mr. Miller enlarged it till he could pass his finger, when he found that the concretion was so large as to almost fill the hollow of the sacrum. Being also of a stony hardness, it was obvious that it could be brought away only in fragments. A drill was accordingly constructed, and a few drill bits, to make a bore of from one-fourth to five-eighths of an inch in diameter; and in order to fix the stone whilst being drilled, a pair of forceps with separate blades was made, which were screwed together after they had been introduced. The anus was then enlarged as far backwards and forwards as possible by incisions, and the stone drilled in different directions until considerable openings were made. A pair of strong polypus forceps were then thrust into the openings, and the blades being forcibly separated by extending the handles, the calculus gave way and was separated into three pieces; each of which had in its turn to be drilled and broken in the same way before it could be extracted. The whole operation lasted not less than two hours and three quarters. Every particle of sand was washed out of the cavity formed by the concretion, and the patient was put to bed. In ten days he was able to go out, and the anus was reduced to its natural dimensions; the power of the sphincter ani being complete. The stone was of the size of a very large turkey's egg, very hard and rough in its external texture, and seemingly composed of earthy matters. The interior, however, was found to be of the texture and appearance of bowel concretions, and had formed around a hard nucleus. A portion of it was sent for examination to Professor Christison, the details of whose analysis are given in the *Edinburgh Medical and Surgical Journal*, vol. xxxi, p. 65, along with a more detailed narrative of the early history of this remarkable case. The nucleus was a rolled pebble of primitive greenstone, of about the size of a large pea; the next stratum consisted of the fibrils of the pencil of the oat, interspersed with a few amorphous fragments of the earthy matter of the outer crust. The outer crust consisted of a little animal matter, a trace of carbonate of lime, but chiefly of the phosphate of magnesia and ammonia; "the matter of fusible calculus being probably thrown down from the urine, when its acidity was lost on its mingling with the alkaline contents of the rectum."

Dr. Christison refers to a calculus of similar constituents mentioned by Dr. Marcet (*On Calculous Disorders*, second edition, 1819, p. 135), who says it was about the size of a walnut, and that it was found in the rectum of an infant born with an imperforated anus, but in whom there appeared to be a communication between the rectum and the urinary bladder. Mr. Miller left Methven, and settled in Manchester many years ago, and had lost sight of this patient; when, hearing of two cases of imperforate anus (in one of which the rectum terminated in the bladder), which were not operated on from a conviction that such a proceeding would be useless, he made inquiries respecting his former patient, and found that he was alive. He had an interview with him during the last three months. He enjoys robust health, has had hardly any complaint since the stone was extracted; and is now an active and energetic farmer in the neighbourhood of Dundee. When he was about twelve years of age, he says he passed with his alvine evacuations a second stone, which was smooth and about the size of a walnut. He passed it without pain, but it has been lost. In answer to inquiries regarding the functions of the anus and bladder, the replies were most conclusive as to his perfect control over the fæces and flatus. His fæces are natural in form and in appearance, and he believes that no one can have a more perfect control over the anus. This case is mentioned by Mr. S. Cooper (*Dictionary of Surgery*, 1838, p. 210), as a "highly interesting one." The interest must be greatly increased by the addition of the subsequent history of the patient, and it may be regarded as one of the most interesting in the annals of surgery. Without operative interference the patient must inevitably have died. But the great interest of it consists in the answer which it affords to the question,—"When there is no trace of the anus externally, does the sphincter exist, and if so, can its functions be preserved by the artificial opening?" (*British and Foreign Review*, vol. xviii, p. 455.) It proves that under these most unpromising circumstances the child may be not only rescued from death, but receive what may be considered to be a perfect cure; and it holds out hope that surgery may be eminently successful in cases which at the present day are often considered to be quite hopeless.

Editor's Letter Box.

THE SPINAL AND GENERAL ORTHOPÆDIC ASSOCIATION.

LETTER FROM JOSEPH AMESBURY, ESQ.

SIR,—My attention has been drawn to some remarks upon The Spinal and General Orthopædic Association, which appear in the ASSOCIATION MEDICAL JOURNAL of December 13th. Of the jocose spirit in which your remarks are made, I have no reason to complain, as you have a perfect right to amuse your readers in such manner as you conceive to be best suited to their tastes; but that you should garble extracts from the prospectuses of the views and objects of the association, and then apply to them unbecoming epithets, is, I submit, exceeding the bounds of independent journalism.

That your readers may have an opportunity of fairly judging of the spirit in which the enterprise has been conceived, and the objects of its promoters, I beg the favour of your inserting this explanation.

The experience I have had,—and I think in this particular my view will be confirmed by every orthopædic surgeon in extensive practice,—leads me to believe that the number of cases of spinal and other deformities of every kind is rather under than over stated in the prospectuses issued by the association; but, however this may be, it cannot be denied that they are to be met with in great numbers in every class of society in every district of the kingdom.

In an extensive practice I have had constantly presented to me the difficulties which the general practitioner meets with in dealing with this class of cases, and that they are, perhaps, of all others, the most fitted for special and exclusive treatment. In the majority of cases the patients are not suffering from disease, or labouring under sickness, such as is the peculiar province of the general practitioner to combat. The subjects of these complaints are simply deformed, or are suffering from some local stiffness or muscular weakness, and the medical attendant is called upon to render that assistance which shall alleviate their distressing condition. Unless he has devoted much attention to the treatment of these cases, and has had an extensive experience, the only aid he is able to render is that of handing his patient over to the instrument maker, and afterwards of inspecting the apparatus supplied, and, to the best of his ability, seeing to its application. That such a course of treatment most commonly fails, I have had abundant experience, as also that it is most earnestly desired by the general medical practitioner that some means should be devised whereby the medical attendant may obtain for his patient the best aid and most efficient treatment without encroaching upon *his* prerogative.

With the twofold object of rendering this aid to the general medical practitioner, and of affording to the public increased facilities suited to their various circumstances, for the treatment and cure of these complaints, the Spinal and General Orthopædic Association has been instituted.

Establishments of an entirely private character will be provided in such localities as the future demands and the convenience of the public and medical practitioners may determine.

The medical staff,—consisting of "consulting physician," "consulting surgeon," "surgeons," and "assistant-surgeons,"—will take the charge and care of the patients under treatment, whether they are residents, or attend only as occasion may require, or are under the care of their family medical adviser.

The general medical practitioners who join the association will be associated with the medical staff as district surgeons; and, when their patients are under their own immediate care, they will have the advice, experience, and assistance of the medical staff of the association as circumstances may require.

The charges will be definite, and arranged so as to meet the requirements of each class of patients.

To carry out these objects, incorporation of the association, under the 19th and 20th Vict., cap. 47, has been obtained, and especially for two reasons: first, because the powers of that act give many of the advantages and privileges of a royal charter, and invest the rules and regulations under which the association is to be conducted with the force and power of legal enactments; and second, because the liability of those who may furnish the funds requisite to carry the project out is thereby limited to the amount of their subscriptions.

That such an association, thus honestly conceived, can, with

any show of justice, be designated a "joint stock company" with "cold blooded" feelings, or that to speak of its objects as philanthropic is "simply shocking," or that the "entire scheme is repulsive," I confidently leave to the determination of the less prejudiced and more enlightened of your readers.

I am, etc., Joseph Amesbury.

26, Fitzroy Square, December 16th, 1856.

[We have given insertion to Mr. Amesbury's letter in the spirit of fair play; but we must say that it has not removed in the slightest degree our repugnance to his scheme. Mr. Amesbury objects to our calling his association "a joint stock company"; but is it not a joint stock company (with limited liability) in every sense of the word? Is not that "a cold blooded scheme" which holds out to its shareholders a chance of six per cent., to be made, be it remembered, out of the contorted spines and twisted arms of the community? Such a scheme, we repeat, is entirely repugnant to good taste. Editor.]

ENCOURAGEMENT OF HOMŒOPATHY BY LEGITIMATE PRACTITIONERS.

Letter from A. G. Field, Esq.

Sir,—I trust I may, without appearing presumptuous, offer a few remarks on a letter in the Association Medical Journal for December 13th, from Mr. J. R. Humphreys, on "the encouragement of homœopathy by legitimate practitioners." It is no business of mine to defend Mr. Long, whom I know only by reputation, but I seek to uphold a principle.

The statements of the writer extend to this: that Mr. Long was summoned to a patient, and he went to see him, though a homœopath was in attendance. That Mr. Long consulted with the homœopath is stated with less confidence, for your correspondent qualifies this part of his statement with "so I am informed," and "I suppose." Now, I most freely admit it to be not only unwise to attempt, but absolutely impossible, without a degrading compromise, for a medical practitioner to meet a homœopath in consultation; but I do think there is here but slender ground on which to condemn a surgeon, and one occupying the position of Mr. Long. I cannot think it either wise or just to ourselves or him thus to conclude a gentleman sanctions that which he doubtless condemns as much as we do. Surely we often err through excess of zeal. Our business is not to quarrel with homœopathy, but to cure disease; not to call silly names, which can be as easily retorted, but to show by our conduct that we are above their influence. No one can be more fully persuaded in his own mind that homœopathy is a delusion than myself; but were I sent for by any patient, whatever delusion he had indulged in, I should certainly go, and if I found his room filled with homœopaths (though I would not consult with them), I would decidedly use what skill I possessed to relieve the patient; and if he refused to act on my recommendations, which assuredly would have no reference to globules or infinitesimal doses, I should then retire. Can any one say that by so acting I sacrifice the honour or dignity of my calling?

While on this subject, permit me to say that I think some of the arguments we are in the habit of using against this very palpable error, homœopathy, are rather calculated to injure than strengthen our own good cause. We frequently hear overzealous defenders of that which requires no defence, or rather, assailants of that which is beneath attack, declare the system of Hahnemann to be absurd. Are not many things which we know to be true, to reason most absurd? Such are the preservative effects of vaccination, and the immunity which the system acquires from future attacks by once being subjected to the influence of many other diseases. Why should we trouble ourselves by attempting to disprove that which we know to be untrue? It is not true; what need of argument with this conviction?

It has often struck me that much of the intemperate violence which is so frequently exhibited against this shadow arises from the assumption of a false position by some of our profession, from an imaginary right which we claim in the public. Surely there is no such right in existence. As a body, we have no place till each one gains it by his individual character and excellence. A few days ago, I heard a physician state that he never could make a certain clergyman understand our position with regard to homœopathy till he asked him how he would like a Romish priest to take possession of his pulpit. But what analogy is there between our own position and that of the clergy? Where is the pulpit or the place of the practitioner of medicine, till each individual has made one by his own qualifications?

I would then, sir, submit that we refrain from argument against that which is not a fair subject of discussion, because it is not an entity; that we refrain from abuse, for it is undignified; and by using it we present those whom we raise to be opponents with weapons wherewith to injure us, for they can abuse as well as we. Abuse is always a bad weapon, and does, "like a dog that is compelled to fight, snatch at his master that doth tarre him on." Those who are wise amongst the homœopaths, wiser in their generation than some of us, abstain from abuse,—a fact pregnant with instruction.

I would, with great deference, recommend a course which I have always found to answer well. I have made known to those homœopaths whom I know that I shall attend to every summons from a patient, and that if they are present when I go, they will be regarded by me simply as friends of the patient; and though it has repeatedly been my lot to attend those who were under homœopathic treatment, I never yet saw a homœopathic practitioner in a sick room, and I never yet had any difficulty in getting a patient to submit to legitimate physic, because they knew that my attendance would immediately cease if they did not act on my advice. I do not think that any of my patients ever took globules during my attendance; but if they had, I should not trouble myself about it till I thought they required real physic, when, if they refused, my responsibility would cease, and I should retire. I trust the profession of medicine has not suffered any degradation at my hands in this particular.

I cannot help thinking, in common with many others, that there is a strong tendency in some zealous and most well-meaning people to force those of us who feel as strong an attachment to legitimate science as they, but who think it wiser to refrain from active hostility and declamation, to appear to belong to the ranks of our opponents. The domain of real science does not need defence. *Magna est veritas et prevalebit.*

I beg your pardon for thus trespassing on your space. In reference to the case which led to these remarks, it appeared to me unwise to deduce conclusions which the statement of your correspondent scarcely warrants. I, of course, cannot say that Mr. Long did not consult with the heterodox practitioner. If he did, I, for one, should say he did wrong; but at the same time I should think he erred if he refused his services when they were required by a patient, be that patient never so deluded.

I am, etc., A. G. Field, F.R.C.S.

28, Old Steine, Brighton, December 16th, 1856.

INTESTINAL OBSTRUCTION FROM GALL-STONE.

Letter from S. H. Swayne, Esq.

Sir,—In the "Periscope" of the Journal (Dec. 13, 1856) is a notice of a communication from Dr. Marrotte to the Medical Society of the Paris Hospitals, "on intestinal obstruction from gall-stone", in which it is stated that he observed that "only five cases of the kind had been recorded by M. Fauconneau-Dufresne, occurring in the practices respectively of Drs. Mayo, Monod, Renaut and Reignier, Broussais, and Puyroyer." Lower down, it is remarked that in Mr. Joseph Hinton's paper "on Intestinal Obstruction", in the Association Journal for May 7th (a mistake for May 20th), 1853, we find reference to three other cases, one published by Dr. Abercrombie, and two by Dr. Oke."

Some years since (probably twelve) I saw a case of the kind which occurred in the practice of my father, the late Mr. J. C. Swayne. The patient was a male, aged about 60, who, with the exception of some stomach disorder, had enjoyed tolerable health until this his last illness. The symptoms were those of internal strangulation, stercoraceous vomiting, etc. Treatment (chiefly purgatives, large enemata, and sedatives) proving ineffectual, he sank exhausted. A biliary calculus, of the size of a walnut, was found closely impacted in the small intestine near the ileo-cæcal valve. The calculus had passed into the bowel by an ulcerated opening through the adherent gall-bladder. Had I been aware that such cases are so rare, I should have earlier recorded the above.

I am, etc.,

S. H. Swayne.

Berkeley Square, Bristol, Dec. 17th, 1856.

BLACK DROP OR ANODYNE TINCTURE.

Letter from Thomas Radford, M.D.

Sir,—The preparation which was called "Black Drop or Anodyne Tincture", and for which I now send you a copy of the receipt, is a medicine which at one time was highly appreciated by those who had taken it; and I have good authority for saying, from documents in my possession, that it was formerly very extensively used, and by the leading statesmen of the day.

The Right Hon. William Pitt was in the regular habit of taking it to procure sleep after his parliamentary exertions. The Right Hon. Charles James Fox and Earl Bathurst also had frequent recourse to its use.

You have, no doubt, heard of a preparation called "Quakers' or Lancaster Black Drop"; but that prepared according to the following formula was generally preferred by those who had taken both. The opinion of those who had habitually taken it was, that it composed nervous irritability, produced comfortable sleep, without leaving any disagreeable headache, etc. Now that we have different preparations of opium—as the muriate and acetate of morphia, and Battley's liquor opii sedativus—this may not be so valued; but your readers have now an opportunity of making trial of it if they think proper.

This receipt formerly, and as far as I am acquainted originally, belonged to a highly respectable medical family—the Halls; who gave it to the late Mr. William Wood.

I had lost it (which was the cause of my not laying it sooner before the profession); but in turning over some papers, I found it; and now send you a *verbatim* copy, to be inserted in our Journal, if you consider it worthy of a place.

I am, etc. Thomas Radford.

Manchester, December 19th, 1856.

"Take opium in thin slices, four ounces; fresh juice of quinces or good verjuice, four pints; let them digest together cold for three weeks, and then add cloves, nutmegs, and cinnamon, each one ounce, grossly powdered: digest again for a week, and on the beginning of the last day add an ounce of saffron; after this, strain or filter, and evaporate in a gentle heat to the consistence of syrup.

"N.B. About half a pound of coarse brown sugar, or sugar-candy, added to the above, helps to thicken the drop, and renders it less disagreeable to the patient."

The following notice was put on the bottle:—"N.B. One drop is equal to three of laudanum."

UNCERTAIN ACTION OF CANNABIS INDICA.

Letter from T. Hayes Jackson, M.D.

Sir,—In August of the present year, early in the morning, I was called in to Mrs. ——, threatened with premature labour. It was her seventh month of pregnancy. On examination, I found the os dilated to the size of a shilling, and uterine pains occurring every five minutes.

Desirous of suspending uterine action, I left three pills, each containing a quarter of a grain of morphia, one to be taken every two or three hours, if the pains continued. When I saw her at 11 A.M. the same day, I found that, though relieved by the morphia, the pains had not ceased.

Mrs.—— having previously had *four* premature confinements, I was anxious to suspend the uterine action entirely; and finding my patient quite able to bear the morphia, I ordered the following mixture, to be taken five hours after the last pill:

℞ Tincturæ cannabis Indicæ ʒij; spiritûs ætheris nitrici ʒij; misturæ camphor. ad ℥vj. M. Fiat mistura cujus sumatur ℥j tertiâ quàque horâ.

Shortly after taking the first dose of the above, Mrs. —— declared herself most comfortable, and free from pain. Half an hour afterwards, however, she stretched herself at full length, under a feeling of approaching dissolution, accompanied with faintness, stiffness in the throat and neck, muscular twitching of the nose and face, tinnitus aurium, and severe palpitation. Her pulse, small and intermitting, ranged between 100 and 120, while giddiness in the head, stiffness of the tongue, difficulty of articulation, a tingling sensation all over the body, especially in the tips of the fingers, severe vomiting, with eructations, every five minutes, continued for two hours and a half, accompanied by burning heat in the stomach and face. During this time, the body was bedewed with cold perspiration, the pupils of the eyes being alternately dilated and contracted, but the intellect perfectly clear. Such being the symptoms at my second visit, I was afraid that my patient was about to "quit this mortal coil." After the time I have mentioned, however, the symptoms began gradually to subside, and the next morning she was convalescent, nothing remaining except a little giddiness. She progressed to her ninth month, and in October was delivered of a child still living. The uterine pains never returned after the first dose of the cannabis.

I may state, that twenty minims of the tincture contained one grain of the extract. Dr. Garrod gives the dose of the tincture as from six to thirty minims; while Dr. Neligan states it as from twenty to sixty, to be frequently repeated till the desired effect is produced; his dose of the extract varied between two-thirds of a grain to four or five grains. In the East, from half a grain to one grain and a half is commonly given. Not to multiply authorities unnecessarily, Dr. Christison prescribes the alcoholic extract, as a hypnotic, anodyne, and antispasmodic, in quantities varying between two and five grains; the tincture in doses from fifteen to forty drops. Dr. Pereira orders the alcoholic extract in doses of from one to five grains; the tincture in quantities varying from ten to sixty minims.

An account of cannabis will be found at p. 790 of the valuable work of Dr. Taylor on *Poisons*. I am, etc.,

Thos. Hayes Jackson.

Darlington, Dec. 22, 1856.

POOR-LAW MEDICAL REFORM.

Letter from F. J. Brown, M.D.

Sir,—Permit me to suggest to Mr. Griffin and his colleagues the propriety of enlisting the medical students in the cause of Poor-law Medical Reform. By this means the axe will be laid to the root of the tree. The course that I advise is, to send a short statement to each medical school, which could be posted upon the notice-boards of the school; to accompany the statement with a letter to each teacher or professor. The students ought to be informed of the true nature of the Poor-law appointments, and their teachers should indoctrinate them with an *esprit de corps* that would prove sufficiently powerful to restrain them, in after-life, from underbidding one another.

I am, etc., Fred. James Brown.

Chatham, Kent, December 30th, 1856.

PAYMENT OF MEDICAL WITNESSES.

Letter from Joseph Godden, Esq.

Sir,—I beg to bring before the members of our Association the unjust law bearing upon us, as perhaps it may be the means of finding a remedy for it, or, at all events, it ought not to be overlooked in the formation of the New Medical Reform Bill promised this session.

"No fee is payable to a medical witness for evidence given at a police office, unless the offender be committed for trial."

I received a summons to attend the Birkenhead police court, and as I have not been able to get my fee, I wrote to the Home Secretary. I subjoin my letter, with the reply, which I received on December 5. Within the last two months I know of five medical men who have been served in the same way as myself at Birkenhead, and yet there seems to be no chance of redress. Can you, or any of the readers of the Journal, point out any means whereby it can be obtained? If so, be kind enough to publish it in a future number, as there is no knowing what trouble, inconvenience, and loss we may have to encounter.

I am, etc., Joseph Godden.

Oxton, Cheshire, Dec. 29th, 1856.

To the Right Hon. Sir George Grey, *Secretary of State for the Home Department.*

Sir,—As a medical practitioner, residing at Oxton, Cheshire, having been called by magistrate's summons to attend the police court, Birkenhead, in an assault case, on the 13th day of November, Jones *v.* Harrison. After I had been there detained the whole forenoon of that day, the case was dismissed, and on my applying to the magistrates for my fee, I was told it should be sent to me on a future day. I called at the office on the 28th ult., and was told by Mr. Drew, the clerk to the magistrates (and I read a letter he had received from the clerk of arraigns at Chester), that, for the future, medical men were only to receive the same amount of remuneration as common witnesses, viz., 2*s.* 6*d.* per day, and that only in cases sent for trial. I was then told nothing could be allowed me. I live two miles from Birkenhead, and it cost me money to go and

return, and I appeal to you, sir, and ask if this act of injustice is to be allowed to be carried out. Trusting you will deign to notice this matter and give it your best consideration,

I have the honour, etc., Joseph Godden.

Oxton, Cheshire, December, 2nd, 1856.

Reply. Whitehall.

Sir,—I am directed by the Secretary, Sir George Grey, to acknowledge the receipt of your letter of the 2nd inst., and to inform you that the Secretary of State has no power to interfere in the matter of your claim for an allowance as a medical witness in the case to which you refer. I am, etc.,

H. Waddington.

J. Godden, Esq.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Barker, Alfred J., Esq., Surgeon, of Upper Holloway, the wife of—a daughter—on December 27th, 1856.

Everest, George, M.D., H.M.S. *Highflyer*, the wife of—a son—at Margate, on December 27th, 1856.

*Fentem, Thomas, Esq., Surgeon, of Eyam, Derbyshire, the wife of—a son—on December 26th, 1856.

Frere, R. Temple, M.D., of Queen Street, May Fair, the wife of—a daughter—on December 27th, 1856.

Grove, John, Esq., Surgeon, of Wandsworth, the wife of—a daughter, stillborn—on December 29th, 1856.

Larkins, J. B., Esq., Staff Surgeon at Poona, Bombay, the wife of—a daughter—at Oxford Terrace, on December 26th, 1856.

Nairne, Robert, M.D., of 44, Charles Street, Berkeley Square, the wife of—a daughter—on December 24th, 1856.

MARRIAGES.

Beckett—Hannah. Beckett, Charles, Esq., Surgeon, of Hull, to Amelia, third daughter of the late John Hannah, Esq., Surgeon, of Alford, Lincolnshire, at St. Mary's, Islington, on December 18th, 1856.

Webster—Squire. Webster, George, Esq., Surgeon, of Peckham Rye, to Rose, second daughter of William Peppercorn Squire, Esq., of Newbury, Silsoe, Bedfordshire, at Silsoe, on December 24th, 1856.

DEATHS.

Bright. On December 26th, 1856, at 12, Cambridge Square, Hyde Park, aged 9, Ellen Catherine, youngest child of *James Bright, M.D.

Geere. At Brighton, on December 28th, 1856, Ellen, wife of George Geere, Esq., Surgeon.

Mitchell, Charles, M.D., at Carisbrooke, Isle of Wight, aged 73, on December 22nd, 1856.

Paris, John Ayrton, M.D., President of the Royal College of Physicians in London, in Dover Street, Piccadilly, aged 71, on December 24th, 1856. He was born at Cambridge on Aug. 7th, 1785. He became a member of Caius College, in that University, and graduated when very young in medicine. He was distinguished for the extent and elegance of his classical attainments. From Cambridge he went to Edinburgh, and was the friend and intimate companion of the many celebrated men who, in the first years of this century, had congregated in the Scottish capital. On his return to London, at the age of 22, he was elected Physician to the Westminster Hospital, but soon after vacated the appointment, as it was his wish to establish himself in the town of Penzance in Cornwall. During his residence at Penzance, Dr. Paris distinguished himself as the founder of the Royal Geological Society of Cornwall; this, we believe, was the first Geological Society in England. When at Penzance, too, he gave to the miners the great boon of the "tamping-bar", the instrument by which they are enabled to pursue their business amid inflammable gases without the fear of striking fire from the rock. In the year 1810 he returned to London, and here for forty-five or forty-six years he was actively occupied as a physician. He was elected President of the College of Physicians in the year 1844, and this office he held until the hour of his death. Dr. Paris was remarkable for his literary ability. The *Life of Sir Humphry Davy* will ever remain one of the classical biographies of the English language. In conjunction with Mr. Fonblanque, he also wrote the *Medical Jurisprudence*. His treatise *On Diet* first brought him into notice, and was published at a very early age; his *Pharmacologia* ran through many editions. Besides these, and many other acknowledged publications, his *Philosophy in Sport* has attained an enormous popularity, and, with his life, the motive for an *incognito* which was never really maintained has altogether terminated. The last ten days of Dr. Paris's life were spent in excruciating sufferings, which were borne with remarkable fortitude. His intellect remained to the last as clear as at any time of his life.

Spackman. On December 23rd, 1856, at Harpenden, Herts, aged 5, Anna Maria Isabella, fourth child of Frederic R. Spackman, M.D.

Ward, William, Esq., Surgeon, at Forant, near Shrewsbury, on December 21st, 1856.

PASS LISTS.

Royal College of Physicians. At the usual Quarterly Meeting of the Comitia Majora, held on Monday, Dec. 22nd, 1856, the following gentlemen, having undergone the necessary examinations, were admitted members of the College:—

Dr. Daldy, Broad Street Buildings
Dr. Horace Dobell, London
Dr. Evans, Lancaster Place, Strand
Dr. Fripp, The Mall, Clifton
Dr. Headland, Guildford Street
Dr. Hillier, Upper Gower Street
Dr. Benjamin W. Richardson, Hinde Street, Manchester Square
Dr. Rolleston, Ely Place

Also, as Extra Licentiates:—

Dr. Day, Stafford
Dr. Pearson, Ely
Dr. Wollaston, late of the Military Hospital, Scutari

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, December 19th, 1856:—

Allinson, Augustus Ward, Beresford Square, Woolwich
Barrett, Osman, Finsbury Square
Callender, William, Newcastle-on-Tyne
Gover, Robert Mundy, Andover, Hants
Hawkes, Edgar Coulson, Bishops Stortford, Herts
Keddell, William Frederick, Sheerness
Reid, David Boswell, University College
Walker, Nathaniel Osbourne, Woodhouse, Toronto, Canada West
White, William Acraman, Frome, Somerset

Monday, December 22nd:—

Bailey, Francis James, Blackburn, Lancashire
Balding, Charles Culledge, Barkway, Herts
Benbow, Edwin, Army
Dresser, William, Atherston, Warwickshire
Kellett, Edwin, Leicester
Kennard, Thomas Atherton, Lambourne, Berkshire
White, Richard George, Southgate Road, Islington

Apothecaries' Hall. Members admitted on Thursday, December 18th, 1856:—

Browne, William Valentine, St. Asaph, North Wales
Dawson, Arthur Houghton, Gildeston, Norfolk
Deamer, William, Brant Broughton, Newark
Graham, William, Goxhill, Lincoln
Johnston, Joseph Salkeld, London
Lewer, John Richard, Wimborne, Dorset
Manning, Joseph, Northampton
Mullinger, Frederick John, Bishops Stortford, Herts
Pigge, Charles, Guy's Hospital
Ransome, Arthur, Manchester

Wednesday, December 24th:—

Beach, Henry John, Cheltenham
Beresford, Herbert, Chesterfield
Cockell, Philip Wyatt, Royal Navy
Collins, William Henry, Hereford
Hayne, William Reynolds, Essex
Hine, Daniel Benjamin, London

IRWIN, John, Whitehaven
ROWE, Samuel, Leicester
SUTTON, Henry Gawen, Middlesbro'-on-Tees
WAUGH, John Neill, Australia
WINTERBOTHAM, Lauriston, Cheltenham

HEALTH OF LONDON:—WEEK ENDING DECEMBER 20TH, 1856.

[*From the Registrar-General's Report.*]

AFTER a sudden increase of mortality the Weekly Return again exhibits results of a very favourable character. In the week that ended on Saturday the deaths registered in London decreased to 1060. In the ten corresponding weeks of the years 1846-55 the average number of deaths was 1269; but if the excess of deaths in the fifty-first week of 1847, when influenza nearly doubled the mortality, be excluded from the calculation, and the average, thus reduced, be corrected for the increased population of the present time, it will be found that the ordinary rate of mortality at this season would have produced 1300 deaths last week, and therefore more by 240 than the number actually returned.

The number of deaths referred to the zymotic class of diseases is 187, whilst the corrected average of corresponding weeks is 317. It may be remarked that none of the diseases of this description show a tendency to prevail to an excessive degree: the mortality from small-pox, which numbered 6 deaths last week (all, except one, in the Small-pox Hospital), is low; and the greatest number of deaths in the zymotic class is referred to scarlatina, which was fatal in 42 cases, the corrected average being 53. Forty children died from hooping cough, and 23 from measles. The deaths from typhus or common fever were 37, exhibiting a decrease on previous weeks. On reference to the table which exhibits the topographical distribution of six principal epidemics, it will be seen that the Eastern Division of the metropolis contributes more than its just contingent to the total mortality from scarlatina and typhus; and to whatever cause it is to be attributed, the same fact has been frequently observed in the current year. Diseases of the organs of respiration were fatal last week in 230 cases, showing a considerable decrease on the numbers in two preceding weeks, which were successively 368 and 287. Bronchitis was the fatal disease in 110, or nearly half of the whole number; whilst pneumonia carried off 93 persons, of whom 71 were children. In the last three weeks phthisis or consumption, which stands in the tubercular class, caused 164, 130, and 119 deaths. The deaths of 3 persons are returned as caused by intemperance.

Last week the births of 868 boys and 823 girls, in all 1691 children, were registered in London. In the ten corresponding weeks of the years 1846-55 the average number was 1465.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·128 in. The mean daily reading was above 30 in. on five days. The barometer rose from 28·98 in. on Sunday to 30·46 in. on Tuesday, the highest reading attained in the week. The mean temperature of the week was 38·8 deg., which is rather below the average of the same week in 38 years (as determined by Mr. Glaisher). The mean daily temperature was below the average on four days, and the extent of depression on Tuesday was 9 deg. The *lowest* reading in the week occurred on Wednesday, and was 24 deg.; the *highest* reading occurred on the following day, and was 48 deg. The range of temperature in the week was therefore 24 deg. The mean dew-point temperature was 36·5 deg., and the difference between this and the mean air temperature was 2·3 deg. The mean temperature of the water of the Thames was 43·7 deg. The *highest* temperature of the river was 48·3 deg. on Sunday; it declined till near the end of the week, and on Friday the *lowest* temperature was 41·1 deg. The wind, which blew from the north at the beginning of the week, changed to south-west, and again veered to N.N.E. On Saturday it was in the west. The air was frequently calm. Scarcely any rain fell; but fog or haze prevailed on several days.

WEEK ENDING DECEMBER 27TH.

THE total number of deaths registered in London in the week that ended on Saturday is 1069, being very nearly the same as in the preceding week. In the corresponding weeks of the years 1846-55 the average number of deaths was 1247; but the deaths of last week occurred in an increased population, and if they are to be compared with the average, the latter should be raised proportionally to the increase, in which case it will become 1372. It appears that the number in the present return is less by 300 than would have been returned if the average rate of mortality had prevailed.

The number of deaths referred last week to diseases of the zymotic class is 211; the corrected average of corresponding weeks is 273. Hooping-cough, which for seven previous weeks had shown great uniformity of results, the weekly number of deaths having been about 40, increased last week to 55. Typhus and common fever ranked next in the order of mortality, and were fatal to 38 persons. Cases of typhus seem to be frequent in Paddington; a nurse of St. Mary's Hospital died of it on the 10th instant; two patients brought to the hospital from Harrow Road and Stanley Street died on the 11th and 22nd respectively, and an aged woman on the 22nd in Market Street. Measles were fatal to 32 children, all under 10 years of age: 3 of the deaths from it occurred in St. Margaret, Westminster; 4 in Islington. Scarlatina was fatal in 26 cases, diarrhœa in 12, erysipelas in 10, croup in 9, small-pox in 5. Taking the diseases of this description in the aggregate, the mortality from them, at present, is not great.

The deaths caused by diseases affecting the respiratory organs were 233, nearly the same as in the previous week, and considerably less than the average. Fatal cases of pneumonia or inflammation of the lungs decreased in two weeks from 93 to 67. Phthisis or consumption, which is not included in the class above mentioned, caused 128 deaths, the corrected average being 135.

Only two nonagenarians died in the week; viz., two widows, aged respectively 91 and 92 years.

Last week the births of 749 boys and 723 girls, in all 1472 children, were registered in London. In the ten corresponding weeks of the years 1846-55 the average number was 1382.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·419 in. The reading fell from 30·33 in. at noon on Sunday to 28·76 in. on Thursday. The mean temperature of the week was 35·7 deg., which is 2·5 deg. below the average of the same week in thirty-eight years (as determined by Mr. Glaisher). The mean daily temperature was below the average on the last five days, and on the last three days the extent of depression below the average was from 7 deg. to 10 deg. The *highest* temperature was 46·5 deg., and occurred on Sunday (the 21st); the *lowest* was 24·6 deg., and occurred on Friday. The range of the week was therefore 21·9 deg. The *highest* temperature on Thursday (Christmas Day) was only 31·2 deg. The mean dew-point temperature of the week was 32·9 deg., and the difference between this and the mean air temperature was 2·8 deg. The mean temperature of the water of the Thames was 40·6 deg.; the *lowest* in the week was 38·4 deg. on Saturday. The wind was generally in the west till noon on Thursday, after which it was in the north-east, north, and north-west. The air was frequently calm. The rain-fall of the week was only 10·13 in., all of which occurred on Wednesday. Light snow fell early on the morning of Saturday.

UNIVERSITY OF DUBLIN: ADDRESS TO DR. MONTGOMERY.

THE following graceful and eloquent tribute to the long and important services rendered by Dr. Montgomery to the School of Medicine, especially in the obstetric department, whose professional chair he filled with eminent advantage to science, and high honour to himself, has been paid by his colleagues. The deputation, who waited on him at his residence to present the address, was accompanied, amongst others, by the President of the College of Physicians. The address was read by Dr. Stokes, as follows:

"Trinity College, November, 1856.

"DEAR SIR,—We cannot permit you to retire from that chair in the School of Medicine in our University, which you have so long and so honourably filled, without not only expressing our feelings of regret upon the occasion, but also recording our unanimous opinion of the exemplary manner in which you have discharged its important duties. It was principally through your instrumentality that the professorship of midwifery was established by the College of Physicians, and attendance on its annual course of lectures rendered an essential part of medical education. To you was assigned the honour of being the first to fill that chair. During a period of thirty years you have discharged its onerous duties with great ability and with undeviating regularity, and by the reputation thus acquired you have conferred dignity on the appointment, and now constitute a bright example to encourage the student in medicine to pursue

his course with zeal, with steady perseverance, and with a determination always to maintain a character for high and honourable conduct. By your indefatigable industry and deep research, as also by your excellent and interesting lectures, obstetrical science and practice have been improved and advanced in this country and in Great Britain; while your important discoveries and valuable publications have acquired for you an European reputation. As our colleague in the school of medicine, we cannot but feel sincere regret at a separation caused, we are well aware, by the public demands on your time, and the pressure of professional engagements. During our long intercourse, we have ever found you the cordial, confidential, and honourable friend, the intelligent adviser, and the assiduous and cheerful fellow-labourer in our arduous duties; and though our connexion with you as professor in the same school has been severed, we shall ever cherish a lively and pleasing recollection of the many years we have been together. In all the other relations of life, professional and social, we trust that we may long continue to maintain the same mutual feelings of friendship and esteem. Most sincerely wishing you all happiness, believe us to remain, dear sir, faithfully yours,

"William Stokes, Regius Professor.
J. W. Cusack, University Professor of Surgery.
Robert Harrison, Professor of Anatomy.
James Apjohn, Professor of Chemistry.
W. H. Harvey, Professor of Botany.
Robert W. Smith, Professor of Surgery.
John T. Banks, King's Professor of Physic.
Jonathan Osborne, Professor of Materia Medica.
Robert Law, Professor of Institutes of Medicine.
F. Churchill, Professor of Midwifery.
Thomas Brady, Professor of Medical Jurisprudence."

Dr. Montgomery returned the following answer:—

"Gentlemen,—It is almost superfluous for me to assure you that I receive, with heartfelt thankfulness, this most flattering testimony of your good opinion with which you have so greatly honoured me. I beg you will believe that I regard it not as a subject of mere ephemeral gratification or pride, however intense may be the pleasure it affords me, but that I trust to preserve it as an honourable and enduring record for the guidance and encouragement of my children, and their children after them, who will, I hope, hereafter look upon it as a powerful incentive to strive earnestly,—no matter how long or how arduous may be the struggle,—to win the approbation of the wise and good, which they should ever feel, as I do at this moment, to be a reward of inestimable value, which neither wealth can purchase nor patronage procure them. I wish to add, that although now officially separated from the School of Physic, that severance in no way abates my cordial anxiety for the welfare and success of an institution in which I so long laboured, and to which I owe so much. And it is my most fervent hope and wish that health, happiness, and prosperity may attend you, my kind friends and colleagues, who so ably uphold its character, and promote its interests.

"W. F. Montgomery."

ROYAL MEDICAL BENEVOLENT COLLEGE.

As several communications have appeared in our contemporaries, adverse to the charge of £40 per annum for the board and education of the exhibitioners of this College, we think it but fair to give publicity to the appended letter:—

"Cheltenham, December 23rd, 1856.

"My dear Mr. Propert,—Will you be kind enough to inform me when and where the special general meeting of the governors of the Royal Medical Benevolent College takes place, in order that I may, if practicable, be there, to give your committee, and yourself in particular, my feeble support on that frivolous and vexatious question, the very moderate charge of £40 per annum for the education, board, etc., etc., of the exhibitioners.

"Let those that are dissatisfied with such reasonable terms reflect that if, through false reasoning, they refuse to strengthen the hands of your committee, they must put up with an ill paid and inferior class of teachers, and that the education of our sons will be second or third rate, instead of, as we all hope and desire, that their instruction shall be equal to the best of our public schools.

"I quite concur in the sentiments of Mr. Stilwell, that, by kind consideration and liberal assistance to strengthen the hands and cheer the minds of those so anxiously engaged in establishing and promoting the well-doing of so valuable an institution, we shall simply be doing our duty to the rising generation.

"I have much pleasure in accepting the terms of £40 per annum; and I trust that my youngest son, Owen Dalton, may be permitted to become an exhibitioner immediately after the vacation.

"I would also beg to propose as a standing rule of your excellent institution, that you follow the example of our excellent College in receiving the exhibitioners' fees for education in *advance*. On no account whatever permit the expenses to fall below £40 per annum, and by all means insist upon prepayments. I would suggest that £10 be paid quarterly, in advance, for the convenience of all parties. At the Cheltenham College, payments are made half-yearly, in advance. It is estimated by the parents of boys at our College, that the entire expenses of board, education, stationery, travelling, and other expenses, average £100 per annum. Here, then, is a saving of at least one-half.

"Pray make what use you like of my letters, and believe me, my dear sir, amongst the numbers of our professional friends who owe you a deep debt of gratitude.

"Faithfully yours, Wm. Dalton.

"J. Propert, Esq.

"P.S. The expense of board and education at the Swansea Grammar School is £64 per annum!"

Testimonial to Professor Sands Cox. A meeting of the Council of the Queen's College, Birmingham, and friends of the above gentleman, was held in the library of the College, on Wednesday, December 17th, John Ratcliff, Esq., the Mayor, in the chair, for the purpose of considering the propriety of raising a subscription to provide a suitable testimonial to him in consideration of the eminent services which he has rendered to Birmingham by the establishment of the College and the Queen's Hospital. The Chairman opened the business by observing that from what had previously taken place, there was but one opinion among the friends of the Institution in which they were assembled, and of those intimately acquainted with the great benefits conferred upon the town by Mr. Sands Cox, that a testimonial ought to be raised to him, and the only question was the sort of one which would be most appropriate and agreeable to that gentleman. Mr. Haines said that he knew Mr. Cox would not accept anything for himself. His great object had ever been the good of the Queen's College and Hospital; and if the public considered that anything could be done, through the medium of a testimonial, to further the interests of those Institutions, it would have his approval. The Rev. Chancellor Law said, knowing as he did Mr. Cox's disinterestedness in all he had undertaken, he did not anticipate that any personal consideration would influence him in the testimonial; and the question, as observed by the Mayor, was the kind of testimonial which would be most agreeable to the gentleman they desired to honour. It was necessary, in order to enable gentlemen to regulate their subscriptions, to know the probable amount of money that would be required. He was inclined to believe that the establishment of a few scholarships to be held by the sons of medical men in the College, to be called after Mr. Cox, would be most agreeable to him, and the number would of course depend upon the amount subscribed. Dr. Birt Davies said he knew that if the proposed subscription would enable them to found scholarships, nothing would be more agreeable to Mr. Cox. Such a design would be fully in accordance with that real nobility of character which he had manifested during the last thirty years, throughout which period he (Dr. Davies) had had the happiness of knowing him. If the testimonial took that shape, it would indeed be adding another laurel to the many which Mr. Cox had already earned from his fellow-townsmen. Mr. Osborn thought the better course would be to raise as large a subscription as they could, and leave the entire appropriation of it to Mr. Cox himself, well knowing, as they did, how he would dispose of it. They might rely upon it, the public alone would be benefited by the testimonial. A conversation ensued upon the subject, after which a resolution in accordance with Mr. Osborn's suggestion was adopted. The following donations have been promised: the Mayor of Birmingham, John Ratcliff, Esq., £50; the Rev. Chancellor Law, £50; ditto, second donation, £50; Mr. Samuel Haines, £50; Mr. James Shaw, £50; Mr. E. Armfield, £50; Thomas Bagnall, Esq., £50; Mr. Thomas Upfill, 50; Mr. James Busby, £50; F. I. Welch, Esq., £50; Mr. W. H. Osborn, £25; Mr. Jacob Phillips, £25; Messrs. Ingleby, Wragge, and Evans, £25; Mr. G. Taylor, £20; Mr. J. B. Payn, £10; Dr. Birt Da-

vies, £5 : 5; Mr. John Boucher, £5 : 5; Mr. Morris Banks, £5 : 5; Dr. Heslop, £5 : 5; Mr. H. R. Cooksey, £5 : 5; Mr. John Suckling, £5 : 5; T. R. T. Hodgson, Esq., £3 : 3; Mr. Langston Parker, £3 : 3; Mr. S. Hemming, £2 : 2; Mr. S. Balden, £1 : 1; Mr. P. Harris, £1 : 1. (*Aris's Birmingham Gaz.*)

CHANGES IN THE MEDICAL DEPARTMENT OF THE INDIAN ARMY. The *Athenæum*, an Indian paper, says:—That our medical readers may learn the changes which rumour alleges are to be made in their department, we may mention that our present information is to the effect that Dr. McLennan, who lately retired from the Bombay Presidency after having attained the rank of Physician-General there, is to return in the capacity of Director-General of the Medical Department for all India. Subordinate to him, in each presidency, there is to be one civil and one military Inspector-General; according to the *Delhi Gazette*, the class of superintending surgeons is to stand, but, as we suppose, subject to the operation of the staff rules, so as to insure their displacement at the end of five years, and allow a constant succession of younger men to fill their important offices. The cry for promotion is urgent, and the quinquennial removal of the superintending surgeons will give it, while their immediate condition as to pay will not be worse than that of the major-generals who are removed on promotion. Our own information coincides with that of the *Delhi Gazette*, as to the formation of a class of staff-surgeons; but the exact position they will occupy, whether they will replace the present garrison surgeons or be aides to the superintending surgeons, we have not learned. There are rumours, also, that the existing orders regarding rank and position, which should never have been issued, are to be abrogated; and that assistant-surgeons in charge of corps, who now draw only 165 rupees a month, are, after eight years service, to draw 300 rupees, as surgeons at present do. The medical staff appointments, in all cases, are to be made by selections; and this duty is to be left to the Director-General to perform.

TO CORRESPONDENTS.

LETTERS and other COMMUNICATIONS for the JOURNAL should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

To CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Communications have been received from:—DR. RADFORD; DR. PAYNE; MR. JOHN SUCKLING; DR. S. H. SWAYNE; MR. A. G. FIELD; MR. M. REDMAN; MR. GLEESON; THE SECRETARY OF THE ROYAL COLLEGE OF PHYSICIANS; MR. SAMUEL HILL; DR. J. C. HALL; MR. HAYNES WALTON; DR. T. HERBERT BARKER; MR. SAMUEL CROMPTON; MR. J. S. SMYTH; MR. GEORGE ALLEN; MR. R. C. B. HOLLAND; MR. J. W. PRICHARD; MR. JOSEPH GODDEN; MR. J. V. SOLOMON; MR. THOMAS HUNT; MR. J. I. IKIN; MR. PROPERT; DR. P. H. WILLIAMS; MR. W. T. BELL; DR. F. J. BROWN; MR. J. ARMITAGE PEARSON; MR. T. WATKIN WILLIAMS; MR. W. G. CARTER; DR. HAYES JACKSON; MR. T. FENTEM; MR. AMESBURY; DR. KIDD; MR. J. SIMONS; MR. OLIVER PEMBERTON; DR. BRINTON; MR. JAMES YEARSLEY; MR. JOHN RUSSELL (Merthyr); THE TREASURER OF THE ODONTOLOGICAL SOCIETY; DR. RADCLYFFE HALL (Torquay); and MR. G. STEVENS.

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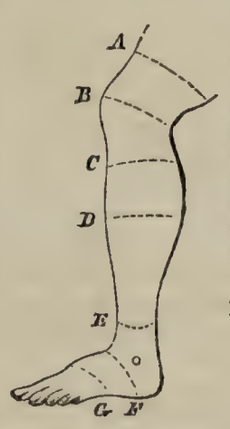
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BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. II.] LONDON: SATURDAY, JANUARY 10, 1857. [NEW SERIES.

Hospital Reports.

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ACUTE RHEUMATISM: PERICARDITIS: PLEUROPNEUMONIA: DIFFUSION OF FIBRINE AMONGST THE MUSCLES OF THE NECK.

Under the care of H. BENCE JONES, M.D.Cantab.: with Remarks by G. GODDARD ROGERS, M.D., Medical Registrar to the Hospital.

C. H., aged 15, a baker's apprentice, was admitted on November 19th, 1856, with acute rheumatism. Six years ago he had a similar attack, and was laid aside nearly twelve months. The present attack commenced four days before admission. He had been riding in a cart during a keen wind; on going to bed, he felt slight pain in his limbs, and found the next morning that he was unable to walk.

The left knee and ankle were swollen, red, and painful; the right knee had been affected, but got better before he came under our notice. He perspired profusely, and suffered most pain at night. The tongue was coated with brown fur; and he had severe constant headache. At the base of the heart a murmur was heard with the first sound; a doubtful systolic murmur was distinguishable at the apex. The heart's action was feeble; and the sounds, both at base and apex, were indistinct. The urine was copious, and of a deep colour; free from lithates or albumen. He was ordered the usual saline mixture, with ten grains of nitrate of potass every six hours; the bowels to be opened by senna; and a morphia draught to be taken at bedtime.

November 20th. He had very little sleep. Bowels freely open. He complains much of headache. The right knee and ankle have again become inflamed. There is a decided murmur at the apex to-day. Two grains of calomel and half a grain of opium were ordered to be taken three times a day.

November 22nd. The right wrist and elbow are swollen; the other joints much the same.

November 23rd. The right leg and wrist are better. The left arm is commencing to be painful. Bowels not open since 20th. The urine is quite as deep coloured. Tongue much furred. Pulse 100, and full. Mitral murmur very indistinct. The aperient was repeated.

November 25th. All his symptoms have been much relieved by the free evacuation of the bowels. Tongue cleaning; pulse soft; urine of natural colour. The headache, however, has never entirely left him.

November 27th. Yesterday and to-day he has been complaining very much of his head. He is slightly deaf, and appears drowsy. The joints are quite free from pain. A loud murmur can be heard at the apex of the heart. There is great tenderness all over the sternum. He vomited early this morning.

November 28th. Towards evening he had slight cough. The intercostal spaces were painful. In the afternoon he vomited again, and complained of intense headache. Slight convergent strabismus was noticed. During the night he rambled very much. The murmur at the apex was very faint; there was no friction sound. Coarse moist sounds were heard over the left lung. On the right side the breathing was somewhat exaggerated. There was no dulness anywhere. A blister was put upon the left side; and the saline treatment continued, with calomel and opium, as before.

November 29th. He was constantly moaning and talking in his sleep during the night. His pupils are contracted; there is great photophobia, and very severe headache, which is increased when he attempts to sit up. There is very little cough. Bowels open. Pulse 112, small and weak. Moist sounds are heard at the back of the right lung. He was ordered to take the calomel every four hours. In the afternoon a severe attack of dyspnœa came on.

November 30th. He is very much weaker, and lies in a semi-comatose state; but when roused, answers rationally. A blister was put on the neck. He had dry harsh cough. Throughout the night he had low muttering delirium; and at 8·30 A.M. next day he expired.

The examination was made twenty-nine hours after death.

Both pleural sacs contained abundance of recent fibrine, and the left one a small quantity of turbid fluid. The left lung was congested in one or two places, but nothing more. The right lung, except just at its upper part, was passing into the stage of grey hepatisation. The bronchi were very vascular, and contained light yellow fibrinous casts. The bronchial glands were much enlarged. The pericardium, especially towards the base of the heart, was very thick; and, together with the fasciæ at the upper part of the thorax, was consolidated by much recent yellow fibrine. The pleural lining of the upper and posterior part of the chest was likewise very much thickened. In the pericardial sac, some turbid fluid and flakes of recent fibrine existed; and there were old adhesions in one or two places at the base of the heart. The walls of the heart were natural; the aortic and mitral valve flaps showed very trifling thickening. There was much recent fibrine between and behind the muscles in front of the larynx; and the various folds and layers of fasciæ in the upper part of the neck were thickened, and occupied by the same deposit. This was the case also with the sheaths of the great vessels, especially on the left side. At quite the lowest part of the neck, the vessels, nerves, fasciæ, and muscles, were blended together by fibrine, which, in one or two places, was softened, and of a yellowish green hue. This fibrinous exudation was also found about the muscles in front of the cervical vertebræ. The left internal jugular vein was rigid, and full of firm coagulated fibrine not undergoing change, and not adherent to its walls. All the abdominal viscera were natural; and the wrist and knee-joints were free from any purulent deposit.

REMARKS. This case affords a good illustration of the well established fact, that pleurisy, and not unfrequently pneumonia, are associated with pericarditis. It also shows that attention may be so fully directed to the heart symptoms, that the above mentioned complications are to a great extent in danger of being overlooked. Or they may progress rapidly, and cause frightful havoc, whilst the signs of their existence are not very evident. The patient C. H. died on the 30th of November. On the 28th, there was no dulness over either lung, but simply exaggerated breathing on the right side. Within two days, therefore, complete hepatisation passing into the third stage must have been established. There was no cough until the night of the 28th, and it was never accompanied by expectoration; whilst the inflammation involving the muscles and their connecting areolar tissue in the neighbourhood of the larynx, and the pressure by fibrine on the phrenic nerve, sufficiently account for the dyspnœa. The headache, drowsiness, and delirium, may be referred in part to the cardiac affection, as an instance of (so-called) metastasis to the brain. But the cerebral symptoms, which accompany rheumatic carditis, generally make their appearance towards the close of the disorder, or when the inflammation is at its highest; and from the first day of this lad's admission into the hospital headache was a prominent feature. Rheumatic inflammation of the fasciæ at the root of the neck being excited, the mischief spread rapidly to the surrounding parts. The sheaths of the great vessels thus participating, and becoming thickened, hindered the free passage of blood to and from the brain. That venous congestion was thus caused, was shown by the aggravation of headache when our patient raised himself. The muscles of the neck were then brought more into play, and their contraction increased still farther the compression around the blood-vessels. As to the respective clearness of the murmurs at the base and apex of the heart, the former was all along clear and distinct; the latter occasionally doubtful, and often very faint. I therefore infer that anæmia had much to do with the produc-

tion of the first; and probably before the rheumatic attack came on, and when he was in good health, it was quite as indistinct as the systolic mitral murmur. The amount of valvular lesion was so very slight, that it would have been no wonder if the natural sounds had been heard throughout. With respect to pericardial friction sound, none was discovered. There was probably extensive pericarditis during his former attack of rheumatic fever, but only a very limited affection of the membrane this time; and that not until a few hours before death.

Original Communications.

ON DISEASE OF THE SUPRARENAL CAPSULES.

By S. J. Jeaffreson, M.D., F.R.C.P., Physician to the Warneford and Leamington Hospital.

[*Read before the Birmingham and Midland Counties Branch, December 11th*, 1856.]

The recent researches, and the able and elegant work of Dr. Addison, on *Disease of the Suprarenal Capsules*, have latterly attracted so much attention on the part of the medical profession, that I hope I may be excused the liberty of drawing attention to three cases of this malady which have fallen under my own observation. The two former may perhaps derive some additional interest from the fact, that they occurred prior to the date of Dr. Addison's discovery of the connexion between this form of disease and certain discoloration of the skin. The connexion between these conditions was a fact so remarkable, that it drew my attention at the time, and caused me to remark it to several of my professional brethren; but as I failed to obtain any confirmatory evidence of the connexion of these phenomena, by seeing or hearing of other similar cases, I quite lost sight of it, till Dr. Addison published his views.

Let me, however, be distinctly understood as not in any way wishing to detract from the merit of Dr. Addison in having first worked out and made public this curious fact. A large hospital, especially in London, gives to the medical staff not only a great numerical advantage of cases, but all the assistance implied by a numerous staff of intelligent colleagues, assiduously engaged in the work of learning, for the best of reasons that they are obliged to teach, and all deriving the greatest advantage from the division of labour implied by the assistance of their more advanced pupils. The want of these advantages may probably have precluded me from following up these cases; and the want of them must also be kindly taken by you as an excuse for many of those defects in the following reports, which are almost necessarily incidental to one who, in the midst of all his other pursuits, has to do this kind of work single-handed.

Except when stated to the contrary, I shall briefly relate the following cases in the words noted down at the time of their occurrence.

Case I. Thomas Wilkins, aged forty, a labourer, residing in Woodhouse Street, Warwick, was admitted a patient of the Warwick Dispensary, on the 28th August, 1849. He stated that he had not been well since the previous Michaelmas, when he caught cold whilst working at Leamington, attended by violent pain of the lower right chest, followed by jaundice. The pulse was 88, feeble; the conjunctivæ were not then yellow, but the skin was; bowels regular; motions yellow. He often vomited. He was so cold—"feet like death often". The following medicine was ordered.

℞ Magnesiæ sulphatis ℥ix; potassæ nitratis ℥iii; potassæ chloratis ℥ii; spiritûs ætheris nitrici, spiritûs juniperi compositi, ää ℥i; aquæ menthæ piperitæ ad ℥xviii. M. Fiat mistura, cujus sumatur ℥i ter die.

Sept. 4th. I find it noted that I could discover no enlargement of liver; that his food was frequently vomited, and that he "had lost much flesh". He was now ordered:

℞ Potassii iodidi gr. xxxvi; liquoris potassæ ℥iii; tincturæ calumbæ ℥ss; inf. aurantii compositi ad ℥xii. M. Fiat mistura cujus sumatur ℥i bis die.

Sumat pilulæ hydrargyri chloridi compositi gr. v omni nocte.

Applicetur emplastrum cantharidis epigastrio.

The vivid impression produced on my mind by the peculiarity of Wilkins' complexion, is evinced by the fact that at his visit on September 11th, he brought his daughter with him to show me her complexion, which, he said, "was the complexion of his family, and such as his own was formerly".

The medicines were continued, and the blisters repeated.

Sept. 18th. The complexion was more bright yellow. He heaved, but did not vomit. The motions were lighter and yellow. The mixture and pills were repeated.

Wilkins had been long on the parish, and the parish surgeon stated that he could not longer afford him any extra allowance, in consequence of his inability to pronounce him to be labouring under any specific disease. Under these circumstances, I procured him a hospital ticket, and admitted him an in-patient of the Leamington Hospital on the 26th Sept. 1849. He then had tenderness in the region of the duodenum and the two dorsal vertebræ opposite this point, on firm pressure. He was evidently emaciated, but less so in the abdomen than in other parts; which, indeed, presented some degree of general fulness below the epigastric region. Pulse and heart's action feeble; tongue white; bowels torpid; urine free and pale; conjunctivæ quite clear. The skin was universally of dark leaden hue, a colour something between jaundice and *morbus cæruleus*. The alvine evacuations were reported to be natural in colour. From the first sight of this man at the Dispensary, I thought unfavourably of his case; although, whilst in the Dispensary and subsequently in the Hospital, repeated most careful examinations elicited no evidence of organic disease of his liver, lungs, heart, or other organs. Besides debility, there was a depressed heavy manner about the man, which I did not consider natural to him. He was not, however, despondent, and showed great gratitude for all that was done for him.

His treatment whilst in the Hospital consisted of a blister over the tender vertebræ, nitro-muriatic acid with orange peel, and common non-mercurial aperient pills.

No appreciable change occurred, except that he expressed himself as feeling rather better, which was perhaps due to the nursing, temperature, and improved diet of the Hospital. About four days before his death, whilst holding up the clothes of another patient for me to auscult his chest, Wilkins almost fainted. I made him lie down on his bed, and examined him whilst so faint, without eliciting any evidence of cardiac or other disease.

On the night of the 17th October, having had some green vomiting in the day, and complained much of headache, he went to bed much as usual. About midnight he got out of bed, and was observed by the other patients staggering towards the fire-place: they reached him just in time to save his falling, and called the nurse and house-surgeon, who found him insensible, with stertorous breathing, slight convulsions, fixed and dilated pupils, cold extremities, and almost imperceptible pulse. He died two hours after he got out of bed.

The Post Mortem Examination was made on October 19th, by Mr. Male, Mr. Birt, and myself, about thirty hours after death. The body was less emaciated than I expected to find it. The lungs were pale, healthy, and crepitant. The heart was perfectly healthy in every respect; it contained many fibrinous clots in almost all, if not in all, its cavities; many of them were quite of a yellow colour, and very firm. The large vessels were carefully traced, but presented no evidence of disease. The liver was rather full and darkish coloured, but healthy in structure. The gall-bladder contained healthy bile. The mucous surface of the stomach was much congested in patches; the membrane was polished, firm, and natural. The duodenum was healthy. The other bowels, only examined externally, afforded no suspicion of disease. The muscles and other tissues generally, especially the fatty tissues, showed a deepish yellow stain. The kidneys were healthy; but in the left suprarenal capsule was contained an encysted tumour, apparently of the scrofulous character; its walls were hard and almost gristly and cartilaginous, its contents in various degrees of softening, from fluid pus to cheesy matter. This was the only mark of structural change we could discover in the body. The brain, though most carefully examined, afforded no morbid appearance. In its colour it was natural, being almost the only part which was not tinged with any yellow stain. The stomach contained some grumous greenish fluid like that vomited.

Case II. On the 23rd of November, 1849, I was called upon by my friend, Mr. Thomas Chavasse, to see Mr. T., a gentleman of sixty-three years of age. Our patient was perfectly comatose: a condition which I believe had crept on during the last twenty-four hours, and appeared to me to be dependent upon cerebral effusion. Blistering and other remedies entirely relieved this condition of the brain, and he was the next day in the most perfect command of his mental faculties, an

enabled to attend to business, and to converse freely and most intelligently.

Almost the only complaint Mr. T. had himself made was of pain of the right shoulder, where, however, no evidence of disease could be discovered. He had been feeble, had lost some flesh, and had experienced occasional vomiting after his meals. He had stated his present deranged state of health to be of about one year's duration; and it was attributed, both by himself and his friends, to great anxiety of mind in consequence of losses and responsibilities in connection with some trustee affairs. His complexion, as respected the face, was very dark, somewhat like that of Thomas Wilkins (Case I). This was not the case in the body or limbs, which were sallowish. The conjunctivæ were clear.

November 24th. The pulse was the same as yesterday—a mere thread and perfectly powerless. There was still no perceptible impulse of the heart; but its sounds, though feeble, were distinct, and without bruit of any kind. His mind was perfectly clear and distinct, even on testing him by a prolonged conversation. He made no complaint of pain except of the right shoulder, and that was less than usual. He had had a fair allowance of sleep. There was no œdema anywhere. On raising him up to examine his chest posteriorly, he soon became faint, and was obliged to be laid down again. It is not stated, though I remember the fact, that the præcordial dulness was much increased in extent and intensity, and that I concluded that Mr. T. must be labouring under hydrops pericardii, as well as his other maladies.

November 25th. Mr. T. died in the evening, apparently from simple exhaustion.

NECROPSY, thirty hours after death, made by Mr. Birt, Dr. Goode, and myself. The body was less emaciated than might have been expected. The discoloration above described was pretty general. On endeavouring to remove the skull-cap, when sawn through, the adhesion of the dura mater was so universal and exceedingly firm, that it was impossible to get the skull-cap off, and we were obliged to remove the entire brain from its base, cutting through the medulla oblongata. The dura mater did not appear much altered in character; the arachnoid was very generally milky, opaque, and thickened, and there must have been very considerable subarachnoid effusion from the quantity of fluid which escaped during the removal of the brain. The substance of the brain did not present any very remarkable appearance. The origin of the eighth pair of nerves seemed to be by finer and more compressed filaments at its root than generally observed; the medulla oblongata also appeared somewhat small and contracted, and the corpora olivaria, pyramidalia, and restiformia were less distinctly marked than usual. The lateral ventricles had been apparently more distended with fluid than natural. On opening the thorax there were considerable old adhesions, most especially on the right side. On reaching the heart we were much puzzled to believe that it could be that organ, for in its position *in situ* it looked more like a bag of fat invested by a thin semi-transparent membrane; this deposition of fat was placed between the pericardia, very firmly and universally adherent to the reflected, less firmly and generally to the true pericardium. The firmness of its adhesion to the true pericardium differed considerably in different parts, and there was also some little fluid in the pericardial cavity. The thickness of this deposit of fat varied from the eighth to upwards of a quarter of an inch. The liver, not amiss in size or structure, presented one puckered, milky coloured cicatrix on its upper surface. The kidneys were flabby and rather elongated; in one of the suprarenal capsules was found a tumour.

I regret to say that my notes of this case go no further. The tumour was handed over either to Dr. Goode or Mr. Birt for microscopic examination, and unfortunately no notes of this examination are on record. My recollection of the case is, however, sufficiently accurate to enable me to state that the tumour was of the size of a large French walnut, and that its section presented cysts in various degrees of softening, just as in the case of Wilkins. In these details I am borne out by Dr. Goode and Mr. Birt.

In the following case, which cannot, I think, fail to be recognised as one of disease of the suprarenal capsules, I am sorry to say that no *post mortem* examination could be obtained, although every effort was made to get permission.

CASE III. Mr. W. R., aged 39, patient of Messrs. Bodington, of Kenilworth, called on me 5th August, 1856. He stated that he had suffered most of the previous winter from tic douloureux, coming on and leaving off suddenly several times in the day, but not during the night—the paroxysms usually lasting from half to three quarters of an hour, affecting the right side of the face, and shooting down to the right breast. On the 30th April he had a tooth drawn on this side, which completely cured the tic-douloureux; but since this period his general health had given way—"has lost flesh; has no appetite; has nausea and occasional vomiting; no headache." The tongue was loaded posteriorly, dryish; the tip and edge being reddish. He had occasionally slight hæmatemesis. His complexion was very sallow, but had been very yellow. The bowels were sluggish; the urine free, clear, too much in quantity.

I considered the case to be one of hepatic derangement, with neuralgia and anæmia, cases by no means uncommon, and prescribed the following:

℞ Emplastri cantharidis partem i; emplastri picis compositi partes v. M. Fiat emplastrum quatuor pollices longum et sex latum, epigastrio applicandum.

℞ Calomelanos gr. i; extracti aloes aquosi gr. iii. M. Fiat pilula alternis noctibus sumenda.

℞ Quinæ disulphatis gr. ii; extracti anthemidis gr. i. M. Fiat pilula bis die sumenda cum haustu infrà præscripto.

℞ Acidi nitrici diluti, acidi hydrochlorici diluti, aa ♏x; tincturæ aurantii ʒss; acidi hydrocyanici (Scheel.) ♏ii; liquoris taraxaci ʒi; infusi aurantii compositi ʒviss. M.

On his next visit (Aug. 12th), I felt convinced that his case was one of disease of the suprarenal capsules, and wrote to Messrs. Bodington to that effect. I was struck by his amazing change for the worse, which could not be accounted for at all by the treatment; and I commenced my notes by "very bad". He had great sickness with yellow and green vomit many days during the week; no appetite; great debility. The opening pills acted nicely; he had taken four. The tongue was decidedly better. He now spoke of pain of a dull kind on and off for some time past in the region of the left kidney. His vomiting occurred once, twice, or thrice a day. It was astonishing how much worn he looked in so short a time, and how much more he was enfeebled. His complexion, even to his hands, was bronzed, and his nails stood out white in contrast. The conjunctivæ were of a dingy leaden yellowish tint. The plaister was kept on four days, and only slightly blistered him. I ordered:

℞ Sodæ sesquicarbonatis ʒij; ammoniæ carbonatis ʒj; potassæ chloratis ʒss; tincturæ aurantii ʒvj; aquæ ℥viii. M. Fiat mistura cujus sumatur pars sexta ter die cum acidi citrici ℈i.

℞ Extracti aloes aquosi gr. iss; extracti hyoscyami gr. iss; M. Fiat pilula pro re natâ sumenda.

August 14th. His wife reported to me that he vomited immediately after the first dose of the mixture to-day, and also yesterday, but not after the others. But he had also been sick after several things he had taken—tea especially. He had, however, never been sick whilst in bed; but only whilst sitting up.

No change marked the future stages of this case, except that of most rapid exhaustion of the vital powers. Intellect was retained to within the last few hours of his life, and he died on the morning of the 20th, without convulsions.

In the former two cases I have no notes of any examination of the urine, but I retain a vivid recollection in both cases, and especially in that of Wilkins, of an examination of the urine without any morbid trace. In the latter case repeated examinations of the urine failed to elicit any morbid condition, either in its specific gravity or as examined by heat, nitric acid, or the microscope.

The former two of these cases derive considerable interest from their accurate correspondence with the description of disease of the suprarenal capsules given by Dr. Addison and others. They were observed long before his views were published, and therefore no colouring can have been given to them, derived from any preconceived views: this, I think, adds much to their concurrent value as establishing Dr. Addison's views. It will be remarked of both these cases that the conjunctivæ were reported to be clear, and I suspect that this is an important distinguishing feature between the discoloration from diseased renal capsules and hepatic disease; for, so variable are the shades of jaundice, that I much doubt whether the eye alone would be competent to detect the difference between some of its forms and the disease in question. I think we can hardly doubt that the third case, that of Mr. R., was also one of disease of the suprarenal capsules; and in this we have an exceptional condition of the conjunctivæ, which are described as being of a "dingy, leaden, yellowish tint." But in the absence of any *post mortem* examination we are not competent

to say that this case was not complicated with some hepatic affection, as I suspected on his first visit to me—a suspicion somewhat confirmed by his own comment on his complexion the first day I saw him, where I note "his complexion is very sallow, but has been very yellow," the latter half of the sentence having been supplied by himself and his wife.

It will be observed that all these cases are males, the ages 40, 63, and 39; the deaths occur in the autumnal season, viz., latter end of August, October, and November. In all three vomiting is a well marked symptom. Two of them are accompanied by well marked neuralgia, in that of Mr. T. of the shoulder, in that of Mr. R. by tic-douloureux of the face. May the pain that Wilkins experienced in the commencement of his illness have been pleurodynia? The absence of any trace of previous inflammatory mischief about the chest and liver, lends some countenance to the idea. In two out of the three cases the urine is especially described as copious and clear, another fact much opposed to the ordinary condition of this secretion in hepatic affection.

The peculiar interest in the case of Wilkins is the entire absence, under most careful and minute examination, of any other form of disease whatever; whilst that of Mr. T. is hardly less interesting from its complications.

Having said so much on these cases, I will not venture to make any general remarks upon this disease; and the more so, inasmuch as I have not had the opportunity of consulting the actual work of Dr. Addison, but only extracts from it.

It may fairly be asked, does the general anæmia depend upon the disease of the suprarenal capsules? or, is the local malady but an expression of the constitutional? The case of Wilkins goes, I think, far to affirm the former supposition, and to prove that the local malady is in itself capable of spoiling the vital fluid to the extent of destroying life itself. It is probable that further researches on this interesting subject may lead to the discovery of some important laws respecting the physiological import of not only the suprarenal capsules, but of several other organs, whose use in the animal economy has been hitherto clothed in mystery.

MEDICAL NOTES ON THE MILITIA.

By J. I. Ikin, Esq., Leeds.

No. IV.

HOSPITAL REGULATIONS OF THE PUBLIC SERVICE: WITH REMARKS ON MALINGERING: DESERTION: MILITIA ANECDOTES, ETC.

I stated in my former paper that the regimental surgeon is responsible for the correct keeping of the medical register, which, according to the hospital regulations, must contain a detailed account of *every* case treated, except itch. When the Inspector from the Medical Department visited our hospital, then in the citadel at Hull, he pointed out to me that the register was not complete, as only a portion of the cases was entered at length, whilst every case ought to have been registered as pointed out by the regulations; and he added, that he himself, whilst a regimental surgeon, never omitted fully to transcribe every case, even when he had a large hospital full, as was often the case on the West Indian stations; and that he had sometimes entered sixty or seventy cases in a day. This certainly was most praiseworthy industry; but, on foreign stations, the diseases, such as yellow fever, etc., often assume strange and peculiar types, worthy of record. I at once admitted that the blame, if any, rested upon my shoulders, as I had taken upon myself to direct the assistant-surgeon to discontinue keeping a detailed account of each case, and only to record the most interesting and severe cases, as it seemed to me a needless waste of time and paper to fully record every case of ordinary catarrh, mild febrile attack, or gonorrhœa, as all the cases were regularly entered in the admission and discharge books. This was not considered a satisfactory explanation, and next day I received a long official letter, calling my attention to the omission. Luckily, we had all in order in the hospital, and according to regulation, saving this breach of duty, if it deserves to be so called; so that no fault could be found with the state of the hospital, though we had only a few hours' notice of the Inspector's visit. A remark was, however, made on looking over the diet tables, on the *generous* nature of the diets, the number of extras, beer, wine, etc., which, he said, seemed to be very generally allowed, and were rather inconsistent with active treatment; and that they might be thought expensive at the War Office, and probably lead to some explanation being required. My reply to this remark was, that I found, from experience, in the great majority of cases, reducing young recruits and sick men by long continued "spoon or low diet" was most prejudicial, and considerably retarded their recovery; that I had found that generous diet was economy in the end, and sooner emptied the hospital; and that my monthly sick reports proved how rapidly the men were cured, and the patients sent from hospital fit for duty. I ventured to add, also, that, if the authorities in London could judge better than I could what diet was required by the sick under my charge in Hull, the sooner medical officers were dispensed with the better. No reply was or could be given to this, except that the Medical Department wished to place no obstacle in the way to the efficient treatment of the sick, but the contrary. I must, in justice to the service, here add, that the medical officer has really the power to order what he likes, and what he considers requisite, though at times explanations are required, and his orders must be carried out in regulation fashion. A medical friend of mine had to account for a large consumption of wine and brandy in hospital, and this he succeeded in doing at once by showing the number and malignant nature of cases of fever of a typhoid character he had had to treat. By a somewhat strange coincidence, and to my gratification, within a very few days of our inspection, an altered and improved hospital diet table was issued from the War Office for the use of the service, allowing medical officers to order extras in form of food, besides porter, wine, beer, brandy, etc., with any of the diets, instead of, as heretofore, being restricted to particular diets.

I was also asked if I kept a meteorological table, and registered my observations. My reply was, that I did not; but that, when furnished with barometers, thermometers, weather-vanes, and other suitable hygrometric apparatus, the observations should be made. As, however, I made a practice, with the above trifling exceptions, of rigidly complying with (or directing they should be complied with) every medical regulation of the service, esteeming it my duty to do so, or to resign my appointment, I was at special pains to render my annual report at the end of the year complete, and in accordance with the regulations, as previously described: I therefore filled up the meteorological tables for each month with a transcript from the register kept at the Philosophical Society at Hull, the completeness of which ought to have been satisfactory to the authorities, if they were ever at the trouble of perusing the document at all.

I have now faithfully enumerated the returns and reports required from the regimental surgeon by the War Office and Medical Department; and I may add that, along with these, the correspondence with the purveyor on home service is incessant; and I believe surgeons on foreign service find their communications with the Commissariat no less troublesome.

In concluding this part of my observations, desultory as I fear they will be considered, I would confidently appeal to the authorities themselves, as well as to the profession; and inquire whether the duties of the regimental surgeon are not overlaid with needless forms and bookkeeping; and whether this system of routine must not occupy the time which ought to be given to the strictly professional and more important duties of attending to the sick? Did the system, or did it not, break down at the onset of the late war? and may it not do so again? For fear of breaking the rules of the service, not acting according to regulation, or from not filling some form or requisition, or the document not going through the proper channel, what confusion, neglect, and misery, was the result! The regimental surgeon not having sufficient authority, one officer relying on some other officer, one department on that of another, action at the right time and in the right place become impossible; and clothing, bedding, drugs, and medical comforts, lie useless or rotting in some ship's bottom close at hand. The medical officer should surely be master and responsible in his own department, if the system is to be reformed, and emergencies met at once. Let, then, the authorities consent to simplify their numerous regulations, and subject them to a careful revision. The formation of a medical staff corps, great improvement as it will prove in the management of military hospitals, is not all that is required; the *system itself* should be revised, and conducted more in accordance with the rules that govern every well ordered public or private undertaking, where each officer is supreme in carrying on his own individual department, though responsible to his superior for the result and expenditure. Now that the excitement of the war is subsiding, and attacks on *individuals* in authority or command (often unjustly

made) have ceased, and a calm and dispassionate survey of the working and complicated routine of the various public departments can be taken, it is to be hoped the result will be the accomplishment of improvements and reforms which time and trial prove to be required in all human institutions, not excepting government offices.

I have a few other remarks to introduce, as I forbear to dwell on topics which have unhappily given rise to such painful reflections in the public mind, to serious public inquiries, and to the animadversion of the most powerful portion of the press.

To turn to less serious matters, let me add a word on the preservation of medical comforts, such as wine, spirits, and laudanum. They should be carefully secured, or the consumption in most military hospitals would be amazingly quick and copious. I was unlucky in having in my own regiment (whilst in charge of line regiments, I was more fortunate) two hospital sergeants, each of whom had a morbid taste for tincture of opium as well as for brandy: at last, gratifying their tastes beyond all moderation, they were discovered and punished. One of them, however, became maniacal, and threatened to kill both hospital orderlies and doctors. I found him one night, on making unexpectedly the evening visit, sitting mad drunk in his room, which he had lighted up with a number of candles, in full uniform, a drawn sword in his hand, and his musket, with fixed bayonet, at his side, shouting and defying any one to take or approach him; the orderlies in a state of alarm, and the whole hospital in great excitement. With management and the help of the orderlies, I closed with him, seized his sword and musket, and got the orderlies to knock him down on the bed, and try to hold him there till I obtained a guard to remove him. Whilst I went away with the sword to see the colonel, and procure help, he got free, having defeated both orderlies; so, when I returned with the guard, I again found him flourishing away with another sword. It appeared the sword just obtained was my own, which I had forgotten was left under his charge, and which, in the affray, got damaged; and that the second was his, which he kept hung up in his room, and which I had overlooked. He was secured, and sent to the cells, where he tore to ribbons every article of his dress, and almost smashed the prison door to pieces. On recovering from this attack of drunken mania, I got him discharged as insane, having ascertained he had been so previously; and, as I did not consider him responsible for his actions, he was not severely punished.

My other sergeant, a clever well educated fellow and good accountant, but dreadfully dilatory, was equally given to drink, and had a trick (as we suspected, but never could strictly prove) of diluting the laudanum with water after taking a dose. The source of temptation was removed, and rigidly kept under lock and key; and the threat of getting him reduced to the ranks, if drunkenness or any other evil habit was observed, constantly hung over him, and kept him in something like order; but, finding him such a useful servant, I befriended him as long as I could with any amount of propriety, as the teaching a hospital sergeant his duties is no joke, and entails endless trouble on the surgeon. When the regiment was disembodied, I had sundry bills for spirits supplied to my sergeant, and left unpaid, forwarded to me.

I will here add a few remarks on *desertion*. It appears from official returns (*vide* Roberts), that, in the three branches of the service, artillery, cavalry, and infantry, desertion is by far the most frequent in the latter; and that, out of a force of 43,000 in the United Kingdom, an annual loss of 3,000 men by desertion, takes place in the following proportions; showing that, when pay is highest, desertion is least.

In the Artillery . . .	5 per 1,000
In the Cavalry . . .	8 „
In the Foot Guards . .	8 „
In the Infantry . . .	55 „

With regard to *branding* deserters with the letter D, I much question the propriety of this punishment in the case of militiamen, as it tends to render a temporary service unpopular; and it is very questionable whether any severe punishment like this, or flogging (now, happily, almost entirely given up), tends to reform military offenders. We had a few of our deserters branded, three or four; and when the first case of branding was ordered by court martial, and confirmed by the General commanding the district, it made a great commotion, as the sentence is read on parade before the whole regiment. From some oversight of the commanding officer of the day, the assistant-surgeon was sent for to brand the deserter on the spot. Luckily, he had not the means of doing it with him, and declined; and the prisoner was removed to the hospital to have it done there. I was not in barracks at the time; but, on going to the hospital next day, I heard what had happened, and at once protested against the employment of a medical officer for such a duty, as the rules of the service no longer require him to brand deserters (though they did formerly), the duty now devolving upon the drum-major, who ought to do it under the superintendence of the medical officer; consequently, this was the case in future, and the assistant was spared such an ignoble duty. Branding is done (not burnt with an instrument or brand, as formerly) with three or four needles tied together, and the letter D is pricked out in the skin under the left arm; a little gunpowder rubbed in, which does better than caustic; in fact, it is the same as tattooing.

In inspecting recruits, I have frequently detected the most ingenious tricks for concealing the letter D, the mark of which is an insurmountable objection to re-entering the service; and, on the other hand, I have detected men malingering, and even wearing a truss, saying that they were ruptured, when no hernia existed, in order to obtain their discharge, or escape hard labour punishment. I once certified a deserter as fit for hard labour and confinement in Weedon Prison; and the medical officer there reported he had been sent with a rupture, and was consequently unfit for hard labour. The governor reported the case to the General of the district. I received from him, through my commanding officer, a severe official communication, and the request of an explanation of my apparent neglect of duty in certifying such a man as fit for hard labour when he had a rupture. I was able to give an explanation, and repeated my own and the assistant surgeon's unqualified opinion that he had no hernia when sent to Weedon, though he thought proper to wear a truss. We luckily had kept him under observation for a day or two, to be on the safe side, before giving the certificate: in fact, we knew him to be a bad character and malingerer, and he was so entered in the defaulter book. I presume my explanation was thought satisfactory, as I heard no more from the General; but I at once put myself in communication with the surgeon of Weedon Prison, and remonstrated with him for reporting the case without previously communicating with me. To my great satisfaction, in a short time afterwards, he wrote a long explanation, stating that the man had deceived him, and that he now felt convinced that he did not suffer from hernia, but was an accomplished rogue and malingerer, and ought to be punished.

With regard to concealing the letter D, a recruit one day presented himself, a strong likely man for the service, with pieces of plaster stuck on different parts of his body, and one under his left arm. On my asking the reason, he said he had been teazed with boils; but, on my raising the plaster on the above region, I at once detected the mark of D. In another case, the mark was neatly rubbed over with a sort of flesh-coloured paste; but, unfortunately for him, a little bit was loose, and, on applying my finger, "the d——d D", as the man termed it, was discovered, or else he would have passed. I have been deceived in this way, but not often. I have known men to hire false teeth, in order to try and pass the surgeon. One young fellow, by no means bad looking, tried me several times and at different places, both at Leeds Barracks, my own surgery, and at some of the neighbouring towns. The last time, he turned up with false front teeth (his own having been broken by an accident), and I had nearly overlooked them and passed him, but, calling to mind his features, I took him close to the window, and discovered the ingenious trick, and was obliged to refuse him. His plea was, that I had previously said "his only chance to become a soldier was to get some false teeth," and he had done so. He had agreed to pay so much for the loan of the teeth for the day, if rejected; and to purchase them, if he passed. The poor fellow showed such anxiety to serve his Queen and country, that I really think I ought to have passed him.

I may here add another amusing incident in militia life, showing how soon the *esprit de corps militaire* is established. Our regiment had not assembled for the first training above a few days when, one morning, a man applied at the hospital with some dreadful bruises and a black eye. On inquiring how it happened, his reply was, "Please your honour, *only* a *civilian* did it; but he got the worse of it in the end." That a man who had not been in the ranks above a few days should talk with contempt about "civilians", was really amusing.

At the onset, I, unfortunately for myself, passed a fellow with a wretched figure and high prominent shoulders. When stripped, he did not look so bad; but, when in uniform, he certainly was a wretched unsoldier-like object, though remarkably

powerful, as he had been accustomed to carry heavy weights as a bricklayer's labourer. When the regiment assembled, and the poor fellow got his uniform, he was sent to me by the captain of his company with a note, asking what was to be done with him, as his coatee would not meet; "that he spoilt the company, and could not do the drill." I saw at once the oversight I had made in passing him at all, but I had no resource but to make the best of it now, as young officers were constantly wanting their stupid awkward looking fellows to be discharged as unfit for the service, and I would not consent to certify; so I wrote back in reply, "that the man must be supplied with a larger coatee, must practise extension movements, be well drilled, and made to stand erect; and that I could not answer for all the recruits being made alike, or having equally good figures." One of our officers, a very clever caricaturist, sketched my friend, and christened him "the doctor's dromedary", and affixed my official note at the bottom of the sketch, which was exhibited at our first public mess, presided over by the late estimable and high minded Lord Beaumont; and the caricature was handed round, much to the amusement of all the party. I was not so foolish or thin skinned as to feel annoyed, but quite the contrary. In fact, in the public service, you must be able to stand up for yourself, and defend your own opinion, right or wrong, if you are to have any comfort at all in the discharge of your duty.

A colonel of a flash Hussar regiment of which I had medical charge, once sent a recruit back to me that I had passed, with the remark, that the man was not good looking, and had an indented nose, and was not fit. I replied, that it was impossible for all his men to have Roman or Grecian noses; and that, as his officers and men were *all* such handsome fellows, they could well afford to admit a man to form a contrast. This seemed to please him, and he accepted the recruit. To have a regiment, as the Emperor of Russia has, of all *pug-nosed* men, is certainly a master of taste!

After the incident just named, I took an early opportunity of getting rid of my "dromedary", by recommending him to claim his discharge under the old Militia Act, requiring only fifty-six days service, the operation of which act also enabled us to get rid of a few other unpleasant and by no means elegant looking customers; so that, when the General inspected the regiment, he congratulated the Colonel on the fine body of men he commanded, and me on the highly satisfactory state of the hospital. In truth, the regiment did its duty, and furnished more than the average proportion of volunteers to the line, particularly to the Scots Fusilier Guards—so many, that the Colonel, the Duke of Cambridge, wrote to our commanding officer to acknowledge the services of the regiment. Afterwards, one of our young officers got a commission presented to him in the Duke's regiment, and four of our other officers obtained commissions without purchase in line regiments.

I must now bring these observations to an end. I have only to add that, after some hesitation, the Government admitted the claims of the militia surgeons to compensation for their services and the sacrifices made by them, and awarded a gratuity of twelve months pay, as *some* acknowledgment due to them. When we bear in mind that, out of 70,000 embodied militia, 38,000* volunteers replenished the line in less than three years, when our army was almost annihilated in the Crimea, by disease and deprivation as much as by the fortune of war, and in its utmost extremity for want of men, it must be admitted that the militia branch of the service nobly fulfilled its mission, and formed then, as it ever has done in its history of former times (as testified by Wellington and others), and will form again, an efficient and patriotic army of *reserve*, of which Great Britain may feel justly proud.

At the commencement of these observations, I stated that, out of 2,000 recruits first inspected for the militia nearly three years ago, above one-half of them could neither read nor write. Recruits for the line I found to present a still greater amount of ignorance. In this statement, I give those men credit for being able to read, though, according to their own admission, they can do so only "a little", or "a very little". I have just looked over my recruit register for the last six weeks, and find that, out of the 300 recruits last inspected, 105 can neither read nor write. This shows a greater proportion of ignorant men than was presented in the militia three years ago. Surely this evidence of the deplorable want of education amongst the labouring population shows the necessity of adult schools, both military and civil. Men in the public service have time to attend school and receive instruction, and, in my opinion should be compelled to do so, either during the day when their duty is over, or in an evening. Regimental libraries (or village lending libraries), recently established with the best intentions, are of little use without readers. It is painful, and discreditable to those in authority, to reflect on the amount of ignorance existing amongst such a fine body of men as are now serving their Queen and country. Means ought to be taken to improve their minds as well as their bodies. By intellectual cultivation, crime would diminish, the good conduct list would be rapidly augmented, and promotion more readily ensured.*

[Errata. In Mr. Ikin's last paper, page 2, col. 1, top line, read "*these*", instead of "*this*". Also, at page 2, col. 2, read "a guard-book for keeping in regular *series*," instead of "*lines*".]

* In a previous note, I stated that 33,000 volunteers replenished the line; it should have been 38,000.

* The number of crimes recently so common has been attributed to disbanded militiamen, as well as to ticket of leave men. I am glad to contradict this as far as the 4th West York Regiment is concerned; for, on inquiry made at the Borough Gaol, I find that only five prisoners from the 4th West York have been sent since May 1st, 1856, and these for desertion before disembodiment, or for unlawfully enrolling in other regiments. Not one prisoner for felony has been received.

CASES OF LITHOTRITY.

By William Thomas Bell, Esq., Great Grimsby, late House Surgeon to the London Hospital.

Summary. *Failure of Operation from Impaction of a Fragment of Calculus: Lithotomy one year afterwards: Recovery.*

William Willson, aged thirty-two, agricultural labourer, of light complexion, sandy hair, good stature, and well formed, although worn down by his sufferings, came under my care in October 1853, with well marked symptoms of calculus in the bladder. I sounded him, and readily detected a stone of considerable size. His bladder symptoms were severe; for which I ordered him to keep his bed, and prescribed the following medicine.

℞ Sodæ bicarbonatis gr. lx; tincturæ hyoscyami ɱlxxx; spiritûs ætheris nitrici ʒiss; tincturæ opii ɱxxiv; aquæ cinnamomi ʒviiss. M. Fiat mistura cujus capiat cochlearia ii magna 4tis horis.

I also ordered a hip bath at night, and a ten grain suppository of compound soap pill, and the bowels to be regulated with castor oil. He soon improved under this treatment; so much so as to fancy the stone did not exist. In about ten days I performed lithotrity, and had some difficulty in retaining my hold of the stone from its polished surface and hardness; at last it was freely broken up. After three operations at moderate intervals, a fragment became impacted in the prostate gland; evidently a broad flat piece, because a good sized catheter could be passed over it into the bladder without much difficulty; for its removal I tried every possible means that could be thought of either to extract it, break it, or push it back into the bladder. This proved tedious, and the poor man's funds became exhausted. He went home, a distance of twenty miles, to try to raise funds to complete his cure. He commenced work, which he followed as long as he could. There was a stricture just below the glans penis, dilated with bougies; this proved an obstacle to the passage of fragments, requiring interference to remove them. A good deal of stone was passed after the third operation.

A year afterwards, in Jan. 1855, he again returned to me with his former symptoms. Upon sounding him, I distinctly felt the fragments of stone in the prostate. After he had had a few days rest and aperients, I performed the lateral operation of lithotomy while he was under the influence of chloroform, and removed a large quantity of broken calculus, including some large pieces, with the forceps and scoop, and by frequently syringing out the bladder with tepid water. The portion from the prostate came out during the operation. The day after the operation he had a little shivering and sore throat; most probably from cold caught during the operation. Independently of this, he had not one bad symptom; he made a good recovery in a month. I have seen the patient quite recently, two years after the operation; he remains in perfectly good health.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS BY PHYSICIANS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By EDWARD SMITH, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

LECTURE I (*concluded*).

RESEARCHES AS TO THE QUANTITY OF THE INGESTA AND EGESTA, SHEWING THAT PHTHISIS IS NOT ESSENTIALLY DUE TO DEFICIENCY OF FOOD, DEFECT IN DIGESTION, OR WASTE OF FOOD.

WE will now proceed to consider, with some detail, the state of the general system which is co-ordinate with the attack of phthisis, at least at or about the period of origin, and during a large part of the progress of the disease. This may be most conveniently effected by discussing the subjects which relate to the two classes of ingesta, viz., the food and the air; for upon these two processes mainly the health of the system must be dependent. The former will occupy the remaining part of this lecture, and the latter the next lecture.

Food. The appetite does not in general differ materially from that of health; it is said to be somewhat increased, but I have not found in the majority of patients any state which would warrant me in affirming that there is any decisive change induced by the disease. This will of course imply both that the enjoyment of food continues, and also that the quantity of the food taken is, in ordinary language, sufficient. I cannot adduce any other facts to corroborate this inference respecting the degree of enjoyment (and none are needed); but I can prove that the quantity of food actually taken by phthisical patients is equal to the healthy standard. (See *British and Foreign Medico-Chirurgical Review* for April 1856, with diagrams in the number for July 1856.) During the past year, I prosecuted an inquiry into this subject on fifteen male in-patients of the hospital, and weighed with great accuracy, I believe, all the fluid and solid food which they took during a whole month. The patients were of different ages, and in various stages of the disease; and a few of them were not only in the advanced stage, but had the general system much emaciated and enfeebled. The returns thus obtained are very voluminous, but a simple statement of the average results will suffice.

The subjoined table shows the average daily quantity (in ounces avoirdupois) of solid food, and of meat and bread; also the average daily quantity of fluid, and of ale and porter, used by fourteen patients for a month during May and June; also the average daily weight (in ounces) of undesiccated fæces passed by them during the same period. The cases are arranged in the order of quantity of solids in the urine, beginning with the highest.

No. of case.	Solid food.	Meat and fish.	Bread.	Total fluids.	Ale and porter.	Fæces.
69	40·1	6·8	21·7	103·0	15·1	7·0
95	32·3	6·2	18·4	72·2	8·2	7·5
107	21·1	5·2	9·1	83·3	14·7	7·8
88	22·3	5·4	8·7	53·0	19·0	2.41
79	30·1	4·1	14·0	63·3	8·7	9·6
75	21·6	4·3	9·1	60·0	8·0	5·65
46	26·6	3·8	15·6	67·0	10·0	5·21
80	28·8	4·7	14·0	62·6	7·4	4·75
51	14·7	5·0	6·8	92·8	8·0	5·85
90	21·7	4·2	8·6	43·6	2·4	6·14
58	31·4	5·2	16·6	82·6	8·0	7·55
73	15·2	3·1	8·4	62·0	9·1	2·6
85	19·7	3·7	7·1	54·8	8·0	4·82
77	19.0	4·0	8·2	51·3	10·0	2·34

It thus appears that, on the total average of fourteen patients taken for the period of a month in May and June, the quantity of solid food per day was 24¾ ounces, and that of this quantity were 4½ ounces of cooked meat without bone, and ¾ pound of bread. These average quantities differed much in the several cases, as the quantity of food in health differs, according to the stature and other peculiarities of each person, and were the least in the most advanced cases of phthisis. The highest average occurred in a soldier, 6 feet 1½ inches high and 13½ stones in weight, and was to the extent of 40 ounces per day, and of that nearly 7 ounces were cooked meat, and nearly 22 ounces were bread. The lowest average was in an advanced and shattered case, of short stature and light weight, and was 19 ounces per day, of which were 4 ounces of cooked meat, and 8¼ ounces of bread. The average of the seven less advanced cases was 27¾ ounces of solid food per day, including 5·1 ounces of cooked meat, and 15¼ ounces of bread; whilst, in the seven more advanced cases, the average quantity was 21½ ounces of solids, including 3·6 ounces of meat and 10 ounces of bread.

In estimating the value of these figures, we must not forget that, even in the least advanced case, the duration of the disease had been for a long period, and the amount of deposit or destruction, or both, considerable; and also that all the cases had become emaciated to a greater or a less extent. In referring to the results of these experiments, I therefore take the strongest argument against myself; for, as my aim is to prove whatever may be causative of phthisis, I at least go far enough when I take cases of the earliest deposition, and too far when the disease, by long continuance, has reacted upon the system. If, therefore, in the latter case, it can be shown that the quantity of food taken into the system is equal to that in health, *à fortiori*, the argument would be strengthened if we could refer to conditions existing at an earlier period of the disease.

Now, if we refer to our own experience, or to the dietaries of public institutions, we cannot doubt that the quantities of solid food thus given, on the averages, in early phthisis, are equivalent to that which is taken in health. But, since the appetite, whether in health or disease, varies much in the long period of a month, and since in phthisis it is hardly possible that a whole month should pass without some complication having appeared which would doubtless modify the appetite, we may gain a truer representation of the amount of food taken by considering the daily returns of the cases. This I cannot do in detail; but I shall refer to the case of the Life Guardsman, No. 69, who took the largest amount of food. From May 15 to 31, the largest quantity on any one day was 49 ounces, and the smallest 40½ ounces; and, on the average, the quantity was 45 ounces, or nearly 3 pounds in weight, against 40 ounces on the average of the month. After May 31st, his appetite failed from an inflammatory complication; so that, on one day, he took no food whatever, and on the remaining days until June 11th, the quantity varied from 20 ounces to 38¼ ounces. In this case, the quantity of meat per day, from May 15th to 31st, varied from 6 to 11 ounces, and subsequently from nothing to 9 ounces; whilst that of bread varied in the former period from 22 to 30¼ ounces; and in the latter period, from nothing to 20 ounces.

This case forms one end of the table; but if we take one at the other end, which was under observation for a month, and was in a most shattered condition, we shall find great variation from day to day. Thus, in case No. 85, the quantity of solid food varied per day from 13 ounces to 23½ ounces, and of meat from 2½ ounces to 6 ounces, and of bread from 5 to 10 ounces.

A careful perusal of the tables in each case cannot fail to teach that, in uncomplicated phthisis, in the earlier stage, the quantity of solid food is equal to that taken in health.

Now, if we turn from such facts as those now given to the impression which is left upon our mind by careful inquiry from numbers of patients who come under our observation, the same result is obtained. It is my practice amongst the out-patients to note the state of the appetite; and I affirm, with every conviction of truth, that in but a small minority of the cases is the appetite not good, or the quantity of food taken or desired less than their ordinary standard. That, in some instances, the appetite should be insufficient or unsteady, either for a longer or a shorter period, would not be by any means peculiar to disease, much less to phthisis, and has no weight in opposition to the general results.

The quantity of fluid food which was taken in the long inquiry before referred to is not so important to our subject, since that might depend upon other conditions than a desire for nutrition. It consisted, however, in part, of nutritive materials, such as milk, beer, wine, and beef-tea; but the larger quantity was of tea, coffee, and water. It may, however, render the argument less incomplete, if we refer to it; and it may also be of interest, if considered without much detail. (See Table.)

On the total average, the quantity of fluid per day in each case was 70 ounces, or 3½ imperial pints, which quantity in-

cluded half an ounce of wine and 10 ounces of ale and porter. It was the least in the most advanced, and the greatest in the least advanced cases; and when the fourteen cases are divided into these two classes of equal numbers, the quantity is 64 ounces and 72 ounces. The case which took the largest quantity of solid food took also the largest quantity of liquids; and in that the latter was, on the average, 103 ounces, or more than 5 imperial pints. The least average was found in one of the advanced cases, No. 90, and was 43½ ounces. There was much variation in this quantity from day to day. In the cases which took the largest quantity, it varied from 66 ounces to 127 ounces; and in that which took the least, the variation was from 34½ ounces to 54 ounces.

Thus, on the average, the proportion which the fluids bore to the solids in the food was somewhat less than as 3 to 1, and it varied in the different cases from as 2 to 1 to as 4 to 1. The total quantity of ingesta on the whole average was 93 ounces, or nearly 6 avoirdupois pounds weight per day. In case No. 69, it was as high as 143 ounces, or 9 pounds in weight; and in the case which took the least food, it was 70¼ ounces, or one-half of that taken by case 69. The total average in the seven cases the least advanced was 99½ ounces, and in the remaining seven cases it was 85¾ ounces. Case 69 took 170½ and 172½ ounces of ingesta in two succeeding days, or a total of 21½ pounds by weight; whilst the largest quantity taken in one day by the most advanced case was 90 ounces, only one-quarter of which was solid.

It is not my present purpose to show the effect which phthisis has in its ultimate progress in lessening the quantity of the ingesta; but it is evident from the above mentioned facts, that the quantity of both solid and fluid food is less in advanced than in early cases. It is, however, clear that, in every stage of the disease, upon the average, there is no inconsiderable quantity of ingesta, especially of a nitrogenous kind; and that the diminution in quantity is less than the wasting and exhaustion of system would lead us to expect. In the early stages, and for a long period after the first deposition of tubercle, there is no lessening of the quantity or the enjoyment of food; and, as we cannot prove the state of the appetite at the moment of first deposition, since that moment is never known, we are left to the inference, that, as in health, viz., before the first deposit of tubercle, the appetite was good; and, as it was so long after the deposit, it must have been the same at the moment of the deposition. I would, therefore, affirm the rule, that phthisis is not necessarily dependent upon loss of appetite, nor upon an insufficient quantity of food, where it can be obtained.

Having, then, established this fact, the next step will be to consider if the food thus abundantly introduced into the system is duly digested and prepared for the sustentation of the body. Now, the fact of the appetite being continuously good, and the quantity of food being normal, would, *à priori*, show that the food must be duly disposed of according to the usual course observed by the system. Our own experience, as that of our patients, leads to the belief that, wherever the organs concerned in digestion become deranged in their action, we suffer a diminution or loss of appetite, and consequently greatly diminish the quantity of solid ingesta. Then, again, when, from overfeeding or lessened wear and tear of the system, the body experiences repletion, the appetite and quantity of food commonly lessen. Both of these results are quite in keeping with what has long been proved to be a law of nature in the system, viz., that, whenever she cannot use or has no need, she ceases to desire. It is quite true that, in one or two diseases, this law may appear to be set at nought; but, upon the whole, the rule would be universally acknowledged. Hence, on this ground, we should be prepared to believe that the food taken into the system in phthisis is duly digested. If it were not so, it would depend either upon an altered action, and therefore an altered state of the organs of digestion, or upon its being hurried too rapidly through the alimentary canal.

If it depended upon derangement of the digestive organs, it would certainly evince itself by the well known signs of indigestion. We have already inferred that no such state of things exists, by the fact of the continuance of the appetite and supply of food, and we get abundant confirmation of this in our medical practice. I am of opinion that in no stage of the disease is dyspepsia more commonly observed in phthisis than in any other chronic disease of vital organs; but on the contrary, that it is much less marked than in long continued disease of the liver. Much less is it a necessary concomitant of the early stage of phthisis. As a rule, which may certainly be proved to exist amongst the out-patients, the tongue is clean and is remarkable only from a deficiency of blood in its structure, and there is neither tenderness at the epigastrium on pressure, nor pain or inconvenience after meals. Of course, as dyspepsia is the most frequent disease affecting humanity, and the most frequent in hospital practice, it is not unfrequent amongst phthisical patients, who constitute so large a proportion of all cases of disease; but in them as in others, it is only temporary, and is as amenable to treatment as it is in persons otherwise healthy. Pressure over one or both lobes of the liver will not unfrequently give a little pain, and indicate the existence of a condition which otherwise would be most readily referred to the lungs themselves, but which a little blue pill and the ordinary treatment for inactive or congested liver speedily removes. Then, again, I would affirm that in the early stages of phthisis, dyspepsia is not by any means a constant concomitant, and consequently that the latter is not even a necessary effect of, much less can it be a common cause of the former. But all this rather refers to the effect than to the cause; yet if dyspepsia were a common cause, it would surely commonly attend the early stages of the disease. But regarding it at an anterior period and as a cause, I do not think that there is any evidence to show that phthisical persons were especially subject to dyspepsia before the period of earliest deposit, or that dyspeptic persons are peculiarly prone to phthisis. Hence, whilst dyspepsia may occur to phthisical patients either before or after the deposit, it is only to the extent in which it attacks persons otherwise healthy, and is not necessarily or commonly causative of phthisis; and so far it is fair to infer that in phthisical cases, as in health, the abundant food is properly digested.

The other alternative of want of due digestion, viz., the *hurrying* of the food again from the system, can be due only to the acts of vomiting and purging. Vomiting is not by any means common in the early stage of phthisis, nor indeed in any stage of the disease; and we know that it is not frequent in health, or in that condition which immediately precedes the earliest deposition of tubercle. In the later stage of the disease it is sometimes found, and may then in part account for the wasting; but it is then rather the effect of a general irritability attending upon an exhausted system, and of a distended stomach impeding the very limited action of the lungs. In the investigation of 15 patients for a month, only two during that period had vomiting. In one it was considerable, and produced on the average of the month 1·82 ounces per day. This case exhibited great nervous excitability in his temperament, and in the large quantity of colourless urine of very low specific gravity, and he subsequently died of brain disease. He had been intemperate. The other had vomiting to the extent of an average of one-fifth of an ounce per day, and at the same time had diarrhœa and albuminuria. The former was an advanced, the latter an earlier stage of the disease. In the former there were at the same time only 21 ounces of solid food taken per day, although the system had not greatly suffered; a circumstance probably attending upon or due to the vomiting. So also purging is not common in health, neither is it frequent nor peculiar to the early stage of phthisis. I do not know that in the early stage of phthisis there is much change in the frequency of the alvine evacuations; but if there be, it is rather on the side of a deficiency of action. Hence by neither mode is the food once taken into the system unfairly hurried out of it.

But there is yet a third source of evidence in reference to this perfect or imperfect digestion of the food to which reference should be made, viz., the amount of nutritive matter still left in the fæces when they have passed through the alimentary tract. It would not be difficult to determine this fact with accuracy, but my present inquiries have stopped short at this point. In the inquiry to which reference has been made, the quantity of most of the egesta as well as the ingesta was determined; and, so far as that may be a guide, it has been ascertained with a fair amount of accuracy. (See Table.)

On the total average of all the cases on each day for a month, the weight of the fæces was 6·3 ounces avoirdupois, and varied from 2·34 ounces to 9·6 ounces per day; whilst in health, on Lehmann's authority, the fæces weigh from 5 ounces to 7¼ ounces. In the seven most advanced cases it was 4·9 ounces, and in the seven least advanced cases 6·4, or a difference of 1½ ounce per day on that average. Thus, in reference to the stage of the disease, it agrees with the ingesta, but the proportion of the fæces to the whole ingesta is even less in the advanced than in the early stage, viz., 1 in 17½ in the former, and 1 in 15½ in the latter; and the proportion of the fæces to the solids only in the ingesta is precisely the same in both classes, viz. 1 in 4·3. So far, then, as quantity is evidence of nutritive quality in the fæces, it is clear that there is no greater waste in the advanced than in the early stage of the disease.

As the fæces in these experiments were not desiccated before they were weighed, they may have been more or less solid, and would thus vary in weight with the occurrence of diarrhœa or with the frequency of the stools. Hence there would not necessarily be a constant correspondence between the weight of the fæces and of the whole ingesta, or of the solid or fluid parts of the ingesta taken separately. The case (No. 69) which took the largest quantity of both solid and fluid food did not have the greatest weight of fæces, but the greatest weight of fæces was found in a case in the early stage (No. 79), in which there were the complications of diarrhœa and excessive albuminuria.

The case which appeared to closely resemble a state of health was a ruddy looking farmer (No. 95), who had one lung sound. On the total average, the weight of his fæces per day was 7¼ ounces, whilst that of the total ingesta was 105½; so that the former was one-fourteenth of the latter, and as 1 to 4·2 of the solids in the ingesta. This is somewhat more than the proportion which the total average of the cases gives, and consequently shows that as we approach to a state of health the quantity of fæces increases and not diminishes.

It has been stated that when the stools were numerous, the total weight of the fæces was increased. This was seen in case 79, in whom it amounted to 20 ounces on one day, and 16¾ on another day. In case 69 also to 19 ounces in one day, and in case 95 (the healthy looking man) to 19, 19, and 21¼ ounces on succeeding days. The same fact, however, occurs in some instances where there is deficient action, or when an evacuation occurs only once in two or three days. The largest amount passed in any of the cases was in one of very sluggish temperament, who, after passing three days without an evacuation, had one to the extent of 32 ounces, and again another of 20 ounces at a further interval of two days. In this case there was a considerable quantity of food taken, viz., 31½ ounce average. There was, however, an instance of very costive habit, in which, after an interval of two or three days, the evacuation varied only from 5¼ to 8¾ ounces, and produced on an average of a month only 2·41 ounces per day. In this instance, the average quantity of solid food was 22¼ ounces. Thus it is evident that it would be fruitless to expect the fæces to bear the same proportion to the ingesta from day to day, and there is only a very general proportion between them in the long interval of a month.

From the foregoing statements, we learn that, in the cases nearest to health, the quantity of fæces was above the average of the whole cases combined, and was greater in proportion to the total ingesta than in the more advanced cases; and also that, as the disease advanced, the proportion of the fæces became less. Moreover, as, on the total average, the weight of the fæces in phthisis is much greater than in health, there are some grounds for the inference, that the food does not in that disease pass off in the fæces, undigested and unappropriated by the system, at least not to a greater extent than probably occurs in health—a probability infinitely greater when we limit the attention to the condition precedent of the deposition of tubercle. Hence we have not as yet any evidence by which to ascribe the origin of phthisis to the absence of abundant nutriment in the body.

Now, if, in addition to the previously mentioned facts, we add the not insignificant one, that phthisis occurs in all classes of the community, and therefore, in a very large proportion of instances, in persons who must, throughout their whole period of existence, have had abundant and proper nourishment, we must acquit the whole of the organs of digestion, as well as the quality and quantity of food, of any necessary share in the production of phthisis, and, for all purposes of practice, may exclude this subject from our attention.

[The researches into the quantity and chemical constituents of the urine were not completed when the above lecture was delivered; hence they are not inserted in this place.]

Alleged Cure for Sea Sickness. Dr. Landerer, at Athens, announces that he has discovered a sovereign specific against sea sickness. His remedy is to give from ten to twelve drops of chloroform in water. The chloroform in most cases removes nausea, and persons who have taken the remedy soon become able to stand up, and get accustomed to the movements of the vessel. Should the sickness return, a fresh dose is to be taken. It was tried on twenty passengers on a very rough voyage from Zea to Athens, and all, with the exception of two, were cured by one dose. The minority, two ladies, were able to resist the feeling of illness on taking a second dose. *(Galignani's Messenger.)*

Reviews and Notices.

A Few Remarks on the Perforating Ulcer of the Stomach and Bowels. By J. Bower Harrison, M.D., F.R.C.S., etc. pp. 68. London: Churchill. 1856.

In this little *brochure*, Dr. Bower Harrison presents us with some very sensible observations, written in the same easy conversational strain which characterises all his other medical productions. After narrating several very interesting cases, he discusses in succession the diagnosis, treatment, and morbid anatomy of the fatal lesion under consideration; scattering here and there, as he proceeds, a short but highly useful practical remark. For example, he very truly observes that—

"Many cases are recorded with great minuteness which still omit points of the utmost importance in diagnosis. In order to report a case well, we must have some previous knowledge of what is chiefly worthy of observation." (pp. 9, 10.)

The first of Dr. Harrison's cases is an interesting illustration of the practical acumen of the late Mr. Robert Thorpe, of whom Sir James Bardsley so justly observed at the Manchester anniversary meeting, that his knowledge far exceeded his power of expression. The case was that of a female presenting the ordinary symptoms of strangulated hernia, with "a small tumour in the bend of the right thigh, as nearly as possible in the situation of the crural ring." The woman was conveyed to the Manchester Infirmary, where every one thought the case to be one of hernia, with the exception of Mr. Thorpe. After death, the tumour was found to be merely a softened gland; and there was peritonitis from perforating ulcers of the small intestine.

In another case of fatal perforation occurring in a gentleman who, "though only thirty-seven years of age, had a much older look, and might easily have been taken for fifty", the immediate occasion of the fatal rupture of the stomach by perforating ulcer, was an overloaded condition of the organ. The patient "was a man of very abstemious habits, and accustomed to long fasts; but on the morning of the attack he had made a hearty breakfast, and partaken of mutton chops." The author also remarks that—

"Many cases are recorded in which a hearty meal has been the precursor of death by perforation; and others are mentioned in which an emetic has been the occasion of a fatal rupture." (pp. 42, 3.)

As signs of perforation having taken place, it is stated that—

"The pain which ensues rarely or never abates, but becomes more and more severe, until death occurs. Exceptions have indeed been mentioned, but they are certainly rare. The pulse is not always affected at the commencement, and sometimes it remains steady for many hours, and fails only with the approaching collapse. The intellectual faculties are unfortunately too clear, and remain unimpaired to the end. I do not think that there is any peculiarity in the tongue, nor should we expect any. The abdomen mostly becomes tympanitic after perforation has taken place, though, before that occurrence, it is often hard and contracted. If the patient vomit, he does not vomit much; it is an abortive effort, attended with aggravation of pain and flatulence. If fluids be taken—at any rate, when the perforation is in the stomach—there is a dreadful accession of suffering after a brief interval.

"The pain which attends perforation is sudden and violent. It is violent at once, and does not become so by degrees. This in itself is striking, and unlike the more gradual invasion of ordinary inflammation. Again, it is more than commonly violent. The patient says he cannot bear it. He speaks authoritatively, and says he must have relief, or he shall die." (pp. 22-4.)

Speaking of the liability of anæmic young women to this disease, the author observes:

"It would appear that the changes in the molecular constitution of the stomach are more rapid than those of other parts of the body, and that it is the first to suffer when aliment is

withheld. Hence, ulceration of the stomach has been known to attend states of starvation." (pp. 34.)

In regard to treatment, the account is not a hopeful one. In the preliminary dyspepsia which may be supposed to indicate the existence of gastric ulcers prone to produce perforation, the main consideration is attention to the feeding of the patient. His food must be given in small quantities at once, and must be unirritating in quality. "A due regulation of the food is paramount to all other considerations." Opium, bismuth, iron, and aloes, are spoken of judiciously and approvingly. Of nitrate and oxide of silver, Dr. Harrison has not had much experience. When perforation has occurred, "opiates and rest are our chief reliance; and the hope of recovery is small indeed."

We commend this little work as containing an excellent and very intelligible sketch of what is known respecting the disease of which it treats.

On Artificial Digestion as a Remedy in Dyspepsia, Apepsia, and their Results. By Edward Ballard, M.D., Licentiate of the Royal College of Physicians, etc. pp. 46. London: Walton and Maberly. 1857.

The introduction into the list of therapeutic means of pepsine, the digestive principle of the gastric juice, is, Dr. Ballard informs us, due to Dr. L. Corvisart of Paris: and it has received an extended trial and been recognised as a valuable addition to our means of cure both in France and Germany. The following extract from Dr. Ballard's little work will shew how pepsine is to be prepared and employed.

"*Preparation.* The following are the directions given by M. Boudault for the preparation of this medicine. 'Take a sufficient number of rennet bags (the fourth stomach of the ruminants), open and reverse them, and wash them under a thin stream of cold water; scrape off the mucous membrane, reduce it to a pulp, and macerate it in distilled water for twelve hours; filter and add to the liquor a sufficient quantity of acetate of lead, collect the precipitate, and pass through it a current of sulphuretted hydrogen; filter again, and evaporate at a low temperature, and powder the dry residue.' Pepsine thus obtained varies in transforming power, and it was necessary to obtain a medicine whose energy for equal weights should be uniform. With this view it was necessary to assume a standard dose, and this was the quantity of pepsine, which when acidulated with three drops of lactic acid, and added to fifteen grammes of water, would transform six grammes of fresh fibrin, finely cut up, and kept in a bottle at a temperature of 40° centig. for twelve hours, with occasional shaking. This quantity being ascertained, starch is added to bring this dose to the weight of one gramme. The solution of pepsine is now, as we conclude from a recent brochure of M. Boudault, not evaporated to dryness but only to the consistence of a syrup, which is mixed intimately with starch pulverised and dried at a temperature of 100° centig. In this state the whole can be reduced to powder, and a medicine of an uniform efficacy is obtained.

"There are four kinds of 'Poudres Nutrimentives', numbered 1, 2, 3, and 4. Nos. 1, 2, and 3, are acidulated with lactic acid, in the proportion of three drops to each dose of a gramme. No. 4 is neutral, or nearly so. No. 1 is the basis of Nos. 2 and 3, which, as we shall see, contain other active ingredients.

"*Characters.* Pepsine thus procured, and diluted with dry starch, is a rather coarse powder of a light brown colour, not uniform, but evidently consisting of two kinds of powder, which are evenly mixed. It has a slight odour of gastric juice, and a slightly acid, saline taste. It slowly attracts moisture from the atmosphere, when exposed; but, in well-corked bottles, may be preserved for an indefinite time without losing its physiological properties. When water is added to it, the pepsine readily dissolves, the starch with which it was mixed remaining insoluble. The filtered solution possesses all the transforming power ascribed to it. It need scarcely be said that the pepsine contained in the 'Poudre Nutrimentive' is not chemically pure. The process of rendering it so has been followed by the destruction of its physiological properties.

"*Dose and Mode of Administration.* The average dose of the 'Poudre Nutrimentive' is about fifteen grains. This dose rarely need be exceeded. In some instances a smaller quantity may suffice, as where it is administered to infants. It may be taken dry or in solution. In the former case, the dose may be taken in a morsel of unfermented bread; in the latter it may be dissolved in the first spoonful of soup taken at dinner, provided this is cool; or it may be disguised by administration in sweetened water, etc. The principal point to attend to is, that it must be taken with, or at the commencement of the meal on which it is to act. M. Corvisart recommends the following as a formula which meets with general approbation:—

"Take of pepsine 6 grammes (93 grains); dissolve for twelve hours in syrup of acid cherries, 60 grammes (15½ drachms); add elixir of Garus, 15 grammes (3¾ drachms); filter.

"A more ready mode of preparing this syrup consists in first dissolving the pepsine in a little cold water, filtering, and then adding the other ingredients. The elixir of garus may be substituted by an equivalent quantity of syrup of cherries. A sixth part of the quantity is a dose. This mixture of pepsine with syrup must only be made extemporaneously; for, if preserved for a few days, the pepsine acts upon the cane sugar like a ferment, transforming it first into glucose, and subsequently into lactic acid. An advantage to the digestion may, as it appears to me, occasionally be gained by the simultaneous use, with the pepsine, of an additional quantity of lactic acid. No considerable quantity of liquid should precede, or immediately succeed a meal in which pepsine is used; and the same must be said of the drinking of the stronger alcoholic beverages.

"There is another mode in which pepsine may be used to promote the nutrition of the sick. I refer to the previous conversion, by its aid, of the food to be administered into true nutriment. There are cases of disease in which thus, alone, can sufficient support for the preservation of life be possibly introduced; cases where the use of solid animal food is urgently indicated, but in which the patient, from the dryness of his mouth, or other causes, is incapable of taking it; where nothing but liquid or dissolved nourishment can be introduced. These are cases in which medical men seek to maintain life by beef-tea, soups, juice of meat, and nutricious enemata. Now we begin a new era in the nourishment of such patients; we may now furnish them with all they require to maintain life, already digested, and in the form of liquid such as they can swallow, or such as, with improved prospects of success, we may inject into the rectum.

"*Therapeutical Effects.* It may be premised, that, in availing ourselves of the use of this medicine, the food with which it is given must be animal or nitrogenised food. It, nevertheless, does seem to operate, in some degree, upon the amylaceous ingredients of the food; upon such of them, at least, as have been previously transformed into glucose, causing the ultimate conversion of the latter into lactic acid. It is, probably, on this power that the efficacy of rennet in the treatment of diabetes depends.

"An immediate effect of the administration of a dose of pepsine in dyspepsia, is sometimes, but not invariably, noticed in the production of *appetite* which had previously been absent. A few doses, in most cases, are followed by an appetite for subsequent meals; and where but little food could be taken without disgust at the commencement of the treatment, it often happens that full meals are shortly taken with pleasure. In those instances where voracious appetite accompanies prolonged diarrhœa, from the apepsia of infancy, the appetite becomes reduced, as soon as the effect of the general improved nutrition becomes marked.

"The relief and rapid disappearance of painful sensations after meals, is a more marked effect of the use of pepsine in cases of *dyspepsia*, arising out of defective or imperfect secretion of the gastric juice; and the same thing may be said of the arrest of the vomitings, which are due to the same cause; and of flatulent distensions that arise from the chemical decomposition of the aliment."

For a further account of the benefits to be derived from the use of pepsine, and for a series of illustrative cases, our readers are referred to the book itself. The principle on which this remedy is administered is physiological and simple; and if it prove as efficacious in the practice of others as it has been in that of Dr. Ballard and the continental physicians, a valuable addition will have been made to our therapeutic stores.

De La Rue's Medical Memorandum Book and Indelible Diary: 1857. Edited by a Physician. London: John Churchill.

This is one of the best pocket-books which a medical man could possess. In addition to its well arranged diary, it contains an amount of information on points which specially interest the practitioner, such as he will find in no other diary that we have seen. The days of meeting of scientific societies, the fees allowed by law to medical practitioners, the names of all officials in any way connected with medicine, are all duly recorded; in addition to which, short hints are given with respect to matters in which even the best and ablest medical man may for a moment be at fault, such as the antidotes for the various poisons, the numerous signs of pregnancy, the relative strength of the various wines and spirits, and the proportions of the most active ingredients used in the more important preparations of the London *Pharmacopœia*. This little pocket-book is, in fact, to the general practitioner, only second in importance to his pocket instrument-case.

The Liverpool Medico-Chirurgical Journal. No. I. January 1857. pp. 146. Liverpool: Walmsley. London: Churchill.

The Australian Medical Journal, edited under the superintendence of the Victoria Medical Society. Nos. I, II, and III, January; April, and July, 1856; each No. 80 pp. Melbourne: T. M. Buzzard.

We have placed together the names of two new medical periodicals, one of which is issued by the profession in Liverpool, while the other represents the state of medical science in one of our most flourishing colonies on the other side of the world.

The *Liverpool Medico-Chirurgical Journal*, its conductors state, is intended to "incite to literary exertion, both in that town and elsewhere, those whose opportunities and abilities well qualify them for the task, but who have hitherto lacked the initiatory stimulus." We wish our *confrères* success in this object; but they must not be sanguine. The *Journal* is to be a quarterly publication: and if the first number be a fair specimen of the work, it will certainly be very creditable to the profession in Liverpool. We shall have occasion to refer to some of the articles under their proper classes in the Periscope or elsewhere; but, in the mean time, the following list of titles will show what our Liverpool brethren have put together in print as their special contribution to the instruction of the profession:—

"A Sketch of the Medical History of Liverpool. By F. D, Fletcher, M.R.C.S. Six cases of Lead Poisoning. By T. Inman, M.D. Slow Poisoning by Antimony. By J. Birkbeck Nevins, M.D. Artificial Enucleation of a Large Fibroid Tumour of the Uterus, with some Remarks on the Surgical Treatment. By T. F. Grimsdale, Esq. Concealed Accidental Hæmorrhage. By L. E. Desmond, Esq., B.A. Excision of the Shoulder-Joint. By E. R. Bickersteth, F.R.C.S. Seven Cases of Transfusion of Blood. By Alfred Higginson, Esq. The Cachexia of Young Children. By E. Whittle, M.D., M.R.I.A. Cases of Continued Fever. By Robert Gee, M.D. Case of Idiopathic Tetanus. By J. Sinclair, M.D., M.R.C.S. Case of Stone in the Bladder, Lateral Lithotomy, Recovery, with Union by the First Intention. By J. Nottingham, M.D., F.R.C.S. Case of Mollities Ossium of the Clavicle. By James Hakes, Esq. Abstract of the Proceedings of the Medical Society."

The Australian Medical Journal is, we believe, the first publication of the kind which has appeared in the colony whose name it bears. It is conducted by a committee of the Medical Society of Victoria; and the numbers which have reached us are marked by the practical character of the communications, as well as by the sound moral tone maintained in regard to the social and political affairs of the profession. Under such guidance, true scientific medicine will stand its ground well in Australia.

Periscope.

PRACTICE OF MEDICINE AND PATHOLOGY.

TREATMENT OF ASPHYXIA.

Two articles on the important subject of the treatment of Asphyxia have lately appeared in the medical journals, and an abstract of them is subjoined. The opinions of Mr. Jennings of Malmesbury are already well known to the readers of the Association Medical Journal.

RATIONALE OF THE FATAL TENDENCY OF THE WARM BATH IN ASPHYXIA.

In a paper published in the *Lancet*, Dr. Marshall Hall says that an animal dies in air consisting of such a proportion of carbonic acid with oxygen as to prevent the evolution of carbonic acid from the blood. If, without producing sudden effects, we change the relative proportion of the respiration and the circulation, morbid phenomena are produced special to each case. If the circulation be disproportionately augmented, carbonic acid is formed and morbidly retained:—slighter convulsion and slower death ensue. If the respiration is unduly and disproportionately augmented, the animal is cooled; for mere pulmonary respiration is a cooling process, by the difference of temperature of this inspired and expired air; and in this case also the animal dies, but now from loss of temperature. This latter is the case in the asphyxiated patient, if the respiratory movements be unduly hastened—that is, disproportionately to the rapidity of the remaining circulation. On the other hand, if in the asphyxiated we excite the circulation without simultaneously and proportionately inducing the respiratory movements, we destroy our patient by carbonic acid, formed in the course of that circulation, and uneliminated by respiration.

The warm bath in asphyxia is injurious, and has, Dr. Hall is convinced, of itself proved fatal in cases in which the patient, without it, would have spontaneously recovered. Warmth is so obviously a stimulus, and a stimulus is so apparently required for a patient taken out of the cold water in a state of asphyxia, that in recommending the warm bath we seem to be addressing ourselves to the common sense of mankind, and it was a step in advance to entertain a doubt on the subject.

But when we begin to experiment—when we learn that an animal deprived of respiration by being submerged under water, lives longer in cool water than in warm water, we learn to consider whether, in fact, coolness is not more favourable to life in the asphyxiated from submersion, than warmth. Animals bear the abstraction of respiration in proportion to their coolness: the hybernant animals and the batrachian tribes will scarcely drown at all. If a kitten be first cooled, or if it be immersed in cool water, it will not drown so soon as it would do if submerged at its ordinary temperature in water of the same temperature. There are other facts which point to other modes of treatment of the drowned, which the administration of the warm bath necessarily excludes. If a poor creature be perishing for want of food, we cautiously administer food. If a man be, in like manner, perishing for want of air, should we not administer air? And in the case of drowning, is not the want of air the first condition to which we should bring succour, and the want of temperature the second or third? Then in drowning we should administer air first and warmth in the second place. Warmth administered without air raises the temperature, and in so doing augments the necessity of respiration to life. If any effect be produced by the warm bath, the circulation is accelerated. But to accelerate the circulation without inducing, at the same time, efficient respiration, is to augment the formation of carbonic acid without its elimination from the system. Secondly, all excited respiration through the medium of the cutaneous excitor nerves is excluded, the uniform temperature of the warm bath excluding the excitants of those nerves arising from the alternate application of heat and cold to the surface; and thirdly, imitated respiration is excluded by the very sustained position of the patient, excluding, as it does, alternate pronation and rotation, and pressure applied and removed, or changes of position and compression, which induce respiratory movements. So that the warm bath is not only positively injurious by poisoning, but negatively, by excluding the de-poisoning process. Lastly, the warm bath excludes those frictions of the limbs upwards, with pressure, which really constitute the most effectual means of promoting the circulation and warmth. Nor is it unimportant to save the time expended in preparing the warm bath, or in carrying the patient to it.

JUGULAR VENESECTION IN ASPHYXIA.

Dr. John Struthers of Edinburgh, in a paper published in the *Edinburgh Medical Journal* for November 1856, advocates the practice of opening the external jugular vein in cases of asphyxia. He refers to the ascertained fact that the right side of the heart may be disgorged in animals by jugular venesection, with the result of increasing the action of the heart when it has become feeble. A point which remained to be ascertained was the amount of obstruction which would be offered to the reflux of blood by the valves in the veins of the neck. Dr. Struthers gives a description of these valves, and details some experiments which he performed on the dead human body with the object of ascertaining whether or not fluid would pass these valves. It appears that the valves do sometimes offer an obstacle, but that this may be overcome by the introduction of a catheter; and that regurgitation does not readily take place from the external jugular vein unless it be so distended as to overcome the action of its terminal valves.

In making the practical application of what has been said, Dr. Struthers observes that, the remaining indication beyond the maintenance of artificial respiration, in the treatment of asphyxia, is specially to restore the action of the heart. The stagnation at the lungs produces accumulation of blood in the right side of the heart, distending and at length paralysing it, the action of the heart continuing a short time after respiration had ceased. It may be asked, Why does restoration not quickly follow well performed artificial respiration, after a short immersion? The natural relation between the lungs and the air has been restored, and respiration is going on. All that would seem to be now wanting is the forcing power of the heart to drive the blood onwards; but the pulmonic heart is paralysed by a mechanical cause, which, unless removed by regurgitation, must or may render fruitless all attempts at resuscitation.

In regard to this important indication, Dr. Struthers infers, from his experiments on the human subject, and from the general view he has presented of this inquiry—1, That it is generally possible to disgorge the right side of the heart by jugular venesection; and 2, That there is every reason to believe that jugular venesection will prove a useful means in resuscitation.

In jugular venesection under other circumstances we make pressure below the opening, and the blood flows from above. This proceeding is to be regarded as a general bloodletting, as in bleeding at the arm, and in addition, as a local bloodletting to the head; as a more direct and rapid means of relieving congestion of the head generally, and pressure on the brain from venous obstruction. In asphyxia, jugular venesection may possibly be useful on this principle also, as well as on the much more important principle of regurgitation; but it is to be borne in mind, as my experiments show, that the blood which comes from above may still be a regurgitating current from the internal jugular, on account of the very free communication which always exists at the upper part of the neck between the various jugular veins of the same side, enabling injections to pass readily from one to the other.

There is one danger attending this procedure—that of entrance of air into the veins. This accident is especially apt to occur at the root of the neck, where the veins do not collapse easily, but are kept open, or "canalised," by their relation to the bones; so that during the act of inspiration, air is very liable to enter. To leave a wound in the external jugular vein in an open condition during the performance of artificial respiration, would therefore place the patient in very dangerous circumstances. It is, however, evident that air cannot enter as long as the veins are distended or full. The danger then may be obviated by closing the wound as soon as the blood ceases to regurgitate actively. Recollecting that our object is not to empty, but only to relieve the over-distension of the auricle and ventricle, the escape, by regurgitation, of even one ounce, should afford very material relief. As, however, part comes from above, the safe plan is not to close the wound until the blood ceases to flow actively.

In the great majority of the drowned, although the body is early recovered from the water, the vital actions have ceased; means of resuscitation are usually continued for perhaps an hour or more; and the means commonly had recourse to, after stripping and drying the body, are warmth and friction, and attempts to restore respiration by artificial means, or by galvanism.

Dr. Struthers would recommend jugular venesection to be performed *as early as possible;* that the vein should be opened at about an inch above the clavicle; that the veins be simply allowed to disgorge themselves; and as soon as the active flow ceases, not waiting too long, that the wound should be carefully closed, and artificial respiration immediately commenced.

With regard to assisting the regurgitation, he would not be disposed to interfere if the blood came with even moderate freedom. If it did not, it might then be advisable to introduce a probe, or blow pipe, or instrument like a female catheter, and slip it gently in the direction already mentioned, for about a couple of inches. If this be not succeeded by a regurgitating current, then abandon the procedure, and close the wound. The patient has had all the chance which the surgeon can give of the benefit which, he believes, jugular venesection will generally confer.

British Medical Journal.

SATURDAY, JANUARY 10th, 1857.

THE LUNACY ARISING FROM PUERPERAL FEVER: IS THE PATIENT'S DETENTION FOR LIFE JUSTIFIABLE?

The dreadful murder last week of two young children by their mother, Martha Bacon, in Kennington Lane, draws our attention to the commission by women of deeds, deemed horrible crimes by the informed public, but for which in reality they are not properly accountable. The poor woman who put an end to her two children's lives, it is admitted on all hands, is a lunatic. Her unmeaning tale about the men who broke into her house and cut her own and her children's throats—her vacant stare at the witnesses as they gave their evidence—so strongly stamped her case, that every one in court felt the impropriety of placing such a poor creature in the dock of a court of justice. Had a medical man versed in lunacy witnessed this examination, he would at once have jumped at the conclusion that he saw before him a person who had gone insane in consequence of an attack of puerperal fever. And this, we are given to understand, is actually the case. Martha Bacon was attacked with this fearful malady immediately after the birth of her last child, fifteen or sixteen months since, and between that and the present time has been an inmate of the Lincoln County Asylum. Those who have seen much of puerperal fever are aware that in the delirium which attends it, the mother but too often directs her violence against her own children. Over lactation often results, as our associates well know, in insanity, which, in a similar manner, shows itself in the commission of acts of infanticide. Mrs. Brough, who murdered her six children some time since, was an example of this class of lunatics. This woman was the nurse of the Prince of Wales, and was dismissed from that responsible office on account of severe headaches; these headaches terminated in that "terrible black cloud" of the brain, under shadow of which in one night she made a clean sweep of all her little ones. This woman, who very narrowly escaped hanging, is at the present moment an inmate of the criminal wards of Bethlem, and is, at times, of decidedly unsound mind. There are many women, however, in this asylum at the present moment incarcerated for life, by the order of the Home Secretary, for crimes committed during the delirium attendant upon puerperal fever, who have recovered their reason, and it is to the hardship of

their cases that we wish to draw public attention. As long as a criminal lunatic of this class is within the childbearing age, no doubt it would be unsafe to let her loose again upon the world, as relapses but too often occur during subsequent confinements; but we cannot conceive on what grounds perfectly sane women, past the change of life, are confined as state prisoners. The conditions which brought about their former insanity cannot by possibility occur again; and to continue their confinement is to punish them for acts committed years before, at a moment when they were no more accountable for their actions than they would have been for those committed during an attack of brain fever. The injustice done to these poor women is not felt so much, perhaps, at the present moment, as there are but few of them in our public asylums saved from ignominious deaths by the merciful intervention of our own profession, but year by year we shall certainly see an increasing number snatched from the gallows by the juster ideas now obtaining with repect to the responsibility of women who commit meaningless crimes, such as those we have already quoted, and then it will be no longer possible to continue the present unjust system of perpetual confinement.

THE LATE HUGH MILLER.

The sudden death of Hugh Miller, one of the most laborious of men of science, and classical of English writers, is by this time too well known to require a detailed account of its occurrence. Suffice it to say, that Mr. Miller was found on Wednesday, December 24, shot through the heart with a pistol bullet. The well known character of the man led to the hope at first that the melancholy event was the result of pure accident, he having been in the habit of keeping a loaded pistol in his bedroom, from an apprehension (which was not without grounds) of danger from burglars. An investigation, however, of the circumstances attending his death, made by Professor James Miller and other medical men, together with a knowledge of the influences under which he had been placed, leave no doubt that the act was suicidal. The conclusion drawn by Professor Miller is embraced in the following words:

"The cause of death we found to be a pistol shot through the left side of the chest, and this we are satisfied was inflicted by his own hand. From the diseased appearances found in the brain, taken in connection with the history of the case, we have no doubt that the act was suicidal, under the impulse of insanity."

The subjoined extract from the *Witness* newspaper—of which, in addition to his scientific pursuits, Mr. Miller was the editor—gives an idea of the condition to which his mind had been overworked.

"For some months past his overtasked intellect had given evidence of disorder. He became the prey of false or exaggerated alarms. He fancied—if, indeed, it was a fancy—that occasionally, and for brief intervals, his faculties quite failed him, that his mind broke down. He was engaged at this time with a treatise on the *Testimony of the Rocks*, upon which he was putting out all his strength, working at his topmost pitch of intensity. Hours after midnight the light was seen to glimmer through the window of that room which, within the same eventful week, was to witness the close of the volume and the close of the writer's life. This overworking of the brain began to tell upon his mental health. He had always been somewhat moodily apprehensive of being attacked by footpads, and had carried loaded firearms about his person. Latterly, having occasion sometimes to return to Portobello from Edinburgh at unseasonable hours, he had furnished himself with a revolver. But now, to all his old fears as to attacks upon his person, there was added an exciting and over-mastering impression that his house, and especially that Museum, the fruit of so much care, which was contained in a separate outer building, were exposed to the assault of burglars. He read all the recent stories of house robberies. He believed that one night lately an actual attempt to break in upon his museum had been made. Visions of ticket-of-leave men prowling about his premises haunted him by day and by night. The revolver which lay nightly near him was not enough: a broad-bladed dagger was kept beside it, while behind him, at his bed head, a claymore stood ready at hand. A week or so ago, a new and more aggravated feature of cerebral disorder showed itself in sudden and singular sensations in his head. They came on only after lengthened intervals. They did not last long, but were intensely violent. The terrible idea that his brain was deeply and hopelessly diseased, that his mind was on the verge of ruin, took hold of him, and stood out before his eye in all that appalling magnitude in which such an imagination as his alone could picture it."

He appears to have had the idea that he must have walked in his sleep. This he expresses, in terms of agony, in a letter to his wife, which was found lying beside his corpse. "I *must* have *walked*", he says; "and a fearful dream arises upon me. I cannot bear the horrible thought." The same idea appears in his description of his symptoms, as given by him to Dr. Balfour and Professor Miller, who met in consultation on his case on the day preceding his death.

In conclusion, we must, as a duty, animadvert on a fault of omission. While we have no desire to say anything which would increase the regret of those who have known Mr. Miller both in his social and in his scientific relations,—a regret in which, as members of the scientific world, we partake,—we would ask why, after he had described to his professional advisers the symptoms of cerebral disorder, under which he suffered, he was allowed to sleep *alone?* Who knows but that, if he could have been safely preserved by the care of a watchful attendant through the dread hours of night, the overworked mind might in time have recovered its healthy tone, and an ornament to science have been preserved to us for a longer time?

THE WEEK.

We trust our associates will not forget that the opening of the year is the time for recruiting our ranks. The resignations, we believe, have not equalled the new admissions; nevertheless we should not feel satisfied with merely keeping our numbers at the same level. It should be remembered that our force would be doubled if every associate were only to find us one recruit from among his friends, and we trust that they will use their influence accordingly. As it is, the Association is the only really powerful body in medicine, and it lies within our own power to make it the directing influence on all matters pertaining to our science.

Dr. Mayo has, contrary to expectation, been elected President of the Royal College of Physicians, in place of the late lamented Dr. Paris. As we explained in our last number, the choice for this important and dignified office is but limited, inasmuch as out of the large number of Fellows of the College of Physicians, the elects (only seven in number) have the power of selection. It cannot be denied that the system which narrows the field in this manner is a bad one; but this, we regret to say, is not the whole of the evil. The election generally takes place on the principle of seniority; and thus a bonus is given to longevity rather than to eminence. It is certainly strange that

a learned profession should consent to be governed by a system which has been repudiated in the army; and which, indeed, is about to be abolished in the medical service of India.

These remarks are made without the slightest wish to disparage Dr. Mayo, whom we believe to be a thoroughly worthy man. He was, at Oriel, a contemporary of Whateley, Arnold, and Newman; and has, for many years, devoted his attention to mental phenomena, on which he has thrown much light. It is needless to state that Dr. Mayo has passed the age of active life. This, however, is the fault of the method of his election, which, we have reason to believe, will before long be entirely reformed.

The Inquest on Mr. William Marcooley, of Brompton, has terminated with a verdict of manslaughter against Joseph Burrows, the assistant of Mr. Budd, the chemist in Brompton Row. It appears that this person carelessly supplied a drachm of Scheele's prussic acid, in place of a dose of castor oil; and the consequence was the immediate death of the unfortunate deceased, when he swallowed what he conceived to be an innocent aperient. It appears that the assistant was attempting to do two things at once; to supply the oil to one customer, whilst he was making up a lotion, containing the deadly quantity of prussic acid, for another. This case seems to prove that no legislative enactment can possibly provide against the carelessness of individuals, as it would appear that every precaution was taken in Mr. Budd's shop against the misplacement of poison bottles, by the method of keeping them in a separate cupboard.

Another case of poisoning, happily not fatal, has occurred during the week. A poor sempstress, miserable and hopeless, attempted to poison herself and child with laudanum. She purchased the drug at four different chemists. The only method of stopping the sale of deadly drugs to the public, would be to publish the name of every individual who supplied them in cases such as this, where the facts come out before the police magistrate, and are published in the daily newspapers. If a dozen druggists were posted in this public manner, we will engage that a stop would be put to the indiscriminate sale of poisons.

We regret to have to announce in our obituary of this day another addition to the long list of those members of our profession who have fallen victims to their zeal in the discharge of their duty—we refer to Mr. Henderson, a student of St. George's Hospital, who died last week of scarlet fever, contracted while performing, for a short time, in the absence of a friend, the duties of House Surgeon to the Hospital for Sick Children. The deceased was a young man of much promise, distinguished for energy and unwearied activity in the search for professional knowledge. He had acquired by industry in one of our Colonies the means of pursuing his studies in England; and had come over here with the laudable ambition of obtaining such knowledge of medicine as would enable him to provide for relatives in Australia, who are now left destitute by his untimely death. The shortness of the time at his disposal rendered him perhaps imprudently diligent in working at the many subjects with which a "general practitioner" ought (especially when remote from professional assistance) to be familiar; and thus the malignant disease by which he was unfortunately attacked found an easy prey in a body exhausted by unceasing labour, and a mind wearied with anxiety and study. It is not, perhaps, a misfortune for any man to die, at whatever period, and however far from those who are dear to him, provided death finds him in the conscientious discharge of his duty; but it is difficult to exaggerate the loss of such a man as we have described to those who are now dating their expectations from the day of his return to them. It may be some consolation to them to know that his worth was appreciated, and his death deplored, by those who knew him here.

It would seem as though there were an epidemic of assassination abroad. The news of the attempt upon the life of the King of Naples has scarcely grown cold, before we hear of the tragical death of the Archbishop of Paris. The dagger of the priest has proved more fatal than the bayonet of the soldier. Just as the archbishop was entering the vestry of the church of St. Etienne at Paris, he was mortally struck by an ecclesiastic named Verger, who drove his weapon with such force into the breast of the prelate, that, notwithstanding the rich embroidery of his stole, it traversed one of the ventricles of the heart, and he died almost instantly, without a struggle.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 9th, 1856.

Cæsar Hawkins, Esq., F.R.C.S., President, in the Chair.

PAINFUL SWELLING OF BOTH LEGS, RESEMBLING PHLEGMASIA DOLENS, WITH EXTENSIVE OBSTRUCTION OF BOTH FEMORAL VEINS, IN A PHTHISICAL PATIENT. BY HENY LEE, ESQ.

This woman was seized, while a patient in the Brompton Hospital, with pain, tenderness, and swelling in the upper part of both thighs; the symptoms subsequently extended down the extremities, the legs and feet becoming œdematous. The right limb was the first affected. There were no acute inflammatory symptoms. The affection continued until her death, which occurred about seven weeks after the first appearance of these symptoms. On examination after death, the lungs were found infiltrated with tubercles. The left iliac and femoral veins were completely plugged. The right femoral vein was found to be occupied for eight or nine inches by a continuous false membrane, and obstructed, more or less perfectly, at different parts, by fibrinous deposit. The false membrane was nowhere so adherent to the lining membrane as not to be easily separable from it; and there were portions of the latter over which the false membrane passed which were in no way altered from their natural character. The author proceeded to argue that such a case could not be regarded as having a local origin, and consequently a starting-point from which inflammation might extend, as is stated to be necessary in phlegmasia dolens, and which affection his case accurately simulated in all respects but the absence of any uterine affection; and also to contend that phlebitis may arise independently of any extension of inflammation, and in such instances can only have for its cause the stagnation of the vitiated blood in the vessels. The author quoted a case recorded by Dr. M'Clintock in the *Dublin Quarterly Journal* for August last, in which inflammation of the large veins of the right side of the neck took place in a woman who had a puerperal affection; and detailed several experiments on dogs, instituted for the purpose of proving his arguments.

Dr. Theophilus Thompson bore testimony to the accuracy of the accounts given by Mr. Lee of the case described by him, excepting that the patient had been the subject of phthisical symptoms six years, and not eleven, prior to death. The obstruction of the veins had no relation to the amount of disease of the lungs. In the case in question the amount of tubercular deposit was not great; and there were no cavities of considerable size. There was ulceration of the mucous membrane of the intestines, and also (as in two other cases which he recollected of a somewhat similar nature) some tense-

ness and tenderness of the abdomen—symptoms almost leading one to suspect inflammation of the peritoneum. In a case of a lady, thirty-five years old, one of the most striking symptoms was a marked murmur in the jugular veins—a symptom which he believed to be usually associated with a diminished proportion of fibrine in the blood. None of the cases he had seen were associated with any very decided marks of inflammatory action, and all of them appeared to lead to the conclusion to which Mr. Lee had arrived, that the blood, owing to some peculiarity, more readily absorbed certain morbid elements, and was less able to resist the contaminating influences.

Dr. Cursham related the case of a phthisical subject, between thirty and forty years of age, who suffered from œdema of the left leg; and after death there was found an obstruction in the femoral vein, as far as the popliteal. The lungs were extensively diseased on both sides, one lung being completely full of tubercles. The woman had borne children. There was considerable ulceration of the intestines; but no disease of the uterus. He had seen a similar case two years ago—that of a little boy, in whom, after death, there was found an obstruction in the lower part of the vena cava, and in both femoral down to the popliteal veins. There was ulceration of the intestines, but no disease in the pelvic or abdominal viscera.

The President inquired if there was suppuration going on, or whether there was anything in Mr. Lee's case to take it out of the ordinary category of abscesses producing secondary deposits?

Dr. Barclay said he had not seen many cases of idiopathic phlebitis, but he had notes of one or two, in which no suppuration was discernible—cases of chlorotic females, in whom there was some derangement of the uterine function.

Dr. Peacock had seen cases of obliteration of the renal and portal veins without suppuration, and he thought these were more unexceptionable instances of idiopathic phlebitis (if such a disease existed) than those cases in which suppuration was going on in other parts of the system.

Mr. Lee believed that wherever the blood would stagnate, from whatever cause, phlebitis would be produced. The cases that had been mentioned appeared to confirm the position that inflammation of the veins was not propagated by continuity of surface, but that the disease was carried forward by the blood. The same remark might apply to the arteries: as long as there was a perfect lining membrane there could be no effusion of lymph; but when inflammation was excited in the artery by deposit between its coats, or the coagulation of blood upon the surface, there might be effusion into the arterial canals.

LARGE MYELOID TUMOUR OF THE THUMB. BY T. B. CURLING, ESQ.

M. S., a married woman, aged thirty-two, was admitted into the London Hospital, July 8th, 1856. About twenty years ago, she first noticed an enlargement of the distal end of the metacarpal bone of the right thumb, which gradually increased, without pain, until it attained a great size. About six months since it became painful, and ulcerated in two places, giving exit to a very fœtid discharge. On her admission, the tumour was found to be situated between the thumb and first and second fingers, was irregularly spherical, hollow, and measured six inches in length and five in depth. It was hard and nodulated, consisting, apparently, of a hollow, osseous case. The skin covering it was tense, red, and polished. The tumour implicated the metacarpal bones of the thumb, fore, and middle fingers. At the back of the tumour were two rounded openings, having smooth, bevelled margins, each about the size of a half-crown piece, and communicating with the large cavity in the interior of the tumour, which was lined in some parts by a smooth, laminated membrane, but chiefly by numerous granulations and small excrescences, thickly studded, giving a warty or cauliflower appearance to the part. An abundant fœtid discharge constantly proceeded from the cavity. The woman suffered so much, that although weak and only recently confined, the tumour was removed immediately after her admission. She perfectly recovered. A minute microscopical description of the tumour, made by Dr. Andrew Clark, was given in the paper, and the author called attention to the following characteristics of the case:—the very slow growth of the tumour; its large outgrowth of bone, and hollowness, the latter part being probably due to the degeneration and softening of the solid myeloid elements, and their escape by the ulcerated openings; the combination of an osteoid growth with enchondroma, myeloid disease, and epithelial cancer; the extension of myeloid disease to neighbouring bones by contiguity or encroachment, a circumstance in the history of the disease which, the author believed, had not hitherto been remarked.

SUCCESSFUL REMOVAL OF A LARGE CYST FROM THE UPPER PART OF THE NECK OF A YOUNG WOMAN. BY SAMUEL SOLLY, ESQ., F.R.S.

The patient, a fair, delicate looking young woman, aged 27, who had been considered at birth to be the subject of spina bifida, consulted the author in August last with the object of having a tumour removed. The tumour was hard and unyielding, about the size of a goose's egg, flattened anteriorly; it hung by a broad thick pedicle to the upper part of the neck, a little below the occiput. She suffered no pain, but it was inconvenient from its weight and position. At birth, the tumour was about the size of her head, measuring ten inches and a half transversely at its connexion with the neck, and fourteen inches longitudinally; the lower part was of a dark colour, the skin being very thin, and fluid frequently oozed from that part. It increased for the first three years, but decreased from her third to her sixth year. Until two years of age she was very weak, and her left arm and leg were often much swollen; at this time any movement of the body produced pain. From her second year her health improved, and at four and a half she walked alone. She passed through all the diseases incidental to childhood well up to twelve years of age; at that period she had a fit, preceded by a most violent pain in the head, for which she was bled from the arm, and recovered perfectly; from that time to the present she has enjoyed uninterrupted health. The tumour was seen in early life by several of the most eminent surgeons in town, but nothing was done. Finding that by pressure he could detect no cavity within the tumour; that manipulation gave no pain or inconvenience to the nervous system; having no doubt about the solidity of the pedicle; being able distinctly to feel the arches of the cervical vertebræ underneath it, and being consequently assured that no canal of communication now existed between the tumour and any other part, whatever might have originally been its nature and connexion, Mr. Solly resolved to remove it. The operation was performed on the 25th of August, and the patient is now perfectly well. The hæmorrhage was very free, requiring ligature of six large vessels and other means for restraining it. The wound healed very slowly. There was severe pain in the head at frequent intervals after the operation, but the author considered it hysterical, and it yielded to the use of aconite. A section of the tumour exposed a large cavity in the interior; a saw was required to divide it, in consequence of the walls containing firm calcareous plates. The cyst, which was about equal to two-thirds of the size of the tumour, was lined by a smooth membrane, and contained a viscid yellowish fluid not unlike white of egg; it was completely closed, but the line of junction could be clearly traced by a whitish-yellow line of ligamentous tissue running through the pedicle, which exhibited under the microscope all the characters of the yellow elastic tissue. The firm walls of the tumour were found to be composed of dense fibrous tissue, with calcareous granules interspersed throughout it; these latter consisted of carbonate and phosphate of lime not shaped into bone tissue. The author considered, upon a review of the case subsequently to the operation and the drawing up of his paper, that the tumour, in all probability, originally took its origin from the cranium, and not from the spinal canal. There was no deficiency discoverable in the skull. The patient was now quite recovered, and free from any unpleasant symptoms.

Mr. Prescott Hewett, who had examined the case, said that when this child was born the occipital bone was lying on the tumour, which afterwards gradually dropped down. He knew of no case of spina bifida where there was so large a tumour about the cervical region. Though it was originally stated, on high authority, that the tumour was spinal, it might not have been meant that it actually came out of the spine; as he had seen, in a museum, a preparation of a reported case of spina bifida, the catalogue stating that the tumour came out of the occipital bone. There was probably, at that period, no accurate notion as to the origin of the tumours, and any tumour occurring about the occipital region might have been referred to spina bifida. In this case the long and slender pedicle came out between the occipital protuberance and the foramen magnum; and the tumour dropping down behind the spinous processes and covering them, the case might, not unnaturally, have been mistaken for spina bifida. In Paris, in 1837, a child having a tumour of a similar character was taken to several hospitals, and the case was pronounced by the

first surgeons to be one of spina bifida, which ought not to be touched. A gentleman, however, performed an operation, and the child died; but the tumour was found to be connected with the occipital region.

Mr. Chas Hawkins referred to a tumour in the collection of the Pathological Society, taken from a gentleman who had had it from the period of birth, coming out from the sacrum. The tumour decreased in size at the period of manhood, but the gentleman fell upon it, and death resulted. When first seen it was supposed to be of spinal origin, but in the anterior portion there were found several pieces of bone, resembling the bones of a fœtus, and the supposition was that the tumour was a portion of a twin attached to the patient in the womb, and remaining there during life.

Mr. Solly thought the cases were not similar. In the case of imperfectly developed fœtuses, some portions of bone always remained, but in the case he had related there was only a calcareous deposit.

MEDICAL SOCIETY OF LONDON.

Saturday, December 6th, 1856.

W. D. Chowne, M.D., President, in the Chair.

RECOVERY AFTER SEVERE INJURY OF THE HAND.

BY HENRY HANCOCK, ESQ.

Mr. Hancock brought a boy to the society, whose hand had some five weeks previously been drawn in between two pressing rollers of a steam-engine. The space between the rollers through which the hand was drawn was only one-sixth of an inch. When admitted into Charing Cross Hospital, the whole of the phalanges of the four fingers, and the digital halves of the metacarpal bones were found completely crushed and pulverised, the fingers flattened and widened, whilst the index-finger had burst from the pressure. Mr. Hancock, however, as the extent of the wound was comparatively small, determined upon endeavouring to save the hand, and he now submitted the results to the society, drawing attention to the fact that not only were the individual bones restored to their natural shape, but the joints were recovered, and the boy was rapidly obtaining the perfect use of the hand and fingers, an exceedingly good example of conservative surgery.

SOME OF THE PATHOLOGICAL INDICATIONS OF THE URINE.

BY J. L. W. THUDICHUM, M.D.

The author said that the subject which he ventured to bring before the society, though of a practical nature, and closely affecting every case of illness that occurred, yet appeared to many more an ornament than an essential part of medical science, and had been left to operative or analytical chemistry, Clinical medicine, though it recognised as practical features the specific gravity of the urine, the occurrence of deposits and abnormal substances, did, in most cases, not ascertain the bearings in disease of the most important normal ingredients of the urine. It had, in fact, been impossible to ascertain them before the invention of certain analytical methods—the volumetrical method for urea of Professor Liebig, the method of Professor Vogel for determining the amount of colouring matter discharged in the urine, and, above all, before the general introduction of certain principles of observation at the bedside, which, by connecting quantities with time, created a new basis for pathological research. The author's wish was now to bear witness to the practical usefulness and general applicability of these methods and principles. The ease and simplicity of the analysis of urea was connected with so little expense in time, that one might reasonably expect that no practitioner would pronounce upon the quality of any urine without having, by that method, accurately ascertained the amount of urea it contained. The total quantity of urine discharged by healthy adult persons in twenty-four hours the author estimated to vary between 324 and 432 fluid drachms. The variation, or a certain mode of variation, formed an essential symptom of all diseases. Thus the quantity of the urine was diminished in all acute febrile diseases, and the fall and rise or low state of the quantity of urine was pathognomonic of an increase, decrease, or continuance of the intensity of the disorder. The author continued by stating that the amount of the solids discharged by the urine in twenty-four hours had hitherto been under-estimated; for the daily average given by Dr. G. Bird was 650 grains, whereas, by the most accurate observations made with better methods, the mean amount of solids was found to vary between 849 and 1,019 grains. Now, in disease generally the amount of solids sank from the daily 850 or 1,000 grains to 650 or 550 grains, and then was formed mostly at the expense of the body, if little or no food was being taken. The author then considered in detail the pathological indications of the solids in different diseases; explained, by means of a diagram and a scale of colours, the method of Professor Vogel for determining the amount of colouring matter or urohæmatine discharged by the urine, and the pathological indications thereof.

Physiological quantity and pathological indications of urea. Numerous experiments had shown that a healthy man, who lives well, discharges on an average from 463·32 grains to 617·76 grains of urea in twenty-four hours, which, calculated upon one hour, gave 19·3 grains and 25·74 grains respectively. For practical purposes, these figures were valuable, even though subject to certain variations. As urea was the principal product of the metamorphosis in the body of nitrogenized food, the quantity of urea must stand in a direct relation to the quantity of food taken, or, if little or no food be taken, to the amount of nitrogenized component parts of the body disintegrated in the place of food. In this sense must be taken the expression that urea is the measure of dissimilation, if he might be allowed to use this term as the counterpart of assimilation. "Der Harnstoff ist das Maass des Stoffwechsels," says Bischoff; and this was so nearly true, that, with a slight modification of the sentence, we might say, urea is the measure of the most important part of the change of matter in the system. The intensity of the change was expressed by the amount of urea in the urine. More urea was produced during waking than during sleep, more during bodily and mental exertion than during an equal period of inactivity. A large amount of nitrogenized food taken into the stomach would increase the amount of urea above the average; a small amount of vegetable food would make it sink below the ordinary medium. An excess of urea was common in the stadium increments up to and over the acme of all acute febrile diseases, such as typhus, pneumonia, pyæmia, and others; and the total quantity of urea discharged in twenty-four hours might amount to 772 grains, 926, or even 1,235 grains, being double the amount of that discharged during health. This increase was the more an important feature of disease, as the ingestion of nitrogenized matter fell to a minimum at the same time; in other words, because these patients had mostly got no appetite, and if they had, were caused to restrain it by the dietary rules of their medical attendant. As soon, however, as the fever had abated, the amount of urea would sink, and that the lower below the normal quantity the less food the patients were able to take from the loss of appetite continuing, or from the inadequacy of the organs of digestion to perform their task; but as the patients recovered appetite and strength, the amount of urea would rise to its usual height. The same process was observed during the exacerbations of chronic disease, which in fact constituted an acute episode in the long train of symptoms. So an exacerbation of phthisis might be accompanied by a urine similar to that of an attack of pneumonia by containing an excess of urea. But in diseases which were of a chronic nature, and accompanied by impaired nutrition, the amount of urea sank below the average. The lowest amount of urea which the author had ever observed to be discharged during twenty-four hours was 75 grains in 200 fluid drachms of pale, faintly alkaline urine. This was from a lady suffering from an ovarian tumour, for which she had been salivated several years ago. The growth of the tumour had been arrested since that time, but an anæmiated condition of the body had established itself. So low an amount of urea as 75 or 90 grains in twenty-four hours, generally, only occurred towards the fatal end of the disease, when not only was the production of urea very limited, but the excretory activity of the kidneys began to get languid also. The diminution of the quantity of urea might be due to the failing of the excretory activity of the kidneys only, though at the same time an excess might be produced in the system. The excess was thus retained in the body, and would cause uræmia. In dropsy not connected with disease of the kidney, urea was also retained; but here diuretics might be administered. The amount of urea would here indicate the amount of depuration effected, just as in retention of urea the smaller amount discharged would allow us to calculate, taking the whole case into consideration, the amount produced, and by subtraction the amount retained in the blood. In conclusion, the author performed the quantitative analysis for urea by the volumetrical method of Professor Liebig.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from R. Griffin, Esq.

Sir,—I have addressed a letter to the Right Hon. Viscount Palmerston, with a statement of the grievances of the Poor-law officers, and remarks on sanitary measures and vaccination. A copy is now in the press, and will shortly appear in the form of a pamphlet, for distribution to each member of Parliament and Poor-law medical officer.

I beg to lay before your readers the annexed correspondence between Mr. Fox and the Romsey guardians, which speaks for itself. I can only add, that I hope no gentlemen (especially a colleague, as in the case of the late vacancy in the Frome Union) will be found to accept the appointment, and thus verify the words of the Poor-Law Board, that "whenever a vacancy occurs, there are plenty of candidates for the office, and therefore there is no need of increasing the salaries."

Let the profession be true to itself, and the guardians will be compelled to do Mr. Fox justice by re-appointing him at an increased salary, which undoubtedly he merits, or they surely would not have permitted him to hold the office during the last twenty years. I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, January 5th, 1857.

I. *Mr. L. O. Fox to the Board of Guardians of the Romsey Union.*

"December 20th, 1856.

"Gentlemen,—I beg respectfully to state that, as the price of articles consumed in conducting a union practice, viz., corn, hay, and horseflesh (not to mention double income tax), has advanced, I am compelled to apply for an increase of salary. I would remind the Board that my present stipend is only 13*s.* 10*d.* per week for attendance on the sick paupers in a population of 1,400, over an area of 5,000 acres—a sum quite inadequate to the duties required.

"I am, etc., L. Owen Fox."

II. *Copy of Proceedings of the Board of Guardians.*

"Romsey Union, December 29th, 1856.

"The application of Mr. Fox, medical officer, for an increase of salary, for reasons stated in his application, was considered, and it was moved, and resolved unanimously—

"That, at the special meeting held this day, the Board declined to augment the salary of Mr. Fox; but, in case Mr. Fox should be dissatisfied with the present rate of payment, the Board will be happy to receive his resignation.

"Ordered that the clerk do forward a copy of this minute and resolution to Mr. Fox."

III. *Mr. Fox to the Board of Guardians.*

"December 31st, 1856.

"Gentlemen,—I beg to inform you that I cannot continue my services as medical officer on the present terms, and therefore give you notice that, on and after 26th January next, I shall resign my appointment.

"I am, etc., L. Owen Fox."

MEDICAL ETIQUETTE.

Letter from J. R. Humphreys, Esq.

Sir,—The letter which you published last week from Mr. A. G. Field is an apt illustration of the old adage, "There are none so blind as those who won't see." Your correspondent seems to throw a doubt on the statements which I made in the Journal of the 13th December, as to whether Mr. Long did or did not consult with the homœopath. Now, sir, I beg to inform your correspondent, that Mr. Long not only consulted with the homœopath, but approved of what he had done; and Mr. Long met the homœopath on two or three occasions. Mr. Field objects to my suppositions being taken as facts: the only supposition I advanced was, that Mr. Long took his fee; and I think that is a very reasonable supposition for me to make, as I do not suppose Mr. Long would come from Liverpool without his fee, to meet a homœopath whom no one in Shrewsbury would meet in consultation. Your correspondent thinks that by answering to the summons of a patient who is attended by a homœopath, "he does not sacrifice the honour or dignity of his calling." Now, with all respect to his judgment, I think he does. He draws the line between right and wrong so faintly, that he cannot well keep on the right side of it. I think it would be far more consistent with his dignity if he—and all others who possess similar latitudinarian principles—would not pander to the caprices of their patients by meeting those who, according to Mr. Field's own admission, are practising a delusion. Your correspondent says, "as a body we have no place till each one gains it by his individual character and excellence." To a certain extent this is true; but I would remind him that he has a duty to perform to his profession as well as to himself; and that is, he ought not to sanction by advice or counsel those whom our profession as a body has clearly and unmistakably announced to be none of us.

I enclose you a copy of a letter which appeared in one of our town newspapers. It will, I hope, satisfy even Mr. Field's scruples with respect to the statement I made in my former letter. I am, etc.,

J. R. Humphreys.

Shrewsbury, Jan. 6th, 1857.

[Copy.]

To the Editor of the Shrewsbury Chronicle.

Sir,—As it appears some misconception prevails with regard to the causes of the decease of the late lamented Mr. Corbet of Sundorne, in consequence of one of his medical attendants being a homœopathist, I am desired by the family to state, for the satisfaction of his friends, and as a simple act of justice to Dr. Wilkin:—1st. That Mr. Long, the eminent surgeon of Liverpool, who was called in at an early period, was satisfied that everything had been done that could be done, to avert the fatal issue—an opinion which was afterwards fully confirmed by Mr. Fergusson of London. 2nd. That both these eminent men were convinced from the character which the malady assumed in its last stages, that the case had been beyond human aid for a very considerable time previous to the development of the symptoms which first induced the lamented deceased to call in the aid of Dr. Wilkin.

I am, Sir, your obedient Servant, B.

Sundorne, Dec. 6th, 1856.

DOUBLE OPERATION FOR CATARACT.

Letter from Edwin Chesshire, Esq.

Sir,—I find, in an article by Mr. J. V. Solomon, published in the Association Journal for December 27th, 1856, the following passages:—"The traditional practice of the Birmingham Eye Infirmary, which was founded in 1823 by Mr. Hodgson, has been to extract hard cataracts, the pupils having been previously dilated; to delay the operation till the patient is quite blind, or nearly so; and to remove both cataracts on the same day, while the patient is in the recumbent posture; the upper section of the cornea being performed in the right eye, and the lower in the left. . . . . A cataract having been extracted, the surgeon at once directs his attention to the means that are likely to obtain an early union of the wound. In furtherance of this end, I esteem it of importance that the upper section should have been made in the left eye as well as in the right. I have succeeded in accomplishing this upon patients whose eyes are not prominent relatively to the brow, and in some who experienced a difficulty, through nervousness or other causes, in looking downwards at the time of the operation."

I beg to say that it is, and *always* has been, the practice of my colleague Mr. Townsend and myself to perform the upper section of the cornea in *both* eyes, when operating by extraction for double lenticular cataract, whenever the nature of the case has permitted such a proceeding. I would also further state, that it was my invariable custom to perform the upper section in *both* eyes long before Mr. Solomon was connected with the Eye Institution; and, if I am not mistaken, similar operations were performed by Mr. Hodgson and Mr. Middlemore. It certainly is the practice of the Birmingham Eye Infirmary to extract both cataracts at the same operation; and the result having been so satisfactory, I see no necessity for putting the patient, who usually can ill afford the time, to the annoyance and inconvenience of a second operation, and the confinement to the house consequent thereon. I fully agree with Mr. Solomon in the propriety of removing a single cataract, whether traumatic or otherwise, *when dislocated, and producing by its pressure and displacement very severe pain and irritation.*

I am, etc., Edwin Chesshire,

Senior Surgeon to the Birmingham and Midland Eye Institution.

Birmingham, January 2nd, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Allan, John, M.D., of Milner Square, Islington, the wife of—a daughter—on January 1st.

Allnatt, R. H., M.D., of Pensarn, Denbighshire, the wife of—a son, who survived only two days—on December 29th, 1856.

Clarke, John, M.D., of Hertford Street, May Fair, the wife of —a son—on January 1st.

Cockell, Frederick E., Esq., Surgeon, of Upper Bath Place, Dalston Green, the wife of—a daughter—on January 2nd.

Huxley, Thomas H., Esq., F.R.S., the wife of—a son—on December 31st, 1856.

Jeaffreson, Henry, M.D., of Finsbury Square, the wife of—a son—on January 5th.

Ogilvie, J. F., M.D., the wife of—a son—at Alexandria, Egypt, on December 15th, 1856.

Peregrine, Thomas, M.D., of Half Moon Street, Piccadilly, the wife of—a daughter—on December 26th, 1856.

*Sinclair, D., M.D., of the Terrace, Camberwell, the wife of—a daughter, stillborn—on December 31st, 1856.

*Spence, Wm., M.D., Letham, Ladybank, Fife, the wife of—a son—on December 31st, 1856.

Stevens, Charles Palmer, Esq., Surgeon, of Biggleswade, Bedfordshire, the wife of—a son—on December 29th, 1856.

*Stone, Robert N., Esq., Surgeon, of Bath, the wife of—a son —on January 4th.

Whately, Edward, Esq., Surgeon, of Brighton, the wife of—a son, on December 30th, 1856.

MARRIAGES.

Collier—Harris. Collier, Thomas Poole, Esq., Surgeon, of Worship Street, Finsbury, to Sarah Ann, eldest daughter of Lawrence Beeton Harris, Esq., of Mile End Green, at St. Dunstan's, Stepney, on January 3.

Ellison—Blythman. Ellison, Henry, Esq., of Stone, near Tickhill, to Emily Frances, eldest daughter of *Robert Otter Blythman, Esq., Surgeon, of Swinton, Yorkshire, at Swinton, on December 31, 1856.

Hall—Neatherway. Hall, John, Esq., Surgeon, of Caroline Place, Haverstock Hill, to Miss Neatherway, of Stratford Place, Camden Town, at St. Pancras Church, on December 30, 1856.

Johnston—Acland. Johnston, Alexander, Esq., Surgeon, of Wanganui, New Zealand, to Emily Harriette, only daughter of the late Rev. Charles Acland, Chaplain H.E.I.C.S., at St. Paul's Cathedral, Auckland, New Zealand, on September 2, 1856.

Lee—Bluett. Lee, A. C., Esq., Medical Officer Bengal Marines, to Margaret, widow of the late J. R. Bluett, Esq., R.N., at Calcutta, on October 30, 1856.

Le Tall—Bower. Le Tall, Benjamin, Esq., of Handsworth Woodhouse, Sheffield, to Susannah Bower, of Cartwright Street, Doncaster, at the Friends' Meeting House, Doncaster, on December 31.

Macadam—Clark. Macadam, John, M.D., of Melbourne, Australia, to Elizabeth, second daughter of John Clark, Esq., of Levenfield House, Dumbartonshire, at Melbourne, on September 18, 1856.

Macreight—Lax. Macreight, W. W., M.D., to Frances Mary, widow of the late John Lax, Esq., of Knap Hill, Somerset, at Horrington Church, on January 1.

Webber—Ross. Webber, the Rev. Richard L., to Henrietta Porter, youngest daughter of the late John Ross, M.D., of St. Croix, at the Cathedral, George Town, Demerara, on December 2, 1856.

DEATHS.

Driver, Thomas, M.D., H.E.I.C.S., in Sauchiehall Street, Glasgow, on January 1st.

Henderson, Thomas, Esq., late a student at St. George's Hospital, of scarlet fever, contracted while performing, *pro tempore*, the duties of House Surgeon to the Hospital for Sick Children, at 8, Devonshire Street, Portland Place, aged 23, on January 3rd.

Ure, Andrew, M.D., F.R.S., at Upper Seymour Street, Portman Square, on January 2nd. Dr. Ure was born in Glasgow, on May 18th, 1778. After studying in the University of Glasgow, and subsequently in that of Edinburgh, he became a graduate of the Glasgow University in 1801, having previously taken the degree of Master in Arts. He became a Member of the Faculty of Physicians and Surgeons in Glasgow in 1803, and was appointed Andersonian Professor of Chemistry in the University of that name in Glasgow, where he also delivered systematic courses on Materia Medica. In 1809, preparatory to establishing the Observatory in Glasgow, he went to London, where he met and acquired the friendship of Maskelyne, Pond, Groombridge, and other astronomers, as well as of Sir H. Davy, Wollaston, Henry, and the other distinguished chemists of that period. He held the Scientific Observatory at Glasgow for several years, and was there visited by Sir W. Herschel on friendly terms. In 1813, he published at Glasgow *A Systematic Table of the Materia Medica*, with a preliminary dissertation on the operation of medicines. In 1818, he published an interesting memoir, entitled *New Experimental Researches on some of the Leading Doctrines of Caloric, particularly on the relation between the Elasticity, Temperature, and Latent Heat, of different Vapours, and on Thermometric Admeasurement and Capacity.* The conclusions offered in this remarkable paper have been adopted by Mr. Ivory, Mr. Daniell, and other philosophers, as the basis of their meteorological theories. In 1818, he published *Experiments on Nitric Acid;* as well as essays *On a New Explosive Eudiometer*, and on *The Relation between Muriatic Acid and Chlorine.* In 1819, he gave an account of some galvanic experiments made on the body of a recently executed criminal; and wrote *On the Constitution of Muriatic Acid of different gravities.* In 1821, the *Dictionary of Chemistry* was first published. In 1822, he published the *Ultimate Analysis of Vegetable and Animal Substances*, to which the term organic chemistry is now applied. In 1824, he published a translation of *Berthollet on Dyeing and Bleaching.* In 1829, he published his new *System of Geology.* In 1830, some *Observations on Indigo.* In May 1830, he came to London, and became Chemist to the Board of Customs, and conducted important researches on sugar for the Government. In 1833, the House of Commons published a report, entitled *Researches on Sugar Refining, instituted at the desire of the Lords of the Committee of the Privy Council;* these important researches of Dr. Ure led to the fixation of the then established duties by Government. In 1834, an *Analysis of the Moira Brine Spring, with Researches on the Extraction of Bromine*, was published by Dr. Ure in the *Philosophical Transactions.* In 1835, he published the *Philosophy of Manufactures.* In 1836, he published *The Cotton Manufacture of Great Britain, compared with that of other Countries.* In 1837, he published his large work on the *Arts and Manufactures*, with a supplement about two years later; the whole of which has been since greatly enlarged in the last edition of 1853. Mr. Fairbairn, whose opinion is entitled to due consideration, asserts that any person might easily make the machines requisite for that branch of manufacture from a perusal of Dr. Ure's book on the subject of cotton, a sufficient proof of the accuracy of the descriptions and drawings therein contained. Though he had been in delicate health for some years past, he was not seriously indisposed until within a short period of his decease, which occurred somewhat unexpectedly on the morning of the 2nd inst. Dr. Ure was elected a Fellow of the Royal Society in 1822; he was a Fellow of the Geological Society from its foundation; of the Astronomical Society for many years; and also of many learned foreign societies. From looking over his principal writings, it will be seen that every department of chemical science has in succession been made the subject of a distinct investigation. The following testimony to his talents as a lecturer, has been borne by the eminent botanist, Sir W. J. Hooker:—"He has a great and judicious command of language; his delivery is clear, and animated, and forcible; he displays a most thorough knowledge of the subject on which he treats, whether in chemistry or natural philosophy; and he illustrates that subject by the most successful experiments." Dr. Ure was distinguished as a profound chemical philosopher, and also for remarkable skill and exactness in chemical analysis. It has been indeed asserted, on competent authority, that none of his results have ever been upset.

WIBLIN, William, Esq., Surgeon, late of Strood, Kent, at Alfred Street, Bedford Square, aged 40, on December 31st, 1856.

[ERRATUM. In the obituary of last week's number, for "WARD, William, Esq., Surgeon, at Forant, near Shrewsbury", read "WEBB, Wm., Esq., Surgeon, of Llangollen, Denbighshire".]

APPOINTMENTS.

HOOKER, Sir William, elected a Corresponding Member in the Botanical Section in the Academy of Sciences in Paris.

MAYO, Thomas, M.D., elected President of the Royal College of Physicians of London.

ROGERS, W. R., M.D., elected Physician to the Farringdon Dispensary and Lying-in Charity, in the room of Dr. Ballard, resigned.

HEALTH OF LONDON:—WEEK ENDING JANUARY 3RD, 1857.

[*From the Registrar-General's Report.*]

IN the week that ended on Saturday, the deaths of 1,497 persons, viz., 761 males and 736 females, were registered in London. In the first week of the year, during the period 1847-56, the average number of deaths was 1,321; and if this is raised in proportion to increase of population, for comparison with the number in the present return, it becomes 1,453. The deaths now recorded exhibit an excess of 44 over the corrected average.

The number of deaths registered last week is augmented to a very considerable extent by deaths, in reference to which inquests had been held, having been entered in the register-books in more than their just weekly proportion. Many of such cases were not registered till the end of the quarter, though they had occurred, and been investigated by the coroner, at earlier dates. For 25 deaths were referred last week to burns and scalds, 16 to hanging and suffocation, 29 to drowning, 48 to fractures, 7 to wounds; 45 deaths were returned of persons "found dead," or who died suddenly from an unknown or unstated cause. Under these heads and a few others the excess will chiefly be found.

Hooping-cough appears to have been more fatal last week than any other disease in the zymotic class; 51 children died of it. Measles was fatal in 38 cases, typhus and common fever in 37, scarlatina in 29, small-pox in 5. Measles prevails chiefly in the North districts, Marylebone, Camden Town, Islington. Six children died of it in the sub-district of Islington West. A family is mentioned by the Registrar of Hackney-road, in which four children have been attacked by scarlatina maligna, and two have died. A seaman died on the 20th December, from "want of sufficient nourishment," and a widow on the 28th, "apparently from destitution."

The deaths of 8 persons were registered last week, who had attained the age of 90 years or upwards. A man who had been a butler, was the oldest, and died at the age of 94 years.

Last week the births of 1,025 boys and 948 girls, in all 1,973 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,598.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·746 in. The mean daily reading was above 30 in. on Tuesday and Wednesday. The highest reading was 30·13 in. on Wednesday, and the lowest 28·97 in. on Saturday. The mean temperature of the week was 40·6°, which is 3·7° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was 11·3° below the average on Sunday, and was as much above it on Thursday. The lowest temperature on Sunday was 18·5°, and on the following Thursday it was 44·5°. The highest temperature occurred on Friday, and was 52·7°, and the range of the week was 34·2°. The mean dew-point temperature was 37·1°, and the difference between this and the mean air temperature was 3·5°. The mean temperature of the water of the Thames was 39°. The temperature of the river ranged from 36·9° to 41·5°. The direction of the wind was generally west-south-west. The horizontal movement of the air on Saturday was 410 miles. A very heavy gale of wind blew on the evening of that day, accompanied with frequent showers. Between 7 and 10 o'clock P.M. the pressure of wind on the square foot varied from 10 to 12 lbs. The amount of rain in the week was 0·23 in., which fell on three days.

A VERY AWKWARD SITUATION. An accident which, though comic enough, might easily have had a tragical ending, occurred the other day at Madame Tussaud's Exhibition. A medical student, examining the guillotine in the Chamber of Horrors, took it into his head that the sort of yoke which fits down on the shoulders of the criminal to hold him in his place would not be sufficient to confine a person who struggled. His curiosity on this point led him to watch till the place was empty, when he actually put himself in, letting down the yoke. He soon found that he was quite unable to lift it, and it at once flashed into his mind that the sharp axe which was suspended over his neck could not be very firmly fixed, or it would not fall (as it does) with a touch. He was afraid to struggle, lest the shaking should bring it down and at once deposit his head in the basket of sawdust below him, into which his eyes were of necessity steadily looking. Having stayed some time in this plight, he was overjoyed to hear the approach of a visitor, whom he implored to release him. "I'm thinking," said the gentleman (a Scotch visitor of the metropolis) to his wife, "I'm thinking he must be hired to show how the thing acts, and I think we'd better not interfere." So the luckless student was left till M. Tussaud came in, and made fast the axe before releasing him. The axe has been removed and laid by the side, to prevent future accidents. (*Weekly Register.*)

THE LATE DR. PARIS. On Wednesday week last the mortal remains of Dr. Paris were conveyed by railway to the Necropolis Cemetery at Woking Common for interment. The funeral was of a strictly private and unostentatious character, and was attended only by the members of his own family, with the exception of Mr. Justice Cresswell, who is one of the executors of the deceased.

MILITIA SURGEONS. The *Dublin Evening Mail* states that it is intended shortly to employ surgeons of the militia in recruiting for the line regiments, and other duties connected with the service, so as to relieve, to a certain extent, the regimental surgeons, thereby enabling these latter to pay greater attention to the sick of their respective corps, and also to attend more closely to the hospital department with which they are connected.

ROYAL MEDICAL BENEVOLENT COLLEGE.

The following document, being the second Report of the Committee appointed to ascertain the amount to be charged to the Exhibitioners, has been forwarded to us for publication.

"*To the Council of the Royal Benevolent College.*

"GENTLEMEN,—Your Committee, having been requested to re-consider their Report as to the amount to be charged annually to each Exhibitioner, beg to submit to the Council the result of their second investigation, by which it will be seen that no diminution in the present annual charge of £40 can be made.

"In prosecuting this investigation, your Committee have been guided in all instances by the actual amounts of the various disbursements on account of the School; to ascertain which they have examined every item of expenditure contained in the several accounts for the current year, and gone carefully through the books of the Institution, assisted by your Secretary.

"In this calculation, they have not included any portion of the original outlay expended in the foundation of the Institution, the purchase and inclosure of the Land, the cost of the erection of the Building, or of the Chapel.

"Your Committee refer the Council to the accompanying statement, according to which the actual present cost of each Exhibitioner is £38 : 16 : 2; but this calculation does not include any expenses for repairs of fabric, or painting, for keeping up the grounds (of which the Exhibitioners have the benefit), for the annual expenses connected with the chapel, for additional masters (of which one for German will very shortly be required), for extra Servants (which are stated by the Visiting Committee to be necessary), or for any such incidental expenditure as is inseparably attendant on an Institution of this nature.

"To meet these inevitable disbursements, your Committee recommend that the sum of £1 : 3 : 10 be added to the above amount of £38 : 16 : 2, making the charge to each Exhibitioner £40 per annum.

"We have the honour to be, Gentlemen,
"Your obedient Servants,
"FRANCIS WEBB, *Chairman.*
"HENRY HANCOCK.
"CHARLES HOGG.

"7, Soho Square, London, Dec. 22, 1856."

ABSTRACT OF STATEMENT REFERRED TO IN REPORT.

Amount of Outlay for the use of the School exclusively.

	£	s.	d.
Fittings in dormitories, school and class rooms, offices, etc.	1354	0	0
New works, viz., iron hurdles, cap boxes, play-ground	543	0	0
Gas fittings, hot water apparatus	375	0	0
Sundries, viz., lifts, baths, and lavatories	419	0	0
Cost of furniture	2930	0	0
	£5621	0	0

Annual Expenditure.

Salaries and wages (school)	1451	10	0
School implements, books, etc., at 30s. a head for 150 boys	225	0	0
Board for 150 boys and 19 masters and servants	2232	18	3
Washing for 150 boys and 15 servants	335	16	10
Medical attendance	47	2	0
Miscellaneous disbursements: coals, wood, gas, water, as per contract, poor rates, taxes, etc., insurance on school furniture and fittings for £3000, at 4s. 6d. per cent.	578	3	9
Office expenses, viz., salaries (share), rent of office £83 (half), printing and stationery, postage and carriage of parcels	238	10	0
Linen, at £1 per head	150	0	0
Wear and tear on outlay for exclusive use of the school, on £5621 at 10 per cent.	562	2	0
	£5821	2	10

The above £5821 : 2 : 10 annual expenditure, divided by 150 boys, gives as the actual cost of each boy the sum of £38 : 16 : 2. But of these 150 boys, four, viz., the Surrey scholars, pay only £15 a year. Therefore to meet the above annual expenditure,

Say 146 boys at £40	£5840	0	0		
4 boys at £15	60	0	0		
10 day boys at £12	120	0	0		
				6020	0 0
Deduct annual expenditure as above				5821	2 10
Balance				£ 198	17 2

Francis Webb, *Chairman.*
Henry Hancock. Charles Hogg.

Medical Society of London. A paper will be read at 8 P.M. on Saturday, January 10th, by Dr. Snow, "On the Vapour of Amylene".

Association of Medical Officers of Health. The ordinary meeting of the Association will be held at the General Board of Health on Wednesday, January 14th, at 4 P.M.

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Admission of New Members. Several associates have addressed inquiries to us regarding the mode of admitting Members to the British Medical Association. The laws of the Association state that any member of the profession not disqualified by any bye-law (that is, any respectable member of the profession) may be admitted at any time by the Committee of Council, or by the Council of any Branch, on being proposed by *three* Members. Associates desirous of proposing new Members, should forward the names at once, either to the Branch Secretary of the district in which they reside, or to the General Secretary, Dr. P. H. Williams, Worcester.

Mr. Pearson, of Buxton, requests us to state, that in the Volume for 1857 of *the London and Provincial Medical Directory*, there is an error in the return attached to his name. He is not *Consulting* Surgeon, but *Surgeon* to the Charity.

An Associate. We have seen the very unwarrantable attack upon ourselves in the preface to Mr. Lara's new Medical List, and shall not fail to answer it when we notice the Medical Directories next week.

We have received from Mr. E. Stevens, of Cambridge Road, two loaves of bread, as specimens of the pure and unadulterated staff of life, being made of flour, yeast, spring water, and a small quantity of salt only. We can safely affirm that this bread tastes remarkably wholesome; but, as we have not analysed it, we cannot say anything as to its constituents. We rejoice to find that the late inquiry into the adulterations of articles of food has at length attracted the attention of intelligent vendors of food, such as Mr. Stevens.

We are obliged to Mr. Wilde for the manner in which he speaks of the article in question. We have received "Saunders's Dublin News-Letter."

Communications have been received from:—Mr. R. Wood; Mr. Thomas B. Horne; Mr. C. H. Roper; Mr. J. R. Humphreys; Dr. J. L. W. Thudichum; Mr. Frederick H. Hartshorne; Dr. J. B. Pitt; Mr. Alexander Ure; Dr. Bell Fletcher; Mr. Richard Griffin; Mr. J. Burrows; Mr. I. Harrinson; Mr. W. H. Michael; Mr. J. Armitage Pearson; Mr. Henry Ewen; Dr. Lyon; Mr. Edwin Chesshire; Mr. W. T. Bell; Mr. W. H. Johnson; Mr. W. A. Rackham; Mr. John Jones; Dr. Edward Smith; Mr. J. V. Solomon; Dr. G. G. Rogers; Mr. J. K. Spender; Mr. Thomas O'Connor; Dr. Brittan; Mr. J. I. Ikin; Dr. S. Jeaffreson; Dr. P. H. Williams; Dr. Hayes Jackson; Dr. Thomas Hillier; Mr. McDermot; Mr. George May, Jun.; and Dr. King Chambers.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Medical List for 1857, or English Medical Directory. London: Lane & Lara.
2. The London and Provincial Medical Directory for 1857. London: Churchill.

ADVERTISEMENTS.

December 1st, 2s. 6d.

Tables for the Microscopical and CHEMICAL EXAMINATION OF URINE, URINARY DEPOSITS, AND CALCULI. By DR. LIONEL BEALE, Physician to King's College Hospital, Professor of Physiology and Morbid Anatomy in the College.

London: John Churchill, New Burlington Street.

Just published, imperial 8vo, price 5s., beautifully Illustrated,

Health and Beauty; or Corsets and CLOTHING ADAPTED TO THE PHYSIOLOGICAL LAWS OF THE HUMAN BODY. By MADAME ROXEY A. CAPLIN.

London: Darton & Co., Holborn Hill.

TO ADVERTISERS.

British Medical Journal.— Office, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS, LONDON, W.C.

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Seven lines and under	£0 4 0
Every additional line	0 0 6
A whole column	2 15 0
A page	5 0 0

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W. MATTHEWS, Surgical Instrument Maker to King's College Hospital, 8, Portugal Street, Lincoln's Inn Fields, London.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. III.] LONDON: SATURDAY, JANUARY 17, 1857. [NEW SERIES.

Hospital Reports.

ST. GEORGE'S HOSPITAL.

POPLITEAL ANEURISM (DIFFUSED): LIGATURE OF THE FEMORAL ARTERY.

Under the care of G. D. POLLOCK, Esq.

[*Reported by* T. HOLMES, Esq., F.R.C.S.]

J. W., an agricultural labourer, aged thirty, was admitted Nov. 7th. He was healthy in appearance, and had always enjoyed good health. Three weeks before admission, his right foot slipped off a spade as he was digging, and his heel came forcibly to the ground. He was not aware that there was anything the matter with the leg before this. Two hours afterwards, he noticed that the leg was swollen. Next day the leg remained swollen, but was not particularly painful; and he continued his work for a few days. The increase of the swelling, and the accession of pain, then compelled him to take to his bed. On the day before admission he consulted a medical man, who applied a tourniquet on the femoral artery, and sent him to the hospital.

When admitted, there was a large pulsating tumour in the ham, and considerable ecchymosis extending up the inside of the thigh (this latter he had not noticed before the application of the tourniquet); there was much general swelling, which prevented the boundaries of the pulsating tumour being distinguished. A dull sound was heard in the tumour, but no genuine aneurismal bruit. There was considerable effusion into the knee-joint. The toes were not cold.

It was determined to tie the femoral artery in Scarpa's triangle immediately. This was accordingly done, with rather more difficulty than common, in consequence of the presence of an enlarged gland lying over the course of the artery, which compelled the operator to make his incision further outwards than usual. The artery where tied appeared healthy. He had been a little feverish at the time of the operation; this state continued for a few days afterwards, and then subsided.

The pulsation ceased at once on the application of the ligature; the œdema rapidly subsided with raised position of the leg, and the ecchymosis also soon disappeared. There was then (6th day) to be felt a large, irregular, softish mass (evidently the remains of a clot of blood) on the inner side of the knee; at the back was a fluid portion, apparently the unabsorbed serum. The effusion into the joint had disappeared.

The ligature came away on the 13th day, leaving a small sinus leading down towards the artery. No bad symptoms occurred, except slight oozing of blood from the granulations coating this sinus; which, as it showed no disposition to heal, was laid open. After this, the wound closed rapidly. Examination, a few days after the fall of the ligature, showed large vessels surrounding the joint; one especially, at the outer part, felt as large as the radial artery.

At the present time he is about to leave the house cured. The knee is somewhat stiff, so that he is obliged to use crutches; the ham is filled with soft solid substance projecting above the inner hamstring muscles, and reaching also to the tendon of the biceps on the opposite side.

REMARKS. I have added this case as a pendant to a series of popliteal aneurism treated by pressure, reported by me in the last year's volume of the ASSOCIATION MEDICAL JOURNAL. Those readers who are interested in the subject will find it worth while to compare its details with those of Case v of that series (*vide* p. 515). Both were cases of diffused aneurism. In the latter, the history of rupture of the artery previous to the origin of the pulsating swelling was clear. In the case before us, no aneurism had been observed before the accident; but the patient's extreme stupidity and confusion of mind rendered it impossible to attach much importance to his statements; and the opinion of the majority of those who examined the parts was, that they presented rather the appearance of an aneurism which had burst at a certain spot (viz., towards the inner and upper part), than of a traumatic aneurism forming for itself a sac from the cellular tissue. However that might have been, there was no doubt of the existence at that time of a free communication between the artery and the cellular tissue, as evidenced by the extensive ecchymosis; and hence of the propriety of resorting to immediate ligature, instead of giving a previous trial to compression. In the case of Mr. Cutler's patient, the ecchymosis was trifling, and might have resulted from some lesion of an obstructed vein in the neighbourhood of the sac. Here compression succeeded, but not till after the lapse of a long period; nor was the case complete until after the discharge, by suppuration, of the clot surrounding the vessel. It is possible that compression might also have succeeded in the present case; but the risk was not worth running, considering the great probability of success by ligature.

I would call attention to the effusion into the knee-joint, which induced a suspicion of the aneurism having burst into that cavity. Its rapid subsidence, however, proved that this had not been the case. The same feature will be found in some of the cases which I previously reported.

LARYNGITIS FROM SYPHILITIC LESION: IMPENDING SUFFOCATION, AND RELIEF BY TRACHEOTOMY: RECOVERY.

Under the care of H. BENCE JONES, M.D.Cantab.: with Remarks by G. GODDARD ROGERS, M.D., Medical Registrar to the Hospital.

E. M., an unmarried woman, of loose habits, was admitted on January 21st, 1856, at 2 A.M., with severe dyspnœa and aphonia. She was in the seventh month of pregnancy, and during the period of gestation had been continually troubled with cough. For six weeks her breathing had been much affected; and on the 17th, it became so much worse, and was accompanied with such a feeling of constriction in the chest, that she sought medical advice. A blister and suitable medicine gave her considerable relief for two or three days; but on the 21st, at midnight, she woke suddenly with a feeling of choking, and complete loss of voice.

On admission, she had stridulous breathing, her face was congested, and the pulse rapid, and barely perceptible. She referred the chief uneasiness to a spot corresponding with the bifurcation of the bronchi. Twelve leeches were at once applied to this part, and she took two grains of calomel every two hours, until 10 A.M. By this time her pulse had improved in power, and was only 96 per minute. The breathing was greatly relieved, and she only complained of pain when she spoke. An inhaler was used, and calomel given every four hours, in conjunction with salines and antimony.

In the afternoon she vomited two or three times, and this was rather encouraged. A few moist sounds were heard over the front of the chest. By 10 P.M. the gums were slightly tender, and the calomel was discontinued. She complained of more pain in the throat, and could scarcely swallow the medicine.

Jan. 22nd. There was more pain and "dragging" sensation in the chest. The leeches were ordered to be repeated. There was no return of the paroxysms of dyspnœa.

Jan. 23rd. The breathing was laboured during the night. Pulse weaker. She had harsh ringing cough. A blister was applied to the throat, and an ipecacuanha mixture ordered.

Jan. 25th. She has less cough; but frequent vomiting since 7 P.M. yesterday. The voice is clearer and stronger.

Jan. 29th. She was going on favourably; but complained of soreness all over the chest. Bronchitic râles were heard. The sputa were thin and muco-purulent.

Jan. 31st. She expectorates freely, and is much easier.

Feb. 5th. The breathing is improved. The expectoration is of a dirty brown colour. Her voice is good. She enjoys her food, and has scarcely any dysphagia.

Feb. 8th. She was up for an hour or two in the middle of the day, and got a chill.

Feb. 9th. An attack of dyspnœa occurred last night. Sinapisms were kept upon the chest, and a blister ordered at noon.

Feb. 10th. She is very hoarse; but the respiration is not so laboured. Oxymel of squill and dilute sulphuric acid were prescribed.

Feb. 15th. She has been constantly inhaling the vapour of vinegar and water with but little benefit. She passes restless nights, and is often nearly suffocated. On the back of the left forearm a small pimple, of which she took no notice, has assumed the character of a rupial sore.

Feb. 22nd. During the past week she has often been unable to lie down, on account of her breathing. She is weaker, and has been taking brandy. The blister upon the chest has been repeated. At night the breathing was quite stridulous; she had diarrhœa, and pains in the loins and abdomen, which made the nurse fear labour might come on.

Feb. 23rd. This morning, after passing a restless and disturbed night, her face became dusky; there was great orthopnœa; and at midday tracheotomy was performed by Mr. Pollock. There was considerable hæmorrhage from the thyroid veins, but no further ill consequences. She remained sitting up in bed after the operation, and every five minutes, after a fit of struggling, thin blood-stained mucus was coughed up through the tube. At half-past two P.M. the pain in the back and abdomen recurred, and increased up to 11 P.M., when labour came on, and soon ended in a perfectly natural manner. She improved daily from this date.

On the 26th there was some renewal of the dyspnœa, in consequence of obstruction in the lower part of the tube. This frightened her, and she hindered her progress by constant nervous anxiety for its removal. The sore upon the arm was dressed with black wash, and she took sarsaparilla and iodide of potassium. There was plenty of milk for the child, which was puny, and soon showed an eruption of an undoubtedly syphilitic nature upon its forehead and arms. The tube was kept in the trachea until the end of March, when it was withdrawn, and the wound allowed to heal. Whilst remaining in the house for the surgical treatment of her secondary symptoms, she became jaundiced. This delayed her departure, but she left us cured early in June.

Remarks. Although, from the known habits of this patient, there was from the first little doubt that the laryngeal symptoms were the effect of syphilitic lesion in the part, yet until auscultation and percussion had been repeatedly tried, it was impossible to affirm that the case was not one of laryngeal phthisis. The length of time the cough had continued, the gradual emaciation, and the worn aspect of the woman, would all have strengthened this opinion.

Dr. Graves in his lectures remarks, that the diagnosis is one of extreme difficulty, until periostitis or eruption of the skin have appeared; and then he says we may with confidence refer all the symptoms to the same origin. Our suspicions were verified by the after appearance of a sore on the mother, and by her giving birth to an infected child. Great difference of opinion exists as to whether phthisis, acute bronchitis, or pneumonia complicate secondary symptoms, or bear the relation of cause and effect. We can scarcely suppose that the bronchitic symptoms in this patient were totally unconnected with the venereal poison. As before remarked, the history of the case pointed to syphilis as the cause of the laryngitis; but I believe for the previous six months the syphilitic bronchitis, of which Dr. Graves makes mention, had been at the bottom of all the mischief. And not only were the bronchi the seat of inflammation, and of the peculiar chronic irritation dependent upon the existence of syphilitic virus in the system; but the posterior palatine arches and the commencement of the pharynx must have participated. Even if there were no lesion, the simple fact of irritation existing in the adjoining parts must have interfered with the harmonious action of all the muscles during deglutition, and with the subsequent rhythmic contractions of the œsophagus. Hence the frequent dysphagia; and perhaps also the vomiting and retching, which certainly often appeared to be caused by improperly excited reflex action, rather than by undigested aliment or other source of irritation in the stomach itself. The term "irritation" being somewhat vague, I prefer to regard the disease as a low form of inflammation, with thickening of the mucous lining, and loss of elasticity in the submucous areolar tissue, which gradually extended from below upwards; the bronchi recovering themselves to a great extent, and permitting a free passage to the air, whereas their calibre was formerly diminished; whilst the larynx and upper part of the respiratory tract, at first patulous and fit for duty, became inflamed, thickened, and, lastly, ulcerated. The œdema of the glottis next followed, with all the symptoms which rendered an operation necessary.

For the above reasons it was wise to prefer tracheotomy to laryngotomy; for probably by the time the disease had reached the larynx the tracheal lining was sound, and fit to bear the contact of the tube. Thus all the worst part of the affected mucous surface was above the seat of operation, and the vocal organs had time and quiet afforded for their recovery.

Did the limits of this paper allow, the case recorded might open the much debated question of infantile syphilis, and the *modus operandi* of hereditary infections.

On the subsequent history of the patient it is unnecessary to dwell. The attack of jaundice appeared totally unconnected with her previous complaints; and as she was removed to a surgical ward to be treated for syphilis, we saw but little of her after the middle of April.

Original Communications.

INTESTINAL OBSTRUCTION.

By F. Brittan, M.D., Physician to the Bristol Royal Infirmary; and Lecturer on Practice of Medicine, Bristol in the Medical School.

Last April, I published in the Association Journal a case of intestinal obstruction in a woman aged 28. It lasted ten days, and was accompanied with stercoraceous vomiting during the last two days. There was a copious flow of urine throughout. The bowels were freely moved after the use of castor oil, opium, enemata, and O'Beirn's tube; and the patient appeared to be doing well, but complained of pain about the anus, which was found to be occupied by an immense slough. On the ninth day after the bowels had first acted, symptoms of tetanus set in, of which she died.

On *post mortem* examination, the pelvis was found occupied by a mass of cancer enveloping the rectum. The omentum was loaded with nodules of cancer, which, by deposit in masses about the colon, had narrowed its calibre, so that in three spots it would not admit the point of a finger.

In the Journal for December 13th, 1856, under the head of "Hospital Gleanings", is also the report of a case of obstruction in Guy's Hospital. In this case, stercoraceous vomiting was the prominent symptom all through: the flow of urine was uninterrupted. O'Beirn's tube was not used, under the impression that the case was one of fistulous opening between the colon and stomach. The patient died; and the obstruction was found to be caused by a peculiar twist in the sigmoid flexure of the colon.

I have thus referred to these two cases, because I think they are useful for comparison with each other—the *post mortem* examination in each case giving certain information as to the seat and nature of the obstruction; and also with the subjoined, which has just occurred, and which I report from my notes of cases.

Case. On Sunday, I was requested to see a young lady immediately, on account of obstinate constipation and vomiting of matter with fæcal odour. I found her to be a well made girl, about 15, of rather sluggish habits, not much developed, having never menstruated. She never had any illness, but some months since complained of pain in the left hypochondrium, and in the corresponding part of the back, without sickness or pain after food. The bowels had often been rather torpid. On the previous Tuesday she ate heartily, but complained of headache; and next morning had a dose of castor oil, after which the bowels acted once slightly. The same evening, she took Gregory's powder; and on Thursday morning, oil again; but the bowels did not act. On Friday and on Saturday, she had two compound rhubarb pills, but with only very slight fluid evacuations following enemata. She had vomited for the last three days whenever she took anything into the stomach. On Saturday and Sunday, the matters returned had a fæcal smell. Her countenance is now anxious and distressed; pulse 120, small; tongue very coated, dark, and dry; thirst incessant; bowels not very tender, but tympanitic;

the urine passed freely. The most tender spot is about one inch to the left of the umbilicus, only reached by firm pressure. There is no hernia. I ordered her hydrocyanic acid mixture, with two grains of calomel and a grain of opium, in a pill, every six hours: the abdomen to be swathed in hot wet flannels, and a copious warm water enema to be administered at night. The enema brought away a very little pasty looking matter. Judging by her sensations, it must have passed high up into the colon. Three pints were injected.

Monday. The vomiting continues, if anything is taken. The bowels are more swollen. The pain is still more intense in the same spot, but it seems to have moved about. There is not much general tenderness of the abdomen. She lies with the legs down, and can bear pressure. The countenance is more anxious. The following medicine was ordered:—

℞ Pilulæ sapon. c. opio gr. iv; pilulæ aloes compositæ gr. j. M. Fiat pilula quartis horis sumenda.

℞ Olei ricini ʒss; olei terebinthinæ ʒij. M. Fiat haustus.

She was directed to have soda water for drink.

Tuesday. There has been no evacuation, but vomiting continues. The bowels seem hardly so tympanitic. Pulse 110. She has not slept much.

6 P.M. The vomiting has continued; the vomited matters have a fæcal odour, and evidently contain the oil and turpentine. She looks better, and is more quiet.

Wednesday. She is more quiet; has no pain in abdomen but in one spot over the spleen. She has vomited only once. She seems very sleepy, and quite under the influence of the opium. She was ordered to discontinue the pills, of which she had taken seven.

8 P.M. She is still very sleepy; has had no sickness. She has had beef-tea. Pulse 90.

Thursday. She looks and feels better in every respect, but is still very drowsy. The tongue is cleaner. The bowels were moved at 12 in the night, when she had a copious thick motion, with lumps in it; and twice since she had more fluid motions. The pain moved, she says, as the bowels acted; it is now much less. The abdomen is still tympanitic. The countenance is more natural.

7 P.M. The bowels have been moved again, Pulse 105. The pain seems moved; she now feels it about the umbilicus, and it is of a griping character. She is free from sickness and tenderness. The motions passed contained solid matter, small in calibre, like a child's. The tongue is cleaner. The effect of the opium has passed off. She was ordered to have a grain of opium in a pill, to be repeated if restless.

Friday. She is better in every respect. The bowels have been again moved. She had a good night. The abdomen is less full and tense; the tongue cleaner; pulse 90. She asks for food.

Saturday. She is improving. There are griping pains across the colon. Tongue almost clean. She has had no motion. She was ordered to have half a grain of opium at night, and half an ounce of castor oil next morning.

Sunday. She is much better; bowels moved. There is no tympanitis.

From this time she rapidly improved, and lost all pain, except an occasional return of the old uneasiness in the epigastrium; but required some doses of hydrargyrum cum cretâ and castor oil, to promote the evacuations, and to correct their quality. She is now quite well, with the bowels acting regularly.

Remarks. There was here, happily, no *post mortem* examination to give certain information as to the lesion, and its exact nature can only be a matter of conjecture. There was not sufficient tenderness, nor did the symptoms otherwise point to peritonitis nor enteritis as the cause of the obstruction; nor had she ever suffered from either of these, to induce constriction of the gut by bands, or bridles, or old adhesions; and I was therefore inclined to diagnose intussusception. It will be observed that the relief of the bowels was very slight from the Tuesday to Saturday, probably only the effect of the enemata acting from below the obstruction, as is frequently the case in hernia; also that, on Thursday, Friday, and Saturday, the vomiting was incessant, whilst for the five following days there was no action of the bowels at all. The early vomiting would lead to the supposition that the obstruction was high up in the canal; but the second case referred to, in which the vomiting was a prominent symptom all through, seems to discountenance or afford an exception to the general rule, that vomiting is earliest and most severe when the jejunum is involved; for here the lesion was in the sigmoid flexure of the colon. In all three cases, the secretion of urine was uninterrupted, as usual when the obstruction is low in the canal, and absorption of fluids can continue. In the present case, the abdomen was only moderately tumid. From all these circumstances, and the seat of the pain, with its apparent mobility, I was led to ascribe the obstruction to the lower part of the ileum. Intussusception may be remedied by the disinvagination of the involved portion of gut, or, as in a case that occurred in our infirmary some years since, in which nine inches of gut passed in a motion from the bowels, by separation of the invaginated portion, or by adhesion at the neck of the involution, the in-folded portion remaining and narrowing the tube. The latter may have been the case here, and would appear to be so, from the peculiarly small and compressed appearance of the solid fæcal matter. However speculative these suppositions may be, the case affords another instance of the advantage of treating intestinal obstruction by opium, or opium in conjunction with aloes, rather than by attempting to overcome it by purgatives.

TRACHEOTOMY IN CROUP.

By Thomas O'Connor, Esq., March, Cambridgeshire.

Is tracheotomy likely to combat the formidable disease, croup? If so, what is the time to be selected for its performance?

This is a question of statistics—a grave problem to be solved only by a faithful and minute record of cases.

One would not resort to so severe a proceeding as that of opening a windpipe of a child before exhausting every other means of saving life, and until he was reduced to the alternative of either performing the operation, or informing the friends of the patient that the case was beyond the control of medicines.

Let us suppose a case in which the hot bath, bleeding to syncope (if not to syncope, it were at least useless), antimony in full doses every half hour or every hour, calomel in small doses every two hours, and blistering the throat, have been fairly tried in vain; where the pulse is small, and ranges from 140 to 160 or 170 in a minute; where the countenance is assuming a leaden hue; where the efforts at respiration are painfully laborious, and the abdominal muscles are brought into play to their utmost. Is the patient at this stage to be abandoned to a certain fate, the most horrible to witness, that of slow strangulation, torturingly protracted? or is the surgeon to make an opening into the trachea, and at once relieve the breathing? It appears to me, that if nothing more were gained than the remarkable ease this proceeding gives the patient, it would be quite sufficient, on the score of humanity, to determine the question.

Case. I was called about two o'clock in the afternoon of December 13th, to a girl six years old, suffering from croup. I at once bled her to syncope; and when she had rallied from the faintness, placed her in a hot bath, which was maintained at a high temperature until the head and face were covered with large drops of perspiration. This condition is perhaps the most simple, and at the same time the truest criterion of the full effect of a hot bath. Antimonial wine was then given, in ten-minim doses, every half hour; a blister was applied round the throat from the chin to the sternum; and two grains of calomel were given every two hours. The antimony and calomel were continued in these doses for sixteen hours; the former kept up constant nausea, the latter produced no visible result; and I may here say at once that I have never seen calomel exercise any control over croup.

December 14th. At six o'clock, it was evident that if I trusted to medicine alone, the patient must perish miserably in a few hours. I proposed to her friends to open the trachea; and with their consent fixed seven o'clock for performing the operation. I left for the purpose of providing myself with the necessary implements, and had just arrived at my residence, a mile distant, when I was overtaken by the father of the girl, who informed me that the mother had changed her mind, and "would not have her child pulled about"; consequently, that the operation must be abandoned. She, however, urged by the advice of her neighbours, and, it may be, by the struggles of the child, relented between nine and ten o'clock at night, and sent to request me to perform the operation. I at once proceeded to the house, and opened the trachea. On dividing three or four of the rings, the adventitious membrane was squirted out through the opening with a force equal to that of a popgun. On blowing through this membrane, which, considering it the growth only of a few hours, was of astonishing density, it was found to be a very good cast of the trachea from the cricoid cartilage down to the bifurcation, extending a short

way into each bronchus. The relief was marked and instantaneous. I then placed a double canula in the opening, and secured it there, and gave the child a cupful of milk, which she enjoyed very much. I then left, having instructed the attendants to call me if difficulty of breathing or distress should return.

December 15th, 8 A.M. The child was breathing freely, apparently doing well. She had had a good night, and slept several hours. I removed the inner canula, cleaned, and replaced it. From the time of the operation, I withdrew the antimony, and gave tincture of squill in syrup as an expectorant. I had now to leave town, and did not return for three hours, when I learned that I had been sent for to this child half an hour before. I repaired thither at once, and was told that the child suddenly awoke, appeared distressed for a moment, and then expired. On withdrawing the canula, which was *in situ*, a plug of fibrine followed adhering to it. Did this fibrine, which, no doubt, was a part of the false membrane, make its way into the mouth of the canula, and, in the patient's weak state, destroy her? As I was unable to obtain a *post mortem* examination, owing to the prejudices which people have to this proceeding in country places, I am not prepared to give a satisfactory answer to this question.

At the hazard of appearing prolix, I have related *gradatim* my proceeding with this case; not because anything new has been done, but with a view of placing before my professional brethren the conditions which have been complied with, and the result; and not without a hope that others may ventilate the subject a little by giving the results of their experience.

The operation in this instance ought to have been done earlier; for, as I would not preach precipitation in opening the windpipe of a human being of any age before the necessity was clearly established, so I would not recommend the loss of time when once that condition became patent, for every hour lost here is adding to the impurity of the blood, impairing the nervous energy, and lowering the recuperative powers of the patient.

CASES OF LITHOTRITY.

By William Thomas Bell, Esq., Great Grimsby, late House Surgeon to the London Hospital.

[*Continued from page* 26.]

Case II. *Exhibition of Chloroform: Suppression of Urine for Forty-eight Hours; Collapse nearly fatal: Ultimate Recovery.* March 1856. R. T., aged 68, a gentleman of active habits, short stature, with grey hair and sallow pale complexion, had suffered greatly for some years from hæmorrhoids and prolapsus, accompanied with considerable irritation of the bladder, followed by hæmorrhage upon exertion. He came under my care some months ago for hæmorrhoids and prolapsus; a considerable portion of the covering of the prolapsus was ulcerated, from which a free discharge of pus took place. As an application, I ordered a strong solution of nitrate of silver to be applied by means of a camel's hair brush; and astringent injections, as alum, sulphate of zinc, etc.; at the same time carefully regulating the bowels by gentle aperients. There was an open vein at the ulcerated point, to which I applied successfully the actual cautery. As the irritation of the bladder kept increasing, I suspected something more than sympathy between the rectum and bladder or prostate, although the symptoms of stone were not at all conclusive. There was no pain after nor difficulty in passing urine; the stream was slightly forked; there was a frequent desire to micturate, greatly increased by exertion, as walking or riding, with slight uneasiness, although not amounting to pain at the extremity of the penis. The urine was quite clear. There was also hæmorrhage from the bladder upon exertion. The sight of water, or putting his hands into it, increased the irritation, or produced an urgent desire to micturate. He was constantly disturbed at night. My patient was called to London upon business, and, not feeling so well while he was there, consulted an eminent surgeon, who sounded his bladder, but failed to detect a calculus, and attributed his symptoms to disease of the prostate gland, which was enlarged (at the same time giving him a guarded opinion about his having stone). Some years ago, my patient passed a number of small lithic acid calculi; and from that time his bladder has not been quite comfortable.

With these symptoms, I sounded him, and readily found a hard calculus. Taking into consideration his general health, I urged him to have the stone crushed; and to this he readily consented. The stone was very hard, and required great force to break it. The operation was at first performed under chloroform; the third was followed by severe rigors, urgent and continued vomiting, and collapse, which were combated by stimuli, warmth, etc. After the fourth operation under chloroform, the same train of symptoms followed, in an aggravated form. I was hastily summoned to his residence, and found him in a state of collapse, and suffering violent pain in the pubic region, which led me to suppose that the bladder had given way from some cause. After this, he had total suppression of urine for forty-eight hours; his tongue became much furred; he was unable, or nearly so, to speak, or to notice anything that was going on around his bed; he was sensible when roused. Pulse small and intermitting, and scarcely perceptible.

The treatment adopted was the warm bath, at a proper time; after the collapse had passed off, dry cupping to the loins, turpentine over the lumbar regions, sinapisms to the pit of the stomach, and large enemata of warm water thrown up into the colon by means of a long tube. His sickness and hiccup persisting, I gave him creasote in one drop doses every four hours, and brandy and soda water occasionally. He was ordered a light farinaceous diet. With these alarming symptoms, my father and myself considered him dying.

After total suppression for forty-eight hours, he passed urine with several fragments of calculus; prior to this, I carefully examined the bladder, and could not detect any urine in it, and my patient never once had the desire to pass any after he rallied from his depressed state; he attributed his symptoms to the *chloroform*, and urged that other operations, if necessary, should be performed without it.

There was no hæmorrhage after any of the operations from the bladder. On some occasions, after injecting the bladder prior to an operation, it was found so very intolerant that the operation had to be postponed until the following day.

After the urgent symptoms succeeding the fourth operation, I left the patient alone for three weeks until he recovered his strength. I administered quinine, and ordered a generous unstimulating diet, gentle out-door exercise in his close carriage, a hip bath occasionally, and barley or linseed water *ad libitum*.

At each successive operation very little was done at *once*. A few fragments were crushed as quickly as possible; then the lithotrite was withdrawn; and this I repeated at his urgent request about every third day when circumstances would admit of it. From this time to the termination of his case not one bad symptom arose; a large quantity of hard fragments were passed; his bladder and rectal symptoms subsided, and he made a good recovery, and was able in July or August to take a month's tour on the continent with enjoyment and comfort.

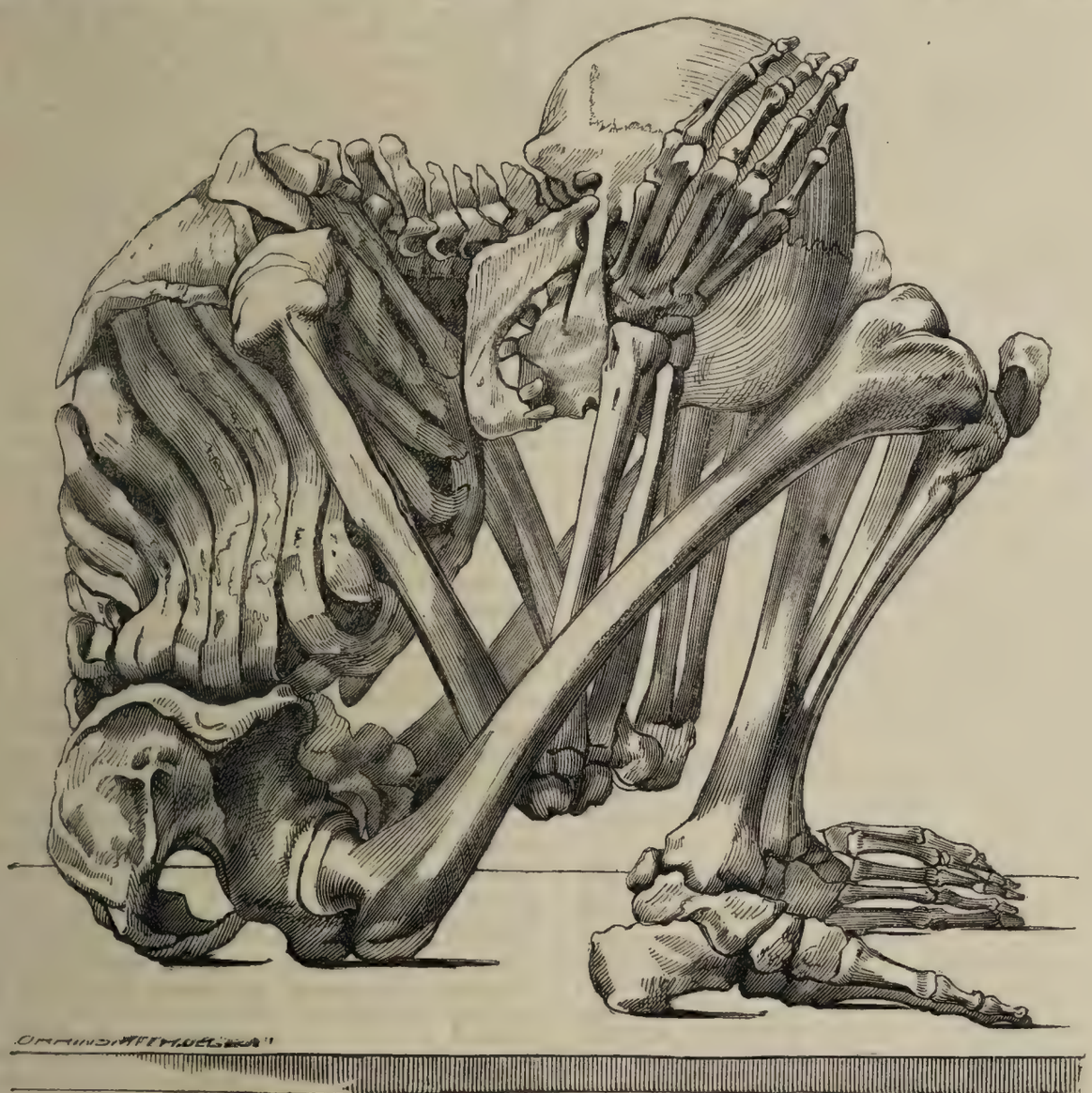
Remarks. The first point of interest in this case is the sudden collapse succeeding the fourth operation under chloroform; he required a good deal of this anæsthetic before getting sufficiently, although in not one instance perfectly, under its influence, to allow of the operation being performed. The next point is the marked effect of chloroform, always producing vomiting and rigors; and none of the symptoms arising during the after operations, where it was not used; hence I have no doubt that it was the cause of his urgent and nearly fatal symptoms. The vomiting was insuperable, and the hiccup continuous for hours, and was relieved for a time by creasote in one drop doses, and ice to suck, with counterirritation by sinapisms over the pit of stomach. He took very little medicine, occasionally an aperient in the form of pill, and a little liquor potassæ, with tincture of henbane at his pleasure; he drank largely of diluents, as barley water and milk; he had some slight difficulty in passing the fragments, some of them remaining in the urethra for some hours. The suppression was no doubt from sudden chill, and checked skin action; but at first I feared he was suffering from renal calculi, although the lumbar pain was not severe. About three weeks was allowed to pass by before attempting another operation, to restore the secretions, and to recruit his health; the fragments of calculus were very hard, and some pieces were of considerable size; at the first attempt to crush it great difficulty was experienced, requiring all the force I could use with Fergusson's lithotrite. I have little doubt that it was a flat calculus, and broke in a star direction; the fragments readily broke up afterwards. He had a horrible disgust for physic. He was a capital patient, and rendered me every assistance at the operations. It is about seven months since he had the last operation performed, and he has not suffered any inconvenience from the bladder since; he can take horse exercise, walk, and shoot with comparative comfort. I feel confident that, had lithotomy been performed in this case, he would never have rallied from the shock of operation. On the whole, about ten operations were performed. My patient found the hot hip bath of great service during treatment.

CASE OF CHRONIC DEMENTIA.

By FORBES WINSLOW, M.D., D.C.L.

DURING a short sojourn in the interesting town of Freiburg, the ancient capital of the Breisgau, in the month of September last, whilst *en route* to Italy, I paid a visit to the anatomical museum attached to the medical university of that place; and, being much struck with the singular appearance of the skeleton of a woman who died at Freiburg, in a state of chronic dementia, *after remaining for a period of ten years in the position delineated in the accompanying drawing*, I requested, through the superintendent of the anatomical museum, Dr. Henry Vogele, permission of the proper authority to have a drawing made for my own use. Dr. H. Vogele kindly undertook to make one for me; and, having done so, he has forwarded it to England, with the following short outline of the history of the case.

The patient, Anna Maria Grumsah, was born at Freiburg, in the Grand Duchy of Baden, May 10th, 1785. She was the only daughter of persons in humble life. Her physical and intellectual development was at an early period extremely satisfactory. At a tender age, her remarkable intelligence was the subject of general admiration. Until she attained the age of 18, she was educated in conformity with her position in life, and the means and taste of her parents. Some of her surviving relations assert that, when in the full possession of her senses, her temperament was very irritable, similar to that often manifested in hysterical females. At the commencement of the present century, Anna Maria Grumsah was considered one of the most beautiful girls of Freiburg. When about 18, she went to Basle, for the purpose of filling a position of responsibility in a gentleman's family, and, whilst there, conducted herself with great propriety and intelligence. Her remarkable loveliness, her uniformly steady deportment, and her amiability and sweetness of disposition, excited universal observation. She soon had many admirers and suitors, one of whom, somewhat superior to her in social rank, succeeded in gaining her affections. To this lover she attached herself with an intense and romantic passion, refusing obstinately and blindly to listen to the advice of her friends and relations. "She loved not wisely, but too well." On one occasion, at a public festival, her lover was seen devoted in his attentions to a rival beauty. Miss Grumsah appeared for the moment stunned; and, on satisfying herself that her betrothed was inconstant, she rushed from the ball-room in a state of great mental perturbation and depression. This attack rendered her unfit for the position she occupied, and accordingly she left her situation in 1806, in the twenty-first year of her age. No efforts were spared by her parents and friends to rouse her from the profound despondency which appeared suddenly to have overwhelmed her. The best medical aid was obtained. She continued in this state of mind until 1812, when she was removed to the hospital at Freiburg. Here she remained for a period of ten years, without any apparent amendment. In 1822, the melancholia became more developed, until she sank into a state of helpless and incurable dementia, in which she continued for the last ten years of her life, which terminated on the 12th February, 1847.



The physician to the hospital, Dr. Schüle, states that, night and day, *for a period of ten years, without the slightest change of posture*, this unhappy woman was huddled up (exactly as represented in the drawing), crouched in a corner of her room, mute and motionless, exhibiting no intelligence, and apparently unconscious of everything that transpired about her. All attempts to excite her mind and rouse her from her position proved abortive. She was reduced to the condition of an animal, merely eating and drinking when food and liquid

were offered to her. She sat in a bent position, with her head tightly fixed between her hands in her lap, night and day, for a period of ten years, as delineated in the accompanying sketch. Her death occurred in 1847. The body was brought to the dissecting-room, and dissected in the same position it had remained in for the last ten years of her unhappy life. The autopsy revealed considerable organic lesions of the brain.

The case is mainly interesting and worthy of record in consequence of the long period during which the patient continued in the position exhibited in the drawing. Her state was not cataleptic, neither was there the slightest symptom of a tetanic condition of the muscular fibres.*

23, Cavendish Square, January 1857.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS PULMONALIS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture II.

INTERFERENCE WITH RESPIRATION. RESIDUAL AND TIDAL AIR. DIMINISHED VITAL CAPACITY AND LESSENED ACTION OF AIR VESICLES LEADING TO DEFECTIVE CHEMICAL CHANGES, TO COLLAPSE, AND TO MOREID PRODUCTS. ALL GENERAL CAUSES ACT BY LOWERING NERVOUS POWER AND LESSENING VESICULAR ACTION. SEX. AGE. TUBERCLE—WHAT IT IS, AND WHY IT SELECTS THE LUNGS AND THEIR APICES.

In considering the nature of an object, it is essential to fix the mind only upon such circumstances as are universal. It is also of equal importance to distinguish effects from causes, and both from merely coincident conditions. These may appear to be very trite observations, but it is to the disregard of them that must be attributed nearly all untrue theories; and to avoid such an error is always a matter of no small difficulty. In applying these remarks to the subject now under consideration, I would direct your attention only to the period of the earliest occurrence of phthisis; for it is manifest that, although new points of deposit may continue to occur in the course of the disease, it is then less difficult to isolate their causes, since the complicating circumstances are fewer at the moment of origin than at a later stage of the disease; and if there be a universal condition causative of phthisis, it must be equally existent at the former as at the latter period. To build a theory of the nature of a disease upon circumstances which attend, and therefore may arise from it, is manifestly to court error, as I conceive to have been the case, in such a theory as that of the fibrine crasis of tubercle.

In my former lecture, I endeavoured to prove that on the weight of evidence phthisis ought rather to be regarded as a local disease resulting from general causes, than as a general disease having simply a local manifestation; and consequently that it is not essentially due to the scrofulous diathesis, to blood disease, or to hereditary influence. In objecting to the prevalent error of ascribing it to a disease of the blood, I stated that the advocates of that theory have to contend with the following adverse conditions, which are generally admitted to exist;—

1. That it may arise from local causes only.
2. That it may occur without disease of the blood.
3. That the morbid product has not been found in the blood.
4. That no state of the blood is known which is characteristic of the disease.
5. That the changes in the blood which have been seized upon are such as accompany and do not originate the disease.
6. That of those conditions the fibrine (to which the diseased condition has been referred) may be unchanged or too much or too little.
7. That the change in quality which is affirmed to exist is proved, not from the fibrine itself, but from the tubercle; or, in other words, that the fibrine is tubercular, because sometimes tubercle is found in it.
8. That at the origin of the disease the general system offers no change which is opposed to the quality of health of the individual.
9. That the disease is arrested in any stage without any vicarious elimination of morbid matter having being set up, or without any change in the general system having appeared, which is in anywise specific.

It was not denied that a state of the blood may be one of the causes of phthisis; but since we cannot point out some specific characteristic of that state, it avails nothing in a practical point of view to regard phthisis in general terms as a blood disease.

Afterwards, it was proved that phthisis could not be essentially due to insufficient food, to imperfect digestion, or to waste of nutritive material.

We now proceed to consider *the condition of the organs concerned in respiration, and the interference with the function of respiration which undoubtedly exists.* There is no doubt that the nutrition of the body demands not only the introduction of suitable food, and its digestion by the alimentary organs, but the complete elaboration of it as it passes through the capillaries of the lung; and hence any hindrance to the latter is as prejudicial to nutrition and to life as prevention of the former. It is also clear, from the products of respiration, that effete matters pass off by that function, and that any impediment to respiration must be followed by a diseased action of the general system. However readily we may subscribe to the facts now mentioned, I think it must be admitted that, in reference to the nutrition of the body, we too much forget the importance of the respiratory process, and give almost exclusive attention to that fact which is most cognisable to our senses, viz., the introduction of food. That air is absolutely essential to life, no one denies; but that a full supply of it to the system is as essential to health, we seem practically to forget; for we commonly content ourselves by sending patients into the fresh air, forgetting that that does not necessarily imply that they will take more air into the lungs. Hence, although we have proved that the digestive organs are not at fault in the production or in the early stages of phthisis, we have yet left for inquiry a function quite as essential, although it be less cognisant to the senses, and in some sense also of more difficult investigation. I am anxious to impress the importance of the subject, since, in my opinion, it is in that direction that we are primarily to look for the solution of our difficulty.

It is very evident to us that the quantity of air admitted into the lungs must be regarded under two aspects. Thus—1. When the lungs have been once distended with air, they never entirely lose it in the ordinary act of respiration, but a large quantity of it remains after even the most complete expiration. This is known as the residual air; and to this must be added the reserve air, or that quantity which, after an ordinary expiration, can be emitted by forced expiration. 2. By ordinary respiration, a certain volume of air is taken into and emitted from the lungs; and this quantity is capable of the greatest variation in health, according to stature and exertion, and especially according to the voluntary effort to breathe more or less deeply. Thus, I am about six feet in height, and breathe about 30 to 35 cubic inches at each inspiration; but by a full inspiration I can inspire 260 or 280 cubic inches, in addition to at least 100 cubic inches of residual air; that is to say, the capacity of my lungs beyond that used by me in the ordinary act of breathing is about 330 cubic inches, or a quantity ten times as great as that which I commonly inspire. This is the tidal air, and is in the proportion of about 1 to 5 of the residual and reserve air conjoined. Hence it is clear that we must have regard both to the effect upon the blood or the system due to the residual air, and to the smaller portion which is continually changing in the act of respiration. It is quite possible that both of these may vary greatly from states of disease, and that each may vary independently of the other. Thus, as the residual air is found in every part of the lung in health, it is to be inferred that any cause which would expel that air permanently from any part of the lung would lessen the quantity of this residual air, and yet at the same moment the quantity of air entering and passing out by the trachea during respiration shall remain the same.

But, since the functions of the body are maintained in health by this full volume of residual air, and the smaller quantity of tidal air which is changing in ordinary respiration, of what use is it

* Should any members of the Association visit the interesting town of Freiburg, they cannot do better than place themselves in the hands of an exceedingly obliging and intelligent *valet de place*, of the name of John Andrew Ritschel, at the *Hährinyer Hof*. He will be found a charming companion in a day's ramble to various objects of attraction.

to regard the total capacity of the lung, which has already been shown to be naturally so much beyond that which is employed under ordinary circumstances? The answer must mainly have reference to the quantity and the action of the residual air, as just mentioned; for it is that air which is more immediately in contact with the capillaries; but doubtless there is a second reason. If we passed our lives in one quiet state of repose, we should require but that little variation in quantity which may depend upon food, fasting, sunlight, darkness, posture of body, and waking in sleep;* but we do not do so: on the contrary, at intervals, we have all to make bodily exertion; and when that is great, as in rapid running, the frequency of respiration is not only increased, but the quantity of air entering with each act is increased; and hence, at these times, we need lungs of a volume larger than is called for in a state of repose. This of course applies most to those persons who are the most exposed to violent exertion; and hence, if, from any cause, the lungs cannot permit this largely increased volume of air, so called for, the evils will fall most heavily upon those classes who most need the increased volume. Hence, at the same stage of any disease, thus limiting the capacity of the lung, the evils of this limitation will be the most felt in the working classes, or in any individual whose requirements in life call for much bodily exertion. Thus, although the lungs are so much more capacious in health than is commonly called for by the usual requirements of life, any considerable diminution must be a permanent evil in lessening the amount of residual air in the lung, and a temporary evil whenever the requirements of the patient compel him to call for a larger temporary supply.

The first of these evils is doubtless the most important, seeing that it is permanent and induces a diminution of the aerification of the blood and the elaboration of the food, which is essential to health and possibly to life. It is, therefore, of moment to be able to measure this evil, and this has been attempted on the largest scale, by my predecessor here, Dr. Hutchinson. He does not profess to measure the quantity of the residual air either in health or disease; but it is manifest that as in disease the capacity of the lung is lessened, the measure of that diminution will be an inferential measure of the lessened quantity of residual air.

But of the two modes of inquiry considered apart, viz., the quantity of air which is being constantly changed, and the quantity which is comparatively fixed in the lungs, I consider the latter is more likely to be due to disease and will progress as the disease progresses, whilst the former may at least be open to inquiry as a cause. The latter, moreover, is important, on the ground that the residual air to be of use must be changed more or less perfectly and frequently, and whilst the diminution of the residual air would be an evil by limiting the local extent of the process of aerification, any lessening of the quantity of air in ordinary respiration would lessen the act universally, and also lessen that upon which, alone or mainly, the value of the residual air depends. But as both acts are necessary to complete respiration, they must be considered together, lest we should find ourselves in a difficulty when we observe that the one may remain normal whilst the other is greatly changed.

Now that the capacity of the lung is greatly lessened in cases of phthisis, is evident from the large amount of that organ which is occupied by solid matter, an amount which often seems after death to have left but little room for air. Dr. Hutchinson's method also proves this during life, and also measures both the existing extent and the loss which has been sustained. Upon this, then, we may rest the fact of a diminished quantity of air in the lung. In reference to the variation of the quantity which is changed by respiration, much is open to investigation and fallacy. I have ascertained, on various occasions, that it is possible for the vital capacity to be reduced one-third, or probably more, and yet the quantity of air in ordinary respiration shall not have lessened greatly from the healthy standard. But in these cases it does not by any means follow that there has been no diminution in the process of aerification, and hence the mere quantity of air ordinarily inspired is no correct measure of the capacity of the lung or of the vital process.

I do not adopt the view of Liebig that the blood in phthisis is unduly oxygenated, because with a great diminution in the number of air cells the same quantity of tidal air, and therefore of oxygen, is received into the few as would have been into the many cells. In many diseases, one part of an organ undertakes a double share of duty when another part has ceased to act, but this is not so in phthisis except in a very limited degree and at the earliest stage, for we do not find the chest expand in one part as it flattens at another, or any evidences (except with the above limitation) of increased action in the air cells. As the chemico-vital changes proceed in each cell, the loss of one cell must diminish them, and hence when three-fourths of the cells are obliterated, the defect must be very great. The continuance of the due quantity of tidal air is no evidence that it must penetrate further into the few remaining healthy cells, for this air does not enter the cells in currents, but by diffusion of gases, and moreover in most of such cases there are cavities with pervious bronchi which will admit a quantity of the tidal air and yet not permit any chemical changes. We have also yet to learn more in reference to the varying capacity of the bronchi before we can fully account for the continued reception of the usual quantity of tidal air after the destruction of so large a portion of the air cells.

This, then, leads me to the point in which we all take the greatest interest, viz., the information to be obtained by the physical examination of the lungs in reference to the quantity of air in those organs.

There are two stethoscopic signs which directly indicate the entrance of air into the lungs, and which are in some degree a measure of the quantity, viz., the tubular breathing and the vesicular murmur. In a state of health the sound of the latter masks the former, except over the larger tubes; but when the vesicular murmur in any part is lessened in degree, then the tubular sounds begin to be heard more distinctly. This last I consider to be the explanation of the term, harsh breathing; for when the gentle buzzing universal continuous sound of the movement of the air in the air-vesicles is absent, the clear, short, intermitting sound of the air passing through the minuter bronchi is alone heard. It is also probable that when the minuter bronchi in any part become closed, and the larger ones alone remain open, that the breathing is still more harsh. It appears to me to be quite easy to distinguish the vesicular from the tubular breathing, and to measure with some nicety any diminution of the former, both absolutely by the lessened sound, and inferentially by the perception of the tubular breathing.

Now since from the structure of the bronchial tubes it is clear that air within them does not come into contact with the blood, they cannot be supposed to exert any influence over the process of aeration, and hence are not essential to the function of the lungs, except so far as the iron tubes which convey the water through the streets may be said to allay our thirst. They are simply conduits, and so to speak, accidents and not essences of the act and process of respiration. A large amount of air in these tubes would be no evidence of even the smallest amount of aeration of the blood, but the absence of this air would be negative evidence of the absence of aeration in the parts of the lung to which it leads. The absence of the tubular sound is, therefore, of definite importance, but the presence of it is no evidence of the integrity of the lung. Indeed, so far is the latter from the truth, that the existence of much tubular breathing may always be taken as evidence of the want of integrity of the lung.

The air-vesicles which are in close proximity to the minuter bronchial tubes are the essential respiratory organs, and the sound attending upon the movement of the air in the lungs is the only evidence which we have of the aeration of the blood. The amount of this sound is also a measure of the amount of air which is exposed to the action of the blood, although it may not necessarily be a measure of the effect which the air produces upon the blood. This latter is unquestionably the point at which we wish to arrive, but it is of difficult attainment. It may be that the amount of vital or chemical change effected in the air vesicles may vary not only with the quantity of air, but the state of the air-vesicles, the condition of the blood, and the amount of vital energy, and hence no one of these conditions may exactly represent the other, yet it may perhaps be permitted to infer practically, that where the state of health is not far different from that of men in general, the amount of air passing into the air-vesicles is a tolerably fair measure of the amount of vital change which follows. Hence the circumstance of the greatest moment is the ability to estimate with accuracy the amount of air which enters the vesicles. This cannot be done by any instrument which simply measures the quantity of air passing into the lungs on inspiration, for the obvious reason that the greater part of this air may not pass further than the bronchial tubes. It can only be effected by carefully noting the amount of vesicular murmur in various parts and in the whole of the lungs. This requires much careful attention and

* See my articles in "Transactions of Royal Medical and Chirurgical Society," 1856; and "British and Foreign Medico-Chirurgical Review", April 1856.

also practical knowledge of the amount which in various circumstances occurs in health, and hence is of difficult attainment, and must mainly rest upon personal investigation and experience. This change is observed in two ways: first, by the length of the inspiratory vesicular sound; and, secondly, by the degree of intensity and extent of this murmur.

A little reflection will suffice to convince us that the length of the inspiratory act must mainly depend upon the amount of air-vesicles then in use, for they not only constitute the bulk of the lung, but are the points where the greatest resistance is offered to the entrance of the air; and they, therefore, claim both length and force of inspiration. On the other hand, if the entrance of air is confined to the various divisions of the bronchi, and especially if it is denied at the same time to many of the smaller bronchi, the length of the trajet of the current is reduced, and the resistance to its entrance greatly lessened, so that a shorter and a more feeble inspiratory effect would result. As, however, the entrance of the air cannot be confined during life to the bronchi alone, in proportion as the quantity of open air-vesicles is very small, so will nature commonly (apart from phthisis) make greater effort to expand those few, in order that they may perform a double share of duty; and thus, with short inspiratory acts, there will be considerable muscular effort in inspiration. The force of inspiration is, however, different from the force of the muscular attempts to inspire; and it is quite certain that there may be the greatest effort in inspiration, and yet the current of air passing into the lungs shall be both short in its extent and feeble in its motion. If, however, the system is inadequate to this increased effort to inspire, as is so constantly seen in feeble and phthisical persons, there is both short and feeble inspiratory effort, as also little muscular effort, since entrance to a large quantity of the air vesicles is denied.

In estimating the extent of the respiratory process in any case, we must, therefore, give almost sole attention to the vesicular murmur, and ascertain, both generally and locally, its vigour, intensity, and extent. Whenever, generally or locally, it is feeble, coterminous with the act of inspiration, and of very short duration, it will be just to infer that there the respiratory process is deficient. Generally speaking, where there is universal deficiency of respiratory murmur there is also a short inspiratory act; for as either few only of the air vesicles are thus expanded, or if many, then they are only very partially expanded, but little air need to enter or quit the bronchi. It must, however, be borne in mind that as the total capacity of the lung is so much larger than is required for the common acts of life, there may be a certain amount of diminution before the health is really endangered from the want of aeration of the blood, and even that is warded off for the time by increased frequency of respiration. Yet as the residual air occupies the whole lung, any exclusion of it from any part must so far lessen the action of the air upon the blood, and an injury, slight or otherwise, must thenceforward be inflicted upon the system.

Now, what evidence have we that the amount of vesicular murmur does vary in a perceptible degree? It is evident that in phthisis, wherever there is consolidation or destruction of a part of the lung, there the vesicular murmur is lessened or lost, although the tubular breathing may remain more or less extensive. There is frequently a source of fallacy in this circumstance, at least at first sight; for even then, unless the mischief is very extensive, some portion of the vesicular sound is audible; but if attention be carefully given, it will be evident that this sound is more distant or isolated than is usual, and it is, in fact, due to isolated portions of more healthy lung in contiguity with the part which is diseased. It is, therefore, essential to fix the mind only upon the spot where the vesicular sound is deficient until it is impressed with the deficiency, and then it may seek to ascertain to what extent and in what direction there is more healthy lung. The loud continuous vesicular murmur in healthy lung which is heard through the stethoscope is not entirely due to the layer of lung, which is superficial and not far removed from the base of the instrument, but in fact consists of the action of the vesicles which are central and more distantly seated. In like manner, although a part of the lung may cease to admit air into its vesicles, it may be surrounded by portions of healthy lung which emit the vesicular sound. So, in old cases of bronchitis with emphysema, there is found more or less extensively an absence or a diminution of the respiratory murmur, whilst the tubular breathing may be even louder than is usual. But it is needless to multiply evidence that in confirmed disease of the lungs the vesicular murmur may be reduced or lost.

Now, what is the condition of the air-vesicles in the early stage of phthisis—at a stage, in fact, when the system appears to have suffered but little, if any, from the presence of the disease? We find a slight, it may be the slightest, amount of dullness on one or both clavicles, with some flattening of the chest over and under the clavicles, and a marked diminution of the vesicular murmur at this and perhaps other parts. It is at the same time ascertained by Hutchinson's method, that the diminution in the vital capacity may be at this stage upwards of 100 cubic inches; and it is that startling fact which gives great gravity to the case. With, then, only slight dulness and lessened vesicular breathing, there is a very large diminution in the vital capacity of the lung. Now to what is the slight dulness attributable, and to what do we look for the explanation of this serious discrepancy between the extent of the physical signs and the deficient capacity of the lungs. The only fact upon which we have at present seized is the deposit of tubercle; but our experience of *post mortem* examinations, and our belief of the extent of the disease in this instance, from the intensity of the physical signs, are quite inconsistent with the amount of diminution of vital capacity. Surely an amount of tubercular matter deposited in the air vesicles which could displace 100 cubic inches of air, or which could be so disseminated and situate as to prevent the entrance into the lungs of so large a quantity of air, must be infinitely more than is found at the early stage of the disease. The conviction is thrust upon us that there must be something beyond the deposited tubercle which is sufficiently extensive to prevent the entrance of so large a quantity of air into the lungs.

However, at the very early stage of the disease there is lessened vesicular murmur and greatly lessened vital capacity. But what is the state anterior to this condition of the lung—anterior so far as we can ascertain to the deposition of tubercle?

This question cannot be answered by reference to any specific case, because it is not possible to state that the case to be referred to would ultimately have tubercle deposited in the lung; or that any case which appeared likely to become phthisical had not then tubercle actually deposited. We must rather refer to the set of cases which, by common consent, are believed to be prone to phthisis. Such are persons of delicate organisation, contracted chests, great excitability without firmness of system, or of much sluggishness of habit, with pallid complexion. There are no returns of investigation into the vital capacity of persons afflicted with other diseases than phthisis, and hence we are left to our own observation. Amongst the mass of out patients of the Hospital there are always some who appear to be on the verge of phthisis; but in whom there are then no evidences of the existence of that disease. All these agree in this one common condition: shortness of the inspiratory effort, and general diminution of the vesicular murmur in its depth and intensity. In such persons it is oftentimes difficult to count the rate of respiration, on account of the very slight breath motion; and on the application of the stethoscope one is led to ask for a deep inspiration in order to hear the inspiratory sound at all. I am convinced that in those cases which have a marked disposition to pass into phthisis, and those in whom there is strumous or other disease of the system indicating debility, there is, with original or acquired flattening and narrowing of the thoracic cavity, less breath motion, less air admitted into the lungs, and less vesicular murmur, than is found in a state of health.

It is thus proved that in phthisis, even in its earliest stage, there is a great diminution in the vital capacity of the lung; and it is asserted that with this there is less respiratory force and less vesicular murmur; and it is also asserted that in those persons whom experience has shown to be most likely to become phthisical, there is less breath motion and less vesicular murmur; which, together with the flattening and deficient mobility of the chest, the external evidences of deficient expansion of the air-cells, must lead us to conclude that in the earliest stage of phthisis there is a great diminution of the function of the lung in aerating the blood; and we must believe that the like fact is observed in persons anterior to the production of phthisis. Whether, therefore, phthisis be due or not to this lessened aeration of the blood, it is manifestly preceded by it, and is accompanied by it in all its stages. We have hence found, as an anterior and attendant condition of phthisis, one of the vital functions of the body greatly reduced in extent and vigour.

[*To be continued.*]

Reviews and Notices.

THE LONDON MEDICAL DIRECTORIES FOR 1857.

How did the medical profession manage before the *Medical Directory* was projected? This question often suggests itself as we turn over its ample pages, giving the literary and scientific history as they do of every man among us, and a host of information bearing upon our science into the bargain. What time must have been lost, what a mighty turning over of many books, and a referring to secretaries of societies, before a medical man could be sure of any fact in connexion with the social life of his profession. Now he finds every thing he wants within its red covers, and indeed new wants are year by year created by the editors, inasmuch as they accustom him to fresh features. The edition for 1857, in addition to its former contents, includes a list of coroners, compiled from original resources, lists of government inspectors and surgical instrument makers, together with a large measure of general information. The editors, in their preface, advert to the "possible" introduction of a government registration act before the publication of another edition, in which case we are promised a more reliable and trustworthy register of the profession; a sufficient proof that the proprietor does not think the publication of a government register will damage his property: an idea which some people entertained, but without any reason, as it is quite clear that a mere list of names, however authentic, can never supersede a work containing so much information as the *London and Provincial Medical Directory*. We have, however, one little quarrel with the editors on a personal matter. On turning to the list of provincial medical and scientific societies, we find the British Medical Association described in just *eight lines*, chiefly taken up with a list of names of the Committee of Council. Now this is, we think, too bad, considering that we are the only powerful Association of medical men in the kingdom, and that our numbers are upwards of 2,200. Nay, much more space is devoted to the "East Kent and Canterbury Medical Society," and a dozen other comparatively insignificant societies, numbering perhaps twenty members. Not one word is said about the different Branch societies belonging to the Association, a goodly number seated in every county of the island. We trust the editors, who are members of the Association, will supply this omission in the next edition; and that they will also give us a page to ourselves, as we certainly cannot be consistently placed either among the London or provincial societies, as we are British rather than metropolitan or provincial.

The *Medical List for* 1857, with its shining red face, greets us this year for the first time. We confess we turned over its pages with the very best intentions and with a desire to do justice to it, when the exceedingly belligerent preface of Mr. Lara, the editor, met our eye. This gentleman opens his campaign with a defiance of all the medical journals of the metropolis with the exception of one: ourselves he especially attacks, after the following manner.

"I have to complain of a clear breach of good faith on the part of the editor of the ASSOCIATION JOURNAL. I received a message from that gentleman, early in 1856, promising me support in any way I should suggest, provided that I would send certain advertisements to his publisher. I sent the advertisements, and he fulfilled his part of the engagement by inserting a paragraph in 'notices to correspondents,' in which he advised the profession not to furnish me with information. I remonstrated by letter; and Dr. Wynter, with a discourtesy foreign to the press in general, did not even deign to reply."

Our associates, who know full well the position of the editor on this journal, can appreciate the probability of this audacious statement. It is scarcely necessary for us to observe that this implied begging on our part for advertisements is grossly and ludicrously false. We never, either by word of mouth, message, or letter, communicated in any way with Mr. Lara; and if any one promised to him our support, he did so entirely without our knowledge. We must be clumsy managers indeed, to quarrel, as Mr. Lara would have it appear we did, on the first opportunity, with a customer with whom we had been in collusion. As to the charge of discourtesy, all we have to say upon the subject is, that we received so rudely worded a letter from Mr. Lara, that the only possible method of reply to it was by maintaining silence. In the exercise of our editorial authority we certainly expressed an opinion that one Medical Directory was sufficient for the profession, and that an attempt to introduce another would only *divide the returns from medical men*, and consequently impoverish both. We can assure Mr. Lara that we shall be the first to acknowledge our error when he really produces a better "List" than the old Directory; but this, we can assure him, he has yet to do.

The *London Post-Office Directory* has of late been classified according to rank and professions; but we regret to see the medical element altogether omitted in the new arrangement. Fashion, officials, lawyers, tradesmen, etc., have all their separate sections and appropriate colour on the edge of the leaves, but medicine is not honoured with a separate existence. We trust that next year we shall see physic introduced between the Law and the Church, and that we shall not find the medical man's name for which we search, supported on either side by that of a cheesemonger or a tailor.

Periscope.

SURGERY.

TREATMENT OF HERNIA.

So much has been written on the treatment of hernia, that the subject might be supposed to be nearly exhausted of interest Nevertheless, as there are still points on which difference or instability of opinion exists, the conclusions drawn from the observations of large collections of cases will always be acceptable, whether they confirm, modify, or oppose, the prevalent opinions. Recently, three articles have appeared which present sufficient merit to justify our giving an abstract of them: viz., an article in *Guy's Hospital Reports*, by Mr. THOMAS BRYANT, on hernia, with an analysis of 126 fatal cases; a pamphlet by Mr. NATHANIEL WARD, Assistant Surgeon to the London Hospital, on some points in the surgery of hernia; and a paper, by Dr. ANDREW BUCHANAN, in the *Glasgow Medical Journal* for July, 1856, on the expiratory method of performing the taxis to effect the reduction of hernia.

EXPIRATORY METHOD OF PERFORMING THE TAXIS.

Dr. ANDREW BUCHANAN states that he has successfully employed, during thirty-four years, the process described in the following paragraphs.

The patient is placed in the position usually recommended, or which may be deemed most suitable in the various forms of hernia, and the compressing force is applied in the usual way. The peculiarity of the method consists in this, that just before the force is applied, the patient is directed to make a very full expiration, and thereafter to refrain as long as possible from making a fresh inspiration; or, as it is more intelligibly expressed to the uninitiated, he is directed to blow as much air out of his mouth as he possibly can, and to continue thereafter as long as he can without drawing a fresh breath. While this is going on, the operator, having made all necessary preliminary arrangements, attempts to return the hernia, beginning as soon as the expiration is a little advanced, and continuing his efforts gently but steadily during the whole period of suspended respiration. When the patient is at length compelled to draw a fresh breath, the pressure should be relaxed, so as not to oppose the force of the muscles of inspiration; but it should not be altogether given up, and as soon as the patient is a little recruited from his exhaustion, he is made to perform another expiration, and so the operation is continued as long as may be required. The first indication of success, consisting in a slight internal motion or gurgling noise in the tumour,

almost universally occurs during the suspension of the breathing, and it is during the same period that the complete return of the hernia is usually effected.

There are some important minor details in the operation, which depend on the intelligence and strength of mind of the patient. If he possess both those mental qualities in a sufficient degree, he will be able, after making the full expiration, to refrain from inspiring by a voluntary effort. Such cases are the most favourable for the success of the operation. In other cases, and these cases occur more especially among females, the patient understands and acts fully upon the direction of blowing out the breath, but wants strength of mind for the subsequent control over the inspiratory muscles. In all such cases it is indispensable to have an assistant, whose duty it is, as soon as the expiration is completed, to apply his hands over the mouth and nose of the patient, so as to prevent inspiration for as long a period as may be deemed safe and advisable. If, however, the lungs can be sufficiently emptied, such cases are little less favourable than the former. Last of all, there are persons who, whether from natural stupidity or from fright and confusion of mind arising from the condition in which they are placed, cannot be made to comprehend and follow out the directions given them. In those cases the lungs are never emptied to the necessary degree, and the success of the operation is proportionally uncertain.

The theory of this operation is simple. In the first place, it disassociates the diaphragm from the abdominal muscles, and, by preventing them from acting in concert, removes the chief obstacle to the reduction of hernia. Secondly, it weakens the muscular power of the body, and diverts it from the act of resistance.

EARLY OPERATION IN HERNIA, ESPECIALLY IN FEMORAL.

Mr. Bryant observes that the danger of delay in all cases, where strangulation is evident, "is now so well appreciated by surgeons generally, that there is no necessity to stimulate such a feeling; but, unfortunately, there is need to urge them to act upon the knowledge of it; for the fact that so many cases are admitted into Guy's Hospital, in a dying and almost hopeless condition, proves too truly that such is not sufficiently understood, or at any rate is not practically carried out. But in femoral hernia delay is of peculiar importance, for three-fourths of the cases which refuse to rally after operation are of this kind. This fact alone is sufficient to indicate, that in femoral hernia, the ultimate result of all strangulation, namely, death of the part, occurs more rapidly than in inguinal. But when with this it is considered that this form is generally found in old women, who are, of course, less able to resist any such injury; that gangrenous bowel and artificial anus are much the most frequently associated with it, the truth (for such it must be called) that femoral hernia passes into a state of gangrene more rapidly than inguinal, becomes evident; and, as a result, the practical conclusion remains to be drawn, that in femoral hernia early relief is most imperative. And here the form in which it is to be applied must not be passed over; for, recognising the conclusion that ruptured bowel from the taxis is most frequent in femoral hernia, together with the fact just mentioned, that gangrene is most frequently associated with it, the inference that the taxis should be employed sparingly and carefully cannot but be drawn. Our rule, then, in such cases, should be, to operate early; to let nothing like force be employed in the attempt at reduction, and not to let valuable time be lost by baths and other fancy remedies." In support of this opinion, Mr. Bryant shows, from statistics, that though femoral hernia is less common than inguinal by 77·7 per cent., it yet requires operation 25 per cent. more frequently. The explanation of this seems to be in the smallness and unyielding nature of the crural ring, together with the shortness of Gimbernat's ligament. Again, it is remarked that ulceration at the line of stricture is more frequent in inguinal, while a sulcated condition of the bowel at the line of stricture is more frequent in femoral hernia. Fourteen cases were noted in which the bowel was sulcated: seven were femoral, and seven inguinal. In four of these cases ulceration existed; all these were inguinal. In not one case of femoral hernia was there ulceration; in several there was commencing gangrene. Mr. Bryant believes that the stricture in femoral hernia is so tight that gangrene at once takes place, which may be followed by ulceration; while the more general and less rapid constriction of inguinal hernia produces ulceration. This is borne out by what is observed in surgery, of the different effects produced by the firm or the loose application of a ligature to an artery, nævus, or polypus.

OPENING THE SAC IN HERNIA.

On this much debated question, Mr. Bryant's statistics show a tendency towards not opening the sac; although, perhaps, he says, more by negative than by positive evidence. The principal dangers of not opening the sac appear to be the returning into the abdomen a ruptured or gangrenous bowel or a bowel strangulated by the contents of the sac. That such accidents may happen, Mr. Bryant allows; but he observes that to return a gangrenous bowel into the abdomen under any circumstances is not easy: the accompanying inflammation not only glueing the gangrenous intestine to the mouth of the sac, but frequently to the sac itself. Here, the opening of the sac is called into requisition: but why do more than is really necessary, because in some exceptional cases fancied or real mischief has followed the use of simpler means? Further, the cases collected by Mr. Bryant seem to him to show that the practice of returning the gangrenous bowel with the sac unopened, and leaving to nature the establishment of an artificial anus, was less frequently productive of a fatal result than was the interference of the surgeon. When the bowel is actually ruptured, however, Mr. Bryant counsels that it should not be returned, but left down.

Mr. N. Ward, in his paper founded on the observation of 100 cases of hernia operations—4 umbilical, 63 femoral, and 33 inguinal—states that 3 deaths occurred among the umbilical, 19 among the femoral, and 11 among the inguinal class. The peritoneal sac was opened in all the cases of umbilical hernia. Of the 63 femoral it was *not* opened in 42, and opened in 21; the average period of strangulation in the former amounting to 37 hours and a fraction, and of age to 52 years; in the latter, that of strangulation to 57 hours, and of age to 56 years. Amongst the 42 cases of *unopened* sac, of the 32 that recovered, the average age was 47; and of the ten that died, the average age was 66. Of the 21 cases of *opened* sac, 12 recovered, the average age being 54, and 9 died, the average age being 59. Of the 63 collectively, 9 occurred in the male, and 54 in the female; 43 were on the right, and 20 on the left side. Of the 33 cases of inguinal hernia, the sac was not opened in 10, and opened in 23. The average period of strangulation in the former was 28 hours and a half; in 18 of the latter, 30 hours. Of the cases collectively, 25 occurred on the right, 8 on the left side; all took place in the male subject.

The operation without opening the sac was performed much more frequently in cases of femoral than of inguinal hernia. The greater applicability of this operation to the one class than to the other, appears to be attributable to the fact of the neck of a femoral sac not undergoing hypertrophy so frequently as the neck of an inguinal sac. In the inguinal class, the pad of the truss bears directly on the narrowest portion of the sac; in femoral, the pad bears mainly on the body of the sac, and not on the neck. The neck of an inguinal sac offers, therefore, a greater impediment to the reduction of a strangulated bowel than the neck of a femoral, and necessitates the more frequent opening of the sac. This remark excludes quite recent cases of inguinal hernia, and also those cases of large irreducible inguinal hernia, in which a recent additional protrusion has been followed by symptoms of strangulation; for, both to the one set and to the other, the operation without opening the sac is peculiarly appropriate. In the second place, in the forty-two cases of femoral hernia in which the sac was unopened, the period during which symptoms of strangulation had lasted prior to the operation, was less *by twenty hours*, than the period of strangulation in the cases in which the sac was opened, and the age was less by four years. The average day of recovery in the *unopened series* was the twenty-third, the average age also being less by nineteen years than in the unopened cases that died; in the *opened series*, the thirty-first day. The shortest period in which a case of opened sac had recovered was the tenth day; and after this, the twenty-first day was the next earliest period. Considering the short period in which the gut had been strangulated in those cases in which Petit's operation had been had recourse to, the less advanced age of the patients, and the comparatively healthy state of the bowel, it becomes a question of interest to determine, whether in *these very cases of unopened sac*, the addition of a peritoneal incision, the exposure and manipulation of the gut would have influenced injuriously, to any great extent, the ultimate event. It is quite clear that had the sac been opened, something would have been done not required by the exigencies of the cases; and to repair that additional something, which could be looked on in no other light than as the infliction of an injury, a prolonged effort at restoration would have been required on the

part of the system. The progress to recovery would in consequence, no doubt, have been retarded, without, however, the certain addition of enteritic or peritonitic symptoms, which Mr. Ward thinks no one could deny would be more likely to ensue from prolonged interference with the intestinal circulation, than from an exposure of the bowel and incision of the serous membrane. His opinion is, that the risk of leaving the bowel unrelieved for a long period—say thirty hours—and then operating without opening the sac, would be greater than relieving the bowel at a comparatively early period of strangulation—say twenty hours—and opening the sac. Mr. Ward refers to the interesting *résumé* of a series of cases in St. George's Hospital, published by Mr. Prescott Hewett in the *Medical Times and Gazette* of September 23rd, 1855. Mr. Hewett states, that the rule at St. George's Hospital is to open the sac freely. The mortality amongst seventy-five cases, in which this plan was adopted, amounted to only nineteen; the operation having been performed as early as practicable, with every amount of attention to a previous cautious use of the taxis, and a subsequent non-purgative treatment. This result, Mr. Ward thinks a very good proof, as far as it goes, that opening the sac, although it may retard the progress to recovery, is by no means of that serious or fatal character entertained by many of the advocates of the extra-peritoneal operation. Mr. Hewett considers that, "if cases of hernia were seen at a much earlier period than they commonly are at our hospitals, and if protracted efforts at reduction were more generally given up, that the rule of not opening the sac would find many more advocates than at present." In this remark Mr. Ward agrees.

STITCHING THE EDGES OF AN OPENED GANGRENOUS BOWEL UNNECESSARY.

As a rule, Mr. BRYANT finds that the strangulated bowel, when returned, rests or is fixed by adhesion at the mouth of the sac; and that in all cases of gangrenous bowel, the affected portion will be found at, if not adherent to, its mouth. Hence he regards the practice of stitching the edges of a gangrenous and opened bowel as at least unnecessary. And further, it is wrong: for in the second stage of artificial anus, when all fear of extravasation is removed, and the divided bowel and the neck of the sac are firmly glued together, the retraction which takes place is the only process by which cure can be expected; for by it the ends of the divided bowel, with the retracting neck of the sac to which they are adherent, forms that temporary channel through which the intestinal fluids find their way to the lower bowel, and thus allow time for the other operations of nature to perfect a cure. Any interference, then, to such a process, cannot but be regarded as improper; and undoubtedly the ligaturing of the bowel's edges to the integuments must come under such a heading. For it is clear, if the necessary amount of retraction in the most favourable cases is but just sufficient to allow a cure, that the required portion of internal retraction must be almost entirely prevented, where the integuments and external coverings form the boundary and with it the resistance. It is true that these assist well to form a firm and direct channel for the conduction of the fæces externally; but this very truth is an extra argument against the practice; for what hope can be entertained of a cure, when the bowel is, as it were, everted, and the traction has been exerted from without instead of from within?

ADMINISTRATION OF ENEMATA AFTER OPERATION.

On this point Mr. BRYANT says "that the administration of purgatives after herniotomy is now, happily, obsolete; but the anxiety of the surgeon to witness a return of the action of the bowel, has not, perhaps, so subsided, as to prevent a frequent, and may be too frequent, use of the enema: that such is the case occasionally, is not to be doubted, for the too frequent remarks in notes of reported cases, such as 'collapse and death after a copious stool following an enema,' forbid any other conclusion. The subsequent treatment to herniotomy by opium is chiefly vaunted (and with perfect justice) for its value in preserving rest to the returned bowel, and thus allowing it time to regain its tone before being called upon to perform its natural duties. And here the question presents itself—Why urge it then at all? The lower bowel, on the first appearance of strangulation, is not unfrequently emptied of its contents, and seldom is it found after death at all distended with fæces; not so the upper portion. As a rule this will be seen full of liquid excretion, ready, as it were, to 'flush' the lower intestine the moment the returned bowel has sufficiently recovered to permit its passage. Why, then, administer enemas? for although their action is not to be compared to the mischief produced by purgatives, still they do stimulate the intestinal canal, and unquestionably at times hasten, if not cause, death. That they are of value, and necessary in some cases, cannot be questioned: still as a rule, perhaps, they should not be administered, and certainly not merely to hasten the action of the bowel, unless decided symptoms are present which denote its over-distension."

British Medical Journal.

SATURDAY, JANUARY 17TH, 1857.

MEDICAL REFORM.

WE call attention to the report, given at p. 53, of the Medical Reform Committee, holden on Thursday last. The proposals agreed on will, we trust, be accepted by the Conference Committee of the Corporations, and adopted as an integral part of their Bill. If this be done, we shall probably have the satisfaction of beholding that hitherto unobserved phenomenon—*a Medical Reform Bill on which all parties have agreed;* and the event will perhaps for the first time have to be recorded, that a conjoined deputation from this Association and the Medical Corporations has had an interview with some member of the Government in support of a Medical Bill. We hope sincerely that all will recognise the importance of unanimity, and that our chance of success will not be disturbed by an outcry for representation by universal suffrage or any other single *non-essential*, provided the major part of the principles of Medical Reform are carried out. The present opportunity is too promising to be lost: let medical reformers make the best use of it. If they cannot get all they would, let them get all they can for the present, and hope and strive for more in the future.

POOR-LAW MEDICAL RELIEF.

THE exertions of the indefatigable Mr. Griffin in the cause of the oppressed Poor-Law Medical Officers are, we confess, worthy of a better return than he has obtained from those ill used and "down trodden" members of our profession. Those who will not help themselves do not deserve to be helped; and we must say that, if the agitation on their behalf falls through next session, we shall feel little more sorrow for their hardships, and shall listen with reluctance to their complaints. It is but once in an age that such a sturdy champion, and such an indefatigable worker as Mr. Griffin, takes the field on the behalf of his oppressed brethren; and the least that they can do is to support him in the struggle he is maintaining with official supineness and selfishness. Yet, what are they doing to back him? Positively nothing, Not a fourth of the Poor-Law Medical Officers have deigned to reply to his circular. We can only say that such conduct is disgraceful. Well may Mr. Lord, in his letter to us on this subject, speak of the lethal spell which has come over the profession, and deplore that want of uniform action, which can alone make the legislature believe in the reality of the grievance, and the determination to have it removed. If Mr. Griffin obtains so little encouragement from

Poor-Law Medical Officers themselves, he may well receive as a ray of hope the support of the less selfish medical students. We print with great pleasure, in another column, the Report of the Meeting of Students of the London Hospital. These public spirited young men will, we hope, reanimate the struggle, by imparting to it a little of the generousness of youth, which we must say seems sadly wanting on the part of the mass of Poor-Law Medical Officers, as far as this movement, at least, is concerned.

The resolutions adopted at the London Hospital were outspoken and to the point, and we have every hope that the proposal to hold an aggregate meeting of medical students will be carried out. We fully believe that such a meeting would be attended by a large number of the provincial students as well as by the majority of those in the metropolis, and we feel confident that the ardour thrown into the struggle would not only greatly cheer Mr. Griffin on his way, but also shame the sluggard spirit that is abroad on the part of well-to-do medical officers, who seem to have no feeling for their poorer brethren. It would not be the first time that the vigour of youth has carried undertakings through, which seemed impossible of accomplishment to the lotos-eaters to be found in all movements.

Meanwhile, the profession has to perform a duty to individuals who have made a stand against the grinding treatment of Poor-law Boards. Mr. Owen Fox, late medical officer of the Romsey Union, disgusted with the weekly stipend of 13*s.* 4*d.* for attending upon the sick paupers of a population of 1400, extending over an area of 5000 acres, has "struck"—if we may be allowed by that gentleman to use the term—for a more equitable salary, and the profession will certainly not spare the individual who accepts the vacant post. Poor-law Guardians very unfairly fight us against ourselves, and the Poor-law Board is ungenerous enough to back them in their unfair proceedings: "whenever a vacancy occurs there are plenty of candidates for the office, and therefore there is no need of raising the salaries". Such is the language of that educated body of men who constitute the only appeal against "gripple" tradesmen and coarse minded farmers. Let us, however, apply this rule of unlimited competition to the members of the Poor-law Board themselves; let us imagine an advertisement inserted in *The Times* to the following effect:—

"WANTED a Secretary for the Poor-law Board. Hours from 10 until 4 P.M. No particular qualification necessary. Salary £1,200 a year. Apply by letter to Gwydir House.

Picture to yourselves, good readers, the staggering gait of the postman as next morning he shot into the hall the sackful of applications for Lord Courtenay's situation. Yet in all probability every man who hungered and thirsted after this £1,200 a year, would think himself as capable of writing as formal a letter, couched in as frigid terms as his Lordship has attained to. If the principle of competition for official posts is to obtain, why should it stop at Poor-law medical officers, why should it not ascend even as high as the premier? If every man who eats the bread of official ease had to go through a system of unlimited competition to gain his post, regardless of character and ability, we fancy there would be a little more sympathy on the part of the governing powers for the position of a scientifically educated body of men like the Poor-law surgeons, second to no other in the kingdom. To revert, however, to the resignation of Mr. Owen Fox's post, we cannot but regret that he has met with such little sympathy and support from his colleagues, Messrs. Taylor and Godwin. If these gentlemen had supported Mr. Fox as Mr. Nunn and Mr. Sainsbury did, the Guardians would most probably have had to succumb to more equitable terms. We cannot read with patience the shabby letter of Mr. Francis Taylor, as it betrays a total want of consideration for the principle for which the Poor-law medical relief reformers are contending, and a most philosophical indifference to the well-being of his colleagues, provided the post he and Mr. Godwin have stooped to accept will "come in with their work!"

TRADING IN INSANITY.

We see with regret that by degrees a trading spirit is manifesting itself among many members of our profession. Only a fortnight since, we thought it our duty to call attention to a scheme for making six per cent. out of diseased spines, etc.; and this week we have been struck with the following advertisement, which we copy from a public Journal:—

> Insanity.—Twenty per cent. Annually on the receipts, will be guaranteed to any Medical man recommending a quiet Patient, of either Sex, to a first-class Asylum, with the highest testimonials. Address, ———

It does not of course follow that the person is a medical man who thus coolly proposes to give a percentage upon insane persons forwarded to him, as though they were so much goods to be dealt in, instead of poor creatures afflicted with the most terrible calamity incident to human nature; but we are informed, and we receive the information with extreme regret, that it is a practice with some members of our profession to receive douceurs from the keepers of lunatic asylums for their recommendations to them of patients. Such a practice is, to our mind, revolting in the extreme, and would bring down upon us the indignation of the public, if the fact clearly and unmistakeably came before the world. We will charitably hope that the writer of the above advertisement, whose address we have omitted, as we do not wish to forward his abominable designs upon the mentally afflicted, is only one of those unqualified persons who keep lunatic asylums as mere business speculations, and who accordingly think any means fair by which they can fill their establishments, and but too often keep them full, perfectly regardless of the condition of the inmates.

It is a stigma upon the lunacy law, that such individuals are allowed to trade in mental misery; and we trust that ere long no persons will be permitted to keep lunatic asylums unless they are qualified medical practitioners. There cannot be a doubt that the all-powerful character of the press has elicited a very unworthy spirit among some members of our profession; and many a man will do that, by means of an advertisement with a masked address, which he would be ashamed to do openly. The public press must be the antidote to the poison it circulates; and we give notice that we will let slip no opportunity of declaring war to the knife against such advertisements as the one we have laid before our readers to-day.

Association Intelligence.

MEETING OF THE MEDICAL REFORM COMMITTEE.

A meeting of the Medical Reform Committee, for the purpose of agreeing on proposals to be submitted to the Conference Committee of the Medical Corporations with regard to the new Medical Bill, was holden at 3, Waterloo Place, Pall Mall, on Thursday last, at 12.30 P.M.

There were present: Sir Charles Hastings, M.D., in the chair; G. Bottomley, Esq., P. Cartwright, Esq., Mr. G. Hastings, Dr. Henry, Dr. Lankester, T. Nunneley, Esq., Dr. Sibson, G. Southam, Esq., J. Stedman, Esq., and Dr. G. Webster. Dr. Wynter also attended the meeting.

The following resolutions were agreed on, to be communicated to the Conference Committee of the Corporations.

1. Proposed by Dr. LANKESTER, and seconded by Dr. WEBSTER—

"That this Committee agree that the Medical Council under the proposed Bill should consist of representatives from the Medical Corporations and Universities of the United Kingdom, in such numbers and proportions as those bodies may determine, together with a certain number of members, not being members of the governing bodies of medical Corporations or Universities, nominated by the Crown, provided that such last mentioned members constitute one-third of the whole Council."

2. Moved by Mr. SOUTHAM, seconded by Mr. CARTWRIGHT—

"That the following preamble precede the resolution: That while the Committee strongly object to one of the present bye-laws of the College of Surgeons, which prevents the admission of any member into the Fellowship, unless he has been educated for three out of six years in the schools of London, so that consequently the Fellowship cannot be attained by every member of the College, yet, trusting that this great injustice will be remedied at an early period, the Committee beg to make the following proposal, etc."

3. Moved by Dr. SIBSON, seconded by Mr. BOTTOMLEY—

"That provided the proposed amendments be adopted by the Committee of Conference, the secretary shall at once write to all the Branches, requesting them, without delay, to call meetings to petition the Legislature and to influence the various local Members of Parliament in favour of the modified Bill."

ALEXANDER HENRY, M.D., *Secretary.*

ADMISSION OF NEW MEMBERS.

THE LAWS of the BRITISH MEDICAL ASSOCIATION, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. WILLIAMS, Worcester; or to any of the Secretaries of the Branches.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

SATURDAY, JANUARY 10TH, 1856.

W. D. CHOWNE, M.D., President, in the Chair.

THE VAPOUR OF AMYLENE AS AN ANÆSTHETIC.

BY JOHN SNOW, M.D.

Amylene was discovered by M. Balard in 1844, the substance which M. Cahours had previously called by this name being now named paramylene. Amylene was made by distilling fusel oil with chloride of zinc. It was a simple carbo-hydrogen, containing ten atoms carbon and ten hydrogen. It was a clear, colourless, and very volatile liquid, of very low specific gravity. It boiled at 102° Fah., its specific gravity was 0·659 at 56°, and the specific gravity of its vapour was 2·45. It was soluble in all proportions in alcohol and ether, but was extremely insoluble in water; requiring, apparently, upwards of ten thousand parts of water for its solution. It had a smell something like naphtha: some persons thought the odour agreeable, whilst others objected to it. It had very little pungency, and was, on this account, much easier to inhale than chloroform or ether. It was necessary that there should be about fifteen per cent. of vapour of amylene in the air breathed by the patient, in order to make him quite insensible. In this way, from three to four fluid drachms were inhaled by the adult, and insensibility was induced in about three minutes. The pulse was increased in frequency and strength during the inhalation, and the respiration was usually accelerated. There had been very little struggling or rigidity of the muscles, previous to insensibility, in any of the cases in which he had exhibited the amylene; and absence of pain was induced with less coma than usually accompanied the use of chloroform and ether. The waking and complete recovery of the patient was also more prompt than with the other two agents. Dr. SNOW had administered amylene in twenty-one operations in King's College Hospital, and there had been no sickness or depression in any of the cases. He was of opinion that it would be free from danger if employed with ordinary care.

Sulphuric ether was extremely safe: he believed that no fatal accident had arisen from its use, although it had been blamed for causing death in a few cases. Its safety arose from the circumstance, that the quantity which it was necessary to inhale occupied a large volume in the form of vapour, and could only be inspired by degrees, and must produce its effects gradually, thus allowing plenty of time to observe them. With chloroform, on the other hand, some fatal accidents had occurred; and although they were few in number, when compared with the multitudes who had inhaled it, they were much to be regretted. A large dose of chloroform occupied but a very small space in the form of vapour, and, unless great care were taken to have it largely diluted with air, it might all be breathed in a few inspirations, and might act with dangerous rapidity. In fact, a very considerable amount of chloroform might be present in the lungs at one time, when the blood which was passing through these organs might become so charged with the vapour as, not only to paralyse the brain, and stop respiration, but also to narcotise the nerves of the heart, and suddenly stop the action of that organ. It was in this way that the accidents from chloroform had chiefly occurred. The amount of amylene which it was necessary to breathe occupied a considerable volume in the form of vapour, and in all the ordinary processes of inhalation must become mixed with a large amount of air: for these reasons, he believed that it would not be liable to cause accident; but, of course, it was advisable to use it with care.

The amylene Dr. Snow had used was made for him by Mr. Bullock, of Hanover Street. He had administered it with his usual chloroform inhaler made a little larger, except during part of the time of two operations in the face, when it was applied on a sponge. He was not yet prepared to say to what extent it might supersede chloroform; but he considered the results hitherto obtained to be so favourable as to encourage its further use.

Editor's Letter Box.

POOR-LAW MEDICAL RELIEF.

Letter from Charles F. J. Lord, Esq.

Sir,—The present critical position of poor law medical officers demands the prompt and earnest co-operation of every union surgeon, the general assistance of the profession, and of every lover of justice and practical benevolence, to the sick poor. The exertions which have been so strenuously made, and so long sustained by Mr. Griffin, have awakened a certain interest in the ranks of poor law surgeons, and forced attention to their case from the Poor Law Board, and from sundry members of Parliament.

From certain leading articles in the medical journals, as well as from Mr. Griffin's special appeal to his constituents, it is evident that some lethal spell is preventing that universal out-speaking, and steady uniform action, which alone can satisfy the legislature and the public that the union surgeons and the profession are determined to persevere in claiming redress—to use the words of Lord Shaftesbury on the subject, "*not as a bounty, but as a right.*"

Ten years ago it was my privilege to work as honorary secretary to the Convention of Poor Law Medical Officers, in conjunction with Dr. Hodgkin (Chairman of the Committee), and a noble phalanx of gentlemen, who laboured to improve the status of the union surgeons, and the position of the sick paupers consigned to their treatment. That at this remote date, efforts in the same direction are still needed, and that they are still going on, is at once evidence of the existence of a deep rooted evil, and of an abiding sense of the same, operating more or less vigorously, but unceasingly, among the profession. Some mitigation of evil undoubtedly ensued from the united, though too fugitive, exertions of the convention. The late President of the Poor Law Board, Mr. Charles Buller, and his immediate successor, Mr. M. Baines, admitted the grievances complained of; admitted the expediency of a change and amelioration, rather than promised the exercise of official authority to enforce measures which they held to be righteous and just. The familiar adage, "the weakest goes to the wall," has hitherto been illustrated in the experience of our professional brethren in the matter of poor law government, as in other efforts after Medical Reform. May we now, by prompt and sustained union, turn the sinister bearing of the phrase on the Poor Law Board and the Boards of Guardians. Let not some discouragement, through lack of present success, some discrepancy of opinion in matters of detail, distract the attention of our brethren from, or weaken their efforts to press forward, such measures as may benefit the sick poor, and secure to themselves a remuneration and control befitting their arduous exertions, and their sacred responsibilities. It is to be hoped that every gentleman will return the statistical form which Mr. Griffin, in the name of the Poor Law Medical Association, has so widely circulated. Though many of the facts which may be thus elicited have been in substance again and again before Parliament, they will now come, in company with other data, as fresh evidence of the existence of a crying evil at the present moment; as fresh proofs of a compact among a body of professional gentlemen who respectfully demand, for themselves and the sick poor, a redress of grievances; and are firmly determined to persevere in seeking them. The reform we seek might be wrung from reluctant Boards, and from a reluctant Legislature, were we, in our own ranks, more true to one another. Too many of our brethren are the victims of an over-wrought competition, one man rising against his brother. Let the only strife and competition now be among the union surgeons, to co-operate at the present time with the Poor Law Medical Reform Association and Mr. Griffin. No one has a right to isolate himself from the general movement for the general good. Each gentleman in his district may use his leisure, spare money, and personal influence to press the cause on the provincial members of Parliament; that Sir John Trollope may have a loud voice raised up in the commons to strengthen his promised advocacy in favour of the sick poor and the poor law medical officers. I am, etc.,

Charles F. J. Lord.

Hampstead, January 13th, 1857.

POOR-LAW MEDICAL REFORM.

Letter from L. O. Fox, Esq., F.R.C.S.E.

Sir,—In the last number of your Journal, you inserted a correspondence between myself and the Romsey Board of Guardians, together with some remarks by our indefatigable Poor-Law medical reformer, Mr. Griffin of Weymouth. I have now to beg the favour of your finding a space for this communication in your next Journal, as it is right the profession should know the result of my resignation; and I trust, sir, you will express your opinion on the conduct of Mr. Francis Taylor, one of my colleagues, as I feel sure you will agree with me that such delinquencies should be exposed. For almost twenty years I held a district in the Romsey Union, on account of its proximity to my practice, and because, having been born in the district, I was well acquainted with the poor. The salary was merely nominal, 13*s.* 10*d.* per week; population, 1,400; area, 5,000 acres. I hoped from time to time that the whole system would be altered; but, hope long deferred making the heart sick, I at length determined to resign, unless an increase to my stipend were agreed to. I made application to the Board, was refused, and I resigned. I wrote to my medical brethren and colleagues; and, among the latter, I addressed the following note to Mr. Francis Taylor and Mr. Godwin (partners):—

"Gentlemen,—As one or both of you are my colleagues, I forward the inclosed copy of correspondence with the Romsey Board of Guardians in reference to an application for an increase of salary.

"Although you have not joined in the movement originated by Mr. Griffin, I trust I shall have your sympathy and support.

"Yours truly, L. Owen Fox.

"January 3rd, 1857."

To this note I received from Mr. Francis Taylor the following reply:—

"Romsey, Jan. 10th, 1857.

"My dear Fox,—I beg your pardon for not answering your letter of the 3rd before; but I have been so very much occupied, I have not had time to think much of the matter, nor to talk it over with Godwin.

"Sainsbury called at my house a few days ago, but I was out. I have not seen him, and I do not know what his views are.

"We have had an application from the Board to take Mottisfont, Lockerley, and East Dean, on the old terms; and, as the two first come in very much with our work, we do not see any objection to our doing so, and have written to the Board to that effect.

"Sainsbury is, I believe, asked also; but I do not know what his views or conduct will be. I suppose you will blame us somewhat for accepting the matter, but neither I nor Godwin see it to be either wise or necessary to refuse the work on these terms. "Believe me, dear Fox, yours faithfully,

"Francis Taylor.

"L. O. Fox, Esq."

Contrast this epistle, Mr. Editor, with the straightforward and manly replies of my other medical neighbours.

Mr. Nunn says, "I shall be happy to support you in any way." Mr. Sainsbury intimates that he did not even reply to the application of the Board; "that the salary is disgracefully low." Mr. Buckell writes, "I am surprised that Messrs. Taylor and Godwin have taken the district. Mr. Griffin and his coadjutors may toil for ever without good results, unless there is some honest, brotherly understanding between medical men themselves." How often are we told that the present state of things is our own fault! And truly! is it not so? What a Christian-like reply to my application for sympathy and support!

"So very much occupied I have had no time to think much of the matter." Bah! no time to think! He had time to write. A man does not require time to think in such a matter if he has a nice sense of honour, or is disposed to do right. I could excuse a *stranger* "caitiff wretch", like his prototype in *Romeo and Juliet*, where "poverty and not his will consents", but I am ashamed of such conduct in a colleague, and in an old college fellow-student, too!

Shade of good old Anthony Todd Thomson! cover your face for shame!

Want of time, forsooth! Why, sir, I remember seeing in an obscure corner of the Great Exhibition an attempt of a sacred subject in plaster carving; and on referring to the Catalogue, I found its author to be a medical man of Romsey! Would that while engaged in his studio, the artist had learned the golden

rule taught by the subject of his chisel, "Do unto others, etc." I have already occupied so much of your valuable space, that I must defer further remarks till a future opportunity.

I am, etc., L. Owen Fox.

Broughton, Stockbridge, Jan. 13th, 1857.

MR. GRIFFIN'S MOVEMENT.

Letter from G. E. Farr, Esq.

Sir,—I beg to inform you that a meeting of the students of this Hospital took place this day, to take into consideration the subject of Poor Law Medical Reform, when the following resolutions were submitted to the meeting, Mr. Corner being in the chair:

1st. Proposed by Mr. Routledge, and seconded by Mr. Farr:—"That this meeting considers the payment of the union medical officers, under the present system, is totally inadequate to the demands made on their time, labour, and skill, the expenses to which they are necessarily put, in performance of their contracts, the risks they run in the execution of duty, and the responsibility that devolves upon them." Carried unanimously.

2nd. Proposed by Mr. Down, and seconded by Mr. Lawrence:—"That this meeting considers that the Poor Law Guardians ought not to have the unlimited power of fixing the salaries of the medical officers, in the reduction of which they have evidently a personal interest." Carried unanimously.

3rd. Proposed by Mr. Mackenzie, and seconded by Mr. Brock:—"That without pledging itself to details, this meeting cordially approves of the principles laid down in the petition to Parliament, drawn up at a meeting held the Freemasons' Hall on May 30th, 1856." Carried unanimously.

4th. Proposed by Mr. Griffith, and seconded by Mr. Harkness:—"That this meeting tenders its thanks to R. Griffin, Esq., for his exertions in behalf of the Union medical officers, and promises him its cordial co-operation and support." Carried unanimously.

5th. Proposed by Mr. Jenkins, and seconded by Mr. Hancock:—"That a copy of these resolutions be forwarded to R. Griffin, Esq., and his information and advice be solicited as to further proceedings, especially as to calling an aggregate meeting of medical students." Carried unanimously.

6th. Proposed by Mr. Giles, and seconded by Mr. Birtwhistle:—"That a copy of these resolutions be forwarded to each of the medical journals." Carried unanimously.

I am, etc., George Evan Farr,
Honorary Secretary pro. tem.

London Hospital, January 12th, 1856.

POOR-LAW MEDICAL REFORM.

Letter from John A. Bolton, Esq.

Sir,—I herewith forward you a copy of my letter of resignation, addressed to the guardians of the Leicester Union, and shall feel obliged by your giving it publication.

I am, etc., John A. Bolton.

Leicester, January 14th, 1857.

"To the Guardians of the Leicester Union.

"Gentlemen,—I now tender my resignation of the office of surgeon to the Leicester workhouse. In taking this step, two months before the expiration of the time I fixed, when appointed, I am not influenced by any sense of having neglected my medical duties, which have been carefully and thoroughly performed, from first to last of my holding office. This assertion I challenge the Board, by minute investigation, to disprove. Still less am I disposed to resign, in consequence of any desire or threat of dismissal expressed by you, since I entirely repudiate all power on your part to influence my position or appointment.

"*I resign in consequence of injustice, insult, abuse, and almost every other violation of gentlemanly bearing, which I have received at the hands of several members of your Board.* Self-respect, independent of the pecuniary sacrifices which I have made to the duties of office, compels me to sever the connection between us. In doing this, I will refer you to the medical book, where you will find that one year's aggregate of 'weekly returns' is 9,314; which, made to divide a salary of £65 (minus £2 2*s.* paid to the book-keeper), gives a rate of remuneration less than three-halfpence for each. For this remuneration I have had to find time, labour, professional knowledge, and diplomas, medicines, instruments, and dressings, &c.

"The returns of the medical book do not furnish the sum total of my duties and requirements. In addition to those appearing in the book, there are hundreds of cases in the year of which no record is kept, and for which I have prescribed and found medicines. Notwithstanding this inadequate amount of remuneration, it never has been my intention to ask for, or receive an increase of, salary on my own account; but it has ever been, and now is, my intention, no less than my obligation, not to ask, but to demand, in the name of humanity and justice, an increase for my successor.

"I am, yours truly, John Adams Bolton.

"Leicester, January 6th, 1857."

EVIDENCE IN THE CORONER'S COURT.

Letter from D. Mackinder, M.D.

Sir,—I have sent you a copy of the *Gainsburgh News*, wherein you will find (page 3), under the head of "Coronership", my communication to the editor. It is, perhaps, unnecessary for me to comment further on the manner in which that inquest was conducted, since every unprejudiced person must arrive at the same conclusion; but a friend reminds me that I did not sufficiently emphasise the fact, that *no medical evidence was taken.*

If mere hearsay statements were to be received as evidence, any murderer might volunteer a doctor's opinion, blind the jury, and escape punishment; while the unsuspecting public, by reposing confidence in the press, would remain in happy ignorance of the inhuman work that had been performed.

"On the evidence of the doctor", ought to mean, I presume, that a doctor gave it as his deliberate opinion before the jury, instead of the mother's version of what the doctor had said, which, as in this instance, might be the reverse of correct.

You will, I think, agree with me, that inquisitions so managed must necessarily militate against that good opinion which all ought to entertain of the exalted function of the coroner—a gentleman who, be it remembered, is the representative of the sovereign, a magistrate of great privilege and power, who owns no peer in his jurisdiction, whom the guilty ought to fear, and the innocent esteem, aye, and reverence.

Regretting the necessity of this *exposé*, which I felt impelled to make for the benefit of that public for whose welfare the coroner's law was instituted, I am, etc.,

D. Mackinder, M.D.

Gainsborough, January 9th, 1857.

ROYAL MEDICAL BENEVOLENT COLLEGE.

Sir,—Among the various communications which I have read in the British Medical Journal and in other medical periodicals, on the subject of the elevation of the charges for the exhibitioners in the Royal Medical Benevolent College, I have failed to discover any allusion to what appears to me to lie at the root of the whole difficulty.

It was originally intended that the school should be opened for one hundred exhibitioners or boarders, and for one hundred day boys. This plan has not been adhered to. But it is manifest that those who proposed that the annual payment for exhibitioners should be £30, calculated upon the surplus which would arise from the fees to be paid by the hundred day boys. Instead, however, of carrying out this admirable proposal, the number of exhibitioners has been raised to one hundred and fifty, and there is no further source of revenue than the contributions of donors or subscribers.

I advert to this matter, sir, because I am of opinion that we may yet rectify the error that has occurred, and the consequences of which will not be permanently corrected by raising the charges from thirty to forty pounds for each boarder.

I am, etc.,
A Sincere Well-Wisher to the College.

January 11th, 1857.

THE AREA OF THE TRACHEA AND BRONCHI.

Letter from I. Harrinson, Esq.

Sir,—Drs. Smith and Bell are engaged in an interesting discussion respecting respiration. Dr. Smith, in his letter (Association Journal, Dec. 13th, 1856), says, "As is usually believed, the area of the bronchi is collectively larger than the area of the trachea." This was thought to be the case in arteries, even by Müller, as regards the branches compared with the trunk, till Mr. Ferneley (*Medical Gazette*, vol. xxv) demon-

strated the error. It may be true as regards the sum of the diameters or the circumferences; "but the sum of the *area* of the branches must be *not unequal* to the area of the trunk, lest the equilibrium of quantity be destroyed."

Mr. Ferneley reminded physiologists that "circles are to one another as the squares of their diameters." For example, suppose a tube of six inches in diameter were to divide into two of three inches each in diameter, the capacity of the two would not nearly equal that of the one. Applying the rule, $6^2 = 36$; $3^2 + 3^2 =$ only 18, it is evident it would take four tubes of three inches in diameter, or nine tubes of two inches in diameter, to carry the fluid away from one of six inches in diameter. This Mr. Ferneley proved by experiment and admeasurement.

I am not aware that this rule has been applied to the trachea, the bronchi, and their tubes; but I cannot doubt its application. I beg to submit it to the best consideration of Drs. Smith and Bell in their respective inquiries.

I am, etc., I. Harrinson.

Reading, January 5th, 1857.

DR. E. SMITH ON TUBERCULAR DYSCRASIA.

Letter from J. L. W. Thudichum, M.D.

Sir,—In the Journal for Jan. 3rd, there is published a lecture by Dr. Edward Smith, in which he takes great trouble to show, that there is no proof of the theory that tubercle originates in a certain morbid condition of the blood, called tubercular dyscrasia. In doing so, Dr. Smith passes some very severe strictures on the originator of the theory of the crases, Professor Rokitansky.

Now, whatever we may think of that theory, Professor Rokitansky cannot be made answerable for it any longer, because he has publicly abandoned it in a highly magnanimous style. If Dr. Smith will turn to Professor Rokitansky's *Lehrbuch der Pathologischen Anatomie*, published at Vienna in 1855, an entire year before Dr. Smith's lectures were delivered, he will find it weeded so effectually, that nothing remains of the crases except a modest chapter on anomalies of the blood at the end of the first volume, in which the word crasis is most carefully avoided.

Of Professor Rokitansky's work a notice appeared in your Journal; a review of it was given in the *British and Foreign Medico-Chirurgical Review*. Yet I have met so many members of our profession who were unaware of the fact to which I have alluded, that I think it quite a duty to fix upon Dr. Smith's remarks, and to show that they are no longer applicable. I hope Dr. Smith will pardon me for bringing him into the position of Massetto in *Don Giovanni:* "It's not the man himself—it's only his gown. Mercy! mercy!" But it must really be provoking to find the new volumes issued by the Sydenham Society quite antiquated already, just as it must be provoking to that worthy society to have been so imperfectly informed. However, there is nothing like putting a good face on a bad matter; and as the proverb, that even if the fox be dead, yet the fur is worth money, does not hold good in the case of the crases, inasmuch as the fox is alive and his skin is not worth much, the best course will be to shelve the crases, and also to shelve the old edition of Rokitansky.

I am, etc., J. L. W. Thudichum.

9, Woburn-place, Russell-square, January 7th, 1857.

CASES OF FŒTAL MALFORMATION.

Letter from Henry Ewen, Esq.

Sir,—If you think the notes of the following cases worthy of being placed on record, I shall feel obliged by your inserting them in an early number of the Journal. The cases occurred many years ago, in the practice of my friend Mr. Robert Cook, of Gainsborough, during the time I was his visiting assistant. In both cases, the notes were taken and the dissections were made by myself.

Case i. *Cranial Tumour in a new born Child.* On Nov. 1st, Mrs. L., of G., was delivered of her first child, a female. The infant had a tumour on the occiput, of the size of a goose's egg; it was transparent, and its base was six inches in circumference. There was a smaller tumour projecting into this through an opening in the cranium which would admit the thumb. The functions of the child were performed naturally.

November 10th. The fluid was evacuated by puncture with a couching needle; and a common sedative lotion was applied.

November 14th. The fluid was again evacuated. The child sucked vigorously.

November 22nd. The fluid was evacuated. The child was much wasted. A compress and bandage were applied.

November 26th. A small quantity of fluid had again collected. There was great emaciation, and paralysis of the lower limbs. The fæces passed at intervals, as in other infants.

November 29th. Death took place. On inspection, the tumour was found to be divided into two cavities by a septum, in which there was a semilunar opening by which the cavities communicated. A small tumour projected into the larger cavity through the opening in the cranium; this small tumour was formed by the dura mater. The ventricles of the brain contained a large quantity of serum and some pus; there was also serum between the medulla spinalis and its membranes, and pus in the inferior part of the cervical and lumbar regions.

Case ii. *Absence of Spinal Chord, and nearly entire Absence of Brain.* On December 25th, Mrs. B., of Merton, near Gainsborough, was delivered, at the sixth month of pregnancy, of a fœtus in which the upper and back part of the cranium, and the arches and spinous processes of the vertebræ, were wanting. There was an imperfectly formed cerebrum, invested with a membrane, but no cerebellum, medulla oblongata, or medulla spinalis. The nerves were connected with the sheath of the medulla spinalis, instead of the medulla, which, as I have stated, was wanting. The other organs were developed in proper proportion.

I am, etc., Henry Ewen.

Long Sutton, Lincolnshire, January 1st, 1857.

TREATMENT OF ULCERATED LEGS.

Letter from J. K. Spender, Esq.

Sir,—I have perused with considerable interest Mr. Hunt's paper in last week's number, on the "Treatment of the Ulcerated Leg without Rest". I am glad that Mr. Hunt's opinions and practice furnish additional testimony to the soundness of the principles first enunciated by my father in his work *On Ulcer of the Leg*, published more than twenty years ago.

In the papers which I published upon this subject in this Journal last spring, I acknowledge that I did not dwell with sufficient explicitness upon the use and the application of the flannel bandage. I fully concur with all that Mr. Hunt has said upon this subject. I never employ any other material for bandages than flannel, simply because I have found that in no other way can a cure be expeditiously or with certainty effected. My father has dwelt with much minuteness upon this point in his work already alluded to; but I passed it lightly over, chiefly because I was fearful of extending my papers to an unreasonable length.

As I am collecting materials for publishing a new edition of my father's work, I shall be happy to forward (post free) a copy of that work to any associate who furnishes me with his name and address, and who would kindly supply me with some authentic statistics, or with any other useful information that I might avail myself of.

I am, etc., John K. Spender.

Bath, January 5th, 1857.

TREATMENT OF ENTROPIUM.

Letter from Francis Whitwell, Esq.

Sir,—In the Journal of the 3rd inst., I find reported a case of entropium, operated on by Mr. Haynes Walton, in which he appears to have proceeded in the mode usually recommended. In the *Lancet* of the 4th of February, 1854, I reported a distressing case of entropium, which was operated on in a different manner with perfect success; and, as the method is so much more simple and easy of execution, I would suggest a trial of it. An incision is carried through the outer commissure, dividing the skin and orbicularis palpebrarum; then, by the application of collodion daily, above or below the eye, as the case may be, eversion can be maintained to any extent necessary. Feeling convinced that this malposition generally depends on an unnatural or spasmodic action of the orbicular muscle, first led me to the adoption of the above mode of relief.

I am, etc., Frans. Whitwell.

St. Julian's Friars, Shrewsbury, Jan. 12, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

*BOODLE, Robert, H., Esq., Chilcompton, Somerset, the wife of —a daughter, on January 11th.

BRADY, John, Esq., M.P., the wife of—a son, stillborn—at Warwick Terrace, on January 10th.

BROXHOLM, R. G., Esq., Sunbury, Middlesex, the wife of—a son—on January 11th.

DE MORGAN, Campbell, Esq., Surgeon to the Middlesex Hospital, the wife of—a son—on January 11th.

WHITNEY, W. U., Esq., Surgeon, the wife of—a daughter—at 12, Great College Street, Westminster, on July 12th.

MARRIAGES.

BRENT—HOUNSELL. BRENT, John, jun., Esq., of Canterbury, to Eliza Anne, eldest daughter of John Hounsell, Esq., Surgeon, of Bridport, on January 8th.

DAVIDSON—MCGHEE. DAVIDSON, R. H., M.D., Bombay Medical Establishment, to Catharine W. J., only daughter of the late Captain Holland L. McGhee, 31st Regiment, at Stirling, on January 7th.

FRANKLYN—GOBET. FRANKLYN, Edward James, M.D., Surgeon 77th Regiment, to Agnes Sophia Maria, daughter of the late John Moore Gobet, Esq., of Bermuda, at Stamford Hill, on January 3rd.

PHILIPPS—GRAHAM. PHILIPPS, J. G. H., Esq., 41st Regiment Madras Native Infantry, to Blanche, youngest daughter of H. G. Graham, Esq., Superintending Surgeon, Saugor Division, at Saugor, Central India, on November 8th, 1856.

SMITH—THOMSON. SMITH, Robert, Esq., Staff-Surgeon, to Annie Macdonald, eldest daughter of W. J. Thomson, Esq., Surgeon, at Arbroath, on January 7th.

DEATHS.

DAVIES. On January 8th, of bronchitis, John Joseph, infant son of *John Davies, Esq., Surgeon, of Dudley Port, Tipton, aged 8 months.

WHATELY. On January 10th, at Brighton, the wife of Edward Whately, Esq., Surgeon.

APPOINTMENTS.

*TURNER, Richard, Esq., appointed Surgeon to the Tunbridge Wells Infirmary.

PASS LISTS.

APOTHECARIES' HALL. Members admitted on Thursday, January 1st, 1857:—

CRESY, Theodore Grant, Her Majesty's Ship *Dreadnought*
GOODALL, William Preston, Market Drayton, Salop
KNOTT, Robert Charles, New Zealand
SKIPPER, John, Dalston

Thursday, January 8th:—

ALLEN, John William, jun., London
FARR, George Evan
HIPPOLITE DE NICEVILLE, Charles Francis, Clifton
MOORE, Edward Denniss, Birmingham
RILEY, James, Birmingham

HEALTH OF LONDON:—WEEK ENDING JANUARY 10TH, 1857.

[From the Registrar-General's Report.]

IN the week that ended on Saturday, the deaths of 1135 persons, viz., 577 males and 558 females, were registered. The average number of deaths in the ten weeks corresponding with last week of the years 1857-56, was 1251; but as the deaths of last week occurred in an increased population, the average must be raised proportionally to the increase for the purpose of comparison; and in this case it will become 1376. The number of deaths recorded last week is less by 241 than would have been returned if the average rate of mortality had prevailed.

The deaths caused by diseases of the organs of respiration are not so numerous as they were about the end of November; 270 are referred to this class in the table for last week—the corrected average for corresponding weeks being 333. Bronchitis was fatal in 140 cases; pneumonia in 87. The former disease began to be in excess of the latter in November; and this excess is always maintained during the winter months, although bronchitis attacks principally persons more or less advanced in life, and is therefore restricted in its operations to a narrower field. Phthisis was fatal last week in 120 cases, nearly half of which occurred to persons between the ages of 20 and 40 years. By the average rate of mortality from this disease, the number would have been 153.

Hooping-cough was the most fatal last week of the diseases in the zymotic class, and carried off 55 children. Forty-nine persons died of typhus and common fever, 36 of scarlatina, 30 of measles, 4 of small-pox, and 11 of croup. Six children died of measles in the Pancras Workhouse, situated in the sub-district of Camden Town, between the 4th and 9th January inclusive. The aggregate mortality from diseases of this class was below the average.

Five persons are recorded as having died from the intemperate use of spiritous liquors. Last year, the number of deaths expressly stated as due to this cause, was 66, or rather more than one in a week; but at this festive season an increase in cases of this description is, unfortunately, to be expected.

On the 30th December a man, aged 74 years, was found dead in St. John's-square from want of the necessaries of life.

Five persons in the present returns, namely, four men and a woman, had arrived at the age of 90 years or upwards. The oldest died in Mile-end at the age of 96 years.

Last week the births of 846 boys and 817 girls, in all 1,663 children, were registered in London. In ten corresponding weeks of the years 1847-56 the average number was 1,517.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·799 in. The mean daily reading was above 30 in. on three days of the week. The *lowest* reading was 28·97 in. on Sunday, and the *highest* 30·26 in. on Wednesday. The mean temperature of the week was 36·8°, which is 1° above the average of the same week in 43 years (as determined by Mr. Glaisher.) On Friday the excess above the average was 7°, on Saturday 9·6°. On Saturday the *highest* temperature in the week occurred, and was 49·2°; the *lowest* occurred on Wednesday, and was 28·1°; the range of the week was therefore 21·1°. The mean dew-point temperature was 34·5°, and the difference between this and the mean air temperature was 2·3°. The mean temperature of the water of the Thames was 40·4°. The wind blew generally from the north-east till the last three days, and then chiefly from the south-west. The daily horizontal movement of the air varied from 5 to 240. Rain fell to the amount of 1·20 in.; on Saturday the quantity was 0·69 in. Snow or rain fell on every day, except Wednesday.

MADNESS CURED BY FOLLY. Old Dr. Rush, of Philadelphia, used to relate a singular case of monomania in a patient in the Philadelphia Hospital. He took it into his head that he was a painter, and resolutely refused for a long time, though possessing fine organs of speech, to utter a word. The doctor one day entered his apartment, and found him sketching on a slip of paper a really beautiful rose; for he had by long practice acquired much skill in the art pictorial, and was very fond of the accomplishment. One day a thought struck Dr. Rush that he would surprise him into voice by dispraising his labours, and resolved to try. "You are painting a very handsome cabbage there, my friend," he observed to the maniac. "Cabbage!—good gracious, old gentleman, does that look like a cabbage? Why, sir, you are a fool! That's a rose, and it's a good one, too." It was not long before the patient was well. His train of silent thought was broken, and he returned home.

LONDON HOSPITALS. The varying expense per bed of some of the London Hospitals may be conceived by comparing some the large and small Hospitals. The expense per bed per annum of each department of St. George's is £46; St. Mark's Fistula Hospital (the most perfect of the smaller Hospitals), £35; while St. Bartholomew's is £53! The other Hospitals vary between these figures, from the latter high sum at the oldest and best Hospital down to the Royal Free, which is more a dispensary for out-patients, or the ophthalmic and others, where patients help to pay for themselves.

THE CORONER'S COURT.

The following correspondence appears in the *Gainsburgh News* for December 27th, 1856 :—

"Caskgate Street, December 23rd, 1856.

"*To the Editor of the 'News'.*

"Sir,—In consequence of the appearance in your paper of the 6th instant, of a paragraph having reference to an inquest held on the body of a child named Leedham, of whom it is stated that 'from the evidence of the doctor, and the appearance of the body, the jury returned a verdict of—Died of Convulsions', I felt it incumbent on me, as the doctor alluded to, to enter into a correspondence with the coroner; and herewith send you copies of the letters that have passed between us; that your readers may form an opinion on the matter, and see what reason they have to congratulate themselves for living in an enlightened country, whose laws are especially framed to protect their *lives and property*.

"Yours faithfully, D. Mackinder."

"Gainsburgh, December 5th, 1856.

"Sir,—You yesterday held an inquest at Gainsburgh, on the body of an infant named John Thomas Leedham, and recorded a verdict of 'Death from Convulsions'. Will you oblige me with the evidence on which that verdict was founded?

"I am, sir, yours obediently, D. Mackinder, M.D.

"To C. H. Holgate, Esq., Coroner."

"Kirton Lindsey, 8th December, 1856.

"Sir,—In the absence of any other evidence taken at the inquest on Thursday last, the mother of the child stated that you had seen the child after death, and gave it as your opinion that it died of convulsions.

"I remain yours obediently, C. Hy. Holgate.

"Dr. Mackinder, Gainsburgh."

"Gainsburgh, December 16th, 1856.

"Sir,—I am obliged to you for your letter, and beg to inform you that that portion of the depositions which has reference to the *medical opinion* of the cause of death of Leedham's infant, is untrue.

"Mrs. Leedham stated to my assistant, Mr. Capron, who went to see her child, that it gasped for breath two or three times after she awoke, and she wished to know from him whether it had died of convulsions; but instead of saying the child *had* died of convulsions, Mr. Capron asserted that it *had not*, and that he believed the cause of death could not be revealed without a *post mortem* examination.

"With all due deference to the opinion of yourself and the jury, I have no hesitation in saying, with Mr. Capron, that in this case a necropsy was imperatively called for, and that the cause of public justice has not been served by such an insufficient inquiry. If an inquest is necessary, a full and complete investigation should be instituted, or the verdict pronounced by your time-honoured court becomes virtually of no effect.

"I do not accuse any one of foul play in this case; but the fact of a child being in perfect health at four o'clock of the afternoon of the 1st, as asserted by its maternal grandmother, of its being poorly in the evening ('having the stomachache'), and taking a powder from the druggist, and then being found dead soon after seven on the following morning, is sufficient to awaken suspicion in anyone acquainted with the little value that is often put on infantile existence. To Godfrey's cordial and such soporific nostrums the table of infantile mortality is no mean debtor; and what can put a stop to such a diabolical system of slow poisoning, if the coroner's inquisition be not rigorously enforced? To record a verdict of 'Died of Convulsions', is tantamount to certifying that it is not known whether the death has been caused by natural or preternatural agency. Convulsion is the last symptom of many diseases, and frequently the last evidence of life in those unfortunate beings to whose existence a period has been put by the hand of a fellow-creature. The child with hydrocephalus, the man with lock-jaw, the drowned sailor, and the wretched culprit on the gallows, die of convulsions: yet how imperfect would be the record of such deaths were they to be registered simply 'Convulsions'.

"The greatest criminal of modern times would still have been perpetrating his horrid deeds had not an outraged public insisted on a thorough and searching inquiry as to the cause of the death of John Parsons Cook, whose last moments were spent in the agony of convulsions! Many other cases might be instanced; but it is, I am sure, quite unnecessary to remind you of them; nor should I have troubled you with this, had I not considered it a duty I owed to my profession, and, what is of more importance, to the public.

"I am, sir, yours obediently, D. Mackinder, M.D.

"C. H. Holgate, Coroner."

"P.S.—Since I received your letter, Mr. Capron has had an interview with Mrs. Leedham, who denies having deposed that the doctor said her child had died of convulsions; but, on the contrary, states that she said it was the doctor's opinion that her infant might possibly have had inflammation of the lungs. It is but justice to you, however, to say, that Wilson, the policeman, states that this is not a correct version of Mrs. Leedham's deposition. D. M."

["I have received no reply to my last letter; but, by way of postscript, beg to inform you that, from the evidence which I have since obtained from various sources, it appears that the coroner did not arrive until an hour past the appointed time; that he then informed the jury he must depart by the next train, which only left twenty-nine minutes to empannel a jury, deliver his address, hear evidence, and sum up—an extraordinary feat, which was actually accomplished, much to the annoyance of the foreman of the jury, who did not hesitate to express his disapprobation."]

Suicide by Strychnine. On December 30th an investigation was concluded before Mr. Wakley into the circumstances attending the death of Catherine Powell, a servant, aged 37, from a large dose of strychnine taken by the deceased with a suicidal intention. It appeared that the deceased, who had been in the service—prior to her last situation at 12, Harrington-square, Hampstead-road—of Lord Milford, Haverfordwest, Pembrokeshire, frequently spoke to her acquaintances of the deadly effects of strychnine; said that Lord Milford had been in the habit of using it for poisoning foxes, rats, and other vermin; and that she had seen an animal expire immediately after taking a small quantity of it. Although she spoke so lightly of the dangerous qualities of strychnine, it was not supposed for a moment that she premeditated self-destruction, for she was a person of a very cheerful disposition and sober habits. On the day of her death she was found by her mistress lying on the floor of the kitchen as if she was in a fit. Mr. Hazell, a neighbouring medical gentleman, was immediately sent for, who found that the deceased was quite dead. There was nothing in the appearance of the body at the time to account for death—no *rigor mortis* such as is believed to follow death by strychnine, with the exception of a strong muscular action in the fingers. On the deceased's box being removed, a bottle of white powder marked "Poison," with the name of the chemist, "Mr. Phillips, chemist and druggist, Haverfordwest," was discovered; and on Mr. Hazell performing the *post mortem* examination, he found traces of poisoning in the stomach. This led to the adjournment of the inquiry in order that an analysis might be made of the contents of the stomach and bottle. Mr. Hazell, having made this further examination, was enabled to state that the bottle contained a compound of strychnine and French chalk, and that the deceased had taken some 12 or 15 grains of the poison, which fully accounted for her death. The coroner, in summing up, observed that the case was an exceedingly important and extraordinary one. It was generally believed that poisoning by strychnine resulted in violent contortions of the hands and convulsions, but here was a case that exploded the whole theory. The deceased, it appeared, was seen well at four o'clock in the afternoon; at a quarter to six she was found dead; but there were none of those convulsive actions about the body which usually were seen when death resulted from such a poison. On the contrary, she lay in an easy and recumbent position on the floor, the only thing peculiar being a slight convulsive action in the fingers. In poisoning by strychnine it had invariably occurred that the body was so rigid and contorted, and the back so bent, that the body could rest on the back of the head and the heels, but it was not the result in the present case. On the whole he considered the investigation one of the most important brought under his notice for some time past, and trusted that it would be duly recorded in medical jurisprudence; for besides its important features in a medico-legal point of view, it was really useful to know that a person might die from the effects of strychnine, and yet no external trace be left, nor even the slightest injury result to the coats of the stomach, which was the means of immediate detection in other poisons. In conclusion, he expressed his belief, from the large quantity found in the deceased's system, that she had taken it wilfully for the purpose of destroying life, and he left it with the jury, under the

circumstances, to consider the state of her mind at the time she committed the suicidal act. The jury, after a brief deliberation, recorded a verdict of suicide, leaving the condition of the deceased's mind an open question. The inquiry then terminated. (*Times.*)

Odontological Society of London. The first meeting of this society was held on Monday evening, January 5th, at 32A, George Street, Hanover Square, when a large muster of the leading practitioners of dental surgery, both in town and from the country, met together. Some preliminary business having been gone through, the president, Mr. Cartwright, delivered an address, in which, after glancing at the progress of dental surgery during the last century, he took a review of the present position and prospects of the profession, and strongly urged the necessity of a liberal education, in conjunction with the special qualification required for those who would practise this department of surgery with credit and success. He then referred to the circumstances connected with the presentation of a memorial to the Council of the College of Surgeons, by certain members of the profession (including himself), stating the reasons which led to the adoption of that proceeding. The advisability of maintaining the connexion of dental with general surgery, was strongly insisted upon; and it was held that a *voluntary* separation from the College of Surgeons could not but be disadvantageous to the body of dentists. The great need of a society formed on the model of other scientific societies, as a point of union amongst the practitioners of dental surgery, and as a medium for the communication of experience and the discussion of professional subjects, was pointed out; and the president concluded by expressing his conviction that these objects would be fully attained by the establishment of the Odontological Society. He then urged upon the members the necessity of cordial cooperation in furthering the purposes of the society, by the contribution of papers of interest, and by attendance at the meetings. Several preparations, illustrative of dental pathology, were exhibited; and there was a good display of instruments and appliances.

Case of Toothache in the Horse. A rather unusual case occurred within the last week in the practice of Mr. Ferguson, Her Majesty's veterinary surgeon in Ireland. A horse, belonging to a person named Walker, living in Brunswick Street, had been condemned as glandered, and ordered to be destroyed, his owner having been prosecuted for allowing him on a public thoroughfare. The animal was wasted in condition, and had a profuse discharge from one nostril, similar to that of glanders. On making inquiries relative to the history of the case, Mr. Ferguson ascertained that the animal occasionally could scarcely masticate his food. This induced him to examine the horse's mouth, with a view of ascertaining the state of his teeth. Seeing one of the upper back teeth (the last but one) discoloured, he determined on extracting it, fancying it possible that it was affected with caries, and that an abscess had formed at its root, and burst into the nose, thus giving rise to the fœtid discharge from the nostril at that side. On drawing the tooth, which was accomplished by a leviathan instrument, exactly resembling the key-tooth extractor for the human subject, Mr. Ferguson's surmises were found to be correct: there was not alone decided caries of the tooth, but also a large chronic abscess at the extremity of its socket, the contents of which had forced a passage for itself through the bones into the passage of the nose, profusely furnishing the nostril with a most offensive discharge, which had been mistaken for that of glanders, and well nigh was the cause of sealing the animal's fate. Since the extraction of the tooth, the discharge has ceased, and the horse masticates his food properly, and has evidently improved in health, strength, condition, and spirits, being now able to do ordinary work. Thus dental surgery is occasionally as requisite for the horse as for his master—man.

Singular Case. On Wednesday, January 7th, an inquest was held at the Calcutta Inn, Cheltenham, before Mr. J. Lovegrove, respecting the death of a young woman named Mary Ann Gilkes, and of a male child of which she had been delivered a short time before her death. The peculiarity of the case is that the birth of the child was not discovered until after the burial of the mother. A medical gentleman who attended the young woman, gave a certificate that she died from epilepsy produced by exhaustion; and the coroner, in the exercise of his discretion, had refused to hold an inquest until after the discovery of the body of the child. That circumstance, however, led to the exhumation of the body of the mother; and, after a long inquiry, the jury returned a verdict that Mary Ann Brunsley Gilkes had died from epilepsy, arising from exhaustion through loss of blood and neglect in her confinement, and that the child had died through the wilful design or neglect of the mother, who was therefore guilty of "Wilful murder". After some remarks from the coroner, the foreman of the jury stated that they wished to make the following addition to the verdict:—"We, the jurymen empanneled to inquire into the cause of death of M. A. Gilkes, being ratepayers of the county of Gloucester, having noticed the discussions which have of late taken place in the Court of Quarter Sessions with regard to the holding of inquests, express our unanimous opinion that the tendency of the interference of the magistrates in controlling the discretion of the coroners, and which, in this instance, nearly caused a miscarriage of the course of justice, is calculated to diminish the safeguard which the full discharge of the duties of the ancient office of coroner had thrown around the lives of the people of this country."

Queen's Hospital Ball, Birmingham. The annual ball for the benefit of the Queen's Hospital, Birmingham, took place on Thursday last, and went off very successfully, there being nearly 1,000 persons present. The hall was tastefully decorated for the occasion. Major-General Windham attended, and his presence contributed much to the success of the ball.

A New Dodge. The following letter has appeared in a number of the *Times* this week:

"Sir,—The manœuvres of rogues infesting London to obtain entry into private houses are really so Protean in their character that it becomes positively necessary to publish every fresh form for the sake of public security. I therefore send you these few lines to put the medical men of London on their guard against losing their time or any easily removed valuable articles lying about in their consulting rooms and surgeries.

"On last Saturday a respectably-dressed middle-aged woman called on me, and mentioning the name of a medical gentleman with whom I was slightly acquainted, asked me to attend a case for him during his absence from town. She gave me the name and address of the patient, and made an appointment for half-past four o'clock the same day. Although rather inconvenient, as I had several places to go to, I attended most punctually, and on arriving at the house indicated was told that no person of the name I inquired for lived there at all. Of course I felt a little annoyed. In the evening I looked through the *Court Guide*, and finding a person with a very similar name living at a house a little further on, in the same street, I again went out in the wet, and this time saw a gentleman who certainly was astonsthed to find a 'doctor coming to attend his wife,' when he happened to be a bachelor, and with every prospect of remaining so.

"I have since called on the gentleman who I supposed had recommended me, and I then discovered that not only there was no truth in the case at all, but also that he himself and four other medical gentlemen had been hoaxed in the same foolish manner, and by the same woman, the only purpose she could have in view being to lay her hands on anything in reach worth carrying off, or else to reconnoitre the premises for a more serious attack. In most of the cases, as in mine, she asked for and obtained the gentlemen's cards; your publishing this note may therefore prevent any other person being imposed upon by her for the future.

"I remain, sir, yours obediently,

"Albert S. Prescott Knight, Surgeon.

"20, James Street, Buckingham Palace, Jan. 12th."

TO CORRESPONDENTS.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Mr. Solomon's letter arrived to late for publication this week.

Communications have been received from:—Mr. Wyer; Mr. W. T. Bell; Mr. Henry Ewen; Dr. Mackinder; Mr. Griffin; Dr. Thudichum; Mr. Thomas Nunneley; Mr. J. K. Spender; Mr. Ellis Jones; Mr. S. Harrinson; Mr. W. B. Kesteven; Mr. A. G. Field; Mr. Robert L. Stedman; Mr. Henry Terry, Jun.; Dr. Sieveking; Dr. Snow; Dr. Forbes Winslow; Dr. G. G. Rogers; Dr. Bucknill; Dr. J. C. Hall; Mr. Francis Whitwell; Mr. George Evan Farr; Mr. J. V Solomon; Mr. Richard Turner; Dr. J. H. Webster: Dr. F. Britian; Dr. Edward Smith; Mr. C. F. J. Lord; Dr. Jeaffreson; Mr. T. Holmes; Mr. T. O'Connor; Mr. John Davies; Mr. L. O. Fox; Mr. W. Stanwell. H. M.; Mr. Edward Lister; Mr. John A. Bolton; Mr. John C. Bloxam; Dr. William Davies; Mr. George Hodson; and Socius.

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The January Number will contain the following Articles: Induction in Medicine.—Preservation of Food in Ancient and Modern Times.—Protective Power of Vaccination. By E. C. Seaton, M.D.—Nursery Government in its Sanitary Aspects. By T. H. Barker, M.D.—Diseases of Colliery Operatives. By W. J. Cox, Esq.—Notes on Poisons. By W. Pickells, M.D.—Sanitary Condition of Canterbury. By G. Rigden, Esq.—Reports of Epidemics in Towns and Districts.—Epitome of Sanitary Literature: and other Articles of interest.—The Transactions of the Epidemiological Society will contain an elaborate Report on the Cholera which visited Her Majesty's Black Sea Fleet in the Autumn of 1854; compiled from Official Returns. By B. G Babington, M.D., F.R.S.

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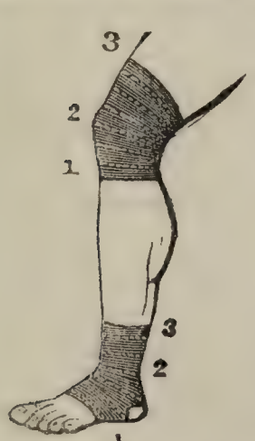
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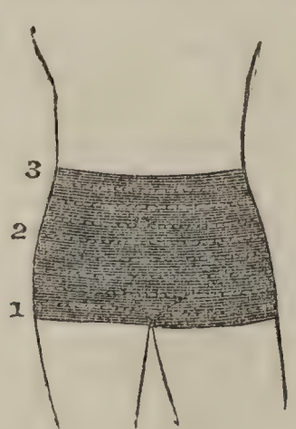
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BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. IV.] LONDON: SATURDAY, JANUARY 24, 1857. [NEW SERIES.

Hospital Reports.

ST. MARY'S HOSPITAL.

RENAL DEGENERATION: CARDIAC VALVULAR ALTERATION: RHEUMATISM: FIBROID FORMATION ON PERITONEUM: DROPSY: TEMPORARY REMOVAL OF SYMPTOMS: RELAPSE: DEATH.

By C. HANDFIELD JONES, M.B., F.R.S., Assistant-Physician to the Hospital.

M. B., a female, aged 29, was admitted into Hospital on September 5th. She had been able to do hard work without fatigue up to three years previously; but had been ailing for two years and a half, at the commencement of which period the catamenia stopped. She was much scarred by variola, which she had at the age of 16. She had had many and severe attacks of rheumatism, but never had rheumatic fever. She had winter cough. There was considerable anasarca of the feet and legs, and ascites: the feet and legs began to swell one month before her admission. On September 13th the urine was noted to be of lightish colour, of specific gravity 1013, slightly albuminous, depositing spontaneously a good deal of uric acid. It was full of whitish flocculi, which formed a sediment on standing. They consisted of numerous hairs, some casts, very numerous corpuscles resembling those of mucus, and epithelial scales. The casts were mostly homogeneous; some contained corpuscles. The quasi-mucous corpuscles were often seen adhering together in fragments, suspiciously resembling casts of the tubes; they exhibited composite nuclei when treated with acetic acid. On the whole I was inclined to believe they were altered renal epithelium. There was a cardiac murmur, which on September 29th I noted was heard at the base of the heart, and along the aorta, not to the left of the apex. On November 4th I could hear it at the apex, and to its left, but it was loudest at the base. It was always systolic. On September 30th the urine was highly albuminous, of specific gravity 1014; an ounce contained (according to Dr. Davy's method) 4·952 grains of urea, and 2·4 grains of uric acid. The acidity was about normal. She was treated by diuretics and purgatives, lost her dropsical accumulations, and left the Hospital in a very tolerable state on November 19th, having taken ten minims of tincture of sesquichloride of iron three times daily for more than a fortnight before her discharge. The urine still continued highly albuminous. Before she had left the Hospital a week her symptoms began to return, and soon confined her to bed. She was readmitted on December 21st, and died on the 25th in a paroxysm of dyspnœa.

POST MORTEM EXAMINATION. The heart was but little enlarged, if at all; there were distinct traces of recent partial pericarditis. The aortic valves, and those of the right side, were healthy; the mitral valve was tolerably efficient, but the orifice was fringed with vegetations. Both lungs were engorged and œdematous. A large quantity of turbid serum was found in the peritoneum. The great omentum had shrunk up into a thick nodose band. The liver was shrunken, its edges rounded, its surface everywhere invested by a dense fibroid layer, forming a membrane which could be peeled off, leaving the capsule beneath nearly normal. The spleen, which was healthy, was similarly invested, and the whole peritoneum was in like manner more or less thickened. Both kidneys were shrunken; their surface was pretty smooth, but with largish prominences of dull whitish tint; the cortical structure was much wasted, the medullary very marked, appearing more extensive than usual. The stomach was very much congested in the middle and splenic regions, containing greenish mucowatery fluid.

MICROSCOPICAL EXAMINATION. *Liver.* The lobules were very markedly congested in their central parts, where the cells were degenerated and breaking up, their remnants forming globular pigment masses. In the outer parts of the lobules the cells were tolerably healthy, cohering so as to form a kind of plexus with well defined roundish areolæ. The Glissonian sheaths were not thickened, but in the central parts of the lobules there was a very distinct appearance of a fibroid stroma. *Kidneys.* The convoluted tubes were distended to some extent, and their epithelium was very much wasted, often appearing as a mere opaque border of fatty granules. It appeared also that the matrix was somewhat thickened. The Malpighian tufts were often collapsed, and the capillaries filled with homogeneous fibrine. The medullary tubes were very much infarcted with coarse fatty granular stuff, and often contained strands and masses of homogeneous fibrine. *Stomach.* Its tubes were in a fairly healthy state, but there was interstitial nucleated fibroid formation in the splenic and pyloric regions.

REMARKS. This case presents several points for consideration, and is of the more interest, as it is quite an ordinary one, which we may expect to meet with over and over again. Renal degeneration, valvular cardiac alteration, dropsical effusion, rheumatism, and fibroid production, appear to be the prominent features.

The renal degeneration, so far as appears, arose silently as a gradual morbid change, uninitiated by any inflammatory symptoms referable to the kidney. The date of its commencement cannot be fixed; probably it had been in progress more than two and a half years, during which the patient had been drooping.

The cardiac valvular change was of no great moment: it had not contributed much, if anything, to the embarrassment of the circulation. The heart might be considered as a very tolerably efficient organ. The deposit on the mitral orifice might have been the result of the rheumatism, or of the renal disease; most probably, in my opinion, of the latter, as also the recent pericarditis.

The dropsy was of renal origin beyond doubt, the result of altered blood-crasis. The diminution of the albumen of the liquor sanguinis is, in my belief, the chief part of this alteration, rather than the presence of urea, or any other urinary constituent in the blood. I am led to adopt this opinion, rather than Dr. Johnson's, because cases are frequently met with in which there is no dropsy, although the renal function is very imperfectly performed, and urinary constituents are beyond doubt circulating in the blood. Something, however, is also to be ascribed to the impaired quality of the capillary walls, which allow transudation to take place more easily than natural. I cannot but think that this is so from observing the disappearance of dropsical effusion, or its being kept off by such remedies as tincture of sesquichloride of iron, which can have no eliminant action. With regard to the microscopic examination of the urine, it certainly did not afford any trustworthy information as to the actual state of the kidneys.

The rheumatism, which does not appear to have been acute and febrile, but probably rather rheumatalgia, was, I suppose, in so far a result of the renal disease, that the latter, by debilitating the system, left the nervous tissue more liable to suffer from the common causes of such disorder.

The fibroid thickening of the peritoneum was a peculiar alteration, remarkably unlike the usual results of inflammation. There were few, if any, adhesions; but rather it appeared as if fibrinous material had been slowly exuding all over the peritoneal surface, and had formed, by its consolidation, an investing layer. By its contraction this caused shrinking of the liver, and rounding of its edges. The capsule of the spleen was similarly altered, but the parenchyma in each of these organs appeared uninvaded by the morbid change. The degeneration of the central cells of the hepatic lobules above described is a condition of almost constant occurrence, when

the hepatic veins and their intralobular radicles have long been gorged with venous blood, semi-stagnating from some impediment to its onward course. The yellow pigment is commonly put down as bile; but the very same, to all appearance, may be seen in the cells of the suprarenal capsules, when the central vein and its adjacent capillaries have been long congested. I believe the pigment to be merely altered hæmatine, which has exuded, and saturated and stained the cells. It is very interesting to observe on the small scale in both these situations the same pathological events with which we are familiar on a larger. A common varicose ulcer on the leg results from a want of due blood supply; the skin suffers in its nutrition, decays and perishes; because, although congested with semi-stagnant venous, it is deprived of arterial blood. So it is with the lobules of the liver, and the suprarenal capsules, which are both constructed on a like anatomical plan; *i.e.*, both are traversed by a large vein in their axis, and consist essentially of cells interwoven with a capillary rete fed by arteries or quasi-arteries, arriving at their exterior. The suprarenal capsule being larger, exhibits to the naked eye the evidence of its malnutrition in the central cavity, which so long perplexed anatomists, and which is just the result of the decay and degeneration of the cell substance around the engorged central vein. It is well worth while to read Cruveilhier's description of this common pathological state, so faithful to nature as he always is. (*Anatomie Descriptive*, vol. ii, p. 720.) The hepatic lobules reveal their changed condition only to the microscope, and thus the most grave alterations are constantly recorded in *post mortem* histories, under the vague term "nutmeg." The most exquisite instances of this are seen in livers where the marginal zone of the lobules is in a state of fatty degeneration, and is therefore devoid of blood, while all the central parts are gorged with stagnating venous blood, and have their cells broken up, or converted into pigment masses. A less marked nutmeg appearance may also be produced by recent congestion of the central parts of the lobules, with mere anæmia of the outer.

The point of principal interest in this case is the great rally that took place under rest and treatment, and the immediate downfall as soon as these were withdrawn. The dropsical accumulations did not return on the evacuants being omitted; steel was taken for many days alone, and with advantage. I think it not too much to assert that had this poor girl been more favourably circumstanced, had she been sustained in a healthy air, with good food, and appropriate tonics, she might, in spite of the seriously diseased condition of several of her organs, have lived with much comfort for many years. I have proof, from experience, that cases of confirmed renal disease may be stayed from a downward progress, and comparative health be enjoyed for an indefinite time, if a tonic treatment be perseveringly maintained.

33, Albion Street, Hyde Park, January 1857.

PETERBOROUGH INFIRMARY & DISPENSARY.

DISLOCATION OF THE HIP-JOINT REDUCED BY MANIPULATION.

By Thomas Walker, M.D., Surgeon to the Infirmary.

"If your highness will but deign to nod, you will find that the thing is done," said the adroit servant of the Sultan, who had, with a flourish of unexampled dexterity, passed his scimitar through the neck of the doomed pacha. The business was really done; for his highness nodded, and his already severed head rolled on the floor! So goes the tale; and if it were a true one, the neat and clean performance of the dexterous swordsman would present no greater contrast to the cord and noose, the beam and the drop, and the clumsy manipulations of our finisher of the law, than does the mode lately introduced into practice of the reduction of dislocation of the hip by simple quiet manipulation, as compared with the cords and the pulleys, the staples and the "fixings", the pullings and the haulings, required in the methods hitherto in use for the reduction of luxations of this strong and well protected joint, by which proceedings the soft parts are often severely bruised, with the infliction of both injury and pain on the already suffering patient. In illustration, the following two cases are placed in contrast with each other.

Case I. On November 3rd, in the case of a stout muscular man, aged 49, I succeeded in reducing a dislocation of the hip. The pelvis was first fixed by a sheet passed between the thighs, and secured to a rope passed round a piece of timber placep across and outside one door of the room. The power of sturdy assistants and of a set of pulleys was brought to bear by means of a jack towel looped round the thigh above the knee, acted on by the pulleys, which were secured to a rope tied round a piece of timber outside an opposite door. All this was a necessary, but a complicated and formidable looking arrangement; yet such as I have always used, and one by which, in the present instance, as in former cases of similar dislocation, with a due exertion of muscular force on the part of the assistants, and of suitable manipulation on my own, the resistance of the muscles on the part of the patient was overcome, and, under the full operation of chloroform, the reduction was effected.

Case II. A man, of a frame equally muscular, was brought, in consequence of a dislocation of the same joint, to the Infirmary on the 30th of December. He was a guard on the Great Northern Railway, aged 28; and, having had a trip on the engine, was descending from the foot-plate, with a basket in his right hand, his left grasping the hand-rail, his left foot on the step, the tender being on his right side, and his right foot in the act of stepping to the ground, when, the engine unexpectedly moving towards the right, the crank of a coupled driving wheel caught him just over the left hip; his left knee caught in the step-bar, and a violent muscular effort on his own part probably assisting the dislocating effect of the pressure of the crank, luxation took place, the head of the femur being thrown upon the dorsum ilii. The nature of the case was sufficiently apparent, especially when I placed him in an upright position; the usual diagnostic marks being then very evident to us all; that is, to Mr. Sprigge, who had previously seen the case, and whose diagnosis was only confirmed by my own and by that of our mutual friend, Dr. Hanbury of York County Hospital, who, happening to be my guest at the time, had accompanied me to the Infirmary, of which he was formerly house-surgeon. Mr. Cobbett, our present excellent house-surgeon, was also present.

Having determined on trying at once the method of manipulation first suggested by Dr. W. W. Reid, I laid the patient on his back, carried the knee upwards, pressing it gently inwards till the thigh being fully flexed, it nearly touched the front of his chest; then with a motion of abduction I brought the limb again to the straight position. In doing this, so distinct a sensation of jerk was felt both by myself and the patient, that we thought that the reduction had been accomplished, especially as he felt relieved of some portion of the pain and numbness of which he had previously complained. That this was not the case was soon apparent. I therefore repeated the same manipulation with only the same effect; but on a third repetition of the same movements, the head of the bone entered its socket with a snap audible to all around the bed, and with entire relief to the most urgent symptoms, with recovered power of the motion of the limb, restoration of its normal position, and of the natural contour of the hip and parts around the joint. After a few days, being able to walk with the aid of a stick, he left the Infirmary.

Remarks. I must now in candour add that my former case was by no means precisely parallel to this with which I place it in contrast. It was in fact a case of dislocation into the foramen ovale; the first effect of my efforts at reduction was, as is not unusual, to convert it into luxation into the sciatic notch, implying therefore a change in the direction of the extension, which being made, it was finally reduced, and, as usual, with a snap sufficiently audible, and always gratifying to the ear both of the patient and the surgeon. So entirely satisfactory, however, was the result of the method adopted in my last case, that I venture to hope that, by a studied variation of the succession of movements therein adopted, we may succeed in reducing the other dislocations, in the same way as those on the dorsum ilii; and I shall certainly take an opportunity, in the next case that may occur either in my public or private practice, of trying what may be done by simple manipulation without the employment of extension and the use of all that "apparatus major" which we have been accustomed to use on such occasions.

Had my experiment in the present instance not succeeded, as almost unexpectedly to myself, it did, my friends and colleagues would have seen more of the case than I was able to show them, so promptly was it relieved, and so short was its duration in the state of dislocation.

Original Communications.

FOUR CASES IN WHICH THE ENTRANCE OF AN IRRITATING FLUID WITHIN THE EYELIDS CAUSED DEEP-SEATED OPHTHALMIC DISEASE.

IN THREE THE RETINA WAS IMPLICATED; IN ONE ACUTE RHEUMATIC OPHTHALMIA WAS EXCITED.

By J. VOSE SOLOMON, F.R.C.S., Surgeon to the Birmingham and Midland Counties Eye Infirmary; formerly Honorary Surgeon to the Birmingham General Dispensary.

CASE XXXVIII. *An Instance in which the entrance of Creasote within the Eyelids induced serious Retinal Disorder* ("*Ocular Hyperæsthesia*," *Mackenzie*): *Recovery*. J. G., a glass painter, 39 years of age, of a naturally sallow complexion, and of good general health, who was accustomed to a liberal diet, and belonged to a long-lived family, came under my care on the 5th of January, 1855, in consequence of a fellow-workman having, by way of a joke, thrown into his eyes a quantity of creasote.

The eyes, when seen by me, half an hour after the accident, were excessively irritable to light, and the sight, the patient said, was extinct; upon placing him in a much moderated light, I found that he could see large objects. The pupils were contracted, but not extremely; the left was the smaller. The posterior parts of the eyeballs presented an orange red colour, of the same shade as is produced by the admixture of blood and creasote.

Treatment. Half a grain of opium to be taken every fourth hour for the next twenty-four hours. Compresses wrung out in cold water to be constantly applied to the eyes. With a view to counteract inflammation, a blister was ordered to be placed behind each ear.

For the following notes I am chiefly indebted to the patient, who is a very intelligent man, having been educated for a schoolmaster:—"When the spirits of tar first went into the eyes, it felt like liquid fire, and the vision became at once red and flaming. The cold water applications dulled the pain, and it became of a dead aching smart, similar to a burn of the flesh. After the rising of the blisters, the eyes felt to be swollen and too large for their sockets. I was quite dark (blind?) till the temples were blistered, and I took some pills." (January 8th. ℞ Hydrargyri c. cretâ, extracti conii, āā ʒss. M. Fiat massa in pilulas xii dividenda, quarum sumat duas ter in die.) "When light became dimly visible to the right eye, the left continued as bad and painful as ever, especially in the eyeball and temple." For the relief of a symptomatic fever which was present, he had the following mixture:

℞ Vini antimonii potassio-tartratis ʒss; liquoris ammoniæ acetatis ʒiiss; spiritûs ætheris nitrici ʒs; aquam camphoræ ad Oss. M. Fiat mistura cujus sumatur ʒi.4tâ quâque horâ.

Bright light was excluded from his chamber.

Jan. 15th. Blisters were applied behind the ears with relief to the ocular and cephalic pains. Between the right eye and an object canvas appeared to be placed; the left was so irritable that he could not open it. When I separated the lids great pain was excited in the organ, and a ball of fire seemed to the patient to be before it. "My mouth" (continues the narrative) "now became sore, and to relieve the pain in my head a blister was applied to the back of my neck, yet I did not experience any change for the better; but as my mouth, tongue and throat became more sore and swollen, so my eyes became clearer, the right so much so that I could clearly perceive the outline of the pattern of the paper on the walls of my bedroom, or any other object in the room, but not for any length of time. I could also open my left eye a little, and see a very pale dim light, which, as the salivation increased, became more clear and distinct; but the light continued only for short intervals of about twenty or thirty minutes, when I was obliged to sit with the eyelids closed, and was in great pain in my eyes and temples, accompanied by a running of water which scalded the face.

"When I was sufficiently recovered to go out of doors (Feb. 16), my eyes felt as if they were scalded by the air, although I wore my glass shades and a large silk one. Pain in the temples accompanied the soreness and running. If I tried to read, I could not do so many minutes before all the letters became confused together; objects appeared dim, and there was pain in the eyes and head, which was particularly severe through the temple. After sleep or sitting with the eyes closed, something like fine white sand appeared on the eyelashes, and around my eyes it felt rough; I could not see it, but my wife said it was fine sand. At this time—about two months after the accident—the vision was clear for an hour or two at midday, dull and dim at dusk, and worst of all by candlelight. Sometimes in walking along the street I became blind, and there appeared before the eyes red and yellow rings; on one occasion I was nearly run over by a cart, and had to feel my way home with a stick."

In March the left eye relapsed into permanent dimness, a mist, like falling flakes of snow, appeared before it. The eye was (March 5) intolerant of light, watery, and irritable, like that of a person who has suddenly come out of darkness into the light. For this state a variety of treatment was tried for two months consecutively—flying blisters to the temple; internally, pills of belladonna and quinine, ferruginous tonics, and iodine. The external appearance of the eye, during the period named, did not indicate the presence of deep-seated mischief; the pupil was moderately lively, the conjunctiva only insignificantly injected by pale red vessels; there was not now nor had there been since the accident a zone around the cornea. The slightest touch upon the eyelids excited convulsive movements in the orbicularis, and the straight muscles of the globe, with winking and a discharge of tears. Considering these symptoms as indicative of asthenic erethism of the second pair of nerves and of the ophthalmic branches of the fifth, I placed upon the conjunctiva a drop of Battley's liquor opii sedativus. On the next day the sight of the eye was clearer, and by perseverance in the remedy the vision was restored. The patient, rather unwillingly, resumed his trade in May: since then the eyes have been as good as they have been for the last twenty years.

In regard to the recovery of the patient, although not acquainted at the time with Dr. Mackenzie's account of "Ocular Hyperæsthesia," I, from the first and throughout the case, entertained and pronounced a favourable opinion.

When sixteen years of age, J. G. was salivated by a druggist for an attack of subacute rheumatism, incurred by sleeping in a damp bed. The mercury completely disordered his health, which had previously been good. For two or three years following, he was affected at intervals with blindness, locked jaw, and rigid flexure of the right knee joint; sometimes he barked like a dog. These hysterical symptoms appeared and subsided suddenly; they seemed to be little influenced by medical treatment: I believe them to have been connected in some measure with immoral practices, although the young man was in a sense chaste, and continued so till the age of thirty, when he married, and in time became the father of children.

REMARKS. This case is illustrative of a curious disease described by Dr. Mackenzie in his *Practical Treatise on Diseases of the Eye*, fourth edition. "From the photophobia of scrofulous or any other ophthalmia," observes that learned author, "we distinguish ocular hyperæsthesia by the age of the patient, and by the absence of redness of the eyes. From retinitis it is distinguished by the excessive pain and intolerance of light—symptoms which do not attend inflammation of the retina; and by the complete and generally sudden restoration to the exercise of vision which happens in hyperæsthesia, whereas the recovery from retinitis is slow and uncertain. After recovery from hyperæsthesia, there is no evidence that the nutrition of the retina, nor of the other structures of the eye, had been at all interfered with; retinitis generally leaves both the sense of vision and other parts of the eye seriously compromised in texture and function." M. Pétrequin, in his *Practical Treatise on Amaurosis*, etc. (Paris, 1841), describes a somewhat similar, if not the same disease, under the name of *erethistic amaurosis*. He recommends, for its treatment, a collyrium of lettuce water and opium; and the internal exhibition of pills containing valerian, henbane, and oxide of zinc—Meglin's pills.

CASE XXXIX. *Retinal Blindness and Ocular Hyperæsthesia from Lightning*: *Recovery*. Mrs. W., aged 53, a florid and healthy looking woman, residing at Pennsnett, Staffordshire, came under my care at the Birmingham Eye Infirmary, on July 17th, 1855, on account of her *right eye* having been struck blind by lightning, upon the 6th of the preceding month, while she was sitting at a window; the electric fluid also denuded the skin of the forehead and face of the same side. The affected eye was closely covered by a handkerchief to protect it from the light, which affected it so painfully that it was only after darkening the room, by drawing down the blinds, the examination of it could be borne.

Right Eye. I found the pupil dilated and motionless when the usual test was applied; no zone around the cornea; the conjunctiva was inflamed, more especially where it lines the eyelids and forms the semilunar fold.

Vision. The ability of distinguishing day from night was abolished.

Subjective Symptoms. She complained of a constant aching pain in the back of the eye and of stabbing pains through it, both of which extended into the brain, and sometimes to the occiput; also of severe and constant pain in the vertex and forehead, similar to that she endured when suffering from typhus fever. In a dark room flames of fire appeared to play before the eyes (photopsia); the same occurred in daylight if she happened to stoop her head towards the ground. The whole of these symptoms have existed from the time of the accident, and have prevented sound sleep: the pains are intensified by daylight.

The *Left Eye* was not inflamed, but so weak and irritable that even large objects were only indistinctly seen, while in twilight the sight was much improved, yet not quite perfect. The pupil was of natural size, and its movements were sluggish.

Treatment. Taking into consideration the healthiness of the patient, I conceived that probably mild therapeutic means would enable her to recover from the *shock*, and the cerebro-ocular congestion to which it had given rise. Accordingly ten grains of purging mass were directed to be taken every night, a blister to be placed behind the ear, and the eye to be bathed by a saturnine lotion. These means mitigated the pain and photopsia, but as the pupil and blindness were unrelieved on the 24th, and *puro-mucous conjunctivitis* was well marked, I prescribed a grain of calomel with a ¼ gr. of opium to be taken twice a day, and as often a solution of nitrate of silver (gr. ii to ℥i) to be applied to the conjunctiva. Lotion as before. In a week afterwards, July 31st, tartar emetic ointment was ordered to be rubbed into the nape. The patient came for a repetition of the remedies on the 21st of August, and again on September 4th. On the 18th of the same month she called to declare herself cured. All the tissues of the eye appeared normal, the pupil of natural size, and the sight was perfect. From the counterirritation Mrs. W. considered that she had derived especial benefit. The mercury did not at any time affect the gums, or cause intestinal irritation.

Case xl. *Retinal Blindness induced by the entrance within the Eyelids of a Boiling Solution of Soda and Soap, the other Tissues and the Humours of the Eye being apparently unaffected. Recovery of Vision: an Epileptic Seizure and Recurrence of Amaurosis.* Hannah Bodfish, aged 20, a servant of all work, a remarkably healthy and strong-built person of florid complexion, applied to the Birmingham Eye Infirmary on Friday, 12th January, 1855, on account of retinal blindness of the right eye. She said that as she was washing on the preceding Tuesday, near to a furnace of boiling water, in which had been dissolved a quantity of common soda and yellow soap, two bricks accidentally fell into the hot solution, which splashed up against her face and entered the right eye. She immediately walked out of the washhouse into the kitchen, which was near at hand, sat down on a chair, and fainted; she did not fall or receive any sort of injury other than that related. In a short time, "having come to herself," she became aware that the skin of the right eyelid, the cheek, and of the corresponding side of the neck were swollen: they were not blistered. The tumefaction of the lids was so great that the right eye could not be opened. To the scalded parts her mistress applied flour and oil; and on the following morning, the palpebral tumescence having subsided, she opened the eye, but found it to be quite blind: the left eye was not affected. She did not obtain medical advice till the fourth day of the accident, when she presented herself as an out-patient at the Birmingham Eye Infirmary. At that time I noted, in addition to the particulars given above, that her expression was naturally heavy, the eyes rather small, and deeply set in the orbital cavities, and that the superciliary arches were prominent. The right pupil was dilated and immovable, even when light was suddenly admitted to the retina; the humours were pellucid; the patient was quite blind; the conjunctiva around the corneal circumference was not injected, but that of the lower lid was somewhat redder than normal: neither ptosis or strabismus was present. She complained of a dull pain in the eyeball, and of uneasiness (*malaise*) in its brow, also of chilliness and thirst. The alvine and catamenial discharges were reported to be regular and healthy. Considering the case to be congestive amaurosis, I directed eight leeches to be applied to the right temple; two table spoonfuls of a fever mixture, containing small doses of tartar emetic, to be taken every four hours, and five grains of blue pill night and morning. A diet of broth and tea was enjoined.

On the fourth day of the treatment, the only change was the appearance of a green light before the eye. I esteemed this symptom favourable, and as indicating that the treatment pursued was in the right direction. Six ounces of blood were now ordered to be drawn from the right temple by cupping, and afterwards a blister to be applied to the nape. The antimonial mixture and pills were continued. The cupping relieved the pain in the eye, and restored a slight degree of vision.

Upon the seventh day of the treatment, and the eleventh from the accident, the gums were sore, the pupil contracted slightly on sudden exposure of the eye to light, and the form but not the colour of my hand could be distinguished. A pill was ordered to be taken once in every twenty-four hours.

On the eleventh day of treatment vision was worse. The nape of the neck was ordered to be blistered and afterwards dressed with savine ointment; and the blue pill to be taken every morning as well as night.

Upon the fourteenth day of the treatment and the eighteenth from the accident, the pupil had assumed the same diameter as that of the companion eye; vision was much improved, and in four days afterwards was perfect, but intolerant of use. She could read small print, thread a needle and sew.

On the twenty-eighth day of the treatment, asthenopia continued. There was slight conjunctivitis of the left eye. She was ordered to take a grain and a half of quinine three times a day, and blue pill on alternate nights.

Feb. 23rd, sixth week of treatment. The sight was perfectly good, but still weak. The patient did not appear to be at all reduced by the remedies. She discontinued her attendance, and I heard no more of her till the 28th of April, when my friend Mr. John Elkington, of Erdington, informed me that she had very recently suffered from an epileptic seizure. I called upon H. B., and found her anæmic, in poverty, and amaurotic in the right eye. The sight was not improved by looking through a pin-hole aperture in a card. She removed from Erdington, and has not since been heard of.

Remarks. What was the cause of Bodfish's blindness? Was it hysterical amaurosis? The physiognomy, the contour of the body, and strong constitutional power, as evinced by the perfect tolerance of an antiphlogistic plan of treatment, emphatically preclude such a notion. For the same reasons, and from the gradual improvement in the amaurositic symptoms under the treatment pursued, we may conclude that the congestion, whether within the eye or the head, or in both—cerebro-ocular—was of the sthenic kind. The precise etiology, it must be confessed, is not devoid of obscurity. A solution, however, in accordance with the whole of the facts of the case, and, moreover, with the clinical history of amaurosis when resulting from injuries of the ophthalmic division of the fifth pair of nerves, may be found in the supposition that the boiling alkaline solution inflicted mischief upon the retina through the medium of those filaments of the fifth pair which are distributed to the globe, lids, and neighbourhood: and that the irritation or shock, having been conveyed to the nervous centre, was reflected along the optic to the retina, there exciting acute congestion. That the nervous centre was seriously disturbed by the accident, appears evident by the occurrence of anæmia, of an epileptic seizure, and recurrence of the amaurosis—symptoms, be it remarked, that arose after the young woman's apparent recovery from the more grave primary effects of the scald. Indeed, should this case terminate in chronic cerebral disease, it will but add to the number of instances where irritation of the fifth pair has so eventuated. A yet more simple theory would be—that the accident was followed by an intercranial hæmorrhage, which made pressure, directly or indirectly, upon the optic nerve, and that the relapse was due to some further cerebral mischief.

Case xli. *Severe Rheumatic Inflammation of the Eyeball excited by the entrance of a Boiling Solution of Gold and Cyanide of Potassium within the Eyelids: Recovery.* On June 24th, some hot solution of gold and cyanide of potassium spirted into the left eye of Mr. B., who was at the time healthy, and thirty-six years of age. The accident caused redness of the part, a severe burning pain, dimness of vision, and intolerance of light; the redness increased; on the third day of the injury the eye ached, and when suddenly turned upon its axis, *felt as if it had been struck a blow.* All these symptoms progressed in intensity, so that on the fourth day of the accident the patient was unable to look, and at night suffered from "*hemi-*

crania." Mr. B. obtained medical aid, for the first time since the injury, upon the 3rd of July—eight days afterwards.

On July 12th I saw the case in consultation: the patient said that the eye felt distended, and that the eyelids seemed to press upon the globe, although neither spasm of the orbicularis muscle nor chemosis of the conjunctiva were present. In the left temple a sense of pressure was experienced, which descended to the upper wisdom tooth of the same side; and thence pain of a more acute character spread over the corresponding half of the face and head. The scalp was so sore that the slightest touch was insupportable. The pains underwent considerable aggravation at night. Mr. B. had hitherto used linen, dipped from time to time in cold water, as a local application to the painful parts, with the effect of inducing perfect ease so long as the temperature of the surface was maintained at a low degree. Darkness was indispensable for the comfort of the eye, which presented, on examination, intense conjunctival redness, and iritis with watery discharge.

HISTORY. Nine years before, the patient met with a similar accident from the gold solution: it was followed by ophthalmia, intolerance of light, and hemicrania, for which he used poultices only, and in a week resumed his avocations. A year and nine months since, he was laid up two months and nine days with acute rheumatism, which affected the head, and the joints both large and small. He got out of doors on the 2nd of December, but was not free from pain. At Christmas the disease again detained him within doors five weeks.

It would be foreign to my object to relate the treatment I recommended for the ophthalmia; it will suffice to say that, in less than three weeks, the eye was healthy functionally and organically, and the patient able to walk several miles.

CASE OF SWALLOWING AN ARTIFICIAL TOOTH, WITH ITS PLATE.

By EDWARD LISTER, Esq., Liverpool.

ON the 22nd October, 1855, I was requested to visit a lady, aged 26, who had swallowed a mouthful of pancake, and supposed that a portion of it had remained in the throat. The probang was introduced, and removed the obstruction.

Her husband called upon me the following morning, and said that his wife had been in the habit of wearing a false tooth attached to a gold plate for several years; and that, about half an hour after my departure, she had missed it, and felt certain that she must have swallowed it.

Oct. 23rd. She passed a very restless night, and complained of pain on the left side of the epigastrium, which increased upon pressure. I directed her to apply warm fomentations to the part, which in some measure relieved the pain. Her countenance appeared irritable; her bowels were in a confined state. I ordered a half-pint mixture containing sulphate of magnesia, powdered acacia, and tincture of hyoscyamus; and directed her to partake of as much farinaceous food as possible.

7 P.M. The bowels have been freely moved by the mixture. About 2 o'clock she experienced very great pain, but at the present time it is much better, and has moved somewhat towards the pyloric orifice of the stomach. She was ordered to continue her medicine in smaller doses. Her appetite is poor; she has not the least desire for food. I requested her to be particular in examining her evacuations.

Oct. 24th, 11 A.M. She feels much better, and wishes to sit up. The appetite still remains low. The bowels have been moved twice since the last visit.

2 P.M. The pain has increased to a great degree, and is of a twitching character. I ordered her to have twenty-five minims of liquor opii sedativus, and to discontinue her medicine.

Oct. 28th. She still complains of slight pain in the epigastric region, in precisely the same situation as before. I ordered a mixture containing ʒiss of liquor opii sedativus, a fourth part to be taken on any material increase of the pain.

Oct. 31st. She is much the same. The pain is increased at times, but is relieved by the opiate mixture. The bowels were ordered to be regulated, when required, with castor oil.

Nov. 8th. The pain is less severe than before, but remains in the same situation. She does not require the opiate mixture, and the bowels act regularly. The appetite is still poor.

Nov. 23rd. She informs me that she has eaten some roast beef and potatoes on the 12th instant, and from that time she has experienced no pain whatever, and feels quite well.

She examined her motions regularly for the first three weeks, not afterwards; therefore it is impossible to state whether the gold plate has passed since that time. She has procured another plate and tooth of the same shape and size.

DEATH FOLLOWING THE INHALATION OF CHLOROFORM IN SURGICAL OPERATIONS.

By T. HOLMES, Esq., F.R.C.S.

THERE seems to have arisen lately a desire to deprecate the employment of chloroform in surgical operations, and to represent it as dangerous to the patient's life at the moment of administration, and injurious to the after progress of the case. We are told of the frightful frequency of deaths from chloroform; of its exercising some unexplained secondary agency, unfavourable to the healing of wounds; of its predisposing to pyæmia; of a depressing influence attributed to it, analogous to that of copious bleeding. Now, all this is so opposed to what a daily familiarity with the use of chloroform had led me to believe, that I was induced to review my own experience in the matter, and to look at the published records of the anæsthetic treatment, as contained in the British and continental medical journals, in order to test the accuracy of my previously formed opinions. In the course of this search I came across a valuable paper in the ASSOCIATION JOURNAL for 1853 (p. 131,) containing a tabular view of the deaths from chloroform (the compilers of which are acknowledged to be indebted principally to Dr. Snow,) and some very sensible remarks thereon. It will perhaps be acceptable that I should continue this table down to the end of the past year, and accompany it by some remarks on the method of administering chloroform, which I have seen reason to believe to be the safest, and on the contra-indications, if there be any, to the exhibition of the drug.

I may premise that the following table is compiled from a careful search through the volumes of the medical periodicals published at home and abroad; and that I have not wilfully omitted any, except two cases, both of which were extracted from non-medical papers without any guarantee of their authenticity; in one the editor professed his disbelief, and the other was evidently an American hoax. I make this observation in consequence of a statement recently made by a correspondent of the *Medical Times* to the effect that deaths from chloroform in London hospitals have been concealed of late days. I can only say that I am quite ignorant of any such concealment, and that I should think it hardly possible, considering the publicity under which hospital surgeons practise, and the habit of holding inquests in such cases. I should be loath, however, to believe, on no better evidence than a random assertion, that English surgeons ever contemplated such dishonesty. I think, therefore, I may say that (errors apart) this table contains all the deaths which have so occurred *during* the administration of chloroform from the end of 1852 where the former list stops, to the end of 1855. That some of them were not *the consequence* of such administration, I think admits of no doubt. I shall have occasion to remark hereafter on one case of this kind (appended to the Table), which occurred at St. George's Hospital. The same remark applies to No. 41. The list shows that the number of deaths from chloroform which have come to light in London and the provinces, as well as abroad, have averaged about six per annum since the introduction of chloroform; that the number is not on the increase of late,* while the use of the drug has been steadily extending ever since its introduction; and that, therefore, we may hope that, so far from its primary administration having become more hazardous, increased practice in its use, and perhaps increased caution in its administration, have still further diminished the little risk which attached to it at first.

In the face of records, showing fifty deaths, most of them occurring under the care of the most experienced surgeons, assisted in many instances by gentlemen whose special duty it is to give chloroform, it would be vain to deny that the administration of this drug is attended with some risk. But is it rational to expect that it should be altogether free from risk? that the power of voluntary motion and sensation should be altogether abolished by the circulation of poisoned blood in the brain without any danger whatever to the motions of respiration and circulation, dependent as they are on the integrity of parts so intimately connected with those which regulate the former functions? Surely not. Nor do the more judicious

* I find no deaths from chloroform reported in the *Lancet*, vol. i, for last year; and do not remember to have heard of any lately, except the case at St. Thomas's Hospital, a short time ago.

advocates of chloroform claim for it any such unattainable safety. I find indeed that, in its early days, some of those who were directly connected with its invention were inclined to deny that any risk attached to it at all, or that any precautions were necessary in its use. Edinburgh surgeons, however, have now, I fear, been convinced by the same lamentable experience as their London brethren, that the same minute precautions are necessary in handling this as any other powerful remedy; and that, in spite of every such precautions, some accidents will occasionally occur. Taking this fact for granted, then, does it furnish a valid objection to the use of chloroform? To answer this, we must understand the conditions of the question. If deaths are to go on at the same rate in future as they have done in the past, this would constitute a very important element in the calculation, and would, I think, justify us at once in refusing chloroform in any but the graver operations. It is hardly possible to form any guess at the arithmetical proportion which may exist between the number of deaths and the number of cases in which chloroform has been given; but whatever this may be, would not any reasonable man prefer, or any judicious surgeon select for him, the pain of such an operation as amputation of a finger or toe, to any appreciable chance of instant death? This conclusion seems reasonable; yet, on the other hand, its effect would be very disastrous to surgery in the present condition of our practice. So accustomed have patients, especially in private practice, become to the idea of painless operations, that it would be hardly possible to persuade them to submit to what they would regard (and justly) as unnecessary torture; and thus a surgeon who should go upon the principle of refusing chloroform in the minor operations would, in all probability, see most of his cases of this kind go wrong from the patient's refusings treatment.

We must endeavour not to limit the application of the anæsthetic (except in those cases, which I will presently speak of, where we can substitute another as efficient and less dangerous), but to lay down some clear rules whereby to avoid passing the limit which separates the stage of narcotism, where sensation and motion are abrogated, from that in which the movements of respiration and circulation are affected. Now I think we have sufficient evidence before us to show that this is accomplished, with nearly absolute certainty, by avoiding the sudden introduction of large quantities of the vapour into the blood, and by administering the chloroform only sparingly after narcotism is established. At the hospital where I have attended (St. George's), and at King's College, great attention is paid to the former point; and the gradual introduction and sufficient dilution of the vapour is sought to be ensured by the method proposed by Dr. Snow. The result has been that in the practice of both hospitals there has been, ever since the introduction of chloroform, only one case in which a fatal result was ever attributed to the direct action of the anæsthetic;* and in that case, as I firmly believe, erroneously. I have introduced the case into my list (No. 45), lest I should appear desirous to suppress the fact; but I do not believe that the fatal syncope was at all connected with the administration of chloroform, and for the following reasons: that the quantity of chloroform expended (for the greater part of which was merely lost by evaporation) did not amount to more than a few drops; that in the ninety seconds during which the inhaler was applied she breathed very seldom, and very imperfectly, and therefore could have inhaled only a very small quantity of the vapour, extremely diluted as that was in consequence of the valve being open; that no trace of chloroform could be found in the blood, though searched for by a process capable of detecting very minute quantities; that the patient was in that condition of health, and that state of nervous excitement, in which sudden death from fear occasionally happens; and, finally, that the opinions expressed by her medical attendants led the coroner's jury to conclude that the accident was not the result of the administration of chloroform. The objects sought to be attained by the gradual administration of chloroform are, that the vapour may be always diluted to a certain extent with atmospheric air, and that that dilution may be further increased *ad libitum*, so that the patient begins by breathing air very slightly mixed with chloroform; and as he becomes accustomed to the taste of it the dose is increased, but never beyond a certain known mixture of air and vapour. In this way narcotism is usually produced at least as rapidly as when the handkerchief or sponge is used (I have ascertained, by repeated observations, that two minutes is the average time at which insensibility comes on); and generally without that irritation of the air-passages, and those distressing struggles so common under the latter method. After the patient is fully under the influence of the vapour, it is only necessary to keep up its action by administering it occasionally when the occurrence of reflex movements shows sensation to be returning. We should bear in mind that common sensation is abolished before the faculty of producing these reflex movements ceases; and that, therefore, no deeper narcotism is required than that which keeps the patient just beyond the verge of the latter condition. It is, I believe, an inattention to these two points which has caused almost all the deaths from chloroform.

The history of the cases, as far as it is intelligibly described, is tolerably uniform. Either the chloroform has been administered continuously, notwithstanding the persistence of narcotism showed that a sufficient quantity was already in the blood, or it was given without any precautions on a sponge, handkerchief, or piece of lint; and this latter was in one case (No. 38) covered with oiled silk, as if purposely to prevent the dilution of the vapour! In many instances it will be noticed that a period of struggling and excitement preceded the fatal syncope. I believe that, in most of these cases, had the chloroform been suspended for a few moments, no alarming symptoms would have followed. The ill effects which may result from the inequality of respiration in these cases has been already pointed out by Dr. Snow. Attention is of course paid both to the breathing and the pulse, and the patient is kept, whenever it is possible, without food for four hours before operation. These precautions seem very matter of course and simple; that they are sufficient in all ordinary cases, the daily experience of eight years, I think, justifies me in asserting; and also in claiming for chloroform thus administered as absolute an immunity from danger as the nature of powerful therapeutic agents permits to them.

I may add, with reference to this method of giving chloroform, that the quantity used is a matter of no great consequence,* as, the same surface being always exposed to the same quantity of air in the bottle (which is also maintained at a low temperature), the ratio of the mixture is constant. Another important advantage of our system of administration (which is, however, of course unattainable out of hospital practice,) is that the chloroform is always given by the same person, who thus acquires the same dexterity in this art as constant practice gives in every other branch of the profession. I again repeat that, with all these or any other precautions, I believe a few fatal accidents will happen; but they may, with proper care, be diminished so far as to make the risk in any given case inappreciable. In the graver cases this risk will go for nothing in determining the question about performing an operation of which, most probably, the patient will not hear unless chloroform is given; in slighter operations it will be for the patient and surgeon to determine whether to submit to the trifling pain or the inappreciable danger. But I hold it utterly visionary to talk, as Dr. James Arnott has recently done in the *Medical Times and Gazette*, of recurring to the old system of the operating theatre. Theorists, whose eyes are blinded by predilections for their own, and antipathies for other men's inventions, may speak coolly of renouncing the use of the "sweet oblivious antidote," which has obliterated the sufferings of thousands, and has substituted placid sleep, or even delightful visions, for what would otherwise have been the extremity of human agony. Those whose practice has been much among such scenes know better; and such proposals are not visited with the reprobation which they would otherwise excite, only because their impracticability secures them from much serious notice.

In a future communication I will endeavour to sum up the information which may be derived (as to contra-indications, etc.,) from the results of these tables.

* In order that no suspicion may rest upon me of wishing to conceal facts which make against chloroform, I will mention here the few other cases in which it has appeared to produce unfavourable effects. In a patient operated on some years ago for tumour of the upper jaw, and who died under the operation, it was thought by some that chloroform had paralysed the muscles of the glottis, and so allowed of the passage of blood into the air tube. This was, however, not made out to the satisfaction of others who saw the case. In a patient recently operated on for hernia, who was in a state of great collapse at the time, chloroform was thought to have increased that depression. She died in a few hours; but, in the absence of a *post mortem* examination (which was unfortunately refused), it was impossible to say that the gut was not ulcerated. In two other cases, it produced severe and repeated fainting fits during the remainder of the day. One was a very old and feeble woman: the other had been kept for a long time under its influence (in a protracted operation for vesico-vaginal fistula), and was besides very hysterical, which complicated the symptoms. Neither had any further bad symptoms.

* There is a limit to this—viz., that the quantity must not be so large as to cover the openings of the air holes into the central tube in the bottle.

TABLE OF DEATHS UNDER THE INFLUENCE OF CHLOROFORM IN THE YEARS 1853-54-55.

[*Continued from the* ASSOCIATION MEDICAL JOURNAL *for* 1853, *p.* 131.]

No.	Date.	Sex and Age.	Operation.	Apparatus.	Quantity used.	Time when death occurred.	Symptoms.	Post mortem appearances.	Reference.
26*	Oct. 1853.	F. 40	Strangulated femoral hernia.	Administered on lint.	℥j at first; 40 drops afterwards.	About five minutes.	No excitement at first. Struggling after four minutes. Stertorous breathing. Sudden stoppage of the pulse.	Heart fatty; its walls very thin; cavity empty.	Lancet, 1853, vol. ii, p. 409.
27†	Oct. 21, 1853.	F. 22	Actual cautery to cancroid growth in vagina.	An inhaler.	Less than ℥ij.	Ten minutes.	Dusky countenance; weak and fluttering pulse; irregular breathing.	Heart flabby; but no fatty degeneration. Stomach full of blood.	Lancet, 1853, vol. ii, p. 410.
28	Dec. 16, 1853.	M.	Removal of malignant tumour of thigh.	An inhaler.	Successive drachm doses.	Seven minutes.	Much struggling and excitement. Sudden congestion of face and failure of respiration.	Congestion of brain and lungs.	Lancet, 1853, vol. i, p. 21.
29	Mar. 26, 1852.	F. 28	Application of nitric acid to sloughy sores of vagina.	Administered on lint.			Threw her arms wildly about. Then the limbs suddenly relaxed. She became insensible and pulseless.	Fatty degeneration of the heart.	Lancet, 1853, vol. i, p. 307.
30‡	Sept. 28, 1853.	M. 43	Syme's operation for urethral stricture.	Administered on a handkerchief.	About ℥j.		Much struggling. Then stertorous breathing. Sudden failure of the pulse.	Heart healthy; flaccid. Pericardium contained serum. Viscera congested.	Month. Jl. Med. Sc. Nov. 1853; and Assoc. Med. Jl. 1853, p. 971.
31	1853.	M. 15	Excision of a small tumour on the cheek.	A sponge.	℥ij.	Four minutes.	"A slight period of agitation" preceded the insensibility. The latter was suddenly succeeded by fatal collapse.	No disease of viscera.	Medical Times, 1853, vol. ii, p. 47.
32	April, 1854.	F. 40	Removal of polypus uteri.	A piece of folded linen.	Apparently a large quantity.	Not stated.	None noticed till the cessation of the pulse.	Left cavities of heart and arteries nearly empty. Right side of heart and veins gorged with fluid blood. Blood in left cavities gave distinct evidence, that in the right cavities more feeble evidence, of chloroform on chemical examination.	L'Union Médicale, 1854, pp. 171-187.
33	1854.	F. 59	Reduction of old dislocation of the shoulder.	A sponge.	℥ij.	Five minutes.	Stertorous breathing. Then, very suddenly, failure of the pulse.	Heart empty. Slight traces of disease (incipient fatty degeneration). Atheroma of coronary arteries. No other disease.	Assoc. Journal, 1854, p. 109.
34§	1854.	F. 45	Amputation of the breast.	A sponge; then a handkerchief.	Not clear.	Forty minutes.	Muttering delirium for a few minutes; then sudden stoppage of the heart's action.	Heart and lungs quite healthy. Effusion of blood in spinal canal.	*Ibid.*, 1854, p. 315.
35	Oct. 17, 1854.	M. 28	Puncture of the bladder.	Administered on lint.	℥iss—℥ij.	Not stated.	Stertorous breathing: flushed face. Sudden death.	Fatty degeneration of the heart.	*Ibid.*, p. 957.
36	June 1854.	M. 18	For phimosis.	"A simple mouthpiece", leaving the nostrils uncovered.	℥ij.	Six minutes.	None except the sudden failure of the pulse at the above time.	Fatty degeneration of the heart.	*Ibid.*, 1854, p. 1061.
37	July 1854.	M. 65	Amputation of thigh.	Dr. Snow's inhaler.	At first rather less than ℥ij; 8 minutes afterwards another ℥.	Fourteen minutes.	Violent spasms at the end of 8 minutes. Pulse and respiration ceased suddenly and simultaneously at the above period.	Extensive fatty degeneration of the heart.	Medical Times, July 22, 1854.
38‖	Oct. 5, 1854.	F. 56	Amputation of leg.	Lint, covered with oiled silk.	Less than ℥ij.	Five minutes.	"Considerable muscular movements and rigidity of the limbs"; then sudden cessation of the pulse.	Heart slightly fatty; cardiac and cerebral arteries atheromatous; kidneys granular. Much subarachnoid fluid.	Assoc. Journal, 1854, p. 1120.

* Addicted to drinking.
† Of dissipated habits.
‡ He was of intemperate habits.

§ She was very nervous about taking the chloroform. Notwithstanding the immense time consumed, she seems not to have been fully narcotised.
‖ She seems to have been in a very bad state of health.

No.	Date.	Sex and Age.	Operation.	Apparatus.	Quantity used.	Time when death occurred.	Symptoms.	Post mortem appearances.	Reference.
39*	May 2, 1853.	M.	Replacement of prolapsus ani with hæmorrhoids.	No particulars.				Aneurism of the arch of the aorta.	Gazette des Hôp., 1853, p. 183.
40	Feb. 15, 1853.	M. 34	Removal of tumour of cheek.	Not stated.	Not stated.	Almost instantly aft. inh.		Nothing remarkable.	*Ibid.*, 1854, p. 215.
41†	Oct. 30, 1855.	F. 35	Removal of a tooth.	"Usual way".	Less than ʒiss.	One hour and a quarter.	Gave sudden convulsive start, and sank down; face congested. After bleeding, and galvanism with artificial respiration for a long time, spontaneous inspirations were observed; radial pulse at first imperceptible, but excited by galvanism and artificial respiration.	Heart very small; right side flaccid and full of blood; left comparatively free and contracted; walls of right cavities very thin, soft, and lacerable; left walls thinner than natural, but less so than the right. Fatty degeneration distinctly recognised; most in right side.	Edin. Monthly Journal, 1856, p. 524.
42	Jan. 1855.	M. 18	Removal of an encysted tumour of the orbit.	An inhaler.	Not stated.		No particulars.	No disease of heart.	Medical Times, 1855, p. 34.
43‡	Mar. 11, 1855.	F.	Parturition.	Handkerchief.	ʒv. (?)		No particulars.		*Ibid.*, p. 361.
44	Apr. 10, 1855.	M. 40	Excision of eyeball.	Dr. Snow's inhaler.	Not known.	Four minutes.	Sudden cessation of pulse, and then in a few moments of respiration also; eyes fixed; tossing of arms; chest spasmodically fixed. Face mostly suffused and congested.	Brain congested. Heart seemed to be healthy; but was easily lacerable. Much fluid blood in right ventricle; left nearly empty. Blood fluid.	*Ibid.*, p. 363.
45§	May 11, 1854.	F. 37	Excision of chronic mammary tumour.	Dr. Snow's inhaler.	The chloroform expended was estimated at 10 drops.	1½ min. The valve kept open all the time.	She was gasping for breath during the whole time. The mouthpiece was put on her face with the valve open, and she was encouraged to breathe quietly, when suddenly the pulse ceased.	Lungs slightly congested; slight traces of fatty degeneration of heart. Viscera otherwise healthy.	P. M. and Case Bk., St. Geo. Hospital, May 11, 1854.
46	Feb. 17, 1853.	M. 25	Removal of cysts from cheek.	A sponge.	ʒi.	Four minutes.	Nothing remarkable at first; but in four minutes sudden paleness, suspension of respiration, and feeble pulse. Artificial respiration, bronchotomy, and electricity were tried without success.	Lungs gorged with dark blood; in some parts effused. Heart a little larger than natural, and very flaccid. Left side of heart empty; a few loose clots in right.	L'Union Méd., 1853, p. 299.
47‖		M. 19	Reduction of ankylosed knee.	A sponge.	ʒss.	About fifteen minutes.	Frequent, undulating pulse; trismus; irregular respiration; blue face; escape of froth from mouth.	Nothing remarkable except some hæmorrhage; erosion of stomach.	Z. d. Ges. d. Ærzte zu Wien, 1854; Ar. Gén., Au. 1854.
48 ¶		M. 45	Amputation of leg.	Handkerchief formed into a cone.	Not stated.	Not plain.	During latter part of operation, failure of pulse and respiration.	Heart attenuated, empty; much deposit of adipose tissue in or on heart; but no distinct statement as to fatty degeneration.	Edin. Monthly Journal, 1855-6, p. 1023.
49 **		F. 25	Parturition.	Not clear.	ʒii.	Twelve hours.	After twelve hours repeated inhalation, absence of all pain, cold sweat, cold extremities, oppressed and wheezing respiration, receding pulse, vacant glare. Consciousness retained up to death.	None recorded.	Buffalo Med. Journal, Dec. 1853; and Amer. Journ. of Med. Sc., Apr. 1854.
50 ††		F.	Dressing of carbuncles.	A piece of muslin.	ʒj.	Some moments.	Unusual blueness of face and lips; cessation of breathing and pulse.	Much fluid in pericardium. Left heart contained much semi-coagulated dark blood; right heart empty. Lungs congested.	Nederl. W. 1854; N. Lancet, 1 and 2, 1855.

* This case is very imperfectly reported.

† It is doubtful whether this patient's death was due to chloroform or to disease of the heart. Patient had taken chloroform at least five times previously without ill effects.

‡ In this case the chloroform was administered surreptitiously by a nurse. The patient was found dead.

§ She was in weak health, and excessively nervous.

‖ The lad was almost idiotic, and addicted to Onanism.

¶ Patient was a large heavy man of irregular habits.

** Patient inhaled chloroform against wish of medical attendant; was "quite comfortable" for twelve hours, when fatal symptoms appeared.

†† Addicted to drink; insane. Chloroform had been given about forty times.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS PULMONALIS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture II (*concluded*).

DIMINISHED VITAL CAPACITY AND LESSENED ACTION OF AIR VESICLES LEADING TO DEFECTIVE CHEMICAL CHANGES, TO COLLAPSE, AND TO MORBID PRODUCTS. ALL GENERAL CAUSES ACT BY LOWERING NERVOUS POWER AND LESSENING VESICULAR ACTION. SEX. AGE. TUBERCLE—WHAT IT IS, AND WHY IT SELECTS THE LUNGS AND THEIR APICES.

As, then, it may be affirmed that, at the moment of the occurrence of phthisis, or rather of the deposition of the tubercle, there is no change in the appetite or the functions of the alimentary canal; but that there is a marked change in the quantity of air which the lungs are capable of containing, and consequently a diminution in the process of aeration, it is important to ask if the last is an effect of some anterior condition, and only cotemporary with the deposit of tubercle, or if it is directly or indirectly causative of this deposit. It is quite capable of proof that the diminished vigour and depth of breathing may not only exist long before tubercle is probably deposited, but it occurs in cases in which no tubercle is subsequently deposited, and hence does not appear to be necessarily connected with that deposition. It is, however, highly probable that the deposit is always, or nearly so, preceded and accompanied by the lessened breathing; and hence its coexistence must be regarded as more than an accident. It seems fair to infer that, as the cases of phthisis form so large a proportion of all cases of disease, much more of those in which there is this lessened breathing, the lessened breathing may commonly be regarded as tending greatly to the deposit of tubercle. Whether, in this point of view, phthisis may practically be regarded as one large section of a still larger class of diseases, rather than as an isolated disease, it may be difficult to determine, but there is a high degree of probability that something might be gained by regarding it in the former rather than in the latter light. The essential feature of this larger class would therefore be the lessened respiration, or the still anterior cause which may have produced that condition.

We must hence consider the defective condition of respiration both as the result of anterior causes, and as in its turn becoming the cause of disease. As the result of an anterior condition, it may be owing either to a general cause or some local impediment in the lungs. If we first investigate the latter, we must at once admit that there is no impediment offered by the bronchial tubes: and hence, if it is found at all, it must be in the air-cells of the lungs. From the proposition, there is no impediment existing in the air-cells which is due to the introduction of any solid matter; and, if any impediment exist at all, it must be from a collapsed or a lessened capability of expansion of the air-cells, and that may be either temporary or permanent. That such a state may exist, is highly probable, from the mere consideration of the action of the cells; for if the actions of dilatation and retraction occur at all, surely they may be varied, and thus be lessened until they are lost; but it is rendered quite certain from the fact that we may have an entire absence of the murmur which always accompanies the action of the vesicles. The diminution of vesicular murmur is to be observed in the only cases under consideration in which there is also diminished respiration. Whether, therefore, this local condition is itself due to a general cause or not, it is fair to infer that it does exist as a condition precedent to or attendant upon phthisis. The demonstration of this state of things upon the dead body has always appeared to me to be a matter of great difficulty; but Dr. Graily Hewitt has affirmed its existence in hooping-cough, on the ground that a certain portion of the air-cells cannot after death be distended with air. This appears to me to be a fair test, assuming that there is no deposit, if it be applied with sufficient care and judgment; but it cannot be applied in phthisis, since it is highly probable that the effete cells would become the depositaries for the new morbid matter; and hence the non-distensibility would be fairly attributable to other and more tangible causes. In hooping-cough the march is more rapid; and hence death may occur whilst the air-cells are both collapsed and empty.

There is, however, one very striking fact which has been seen by all of us, viz., the puckering of the lung at the apex, which is not by any means uncommonly found in phthisis, and in deaths from other diseases. It has been the fashion to explain this by stating that it represents a closed and healed vomica; and when it has been found apart from phthisis, it has been seized upon as evidence of the curability of that disease; but I submit that there is little evidence to support that assumption. On making perpendicular and transverse sections of the puckered part, it is seen that there is a mass of thickened structure having its long diameter directed in a line parallel to the distribution of the bronchi, and having a transverse thickening to the extent of about a line. There is retraction of the pleura along its edges, but more particularly at the apex, with some little morbid change in the character of the membrane itself. On microscopic examination of the thickened mass, it is found to consist almost entirely of a close mass of white and yellow elastic fibres; and to my mind that and the aspect of the adjoining cells rather implies a condensation of the lung tissue, with obliteration of the cells, than the remains of tubercular infiltration and deposition, with the inflammatory exudation such as would necessarily attend the formation and closure of a vomica. Moreover, as the supposition implies that the vomica had been lined by a membrane of the serous type, and consequently that, on the closure of the vomica, the two surfaces must be brought into contact, there ought to be some remains of these surfaces, and of the line of their apposition, in the line of closure; but I have sought for this in vain. I could not affirm, however, that there had not been a cavity at that point; but the anatomical evidence, conjoined with the comparative infrequency both of these puckered parts and of the permanent arrest of the disease, lead me to think that the explanation just offered is at least as probable.

Then, to what circumstances may we attribute the collapse or lessened capability of extension of the air-cells? Can it be local—that is, within the air-cells themselves? Since the air-cells are the essential parts of the lung, and their functions are most important, it may be reasonably inferred that they are endowed with properties either more perfect than or different in kind from those which are distributed to the other parts of the lungs. It is admitted universally that the structures entering into the composition of the air-cells are entirely different from those constituting the bronchi; and with difference in structure there is usually difference in disease. Moreover, the peculiar mode by which the vesicles act, viz., that of extension and retraction in a spiral manner, as may be imperfectly imitated by a spiral spring, must surely be a circumstance depending very especially upon peculiar and local nervous power; and its constant repetition eight thousand times during every hour of life must certainly lead to its diminution. That there should, therefore, be states of disease peculiar and restricted to the air-cells of the lung, would be highly probable. Whether this special liability to disease ever induces the collapse to which reference has been made, is not known at present; but the occurrence of the rapid form of phthisis, and the supervention of phthisis upon inflammatory conditions of the lungs, and also as a result of the inhalation of hard particles in grinding, would seem to render this probable.

The spiral action of the air-cells, above referred to in the text, is imperfectly represented in the drawings on next page.

It is not unusual to see cases in which, with more or less dyspnœa and hindrance to the circulation in the lungs, the only change which can be ascertained is lessened or lost vesicular murmur, with some shortening of the inspiratory effort; and they forcibly impress the mind that there is a state of disease of the air-cells in which their function is simply lessened or lost, and that more or less extensively. This has not been sufficiently investigated, but I feel assured that the next improvement in chest pathology will be to give less attention to the mere conduits of the air, and more to the essential air-vesicles.

Without, therefore, being able to affirm positively that there is collapse of the air-cells, due to local causes as an antecedent to tubercular deposit in the lungs, I submit that there are grave reasons to induce us to believe that such must be the case. That such a state of things should result from a general cause, as that of the nervous system, is highly probable. The air-cells, however much they may be independent of the other and non-essential parts of the lungs, must for that very reason

be dependent upon the nervous system; and as, with a due supply of nervous power, the air-cells may perform their duties perfectly, a deficient supply would be followed by deficient respiration. Any state, therefore, in which there is deficient nervous power in the body (and hence more particularly in the sympathetic system, as influencing the vital action), may or will be accompanied by lessened respiratory action. We all

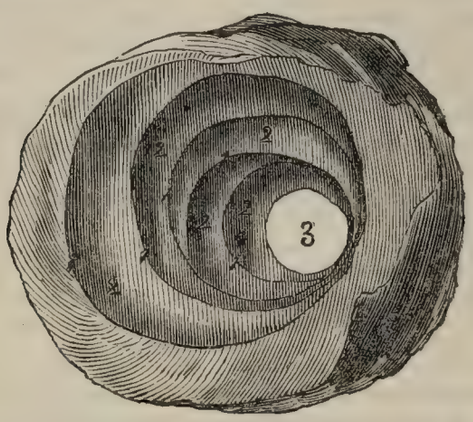
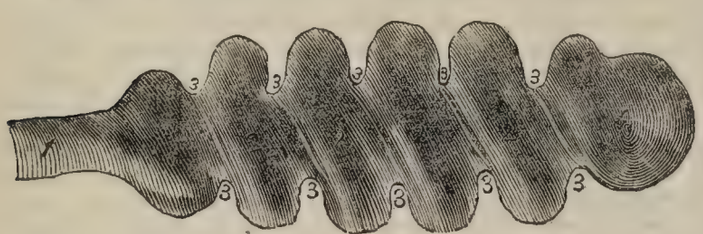


Fig. 1 exhibits a collapsed intercellular passage, with its surrounding air-cells; the opening marked 3 being the distal end, which has been cut away in making the section. The projecting lines 1 are the free projecting edges of the valve or spire, which winds in a spiral manner; whilst the spaces 2 are the air-cells situate between each of the valves or spiral edges. In a good section of a lung, one or two, and sometimes more, of the free edges may be seen, and also traced to a certain point, by continuously lowering the focus. I have a section exhibiting five free edges. In ordinary expiration, it is almost certain that the collapse cannot have proceeded to the degree exhibited in the drawing.


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many other similar evils really assimilate the condition of such an individual to that of the poor cottager with his want of nutriment, clothing, and pure air. Even as to the matter of anxiety, which I believe to play an important part in these morbid agencies, although the rich need not to have any, and the poor must have it ever present with them, there is, in fact, a great similarity; for the sensitive organisation of the one suffers much from a small cause, whilst the blunted feelings of the other bear much without suffering.

Then, again, so far as we know, the disease is known in every clime, whether of heat, moisture, or elevation; none is free from it, if there be masses of human beings there. It is said and believed to have increased in new countries in an increasing ratio with the increase of civilised communities; and, although no statistical returns exist for a period sufficiently long to prove this, the fact is highly presumptive. That, however, phthisis should be common in such savage tribes as obtain a very precarious subsistence and live in crowded huts constructed to prevent change of air, and more particularly if to all this be added the rigors of a Polar region, or the heat and moisture of many tropical countries, may not excite surprise. Whether, therefore, in savage tribes taken generally, phthisis is so destructive as in civilised communities, is not capable of demonstration; but it is probable that the out of door engagements and the thin population of most of such uncivilised people render them less liable to the disease. We cannot doubt that the present habits of society are extremely inimical to health; and that, instead of the highest civilisation being represented by vicious habits and customs and enfeebled constitutions, it ought rather to be, as it is probable it may ere long be, by habits which really tend both to the comfort and longevity of mankind placed in communities.

The influence of sex is not well marked, since it does not act with uniformity, and, except in a large minority of cases, only to a slight extent. In the investigations into the etiology of phthisis published in 1851, I found that, in the whole of England and Wales, the mortality was the greatest in females, and was, to the population, as 1 to 337 in males, and 1 to 313 in females. This was also found to be the case in nine out of eleven registration districts, but in the sub-districts the contrary was frequently found. This last fact was commonly found in the large manufacturing towns, as Manchester, Wigan, Bolton, Birmingham, Nottingham, Coventry, Leeds, and also in many maritime districts and fishing ports, as Liverpool, Bristol, Cardiff, South Shields, and Plymouth. In the agricultural districts, on the other hand, the mortality was commonly greater amongst females. Perhaps this may be explained by referring to the greater hardships which women have to undergo in the poverty of agricultural districts, and the greater anxiety, long hours, incessant labour, and vicious habits of men in the great towns. I do not think that, upon the whole, we can make any great distinction in the sexes in reference to their liability to phthisis; and, when it occurs, it is less owing to the organisation of either than to the circumstances in which they are placed. It is, however, not improbable that a kind of balance may be struck between the less robust organisation and purer habits of females, and the greater labour, exposure, and vicious habits of males; and hence the mortality amongst females would preponderate in those localities where the men are placed under conditions more than usually favourable to health.

In reference to age, I also ascertained by the same investigations that, over the like area, the greatest number of deaths occurred from the 20th to the 35th year, and that there was a remarkable diminution in the 5th year, and thence to the 10th year; and again at the other extreme end of life. When, however, the number of deaths from phthisis is compared with the number of persons living of each sex at the various ages, which is the only correct mode of determining the influence of age, the liability to phthisis is somewhat different. Thus it was, in quinquennial periods, arranged in the order of intensity, beginning with the most intense:—

Males under 1, 55, 35, 25, 45, 20, 65, 40, 30, 50, 60, 15, 4, 70, 75, 80, 10, 85, 5, 90.

Females under 35, 25, 0, 30, 20, 55, 45, 40, 15, 65, 50, 60, 4, 70, 10, 75, 95, 5, 90, 85.

Hence, whilst extreme old age is truly the least liable to phthisis, the early age of 5 years, and even of 10 and of 4 years, is nearly equally indisposed to its influence. The most exposed age is under 1 year old, and again from 20 to 55. The medium liability seems to be about and after middle life, viz., from 40 to 60 years of age, except the interval from 10 to 15 years, which also occupies a medium position. Hence there is a wide range of age in reference to the liability, and the only general facts that can be deduced are, then, that the circumstances attending upon the first months of life, and again when the duties of life are fully entered upon, and until about middle life is attained, are those the most conducive to phthisis. These seem to me to draw away the attention from the organisation of the individual, as reflected by his age, and direct them to the circumstances of his life to which we have already referred. It is clear that the disease occurs at all periods of life, even to those of very advanced age; and hence we must be permitted to infer that it is less owing to age than to its attendant circumstances.

Thus it is manifest that we have to do with a disease which is the scourge of humanity taken as a whole—the poor and the rich, the young and the old, men and women, all climes, occupations, and conditions of men. Now, such being the case, it must be that the cause shall either be one and indivisible, and so spread that it may influence the whole world, or it must be manifold as the requirements of man, and acting ultimately on the nervous system in one common mode. The former is highly improbable, since there is not one influence which in every clime has one and the same degree of power. Even the air which we breathe cannot be regarded as the one cause, for it must vary with almost every habitation. No doubt the common experience of man is correct in regarding a multitude of circumstances as causative of this disease; but, if we admit this as probable, it is quite essential to suppose that, as the causes are many and very diverse, and yet induce one common condition, which is nearly identical under all circumstances, there must be one mode by which all ultimately act upon the system in the production of this one common condition.

Now what can this one common mode be? It must surely be found associated with some of the acts and processes which are essential, and about equally essential, to the life of every man. Of the two which are the greatest of these actions, alimentation and aerification, we have shown that, at and after the beginning of phthisis, alimentation remains perfect, whilst aerification is greatly deficient: hence the mind fixes upon the latter function as the one at fault; and, since the aerification depends essentially upon the air-vesicles of the lung, and they have already been proved to be at fault, it is fair to assume that in them and their functions the common mode of morbid action exists. I would, therefore, affirm that all the circumstances causative of phthisis, as that disease is commonly found, cause it by lessening the respiration, and consequently the actions of the air-vesicles of the lung. I therefore would regard this condition as the essence of phthisis; and other circumstances, as, for example, the deposition of tubercle, as accidents. If, however, the disease be limited to a special class, viz., those in which tubercle is deposited, then the state of the respiratory function of the air-cells would be the essence of the genus, and the tubercle the distinguishing mark of the species.

Hence it would follow that, whatever will arrest the action of any considerable number of air-cells without at the same time closing them or filling their cavities, may induce phthisis. The causes to which reference has been made all act by slow degrees, and the disease resulting is of a chronic kind: but may not the same principle be applied to the production of the acute forms of that disease? At present, it is true, facts are wanting to establish such a law; but it appears to me that there are some reasons which should induce us to pursue investigations in the direction now pointed out. The symptoms attending upon acute phthisis, as contrasted with those accompanying the chronic, are chiefly greater excitement of the vascular system, with more dyspnœa, more nervous exhaustion, and a state of the nervous system greatly resembling that accompanying a low form of fever. Thus there is more rapid nervous exhaustion, and at the same time more vascular action; but these are not commonly the usual marks of inflammation. The more marked dyspnœa may be reasonably accounted for by the more rapid loss of the vital capacity of the lung, and therefore may be so far mechanical. It is, however, also clear that, as there is more rapid deposition of the tubercle, there is also more rapid softening and destruction of the lung.

Now, without attempting to prove that there is or is not an inflammatory basis for this form of the disease, we may content ourselves with the general principle, that the power of the air-vesicles in large portions or the whole of the lungs has become suddenly lessened or lost, and leave it to future investigations to determine the precise mode by which this is brought about. As the air-vesicles are the essential parts of so all important an organ as the lungs, they will no doubt be supplied, not only with the common, but with

special nervous power; and we know that, anatomically, they differ from other parts of the lungs. Hence, with this especial nervous power, there would be especial internal liability to disease; and it may probably be that the cause which, acting on the air-vesicles, induces the rapid form of phthisis, may be rather intrinsic or within the air-vesicles, whilst that inducing the ordinary chronic form may be extrinsic or in the general system. Until, however, we know more of the true nature of tubercle, and can venture with certainty to isolate it from all other growths, we can scarcely venture to affirm that the exceptional disease which is known as acute phthisis is essentially the same with the common form of chronic phthisis.

The next point in the inquiry will be to seek to account for the deposition of tubercle in the lung; for the presence of that deposit is so constant and abundant that the deposit must proceed from some law.

The first step is that which has already been taken, viz., to find a nidus for the deposit, and to account for the selection of the air-vesicles in preference to other parts of the lungs. By the preceding remarks, it has been affirmed that the air-cell, having nearly or entirely ceased to act in performing vital functions, is ready to put on a state of degeneration, and becomes, in fact, a more or less useless body. Now, being a useless cavity in the organism, it is not only the more fitted to take on disease, but to be a depository of morbid products. Hence we may presume that tubercle may result either from some morbid action proceeding within the air-vesicles, or that it simply becomes the depository of the tubercle derived from other sources. The first obtains a high degree of probability from the fact that there are doubtless, in a state of health, one or more layers of epithelium lining the air-vesicles, and which, in a state of health, are continually undergoing changes of degeneration and of reproduction. It is probable that the epithelium, when degenerated, does not pass into the bronchi in the form of epithelium, but is more or less, perhaps perfectly, homogeneous and fluid. Now, we can readily understand that any change which would prevent the destruction of the epithelium, or its escape by the bronchi, would end in an accumulation of epithelium in the air-cell, and that this would go on so long as the basement membrane retained sufficient vitality to continue the reproduction of the epithelium, and the air-cell was sufficiently large to hold the retained mass. Thus the tubercle might be regarded as a mass of epithelial scales; and, as has already been stated, there is further probability on this point, from the great resemblance which exists in the epithelial cell of the air-vesicles to the tubercle-cell there found in phthisis. Now, if this be admitted, we may readily account for a large amount of change in the mass, on the principle that the mass, being composed of effete material, must necessarily decay, and might then lead to the formation of oily and earthy matter, so frequently known to have resulted from long continued degeneration. It must not be forgotten that we have a similar state of things in another disease, viz., epithelial cancer—a disease which doubtless commences upon the free epithelial surface, and becomes ultimately a mass of epithelial cells, with a more or less malignant tendency to the destruction of parts.

The foregoing theory of the identity of epithelium and tubercle is due to Schrœder Van der Kolk and Dr. Addison; and by it, as it appears to me, we account for the deposit of tubercle in the lungs, and for the extreme importance of the disease, on the ground of the vast mass of air-cells in the lung, their peculiar relation to the bronchi, their peculiar mode of action, their incessant action for so long a period, and the all important character of that organ. It, however, leaves it an open question as to the cause which immediately assisted the due disintegration of the epithelial cells; and, as Dr. Addison does not refer to the theory which I have advanced, viz., the disease of the air-vesicle, as an anterior and essential condition, it leaves both that fact, and also the cause which may induce the disease, open to inquiry.

In reference to the alternative above mentioned, viz., that the air-cells may simply be the depository of the diseased secretion, and have nothing to do with the deposition, I am of opinion that it is improbable. It would imply that it proceeded either from the blood directly pouring out tubercle into the cell, or from the changed action of the epithelial cell by which tubercle is formed by the secreting power. Both of these points have already been discussed. The blood does not contain tubercle; and if it did, it would be open to inquiry why it should especially select the lungs for its depositories; and if epithelium has the power to secrete tubercle, why is not that secretion commonly found upon the large secreting surface of the bronchi?

Now, if the foregoing theory of phthisis be admitted, we shall have no difficulty in accounting for the increase of the tubercular matter with the progress of time. Thus, if the inaction or closure of the air-vesicles be due to some general cause, it may and probably will be itself more or less general; but as we have seen that, by the deposition of tubercle in one cell of a lobule, that cell becomes blocked up and distended, and is thus enabled to press upon adjoining cells, and arrest their action, we have a mechanical reason for the imaginary implication of other cells in the process. This will necessarily be for a time impeded when the air-cells of a lobule are full; for the enclosing membrane of the lobule, being far more resisting than the walls of the air-cells, does not readily give way to pressure, and hence calls for further and further distension in the cells of the lobule before it permits much pressure to be exerted upon adjoining lobules. In this way the disease is often limited, in certain spots, to a single lobule; and, as the enclosing membrane has remained firm and healthy whilst the impacted walls of the cells have in part given way, it is very common to see not only an isolated tuberculosed lobule, but to be able to turn the mass of tubercle, with the degenerated air-cells, almost cleanly out of the lobular membrane. If, therefore, there were but one cell in which the disease first began, it might be a considerable time before the larger part of the lung could be implicated. It is, however, probable that commonly there are many centres of action; and, in proportion as this is the case (or, in fact, as the operation of the cause upon the air-cells is more or less general), and also in proportion as the disease is active or otherwise, so we may presume the disease will progress more or less rapidly. By the pressure thus exerted, it is clear that the relations of the parts will become changed, and the tubercle be no longer restricted to the free surface of the epithelial lining, as is the case in the earliest deposition.

It may now be asked if any reason can be assigned for the preference which the tubercle evinces for the upper lobe, and especially for the apex of that lobe of the lung. Nothing has been discovered in the anatomical character of the parts which will offer an explanation; and the idea that it may occur from the greater exposure of the upper part of the chest appears to me to be unworthy of notice. There is, however, a reason to be deduced from the action of the lung, conjoined with the above mentioned theory, which may guide us in our inquiries. It is also one which at the same time accounts for the opposite fact of the preference which inflammation evinces for the lower lobes of the lung. It is this. The direction of the trachea and bronchi is downwards; the direction of the expansion of the chest, and of the indrawing of the air, is downwards; and the greatest degree of expansion of the chest is downwards, or at the base: and hence it would follow that the air would more readily pass from the trachea to the lowest parts of the lungs, and those parts would be the most readily distended with air. Hence the apex of the lung would be less readily distended in ordinary inspiration; and before the air-cells in that part could be fully distended on the deepest inspiration, the air-cells of the lower lobes will have been fully filled, and that distension would have become, so to speak, a fulcrum for the forcible direction of the current of air to the apex. If any one will quietly take a full inspiration to the last possible degree, he will find that the lowest lobes are first fully distended, and that the final effort and effect are both felt at the clavicles. Hence I infer that, in ordinary respiration, the air-cells of the upper lobe, and especially of the apex, are not distended to the extent of those at the base of the lung; that, as a consequence, less vital actions proceed in these cells, and they are the first to put on such morbid conditions as follow from the lessened vitality and lessened or lost action of these vesicles. Thus tubercle, in ordinary cases, first finds its home at the apex or in the upper lobe, and in that part flattening of the chest is first perceived; and that the lessened vital capacity of the lung is chiefly found there, before or at the deposition of tubercle, is clear from the flattening, and also from the greater relative loss of mobility at that part, as compared with the lower part of the chest. This is common not only to cases in which tubercle is deposited, but to those persons who are commonly believed to be specially exposed to that condition; and it is seen even in health by the small breath-motion of the upper part, as compared with the abdominal breath-motion.

The same theory will account for the less frequency of primary inflammatory action at the apex than at the base; for it may be affirmed that there is more active circulation and a greater quantity of blood in that part of the lung in which the air-vesicles act freely, and in which the vital processes are the most active. To this also may be added the effect of gravity of

the blood in an organ composed of materials so unresisting, and containing at all times such a large quantity of blood. Hence, where there is the greatest vital action, vitality, and blood, other things being equal, there will be the greatest liability to inflammation; and these circumstances are found most abundantly at the base of the lung. The contrary will be the conditions of tubercular deposit.

Reviews and Notices.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L. London: John Churchill. January, 1857.

The last number of this, the most entertaining quarterly appertaining to our profession, is more than usually interesting. The charm of the *Psychological Journal* consists in the wide range of subjects, relative to the science of mind in its healthy as well as morbid conditions, which it embraces. To Dr. Winslow is certainly due the credit of having stimulated the professional mind to cultivate a richer field of psychological inquiry than it had been accustomed to, and not only the professional mind, but the mind of observant educated men of all classes, for we observe articles now and then from the pens of barristers and clergymen, which prove pretty satisfactorily that "subtle souled psychologists" are to be found without the profession as well as within it. The interest imparted to the journal by thus opening its pages to able men wherever they are to be found, is to interest in it a very important class of laymen as well as members of our own profession. The *Psychological Journal* may be seen on the table of the rector and the county magistrate, a class of men to whom it is of the greatest importance to be versed in some degree in the science of mind; for be it remembered, *it is they who have practically the control of all the county lunatic asylums in the country?* From an ignorant board of visiting magistrates, the medical superintendents of these asylums expect and receive nothing certainly but crotchety interference and absurd directions; from an enlightened one, considerate treatment and aid in their efforts to improve the condition of the insane paupers committed to their charge. These gentlemen must therefore see with pleasure the propagation of sound views with respect to insanity, such as we find in this journal, among the class which has such power to aid or to obstruct them in the performance of their duties.

Among the papers to be found in this number, we notice a very discriminating review of the new Scottish philosophy of Professor Ferrier of St. Andrew's, and the continuance of Dr. Webster's Notes on Foreign Lunatic Asylums. The indefatigable Doctor, having exhausted in his previous papers the asylums of Great Britain and France, takes a microscopic view of those in Belgium; and we are promised in the next number an account of the very interesting Pauper Lunatic Colony at Gheel, which we shall not fail to notice when it appears. "The Insanity of George the Third" is a paper interesting to the historian as well as to the psychologist; and the article on the use of chloroform in the treatment of puerperal insanity is of great practical interest.

The paper which will attract most attention, however, is by the Editor, on "Prolonged Shower Baths in the Treatment of the Insane". Our readers will recognise this as the title of Mr. Snape's letter addressed to the Visiting Magistrates of the Surrey Lunatic Asylum in reference to the case of Daniel Dolley. When the unfortunate death of that patient took place, and certain adverse influences took advantage of the accident to attempt the destruction of Mr. Snape, we spoke out on his behalf, and supported him as far as lay in our power. We must confess, however, that we never approved of his method of treatment; and we therefore read with considerable pain his letter, in which he not only excused, but upheld it as a practice of the highest importance. We no more believe in the efficacy of knocking down a violent patient with a twenty minutes' shower-bath, followed by two grains of tartar emetic, than we approve of the method lately fashionable in some of our hospitals, of knocking down the pulse in fever by large doses of quinine. Dr. Winslow justly says:—

"In insanity, the *vis vitæ* is often reduced to the lowest possible condition. In the great mass of acute cases of disordered mind which the physician is called upon to treat, particularly in our public asylums, the nervous system is in a state of positive exhaustion and debility. The furor—the violence—the maniacal excitement—the muscular resistance, so often found associated with insanity, are generally symptomatic of profound nervous and vascular depression. The excitement of the insane is an *excitement without power;* and he is truly the 'ablest physician' who, recognising this important pathological fact, does his utmost to *conserve and husband the flagging and ebbing vitality of his patient* until the mind recovers its healthy equilibrium."

Agreeing as we do most thoroughly with this passage, we cannot second Mr. Snape in his view of the object of the shower-bath in the treatment of the insane, viz., *the overpowering of the patient.* Mr. Snape indeed tells us that, in numerous cases, his system of treatment resulted in the perfect recovery of the patient. He has given us no instance of cure; but all the world knows how unhappily he failed in the case of the unfortunate Dolley. Dr. Winslow has, we think, done good service in boldly attacking and bringing to book this new system of treatment, which is, we think, fraught with so much danger to those subjected to it. We have before said that we entirely acquit Mr. Snape of the charge of having given Dolley the bath and the "white mixture" as a punishment for the blow he received; but we confess we tremble at the introduction of a so called remedial agent which may be so easily used as an instrument of revenge. Dr. Conolly, when he denounced "the laying on of hands" and the infliction of the strait waistcoat as the last remnants of the bad old system, had clearly no idea of the scientific *restraints* which modern philanthropy essays to introduce. A pair of handcuffs or hobbles are indeed mild applications in comparison with the double blow of the twenty minutes' continuous shower-bath, followed by two grains of tartar emetic, which are now set forth as appropriate "quietners", as our Leeds friends would call them, for violently excited patients. By the bye, Dr. Winslow asks the question, Is the plunge-bath (or "bath of surprise") still used at St. Luke's? As we have heard singular reports upon this subject, we should be glad to hear the question answered—in the negative.

Association Intelligence.

ADMISSION OF NEW MEMBERS.

The Laws of the British Medical Association, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. Williams, Worcester; or to any of the Secretaries of the Branches.

British Medical Journal.

SATURDAY, JANUARY 24th, 1857.

MEDICAL REFORM.

We have learned with much satisfaction that the London members of the Conference Committee of the Medical Corporations have accepted the proposal made by the Reform Committee of our Association, to introduce into the proposed medical council a number of members nominated by the Crown; and that they have agreed to recommend it to the favourable consideration of their Scotch and Irish colleagues. The following is a copy of the Resolution passed by the Conference Committee.

"That the principle of nomination by the Crown, urged by the Reform Committee of the British Association, be entertained, and submitted to the corporate bodies of Scotland and Ireland, with the expression of a favourable opinion on the part of the London Conference Committee."

The Committee of Conference object, however, to the proportion of members proposed to be nominated by the Crown as being likely to make the Council unwieldy and expensive. This is a point of minor importance, and one which will probably be adjusted with little or no trouble. The proposal of the Committee of this Association has been at once cordially accepted: and thus has been removed the last of the broad grounds of difference between the corporations and the medical reformers of our body.

A RECIPE FOR NERVOUS DISORDERS!

Last week we presented our associates with an advertisement in which a douceur of 20 per cent. on the receipts was offered to any person who would recommend lunatic patients to a "first-class Asylum". This barefaced trafficking in mental aberration only required to be pointed out to be denounced by all right thinking men; and we have received numerous letters approving of our conduct, in holding up the writers of such indecent advertisements to public condemnation.

We rejoice to find, however, that all persons are not actuated by the same sordid love of lucre. There are those, it is evident, who love to do good for its own sweet sake. What other than the most benevolent and philanthropic feeling can induce the priest-physician Douglas to give publicity in the *Times* and other papers to the following advertisement?

TO NERVOUS SUFFERERS.

A RETIRED CLERGYMAN having been restored to health in a few days, after many years of great nervous suffering, is anxious to communicate to others the means of cure; and will, therefore, send (*free*), on receiving a stamped envelope, properly addressed, a copy of the prescription used.—Direct, "The Rev. E. Douglas, 18, Holland Street, Brixton, London."

Admirable man! Not a day elapses, not a "leading journal" flies to the uttermost ends of the earth, but bears consolation to the mentally afflicted, and assures them that one good man, above the desire of pecuniary reward, is ready to inform them of the means of instant cure—for one small postage stamp! Struck with the philanthropy of the idea, and desirous of disseminating the recipe of Mr. Douglas, provided it fulfilled his promises, we addressed an envelope as directed, and received, together with a small pamphlet, the following prescription.

"Alcoholic Extract of the Ignatia Amara - 30 Grains.
Powdered Gum Arabic - - - - 10 „
Make into 40 pills, and take one an hour after breakfast, and one an hour before supper, or at least an hour before retiring to rest. Half a pill night and morning will be found sufficient for very young, very aged, or very delicate persons. The pills may be easily cut if laid on a damp cloth for a short time to soften them, or may be made of the half grain size, at the time of preparing them."

Ignatia beans, out of which this alcoholic extract is to be made, the pamphlet informs us, can be procured at Butler's, the herbalist, in Covent Garden. Now let us imagine the nervous patient, trembling from head to foot, inquiring for them of the herbalist: he receives a handful of brown substances, pretty nearly of the consistence and colour of pebbles, at which of course he looks with pretty much the puzzled air with which the mastiff eyes a tortoise in a very popular French story. But of these he is requested to make an alcoholic extract! or to remain uncured. We beg pardon, there is one alternative in the before-named pamphlet, which is edited by George Hannent, M.B. (of what university we have failed to discover)—this alternative is thus mentioned.

"But when it is desirable *to avoid the trouble* (of making the extract and compounding the prescription), the same quantity may be procured from the author at an additional cost of twenty per cent., or for half a crown, which amount may be remitted by postage stamps, or by post-office order payable to George Hannent, Post-Office, Brixton."

It is curious to observe that the address of the Rev. Mr. Douglas, the prescriber, and that of Mr. Hannent, M.B., the dispenser, *are one and the same.* Of course the pure minded reader will draw no ungenerous inferences from this singular coincidence; neither will his Christian charity allow him for one moment to suppose that our priest-physician derives the least advantage or percentage from the making up of these famous pills. We cannot for one moment believe this of the Rev. Edward Douglas; especially as he tells us in his prescription that, *on his return to perfect convalescence (nearly two years since), he offered, through the columns of the "Christian Times," "Wesleyan Times," and other newspapers and periodicals, to communicate to all suffering from nervous debility, a knowledge of the means by which, he believed, they might be restored to health.* To hint, even, that this pious Christian, so actively benevolent, would endeavour to make a profit out of his beans in this roundabout manner, would be indeed ascribing to him a love of filthy lucre, and an underhand method of obtaining it which must, we know, be distressing to his benevolent heart. We cannot therefore but conclude that our priest-physician has devoted himself body and soul to saving the afflicted; that in the pursuit of this noble object he spends hundreds of pounds out of his own pocket simply in advertisements in the public papers; and that, finally, he masks his method of doing good in the manner we have indicated for the highest motives—in short, that "he does good by stealth," and would indeed "*blush* to find it fame."

It may be as well, perhaps, to observe, on the behalf of the public, that the Ignatia bean which is prescribed in this wholesale manner by this reverend gentleman, is nothing less than nux vomica, the essential principle of which is strychnine! A word to the wise is enough.

THE DISEASES OF ARTISANS.

It is our intention shortly to lay before our readers a long projected series of articles on the Diseases of Artisans. Some time since a Committee of the Society of Arts issued a report upon this interesting subject, which only served to show how little was really known of a class of maladies created by the manufacturing energy of the country, and attacking, in most cases, its skilled labour. In order to elicit information, the Society subsequently issued a series of queries to medical men, but they fell on dull ears, and brought forth few replies. We hope, and, indeed, intend to be more successful; applying ourselves, as we do, directly to the sources of information scattered throughout the length and breadth of the land.

The series will be commenced immediately by a paper on the Grinders' Disease, by Dr. J. C. Hall, of Sheffield; this will be followed by an article on the Influence of some of the Trades of Birmingham upon the Sight of the Employed, by J. V. Solomon, of Birmingham. Many other eminent associates have promised us contributions on the effect of flying particles upon the lungs, in the cotton and woollen manufactories, etc. Mines, coal-pits, spelter-works, and the multifarious manufactories of all kinds which give to England the name of the workshop of the world, will, by the aid of our associates, who are to be found wherever our busy workers are congregated together in these isles, furnish their quota of characteristic diseases. We shall feel obliged, if any such shall have come under the cognizance of our readers, if they will kindly furnish their aid in completing the series. In the volume for 1855, at page 81 and 88, will be found some valuable hints and suggestions in the reports of the Committee of the Society of Arts, which those who intend to kindly furnish us information will do well to consult, inasmuch as they point out the kind of information we shall be glad to receive. It should be borne in mind, however, that the aim and scope of these articles should be something more, if possible, than those of merely surgical or medical papers: they should strive at giving pictures of the various social and industrial conditions which lead to the special diseases of the workers; they should also comprise statistical information, if possible, as to the number of the workmen in each class of manufacture, so that the extent of the evil may be judged; and it should not be forgotten, that an all-important point will be the suggestion of such contrivances and appliances as shall prevent the diseases we speak of. Papers written in such a spirit will take a prominent place in the Industrial Hygiene of this great country—a department of philanthropic labour which has yet to be organised, and towards which, we trust and believe, our associates will in these papers greatly contribute.

THE WEEK.

The Walworth tragedy has put on a new and extraordinary phase. It will be remembered, that a woman named Martha Bacon was some time since charged at the Lambeth Police Station with having murdered her two children. This charge the mother stoutly denied, asserting that the dreadful deed was done by a man who came in at the window during the night. Her story, however, was disbelieved, and she has been for some time under remand, in the hope that further information would clear up the mystery which hangs over the affair. Since the first examination, the inquiries of the police have led to the belief that the poor woman's story may be true after all. Her husband, for instance, has contradicted himself in so extraordinary a manner with respect to money said to have been stolen from the house by the supposed murderer and thief, and he has given so many different accounts of the manner in which he received a severe cut on the hand, that suspicion has for some little time attached to him as the author of the cruel deed. On Wednesday this suspicion was to many people confirmed, by a very extraordinary communication made in writing by the accused woman, and read by the magistrate, Mr. Elliott, in open court. It was to the following effect:—

"Sir,—I must confess I am an innocent person, and he who committed the dreadful deed is my husband; and there was no money on the drawers. He took the little boy down stairs, put him in a chair, and there cut his throat. He then went upstairs and cut the little baby's throat. "Martha Bacon."

The husband, who was present during the reading of this startling document, seemed almost stunned at the charge, and subsequently denied it altogether. It must be borne in mind, that the woman, Martha Bacon, has been confined twice in a lunatic asylum, and that she has not long been discharged from the Lincoln Asylum, where she had been placed in consequence of an attack of puerperal insanity. Her story may be true, or it may be only the offspring of a disordered imagination; at all events, those of our profession interested in morbid mental phenomena will watch the further progress of the case with interest. It is but right to state, that the husband is suspected of having poisoned his mother, at Stamford, with arsenic, in May last, as her symptoms were exactly those of a person dying from the exhibition of that deadly drug. Mr. Elliott has accordingly intimated his desire to the authorities of that place that her body may be exhumed, in order that a regular medical inquiry may be made into all the circumstances of the case.

A letter, on the recent loss of the *Tyne* Steamer, published in the *Oxford University Herald*, by Dr. H. W. Acland, and copied into the *Times*, contains some very pointed remarks on the danger to human life arising from eagerness for expeditious travelling. While praising the conduct of the officers and crew of the vessel under the trying circumstances in which they were placed, Dr. Acland goes on:—

"I must say that I think we, the public, have blame in this and all similar matters. So much stress is now laid on expedition in all steam transit by sea or land that, practically, hours are often more valued than lives. Speed is attained by increased risks, and by increased expenditure of various kinds. The faster the public choose to go, the more lives will from time to time be lost; and though we may, when accidents occur, throw back the responsibility on the professional men who have been thus goaded on, yet still our impatience of delay is at the bottom of the mischief in a great number of the cases. The old habits of seamanship, keeping well off lee shores, heaving to in fogs, waiting for pilots, and so forth, may be too antiquated for the days of steam and the age of hurry; but as long as winds, fogs, currents, and reefs, and the ordinary physical and moral infirmities of men exist, these old habits, if slow, will still be at least safe.

"The papers tell us that this great packet company has lost nine fine ships, and I read of the total wreck, during my absence, of the Ostend packet, under an old and valued commander, when it was blowing a gale of wind at night. If we knew the hearts of all these and scores of other captains, how many would inform us that 'their character was at stake—that, prudent or not, they must go!' The fact is that the public generally do not know what the wear and tear of professional men in their several avocations really is, or, knowing, they do not think about it. Each person has a want, this want is to be supplied, and the whole system becomes one of unhealthy and dangerous high pressure, doubled by competition, and little noticed while successful, because familiar.

"Whether these remarks apply to the present instance others must decide; but, as a working man myself, I feel a resentment if a system urges on its agents, and then turns on them for the consequences. Employers should ever bear in mind that good professional men, especially soldiers and sailors, value, as a matter of course, duty first and their own life second. With what circumspection, therefore, is the standard of duty to be imposed!"

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 6th, 1857.

Cæsar Hawkins, Esq., F.R.C.S., President, in the Chair.

ON THE DETERMINING CAUSES OF VESICULAR EMPHYSEMA OF THE LUNG. BY WILLIAM JENNER, M.D., F.R.C.P.

After referring to the importance of ascertaining the determining cause of pulmonary vesicular emphysema as a guide for its prevention, and to the predisposing influence of all changes in the structure of the lung which impair its contractility, Dr. Jenner adverted to the fact, that the only force capable of unduly dilating the air-cells called into play during respiration is the pressure of air on their inner surface. He then briefly recapitulated the inspiratory theory at present generally received, and quoted the following passage from the latest exponent and most powerful advocate of that theory :— "The act of expiration tends entirely towards emptying the air vesicles by the uniform pressure of the external parietes of the thorax upon the whole pulmonary surface; and even where the air-vesicles are maintained at their maximum or normal state of fullness by a closed glottis, any further distension of them is as much out of the question as would be the further distension of a bladder blown up and tied at the neck by hydrostatic or equalized pressure applied to its entire external surface." (Dr. Gairdner's *Monthly Journal of Medical Science*, vol. xiii, p. 10.) The object of his paper, Dr. Jenner stated, is to show, in opposition to these views, that the force called into play by powerful expiratory effort is by far the most common and efficient cause of vesicular emphysema of the lung. Powerful expiration is, Dr. Jenner affirms, infinitely the most frequent determining cause of acute vesicular emphysema, and of the chronic vesicular emphysema which accompanies chronic bronchitis. It is probably the constant determining cause of the vesicular emphysema which supervenes on chronic congestion of the lungs and bronchial tubes, and on diseased heart, and of the atrophous emphysema of the aged, and the invariable determining cause of vesicular emphysema whenever it is general, or occupies chiefly or only the apex and border of the lung, and whenever the dilatation of one or more vesicles is extreme. Dr. Jenner denies that during expiration every part of the lung is equally supported and equally compressed; and he affirms that the apex, the anterior margin, the margin of the base, and some parts of the root of the lung, are at once imperfectly supported, and comparatively or absolutely little compressed only during expiration. The thoracic parietes covering those parts of the lung, which are the least supported and compressed, are those which are seen when a person makes a powerful expiratory effort with a closed or imperfectly opened glottis, as in hooping-cough, croup, and hypertrophous emphysema, to be driven outwards. These same parts are the most common seats of emphysema. Three cases are detailed by Dr. Jenner in illustration of his position. In proof of the force exerted on the air-cells of the lungs when powerful expiratory efforts are made with a closed glottis, mention is made of the well-known fact, that during the expulsive efforts of labour one or more cells occasionally give way. In a postscript, the author mentions that he had examined several horses for the purpose of ascertaining whether the parts of their lungs affected with vesicular emphysema were situated in those parts of the thorax the least supported and compressed during expiration, and that in all he found such to be the case.

HARVEIAN SOCIETY.

Thursday, January 8th, 1857.

F. H. Ramsbotham, M.D., President, in the Chair.

A CASE OF IRREGULAR INTERMITTENT TETANIC CATALEPSY, WITH REMARKS. BY WILLIAM CAMPS, M.D.

Dr. Camps stated that he did not make this communication to the society as one of very great practical interest, for happily instances of cataleptic seizure are of rare occurrence; but rather with the view of eliciting by discussion some remarks on the physiology and pathology of muscular contraction. He was well aware that, in by far the greater number of cases of catalepsy that have been recorded, the condition of the voluntary muscular apparatus has been one of suppleness and plasticity, easily yielding to the efforts of bystanders, and but seldom, as in the present subject, one of rigid tetanic contraction, altogether opposing itself to all attempts at movement. So much has this former condition been remarked in cases of catalepsy, that some authorities contend strongly that the term catalepsy should not be applied to the disease unless it be marked by a supple yielding condition of the voluntary muscles; but the author perceived no reasonable objection to admitting the existence of the cataleptic state, even though, very rarely, as in the present case, the voluntary muscular apparatus was in a condition of rigid tetanic contraction. Could we witness any sight more surprising than that of a fellow creature suddenly seized with complete stupor, attended with total loss of power as regards voluntary muscular movements, whilst occupied in the ordinary avocations of life, and yet, so far as these movements are concerned, yielding almost complete obedience to the efforts of a bystander; totally deprived, at least to all appearance, of the customary use of his or her senses, and at the same time presenting, in addition, an assemblage of psychological phenomena of the most remarkable description? Ordinarily there need be no confusion between catalepsy and tetanus, except in those very rare cases, like the present, in which the catalepsy is attended with almost insurmountable rigidity. Commonly the two diseases are sufficiently distinct, and diagnostically characterised; but in the case under consideration some of the symptoms of each disease were so intertwined, as to justify the designation of *tetanic catalepsy*.

The subject of the present history was a female, aged 14, small, and rather short in stature, delicate looking, with a very pleasing countenance; the frontal development being very good, the complexion pale, the hair brown. The menstrual function had commenced with her, and had been repeated a few times, but had been altogether suspended from the commencement of this disorder; since which time she had expressed little or no desire for food of any description when she woke up, whereas her desire for liquids was considerable. She passed a good deal of urine in her bed, and occasionally an alvine evacuation, small in quantity. During at least ten weeks previous to the cataleptic seizure she was observed by those about her to be in an unhealthy state, unable to do her customary work; evidently low and depressed in her physical condition. She was not, however, confined to the house, or to bed, but followed her ordinary duties in a sluggish manner. These duties, for the most part, consisted of household work, with some amount of out door field labour, as is common with young women living in agricultural districts. Dr. Camps had the opportunity of seeing this patient on two separate occasions, on Wednesday, and on the Friday following, for some length of time at each visit. At his first visit she was waking up from the cataleptic state, and some parts of the trunk were slightly convulsed; but the extremities were in a state of the most rigid contraction, utterly immovable; yet at the *very instant* at which she woke, and recovered her consciousness, this rigid contraction disappeared, and the parts affected therewith assumed their natural condition. The phenomena observed in the various parts of the body during the waking state lasted about half an hour or more. On waking, her consciousness and intelligence were entire; she replied intelligibly to questions, answering in a low tone of voice. She was evidently much exhausted, and said she felt very weak. She remained awake a little more than an hour, when she again relapsed into the state of cataleptic seizure, accompanied with tetanic rigidity of the extremities. At the second visit made by Dr. Camps, which was two days subsequently to the first visit, he found the patient in a profound slumber, out of which she could not be aroused by any ordinary means. The extremities were in a state of excessive tetanoid rigidity, resisting all reasonable efforts to flex or extend them. These attacks of intermittent, irregular muscular contraction, attended with loss of consciousness, continued to affect this young patient for a period of upwards of twenty weeks, lasting, commonly, from one to two, or even three days. The intervals during which she regained her natural state, were of the duration of only half an hour or more. She has ultimately recovered her health, the cataleptic attacks having disappeared, although leaving her considerably weakened in body. Before recovery, as Dr. Camps was informed, the patient had several attacks of convulsions; and on one occasion only she had delirium, attended with some degree of violence.

Editor's Letter Box.

REMUNERATION FOR MEDICINES.

SIR,—After the delivery of my Christmas accounts, one of them was returned to me in the same envelope with the following note:—

"A. B. begs to return the enclosed bill to C., feeling sure there must be some mistake, as his attendance has been so seldom required during the past year."

[COPY.]	*A. B. to C.*	*Dr.*	
1856.		*s.*	*d.*
Jan. 10th.	A visit (¼ mile off), Miss L.	1	6
„ 19th.	Bottle of mixture (12 oz.), self	5	0
Feb. 2nd.	The like	5	0
„ 12th.	Box of pills (24)	2	6
„ 16th.	Mixture.—29th. Mixture	10	0
March 16th.	Mixture.—29th. Mixture	10	0
April 11th.	The like.—21st. The like	10	0
May 3rd.	The like.—12th. Pills (24)	7	6
„ 16th.	Mixture.—29th. Mixture	10	0
„ 31st.	Visit	1	6
June 11th.	Mixture.—26th. Mixture	10	0
Aug. 11th.	The like.—25th. The like	10	0
Sept. 6th.	The like.—20th. The like	10	0
Oct. 1st.	The like.—14th. The like	10	0
„ 23rd.	The like	5	0
Nov. 1st.	The like	5	0
„ 16th.	Mixture (8 oz.), Miss	3	0
„ „	Visus sub vespere, Miss L.	2	6
„ „	Mixture (8 oz.), ditto	3	0
„ 18th.	Visit.—20th. Visit	3	0
„ 20th.	Mixture (8 oz.), Miss	3	0
„ 22nd.	Box of pills (12), ditto	2	0
„ „	Visit, Miss L.	1	6
„ 24th.	Mixture, Miss	3	0
„ 26th.	Visit	1	6
„ „	Box of Pills (12), Miss L.	2	6
„ 28th.	Mixture, Miss	3	0
„ „	Pills	2	0
Dec. 2nd.	Visit	1	6
„ 8th.	Pills (12), Miss L.	2	6
		£7	7 0

The father sends for his medicine voluntarily; and, in consideration of the expense of it, I treat the others as much without expense as is practicable. For an instance, Miss L., having become weakly from colds, required steel for a fortnight; so she had a full dose of the sulphate of iron in a pill twice daily with meals, for which course of steel medicine she was charged 5*s*.

In the present instance, what charges would pass through a court of justice—"For medical attendances, medicines, etc., during this year—yourself and two daughters"? What charges would remunerate me, or would be fair towards my professional neighbours?

Is it not desirable occasionally to publish such difficulties as this one in reference to remuneration for professional services, in order that the members of our Association may agree upon some scale of charges to the public?

The parties in question are in easy circumstances.

I am, etc., INQUIRER.

THE MEDICAL PROFESSION AND THE DIRECTORIES.

SIR,—Permit me to congratulate the Association that the conducting of its weekly JOURNAL has fallen into the hands of a gentleman so disposed to maintain the dignity and social importance of the medical profession as is apparent in your remarks on the *Medical Directories* in last week's number. You complain with justice that, in the general directories of the day, the proper place is not assigned to our profession, but that it is absorbed into the multifarious trades of the metropolis. This is to be lamented; but it is not to be wondered at, when we find the great majority of general practitioners content to send in a bill in which remuneration is claimed only for the number of pills, draughts, and blisters, which have been supplied. I have before me a specimen of such a bill, together with one from my grocer, and will give you an extract from each, by which you will see that the only difference is in the nature of the articles charged for.

Surgeon's.	*s.*	*d.*	*Grocer's.*	*s.*	*d.*
To a box of pills	1	0	To 1 lb. of tea	4	6
Mixture	2	6	3 lbs. brown sugar	1	0
Box of cerate	1	0	4 lbs. cheese (1*s*.)	4	0
Gargle	1	6	6 pints fresh butter	8	0
Lancing infant's gums	2	6			

While this custom exists, can it be a matter of wonder that the public confound the profession with the trade; and that Mr. Jenkins, surgeon, etc., figures in the directory, as you remark, between a tailor and a cheesemonger? When the time arrives that the general practitioner regards the medicine supplied in the same light as his scalpel and tourniquet, as the mere appliances of science, and charges for his skill and not for its instruments, then only will the public learn to treat the members of a learned profession as they ought to be treated, and then only will they find their names removed from the list of tailors, cheesemongers, *et hoc genus omne*.

There is no denying that the indignities which are heaped on the medical profession are its own seeking. Where there is no self-respect, but, on the contrary, any and every toleration of self-abasement, in order to displace or give the go-by to a rival; so long as the Taylors and Godwins of the profession abound,—it is hopeless for us to expect to meet at the hands of the public that respect and deference which should be the due of a learned and so indispensable a profession as that of medicine.

I am, etc.,

ONE JEALOUS OF THE HONOUR OF MEDICAL SCIENCE.

POOR-LAW SURGEONS AND POOR-LAW GUARDIANS.

SIR,—Admitting Boards of Guardians to be composed of "gripple tradesmen and coarse-minded farmers," the profession is at least indebted to them for refusing to adopt the price of hay, corn, and horseflesh, as the basis on which the salaries of their medical officers should be fixed. Mr. L. Owen Fox says, "as *the price of hay, corn, and horseflesh* has advanced, I am compelled to apply for an increase of salary;" in answer to which the guardians "decline to augment the salary of Mr. Fox" .... "*for the reasons stated in his application.*"

Mr. Edmund Cockey writes, "during the winter it is one horse's work to take me through the district; so that, after paying for medicines, *gates, etc., in addition to horse's keep, and wear and tear*, you will see that very little can be left." It is also made to appear by Mr. Griffin's figures that this said horse, etc., costs the annual sum of £87 6*s*, *a fact* which, I imagine, the guardians were slow to believe, and they, too, decline to augment Mr. Cockey's salary, probably like their brethren of the Romsey Union, "*for the reasons stated in his application.*"

Again Mr. Griffin, in his appeal to the Poor-law Board, founds his claim to two guineas, not alone on the importance of the case, but that he had to travel on a cold, rainy night (I hope Mr. Griffin does not think the "gripple tradesmen" had anything to do with the weather on this occasion), and *to pay for the hire of a carriage*. As the Board does not appear to have issued any order for payment, I fear they do not admit the validity of "*the reasons stated in his application.*"

Allow me, Sir, to contrast the position of a well paid officer of an union with that of the medical officer; I allude to the clerks. Were he dissatisfied with the amount paid him, would he say, "As the price of quills and foolscap has advanced, I am compelled to apply for an increase of salary?" Would he not rather attempt to prove to the guardians that the amount of professional skill brought to bear on their interests was worthy of a higher emolument? Are not his energies strictly confined to the sphere of his duties? do we find him rushing Quixote-like to the relief of every grievance which a pauper supposes to affect him? Let medical officers remember that, when they are supplying medical attendance without proper authority, they may be doing a charitable act (though probably not so frequently as they suppose), but that it is dishonest to include these services in the duties required of them under their agreement with Boards of Guardians. That poor-law

medical officers are inadequately remunerated, all agree; but I humbly submit to them that the talent and skill exercised in the relief of human suffering is a better plea for increased salary than "*the advanced price of hay, corn, and horeflesh.*"

I am, etc., C. H.

January 20th, 1857.

PREVENTION OF POISONING BY LEGISLATIVE ENACTMENTS.

Sir,—Will you allow me most respectfully to hint a doubt of the force of your inference drawn from the circumstances of the poisoning of Mr. Marcooly, that "this case seems to prove that no legislative enactment can possibly provide against the carelessness of individuals." It is a fact that legislative enactments in Ireland have provided against that form of carelessness—I might use a harsher phrase—which permits ignorant boys from dispensing deadly poisons in apothecaries' shops.

If the apothecaries of England were, like the Irish apothecaries, persons educated for their business of compounding and dealing in medicines, there would be fewer cases of murder perpetrated in that manner. I am, etc. H. M.

Dublin, January 12th, 1857.

THE REMOVAL OF CATARACT BY EXTRACTION.

Letter from J. V. Solomon, Esq.

Sir,—I commenced a paper upon the above subject (Association Journal, Dec. 27th) by saying: "The *traditional* practice of the Birmingham Eye Infirmary, which was founded in 1823 by Mr. Hodgson, has been to extract hard cataract, the pupils having been previously dilated; to delay the operation till the patient is quite blind, or nearly so; and to remove both cataracts on the same day, while the patient is in the recumbent posture; the upper section of the cornea being performed in the right eye, and the lower in the left.

"As most of these points have been recently adverted to in the pages of the Association Medical Journal, I may be permitted in this place to concisely state my opinions thereon, which are based upon observations made at the Birmingham Eye Infirmary, and on experience obtained in private practice, since the early part of the year 1848."

I perceive, by my colleague Mr. Chesshire's letter in the Journal of January 10th, that *he has misinterpreted my use of the word "traditional"*, which was italicised in my communication to show emphatically that it referred to the practice of former surgical officers to the institution, in contradistinction to that of the present acting medical staff. On reflection, I see no reason for an alteration in the mode in which I have expressed myself thereon.

I am, etc., J. Vose Solomon.

96, New Hall Street, Birmingham, January 14th, 1857.

ALLEGED DEPOSIT OF FAT IN THE PERICARDIUM.

Letter prom William Davies, M.D.

Sir,—In a communication by Dr. Jeaffreson of Leamington, published in the Journal of January 10th, there occurs the following passage in the description of the *post mortem* examination of Case II:—"On reaching the heart, we were much puzzled to believe that it could be that organ, for in its position *in situ* it looked more like a bag of fat invested by a thin semi-transparent membrane; this deposit of fat was placed between the pericardia, very firmly and uniformly adherent to the reflected, less firmly and generally to the true pericardium. The firmness of its adhesion to the true pericardium differed considerably in different parts, and there was also some little fluid in the pericardial cavity. The thickness of this deposit of fat varied from the eighth to upwards of a quarter of an inch."

It is here stated that there was found a deposit of *fat* varying from an eighth to a quarter of an inch in thickness between the layers of the pericardium, and adherent to the surfaces of that membrane. This is the statement of a new fact in pathological anatomy. The appearances described are familiar to every hospital physician; and if the word lymph or fibrine be substituted for the word fat, the case becomes one of ordinary pericarditis, with which malady the symptoms immediately preceding death, and the manner of dying, sufficiently well correspond. I am, etc.,

William Davies.

Bath, January 12th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Crozier. On December 8th, 1856, the wife of William Garsten, Esq., Civil Surgeon H.E.I.C.S., of a son, at Jubulpore, East Indies.

*Day. On January 11th, the wife of Robert N. Day, Esq., Surgeon, of Harlow, Essex, of a son.

France. On January 17th, the wife of John F. France, Esq., Surgeon, of Bloomsbury Square, of a son.

Glissan. On January 12th, the wife of James Glissan, Esq., Surgeon, of Leonard Square, Finsbury, of a son.

*Jones. On January 16th, the wife of John D. Jones, M.D., of Dalston, of a son.

Marshall. On January 13th, the wife of Edward Marshall, Esq., Surgeon, of Mitcham, Surrey, of a daughter.

MARRIAGES.

Turner—Stirling. Turner, Michael William, Esq., Surgeon in the Peninsular and Oriental Company's Service, to Elizabeth, fifth daughter of Lieutenant Stirling, R.N., of Exeter, at Hoxton, on January 14th.

DEATHS.

Blanch, Gustavus William, Esq., Surgeon, of Merrick Square, Southwark, aged 48, on December 26th, 1856.

*Evans. On January 17th, at Bath, after a few hours illness, Alice Mary, only daughter of Evan Evans, Esq., Surgeon.

Evans, James John, Esq., Surgeon, at 8, Holland Street, Clapham Road, aged 41, on January 17th.

Gray, Joseph Bower, A.M., M.D., Principal of Berwick College, Maine, United States, and formerly of Chelmsford, of typhus fever, aged 39, on November 1st, 1856.

Hosken, R., Esq., Surgeon 2nd Battalion Light Cavalry, H.E.I.C.S., at Nusseerabad, on November 30th, 1856.

Price. On January 18th, Julia Bella, youngest daughter of David Price, M.D., of Margate.

Williams, Thomas, Esq., late of the Madras Medical Establishment, at Cheltenham, aged 70, on January 11th.

APPOINTMENTS.

Barclay, A. Whyte, M.D., elected Assistant-Physician to St. George's Hospital.

*Holthouse, Carsten, Esq., appointed Surgeon to the Westminster Hospital, in the room of C. G. Guthrie, Esq., resigned.

Pitman, H. A., M.D., elected Physician to St. George's Hospital, in the room of Dr. J. A. Wilson, resigned.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, January 16th, 1857:—

Baker, Thomas Stephen, Moreton-in-Marsh
Dickin, William Acherley Parkes, Wem, Shropshire
Gilmour, Robert, Royal Navy
Harkness, William Warwick, Dalston Lane, Hackney
Paterson, Andrew, Dumfries
Prestwich, Joseph, Radcliffe, near Manchester
Pyle, Thomas Thomson, Earsdon, Northumberland
Ruddock, William, Keighley, Yorkshire
Whittaker, John Henry, Louth, Lincolnshire

At the same meeting of the Court—

McSorley, Edward
Coogan, John

Passed their examinations as Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively June 28th, 1850, and August 2nd, 1852.

HEALTH OF LONDON:—WEEK ENDING JANUARY 17TH, 1857.

[From the Registrar-General's Report.]

IN the week that ended on Saturday the deaths registered in London were 1171. Of these 582 were deaths of males, 589 those of females. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1219, but for the purpose of comparison this should be raised proportionally to increase of population up to the present time, in which case it will become 1341. The result of the comparison is that the deaths of last week were less by 170 than the average rate of mortality would have produced.

The deaths in the week from diseases of the respiratory organs (under which head phthisis is not included) were 280; in corresponding weeks of previous years they ranged from 153 in the year 1853, when the mean temperature of the week was 45°, to 386 in the cold winter of 1855, when the mean temperature of the week was so low as 29°. Since the present year commenced the weather has been mild, and the mortality from diseases of this class is not high. In the last two weeks the deaths from bronchitis rose from 140 to 170; and those from pneumonia fell from 87 to 77. Phthisis (or consumption) was fatal to 152 persons last week, of whom 73 died in the period of life 20-40 years, and 52 in the subsequent period, 40-60 years, leaving only 27 of the deaths from this disease at earlier and later ages. Hooping-cough has increased within the last four weeks; and in the present returns 55 children are stated to have died of it. Thirty-four deaths occurred from typhus and common fever; this number is not high comparatively, but it should be observed that nearly half occurred in the Eastern division, whilst only 4 or 5 deaths were registered in each of the other divisions. A family in Shoemaker-row, City of London, has lost three children in ten days from scarlatina, but the registrar has not heard that the complaint is prevailing in his district. In a house in Haberdasher's-place (East), Shoreditch, four deaths have occurred within ten weeks, arising from disease of various kinds.

The deaths of four nonagenarians were recorded in the week. The oldest was a gentleman of the age of 96 years, who died in Lambeth.

Last week the births of 966 boys and 818 girls, in all 1784 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1521.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·636 in. On Sunday (the 11th) the reading fell to 28·85 in., and on Saturday rose to 30·21 in. These values were the lowest and highest in the week. The mean temperature of the week was 36·5°, which is rather above the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer fell to 26° on Thursday, the lowest point in the week. The range in the week was 20·5°. The mean dew-point temperature was 33·9°, and the difference between this and the mean air temperature was 2·6°. The mean temperature of the water of the Thames was 40·1°. The direction of the wind was very variable; on Saturday it was south-west. The fall of rain was 0·39 in.; most of it on Sunday.

PROFESSIONAL EXAMINATIONS.

THE following analysis of a Parliamentary report, recently published, will no doubt be very interesting to many of our readers. The report in question emanates from the various examining boards in the United Kingdom, detailing the number of candidates who have offered themselves for examination; the rules, regulations, etc., relating thereto; and, in many cases, the average rejections from 1846 to 1855.

The Royal College of Physicians in London state that the number of licentiates admitted during the ten years amounted to 124, and that 17 candidates were rejected; for the extra-licentiates, 57 were successful, and 13 rejected.

The Royal College of Physicians in Edinburgh, from 1845 to 1855 inclusive, admitted 68 licentiates, members, and fellows; the proportion of the rejected being one-sixth of the whole examined.

The Royal College of Surgeons of England admitted 4,059 members, and rejected 594; of fellows, 559 were admitted, and 36 rejected. From 1852 to 1855, there were admitted 294 licentiates in midwifery, and 18 rejected; and during the same period 23 candidates were admitted members *ad eundem gradum*.

The College of Surgeons of Ireland admitted from 1845 to 1855, 14 fellows (*no rejections*); 512 licentiates (40 rejections); and 56 licentiates in midwifery, no rejections.

The Royal College of Surgeons of Edinburgh, from 1845 to 1855 inclusive, admitted 27 fellows and 1,039 licentiates, the proportion of objections of the latter being 4 in 31.

The London Apothecaries' Company, from 1845 to 1856, admitted 2,823.

The Dublin Apothecaries' Company, from 1846 to 1855, admitted 214.

The University of Oxford, from 1846 to 1855, granted the degree of M.D. to 7 gentlemen, and that of M.B. to 10.

The University of Cambridge, from 1846 to 1855, conferred the degree of B.M. on 27, L.M. on 11, and M.D. on 23, making a total of 61 degrees. The proportion of rejected candidates for the M.B. had been one in nine, and for the license one in eleven; there had been no rejections for the M.D.

The University of London, from 1846 to 1855, granted 146 degrees of M.B., and 95 of M.D. The number of rejections at the first examination for B.M. was 71, and for the second examination 35. The number rejected for the M.D. was 9.

The University of Dublin admitted, from 1846 to 1855, 26 for M.D., 106 for M.B., and 11 for surgical diplomas. The proportion of rejected to successful candidates for the degree of M.B. has been that of 1 to 14, and for surgery 1 to 5½.

The Queen's University in Ireland, from 1852 to 1855, granted 34 degrees of M.D.

King and Queen's College of Physicians, Ireland, from 1847 to 1856, admitted 7 fellows, 19 honorary fellows, and 71 licentiates; the proportion of rejected candidates being as 1 to 14.

The University of Edinburgh, from 1846 to 1855, granted 594 degrees of M.D.

The University of St. Andrew's, from 1847 to 1855 inclusive, granted 446 degrees of M.D., the number rejected being 70 in 497.

University and King's College, Aberdeen, from 1846 to 1855, conferred the degree of M.D. on 258, and rejected 60. Only 5 degrees of M.B. from 1853 to 1855 had been conferred.

University and Marischal College, Aberdeen, from 1846 to 1855, conferred the degree of B.M. on 71, M.D. on 90, total 161; the proportions of rejections being as 1 to between 7 and 8.

THE NEW WATER SUPPLY FOR LIVERPOOL.

THE long expected supply of water from the Rivington hills, twenty-six miles from Liverpool, has within the past few days reached the town, and has done more to allay the opposition to its introduction than all the speeches which have been delivered in its favour. The question of the Rivington water has been the great cause of local squabbles during the whole period in which the works have been carried on, and the town has on more than one occasion been convulsed by the bitterness of the controversy.

The scheme, as projected by Mr. Thomas Hawkesley, the eminent water engineer, received the sanction of Parliament, and has been brought to a successful close—successful, at least, as far as the construction of the works and the conveyance of water to Liverpool are concerned. The quality of the water is a debated point; one party producing favourable analyses from Dr. Taylor, Dr. Lyon Playfair, and others; and the opponents submitting to the town the antagonistic analyses from local chemists, and cautioning the inhabitants against the use of the water, which, they say, in certain conditions will be poisonous.

The results of the analysis by Dr. Taylor were as follows:—

Calculated for the imperial gallon, the solid contents amounted to 2·7 grains, consisting of—

	Grains.
Mineral matter, chiefly sulphate of lime (with traces of oxide of iron and silica)	2·0
Organic matter of a vegetable nature	0·7
Grains in imperial gallon	2·7

On Dr. Clark's scale the hardness amounted to about 1½ degrees.

"There is", says Dr. Taylor, "nothing of an unwholesome or injurious nature in any of the waters. On the contrary, they contain less mineral and organic matter than is frequently found in water supplied to towns."

The Rivington scheme comprises the impounding of the catchment, river, and spring waters of the Rivington district in three large reservoirs, formed in the valleys, its conduction into filter-beds, and its descent to Liverpool through a pipe line

twenty-six miles long. The reservoirs at Rivington cover 500 acres of land, and hold 3,000,000,000 gallons of water; the entire water-shed, in round numbers, is 10,000 acres; the rainfall, 50 inches per annum; and the undertaking will have cost between £600,000 and £700,000.

At the meeting of the council on January 12th, it was stated that the total cost of the old waterworks was £801,000, producing a weekly supply of water of 44,000,000 gallons; while the total cost of the Rivington works would be £694,772, in addition to £35,278 paid for the purchase of the Chorley Waterworks, and the supply of water would be 19,000,000 gallons per day.

Case of Poisoning by Arsenic. On Monday night an inquest, held at Chesham, before Mr. F. Charsley, one of the coroners for the county of Bucks, resulting in a verdict of "Wilful murder" against Philip White, a shoemaker of that town, for poisoning his wife, was brought to a conclusion. The inquest, which was opened on the 30th ult., was twice adjourned. On the two former occasions a number of witnesses were examined, including the prisoner's daughters by a former wife, of the ages of 8 and 13. The substance of the evidence was as follows:—The prisoner, whose first wife died some time ago of consumption, leaving four children, one son now married, a boy of 14, and the two girls above alluded to, had been married to the deceased only nine months, she being at the time of her marriage the mother of three illegitimate children, one of whom her husband had to maintain. It appears that during this period, and for months previously, Ann Seaward had been living in the prisoner's house, apparently assisting in the domestic work. Between this woman and White an illicit intercourse had been carried on previous to his second marriage, and subsequently, during the temporary absence of his wife. Her evidence further went to show that he had administered to her a drug called "hiera-picra" to procure abortion, she being in the family way during his wife's absence. It appeared that the deceased had been for five weeks nursing a woman at Chesham-common, when she was recalled by her husband, Ann Seaward having declined to remain longer in the house if his wife was away, in consequence of the remarks of the neighbours. She accordingly returned home on the 14th of December, and she died on the Sunday following Christmas-day, having been confined to her bed for a week with erysipelas. During this period the prisoner called in no medical aid, stating he owed the doctor money for his previous wife. She was attended by her mother and sister, and also by Ann Seaward; and when Mr. Dewsnap, a surgeon, was called in by the mother the day before the deceased died, he found her fast sinking and in a most neglected state, though the mother and sister appear to have done all they could for her. A witness named Mitchell swore that the prisoner on the 23rd said to the deceased she ought to have a doctor, and that she replied, "Pooh! What good could he do?" and another woman, who had taken work to the prisoner while his wife was dying, proved he had said he wished he was a single man, as he had been the Christmas before. In consequence of the neglected state of the deceased an inquest was held, when the testimony of Messrs. Farthorne and Dewsnap, of Chesham, having shown the existence of arsenic, the case assumed a more serious complexion, and the prisoner was taken into custody immediately after the first day's proceedings on the charge of poisoning his wife. On the inquiry being reopened, Mr. Joseph Heath, a chemist in the town, deposed that on the 4th of December the deceased, who was a customer of his, had purchased half an ounce of arsenic, alleging it was to poison mice. She had signed the entry required by the act, and he gave her two packages of arsenic coloured with soot, in the proportion of one-sixteenth, cautioning her to be careful as to its use. It was quite usual to supply arsenic for killing rats and mice to persons who were known. Professor Taylor deposed that he had received for analysis a jar, containing the stomach of the deceased and its contents, the intestines, a portion of the liver, one kidney, the spleen, and part of the heart. From an analysis he had come to the following conclusions:—First, that the contents of the stomach of the deceased contained arsenic, chiefly in the blood and mucus; second, that there was arsenic in the coats of the stomach; third, that the appearances presented by the stomach were such as usually attended poisoning by arsenic; fourth, that taking these appearances in conjunction with the discovery of arsenic in the mucus and blood of the contents of the stomach, and the absence of any other cause of death revealed by the *post mortem* examination, it was highly probable that the death of the deceased was caused by arsenic. A supplementary examination confirmed these conclusions. He had no doubt that a sufficient quantity of arsenic to destroy life had been taken by the deceased. The body of the deceased was not penetrated with arsenic to the extent he had known in other cases, but that might have arisen from the poison being taken only a short period before death, so that it had no time for diffusion, or it might have been taken some period before death, and removed by what was technically called elimination, or the throwing of the poison out of the body. Few persons lived more than three days after taking arsenic, and the appearances presented in this case were such as were commonly seen when the poison has proved fatal in two or three days. There was no arsenic dissolved in the stomach. The appearances were consistent either with a recent administration of arsenic in a large dose, or an old administration in several small doses. The jury returned a verdict of "Wilful murder," and the prisoner was committed to stand his trial at the assizes.

St. Mary's Hospital, Paddington. A new accident ward has been added to this hospital in accordance with an appeal eloquently urged by Mr. Coulson, the eminent surgeon, at the last annual dinner. It will shortly be opened for the reception of patients.

Medical Society of London. A paper will be read this evening (Saturday) by Dr. Ogier Ward, "On the Medicinal Effects of Ammonia and its Preparations".

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

We have received Mr. Lara's letter, but see no reason why we should give publicity to it in our Journal.

Pepsine as a Remedy for Dyspepsia. A correspondent, referring to the review of Dr. Ballard's work on *Artificial Digestion*, published in the Journal for January 10, claims for Dr. Tyler Smith the merit of having employed pepsine as a therapeutic agent many years before it was brought forward by Drs. Corvisart and Ballard. In confirmation of this claim, we have been referred to a work on *Scrofula* published by Dr. Tyler Smith in 1844. At pp. 74-7 of that work are paragraphs on the use of solution of pepsine which unmistakably show that Dr. Smith had used it as a means of remedying the stomachic disorder which often exists in scrofulous persons; and also in some cases of consumption. The merit of priority is, then, clearly due to Dr. Smith; but whether or not his book has escaped the notice of Drs. Corvisart and Ballard, we cannot pretend to judge.

Mr. Cooper appears to be a grievance monger. We cannot find room for his complaints.

M. M. Our London Hospital Reports will be resumed next week.

Communications have been received from:—Dr. Thomas Walker; Dr. Camps; Dr. Thomas Hillier; Mr. J. V. Solomon; One Jealous of the Honour of Medical Science; Mr. George May, jun.; Dr. Douglas Cohen; Mr. Stone; Dr. P. H. Williams; Inquirer; Dr. C. Handfield Jones; Dr. Edward Smith; H. M.; Mr. T. Holmes; Dr. W. Davies; Mr. E. Lister; Mr. John Hatton; Mr. Joseph Hinton; Dr. J. C. Hall; Mr. G. Southam; Mr. Samuel Cooper; Mr. J. Jarman; Dr. Samuel Bakewell; Mr. Tom Guy; Mr. Evans; Mr. E. McDermot; Mr. W. H. Michael; Dr. Markham; and Mr. Southam.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Tables for the Chemical and Microscopical Examination of Urine in Health and Disease. By Dr. Lionel Beale. London: Churchill. 1856.
2. Descriptive Catalogue of Preparations Illustrative of the Diseases of the Ear, in the Museum of *Joseph Toynbee, F.R.S. London: Churchill. 1857.
3. On the Treatment of Iritis without Mercury. By H. W. Williams, M.D. Boston. 1856.
4. Adulterations Detected; or, Plain Instructions for the Discovery of Frauds in Food and Medicine. By *Arthur Hill Hassall, M.D.Lond. pp. 712. London: Longmans and Co. 1857.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. V.] LONDON: SATURDAY, JANUARY 31, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

PLASTIC OPERATIONS ON THE FACE: TREATMENT OF VARICOSE VEINS BY LIGATURE AND SUBCUTANEOUS INCISION: ADMINISTRATION OF AMYLENE.

Mr. FERGUSSON operated last Saturday, for the third time, on a little girl who was labouring under a deformity of the face, caused by sloughing of the left angle of the mouth after fever. The child, when first admitted, presented a hideous appearance, the lower lip being deficient in its whole extent, and the upper in great part. Besides the deformity, she was much distressed by the difficulty of retaining food in her mouth while chewing, and by the constant flow of saliva. The first operation consisted in taking a piece of skin up from below the chin, in order to form a lower lip. This was successfully accomplished; the portion so displaced united satisfactorily to the refreshed edges of the cheek on each side, and thus a sufficiently full lower lip was formed, the only defect in which was, that, in consequence of the flap having contracted adhesions to the bone beneath it, especially towards the angle of the mouth, it was not sufficiently moveable. At the next sitting, a piece of the left cheek was brought down, and attached on one side to the refreshed edge of the remainder of the upper lip, and on the other to the angle of the new lower lip, in order to form a commissure to the mouth. This proceeding was also successful, but with a similar drawback as in the former operation, namely, that the new lip was too adherent to the jaw. This still left a large gap external to the newly formed left angle of the mouth, to fill up which was the object of the present procedure. The latter consisted in a division of the soft parts above the newly formed upper lip, by a V-shaped incision, so as to allow of the further displacement downwards of its external edge, which was then refreshed, and sewn to the similarly refreshed contiguous edge of the new lower lip. The hole was thus filled up, and the two lips left much more moveable, in consequence of the adhesions, which had before limited action, having been severed in the course of the dissection.*

The operation was necessarily protracted and troublesome. The patient was at first brought under the influence of amylene; but the anæsthesia so produced did not appear quite sufficiently profound: in fact, the insensibility produced by this vapour is so transient that the patient recovered sensibility during the intervals in which the anæsthetic was necessarily removed to make way for the operator. Dr. Snow accordingly substituted chloroform on a sponge. The patient still gave signs of pain, but was evidently not fully conscious. The case seemed to show that the new anæsthetic is less applicable than the old to cases where, from any cause (such as position, as in this case, the operator being single-handed, etc.), its administration cannot be continuous. In the operations which followed (amputation of the breast, excision of the eyeball, forcible flexion of an ankylosed elbow), it was given with perfect success.

* Is it out of place here to observe how much advantage might be expected, especially to plastic surgery, from the establishment of a photographic department in hospitals? Each stage of a case like this might be exhibited in photograph, and the lines of incision in each operation marked on a duplicate. Such likenesses would furnish a comment on the case more intelligible than pages of description.

Another case of plastic surgery is in the hospital, also under Mr. FERGUSSON'S care—that of a man who had lost the whole of the alæ of the nose. A piece had been brought down from the forehead, and left attached by a long bridge, its sides having united to the refreshed edges of the parts covering the nasal bones; the bridge had been turned back on the forehead, and helped to fill up the gap. At some future time, Mr. Fergusson proposes to attempt the formation of a septum nasi. A point which is observable in this case is, that the new nose has shrunk considerably since its formation, and thus the success has been less perfect than it would otherwise have been. We shall perhaps have occasion to recur to this tendency of parts supplied with less blood than natural to shrink in size, when illustrating another part of plastic surgery. We shall not fail to keep our readers informed of the progress of these two cases.

A case at present in King's College Hospital, under the care of Mr. HENRY LEE, illustrates the advantages of a plan recently invented by him for the radical cure of varicose veins. The patient is a female, of middle age, who had been suffering from great distension of the saphena vein in two places. The trunk of the vein was much enlarged about the middle of the thigh, and a cluster of varicose veins existed at the upper part of the calf. There was also a small ulcer on the leg.

The plan adopted by Mr. Lee is as follows:—Two needles were passed underneath the enlarged vein, at a distance of about two inches from each other, and a suture twisted around each. Care was taken not to wound the trunk of the vein itself. This proceeding was followed by adhesive inflammation around the part operated on, whereby the trunk of the vein was obliterated by coagulum. Three days after the passing of the needles, the vein was divided by a subcutaneous incision midway between the needles, and slight pressure applied by means of a pad of lint. On the fifth day, the needles were withdrawn. The operation succeeded completely at both points; and, ten days afterwards, the patient was completely well, and able to leave the hospital, so far as respected the disease for which she originally applied for admission. She was kept in, however, on another account. When seen, seventeen days after the commencement of the treatment, the vein appeared to be permanently obliterated at both points; the depressions corresponding to the points of section being quite perceptible, and the vessel above and below reduced to a solid cord, which was steadily shrinking from its original size. The ulcer was cured.

This method appears to unite the advantages of the two spoken of by Sir B. Brodie in his *Lectures on Pathology and Surgery*, pp. 189, 190, as having been adopted by himself and M. Velpeau respectively for the cure of varicose veins by subcutaneous incision and by ligature. The adhesive inflammation which follows the application of the ligatures renders the subsequent subcutaneous incision of the vein a perfectly safe proceeding, as the absence of hæmorrhage much increases the prospect of union of the little wound by first intention; and even if it, or the needle-tracks, should suppurate, there is no chance of the passage of matter into the venous circulation, in consequence of the interposition of a considerable clot between each of these and the heart; besides which the tracks of the needles are external to the canal of the vessel. Whether the cure will be permanent is a point which can of course only be determined by subsequent observation; even if not, the patient is for the present delivered from a very annoying infirmity, and has probably a long interval of health, at the expense of a treatment which appears neither painful, dangerous, nor protracted.

Apropos of amylene, a singular fact was related to us by Dr. Martin of St. Bartholomew's. He was administering this vapour to a patient who was about to submit to the operation of lithotrity, not for the first time. An ounce and a half of the fluid was administered in Dr. Snow's inhaler, and the operation performed. The patient, however, showed every sign of perfect consciousness during its performance, and declared,

both at the time and directly afterwards, that he felt as much of the operation as on the previous occasion, when no anæsthetic was given. Three days afterwards, on his being questioned, it was found that he had completely lost all recollection of the matter—that the operation had passed out of his mind, and that he knew no more about it than if he had been completely narcotised. It should be observed that the patient was a man of average intellect, and showed no other symptoms of defective memory. (T. H.)

ST. MARY'S HOSPITAL.

CASES OF DISEASE OF THE STOMACH.

Under the care of F. Sibson, M.D.

[*From notes supplied by* Mr. Hart, *House-Surgeon.*]

Case I. *Profuse Hæmorrhage, probably from an Ulcer of the Stomach. Large quantities of stimulants given. Hydrocyanic acid. Cure.* Mary C., aged 30, a cook, was admitted August 26th, 1856, on account of profuse vomiting of blood. This had occurred two days previously three times, to the extent, it was said, of a pint each time, the blood being "black and congealed." She had always enjoyed excellent health; the catamenia were regular, and were present at the time of the hæmatemesis. She knew of no cause for the attack, and had not previously suffered from pain or uneasiness at the stomach. The vomiting was preceded immediately by sensation of cold in the epigastrium, and by nausea.

On admission, her symptoms were merely those of weakness from loss of blood. Percussion and auscultation showed an apparently healthy condition of the viscera, both of the chest and abdomen, and she could bear pressure anywhere without pain. She was ordered to suck ice, and confined to simple diet. A mixture, containing fifteen drops of oil of turpentine was given every three hours, and a blister applied to the epigastrium. No vomiting occurred for two days, when she brought up a small quantity of clotty grumous-looking blood. The mixture was repeated every other hour, and the blister repeated, and a pill, containing a grain of acetate of lead and an equal quantity of opium, was given every hour. The hæmatemesis, however, occurred next day to the extent of more than a pint, with symptoms of great prostration; thready pulse, pale lips, cold breath, etc. Acetate of lead was now given in very large doses. On the following day the vomiting had not recurred, but she was so excessively weak, that it was thought necessary to give stimulants. Accordingly three ounces of brandy were allowed, with ice and cold beef-tea. The bowels acted on September 11th, the motions containing a good quantity of blood. During the next three days she lay in a very critical condition; the hæmatemesis did not recur, but blood continued to pass from the bowels, and she was in a state of extreme prostration, the pulse being hardly perceptible. The quantity of brandy was increased to five grains daily, and she was ordered to take citrate of ammonia and iron. Under this treatment she continued to gain strength during the next week; the pulse and colour improved, and there was no more vomiting: the motions also assumed their natural appearance. On the 12th of September she vomited her food once; and on the 14th complained of very acute pain in the stomach, accompanied by much collapse. The brandy was continued, diffusible stimulants given, and a blister applied. Under this treatment she so far improved that there was no recurrence of the hæmatemesis during the month; but the pain in the epigastrium and left hypochondrium continued, and these parts were tender to the touch. She was treated with taraxacum and hydrocyanic acid; a liberal allowance of nutritious food was given, and an increased quantity (seven ounces) of brandy. It is unnecessary to follow the details of this case further. Her strength gradually advanced, and she was sufficiently recovered, by the middle of October, to be allowed to leave the house for an hour. Still she occasionally vomited her food, and frequently suffered from nausea and pain after eating. This latter symptom disappeared early in November, and she was discharged at the latter end of that month, three months after admission.

Case II. *Hæmatemesis and Pain probably from Ulceration of the Stomach: Treatment by repeated Blisters, Opium, and Oxide of Silver: Cure.* Ellen T., aged twenty-four, a domestic servant, was admitted September 16th. She had suffered from hæmatemesis five years ago. The present attack had lasted about a month, the prominent symptoms being pain in the left hypochondriac region and vomiting of food. She had also vomited blood, but not constantly, nor in very large quantity. At the time of admission she was excessively weak, apparently in consequence of an almost total inability to retain food; no visceral disease was detected. She complained of great pain over the region of the stomach; the tongue was clean. Leeches were applied to the epigastric region with much benefit, a purge and enema administered, and a blister three days afterwards to the part. Milk diet was given, but she could not take much food. A mixture containing four drops of dilute hydrocyanic acid was now ordered, and appeared to allay the sickness after food. She still, however, complained of acute pain after eating. Blood having been passed on one occasion from the bowels, tannic acid was given in four grain doses three times a day, and the bleeding did not recur. The pain was combated by repeated blisters; still but little relief was obtained. On October 20th, she was ordered a grain of opium and a third of a grain of oxide of silver, to be taken three times a day, and the blister was repeated. From this time the pain diminished, and after a week's persistence in the medicine, began to yield rapidly. She was discharged cured two months after admission.

Case III. *Obstinate Dyspepsia: Vomiting of Food: Sarcinæ in the Vomit: rapid Cure, from Oxide of Silver and Opium.* William S., aged 35, was admitted October 7th. He was a tailor, who had been working in a close, unhealthy room, and had suffered in consequence from obstinate derangement of digestion and constipation. He had been conscious of a sensation of weight in the stomach, especially after food, for the last half year; and during four months of that time had been troubled by vomiting, at first only occasional, but latterly following every meal. Sometimes the whole of the food was rejected immediately, though usually it remained for about half an hour, and then about half was rejected. He had taken hydrocyanic acid with liquor potassæ, bismuth, etc., without experiencing any benefit. In these four months he had lost three stone in weight; and on admission presented an extremely cachectic aspect. He was left without medicine for three days, and dieted on nutritive fluid aliment; under this treatment his aspect improved, and he felt stronger; but the vomiting was constant. Sarcinæ were found in large numbers in the fluid ejected, which was estimated to contain about three-fourths of his food. On the 10th he was ordered a grain of opium and a third of a grain of oxide of silver three times a day, and a blister to the epigastrium. Under this treatment the vomiting subsided with great rapidity. On the 14th it is noted that he had only vomited twice in two days, each time after food, and the nausea was no longer a prominent symptom. The blister was repeated, and extract of belladonna with opium ointment applied to the raw surface. The vomiting did not recur after this date; but the pain after eating, especially solid food, persisted for about a fortnight. This also diminished to a mere sense of weight, and in a month after his admission he was well enough to be made an out-patient. The oxide of silver was continued the whole time, latterly diminished to a quarter of a grain, with an equal quantity of extract of belladonna.

Remarks. We have cited these cases out of Dr. Sibson's clinical book on account of their great practical interest. In the first two, there was every reason to believe in the presence of organic lesion. The great amount of hæmorrhage in the first case, the persistent pain in the part, together with the regularity and healthiness of all the other functions, left hardly a doubt on the point. Notwithstanding, however, the assumed presence of ulceration of the wall of the stomach, her extreme prostration rendered it necessary to keep her alive by large quantities of stimulants; in fact, she was much in the same condition as a woman exhausted by flooding. It is interesting to observe that the direct application of the spirit to the ulcerated mucous membrane did not seem to have any effect in increasing the hæmorrhage; nay, that after the commencement of this treatment hardly any fresh bleeding occurred. In the next case, although the evidence of ulcer was not quite so convincing, still the occurrence of previous hæmatemesis, the persistent pain, and the absence of any other cause for the symptoms, pointed to this as the most probable diagnosis. In this, as in the second case, one of obstinate functional derangement, the influence of the oxide of silver in allaying the irritability of the stomach was most marked. In all of them, blisters appear to have been of signal service. (T. H.)

WORCESTER INFIRMARY.

CASES OF DISEASE OF THE EYE.

Under the care of H. D. CARDEN, Esq., and H. W. BUDD, Esq.

[*Reported by* ERLIN CLARKE, M.B., *House-Surgeon.*]

CASE I. *Opacity of Capsule.* T. Gale, aged 29, formerly a soldier serving in India, until lately held a situation as attendant in a lunatic asylum, but was obliged to give it up from increasing defect of vision. He was admitted into the Worcester Infirmary, September 10th, 1856, under the care of Mr. Carden. It appeared from his statement that, some years ago, he was affected with traumatic cataract of the right eye, when he applied to Mr. Carden, who lacerated the capsule and broke up the lens, which was afterwards completely absorbed; but no useful amount of sight was recovered. Since that time, he had entirely lost the sight of the right eye.

The state of the eyes on admission was as follows:—The right eye presented a dilated and fixed pupil, with an opaque flake of the capsule of the lens lying across the pupillary aperture; the iris was of a greenish hue; the globe of the eye was of healthy firmness, and quite free from tenderness or pain. The left eye was apparently healthy; the iris was grey, and acted freely. Both eyes were rather prominent. Vision with the left eye was sufficiently clear to enable him to move about with freedom; but he was unable to read or to see anything distinctly, for, whenever he looked directly at an object, vision was obscured by coloured spots of various sizes, which occupied the line of direct sight. He also suffered much from a sensation of flashes of light affecting the left eye, which was much aggravated by any pressure on the globe of either eye. These symptoms were of some months' standing, and were increasing in severity; and, as he had applied to medical men of high standing both in Birmingham and London without relief, his spirits were much depressed.

He was first put upon the use of tonics for some little time, with much benefit to his general health, though the sight was not improved. Mr. Carden then determined to remove the opaque capsule from the right eye, thinking that its presence might be keeping up a chronic irritation, with sympathetic mischief in the left. A straight needle was introduced, as in the operation for couching; and an attempt was made to separate the capsule from its attachments. This was successfully done, except in one point, where it adhered firmly to the iris. The capsule was then pushed forwards through the pupil into the anterior chamber, and retained there by the needle, while a small section of the lower part of the cornea was made with a Beer's knife; through this a hook was passed, and the capsule held and readily detached by the needle, which had been retained *in situ* from the first. The withdrawal of the capsule and needle, and closure of the lids, completed the operation.

On the third day, the wound in the cornea had completely healed, the aqueous humour had been secreted, and the eye was painless, though of a yellowish tinge throughout, as if bruised. All this had gone on well, but there was little if any improvement in the left eye; and it was determined now to try the effect of mercury. This was pushed to salivation, when decided improvement began; the spots altered in colour, and appeared less dense than before. Tonics were now given; the man's health and spirits returned; and, on the 24th of November, he could read a newspaper with ease, though the spots had not entirely disappeared; and he was discharged at his own request, with every probability of retaining useful vision.

CASE II. *Conical Cornea.* William Portman, aged 17, a servant, was admitted under the care of Mr. Budd, October 11th, 1856. The cornea of the left eye was of a conical form, perfectly clear and transparent, and the other tissues of the eye apparently healthy; but he was unable to distinguish anything clearly with this eye. He could not read the largest print, nor could he tell whether a wall a few yards off was brick or white stone. This state had been coming on for several months; he was unable to account for it in any way. The other eye was perfectly natural, and its sight good. Mr. Budd directed the application to the affected eye of a small dark case with central aperture, so as to admit the rays of light only to the central part of the cornea. A little instrument of this kind was made of gutta percha, and the lad wore it for nearly a fortnight. Improvement of vision was almost immediate; and at the end of the time the patient could read small print with ease, and vision was also much more distinct. He was then provided with a more sightly apparatus in the shape of a pair of plain glass spectacles, the glass in front of the left eye being blackened, leaving only a small central aperture about a line in diameter. This was found to answer the purpose, and he was discharged.

CASE III. *Conical Cornea.* Sarah Hanley, aged 24, a domestic servant, was admitted under Mr. Budd, December 13th, 1856, suffering from conical cornea in both eyes. She had been an out patient under Dr. Malden for five months, with symptoms of pulmonary tubercles. She was of fresh colour and delicate appearance; and for five years past had been in delicate health. Her sight had been gradually failing for about the same period. Her general health was much improved after the use of cod-liver oil and other tonics. In both eyes the cornea was very prominent, but perfectly clear and transparent; the pupils were rather dilated, and not in the centre of the irides, a much greater depth of iris existing below than above. Vision was very indistinct; she could see large print by holding it sideways, but not when directly in front, nor could she distinguish the beds in the ward beyond the distance of a few feet. The gutta percha instrument was used as in the preceding case, and worn for a fortnight without the slightest benefit, which is the more remarkable as, to all appearance, the cases corresponded very closely in other respects. No. 8 double concave glasses were found to afford very good sight for near objects, and also tolerable distant vision. She was supplied with these, and discharged on January 10th, 1857.

ST. GEORGE'S HOSPITAL.

TWO CASES OF ULCERATION OF THE STOMACH.

Under the care of J. A. WILSON, M.D.Oxon. With remarks by G. GODDARD ROGERS, M.D., Medical Registrar to the Hospital.

CASE I. J. C., aged 45, a labouring man, of temperate habits, was admitted 21st February, 1855, and gave the following history:—He had always worked hard, and had lived poorly of late. Six weeks ago he became troubled with occasional vomiting, and pain after taking food. Subsequently his breathing was short and oppressed, with slight cough, pain in the chest, and frequent headache. His face was flushed; skin hot; pulse 88, and rather full and hard. The tongue was much coated; the bowels constipated; and he passed very turbid and reddish urine, which depended for its appearance solely upon the presence of a large quantity of lithates. There was not the least pain or tenderness on pressure over the epigastric region; but he vomited after his first dinner, and spoke of a dull heavy pain at the stomach during the afternoon. Throughout the night he was extremely restless. A dose of calomel and colocynth, followed up by compound decoction of aloes, unloaded the bowels on the morning of the 22nd; after which he felt easier. He was ordered aromatic powder with bicarbonate of soda in scruple doses three times a day.

Feb. 24th. After supper last night he was very sick, and he also vomited immediately after taking his breakfast this morning. His pulse was now very weak; the skin felt cold and clammy; and he seemed scarcely to have energy to rise from his bed. Beef tea and port wine were given.

Feb. 26. He had severe headache all day, but no vomiting. In the evening, whilst attempting to go to the closet, he fell down from sheer exhaustion. He had been very restless all day, and great tremor of the hands was noticed by the nurse.

Feb. 27th. This morning he became delirious. His evacuations were passed involuntarily. His face was dusky, and severe dyspnœa came on about noon. Previously to this he had exhibited no urgent symptoms to call attention to the chest. However, when he was examined on the day of his admission, loud tubular breathing at the upper part of the left lung told of some consolidation, or more probably disorganisation from tubercle. During the day he took a large quantity of nourishment, and retained most of it upon his stomach. Towards morning, after another paroxysm of dyspnœa, he sank.

POST MORTEM EXAMINATION, thirty hours after death. A few old pleural adhesions existed on the left side. In the apex of the left lung a vomica was discovered, and a few miliary tubercles were scattered about the lungs. The heart was quite healthy. The stomach was distended with a large quantity of partially digested food, tinged of a deep yellow colour. On laying it open, the mucous membrane was found to be extensively ulcerated. The muscular coat was laid bare, and considerably hypertrophied. The ulceration was situated along nearly the whole length of the upper curvature, and encroached a little upon the anterior and posterior walls. The œsophageal

and pyloric orifices were not at all involved in the disease. The liver, spleen, and left kidney were healthy; but several cysts appeared upon the other kidney.

Case II. J. L., aged 56, a greengrocer, who worked hard and had had a good deal of mental worry, came into the Hospital on the 18th of April, 1855. He was in good health until eighteen months ago, when he began to experience occasional "twinges" of pain in his stomach, and during the past three months they had attacked him more frequently. A fortnight before his admission he vomited for the first time; and a week later he suffered incessantly from hiccough and eructations. He was pallid and emaciated; the bowels were confined; pulse small and thready; skin cold; and he was unable to lie down, owing to the constant eructation.

April 19th. At night he vomited nearly three quarts of thin watery fluid. A dose of aloes and senna was ordered for the morning; and then he commenced taking the nitrate of bismuth with magnesia.

April 20th. Very low spirited. The sickness returned at intervals. Brandy was ordered; and a blister put on the epigastrium.

April 24th. Somewhat easier. The vomiting ceased on the 22nd. An enema every evening kept the bowels gently open; whilst a few drops of chloroform added to the mixture acted almost magically in relieving the epigastric pain.

April 30th. He vomited a quantity of dirty blackish fluid. There was more singultus; the pulse was very weak; and in the afternoon he had two attacks of syncope. A creasote mixture was prescribed, and acetum cantharidis rubbed on the epigastrium. This relieved the pain, and he got some sleep; but on the following morning the sickness returned, and continued until midnight, when he sank from exhaustion.

At the examination, which was made thirty-six hours after death, all the thoracic viscera were found healthy. The stomach was large, and greatly distended, and its pyloric end was intimately adherent by old bands of lymph to the under surface of the liver; whilst the pancreas adhered to it behind. The contents were chiefly bloody grumous fluid. On laying it open, a large and deep ulcerated cavity was observed near the pylorus, about the size of a crown piece, and here the mucous and muscular coats were entirely destroyed. The adhesion of the pancreas alone prevented any communication between the cavity of the stomach and the sac of the peritoneum. The pyloric orifice was encroached upon by the ulceration, and the surrounding mucous lining was highly vascular. The whole of the muscular coat was thickened, especially around the pylorus; but *here* the thickening entirely depended upon chronic inflammation. All the other organs were healthy.

Remarks. Examples are here afforded of two very dissimilar predisposing causes of subacute inflammation in the mucous lining of the stomach: privation when the system required support amidst undue physical exertion, in the one case; in the other, mental anxiety and its consequent depression. If, according to Dr. Budd's theory, we regard the secretion of gastric juice as a reflex process which is sometimes excited, even in the absence of food, by mental emotion, and which may cause softening of the mucous membrane, it is fair to infer that long continued harass weakens the vitality of the stomach; that the gastric juice, in common with all other secretions, is vitiated; and that this twofold change renders the viscus obnoxious to any exciting cause of inflammation.

In the second case, where the greatest amount of mischief existed, vomiting did not come on until a late period: pain, however, had throughout been an urgent symptom. Its severity and long continuance arose from the extent of ulceration in the neighbourhood of the pylorus, where, necessarily, the food in its passage came in contact with a surface stripped of its protecting tissue.

The first patient was, indeed, not free from pain, but the situation of the ulcers rendered them less exposed to constant irritation from matters taken into the stomach. The short and hurried breathing no doubt arose from a desire to avoid the frequent descent of the diaphragm upon a tender part.

Cases in which a complete chain of ulcerations existed all along one or other of the curvatures used to be reckoned extremely rare; but a paper by Dr. Habershon in the last volume of *Guy's Hospital Reports* contains several instances. I cannot find any similar records of continuous ulceration along the greater curvature. It is somewhat remarkable that in Case II. traces of *inflammatory* thickening were found only about the pylorus. The state of the muscular coat in the other parts of the stomach appeared to be one of hypertrophy. This hypertrophy was general, and not limited to the pyloric extremity, as might have been supposed, owing to an impediment at the outlet, requiring increased muscular power to propel the food. I incline, therefore, to regard it as dependent upon *frequent irregular muscular contraction;* the result of implication of the sympathetic coronary plexus and the pneumogastric ramifications.

In Case I. even, where no obstruction existed at the pyloric outlet, there was general hypertrophy, probably from the same cause. That this notion is not far fetched, experiment and observation daily force upon our attention. Many cases of gastralgia, and supposed congestion of the liver, especially its left lobe, are now found to recover by the aid of nervine tonics; proving the immense, although obscure, influence of the nervous system upon the stomach. And this leads me to remark, in conclusion, that where it may be presumed from the history that superficial ulceration of the mucous coat is commencing, it would be well to give the nitrate of silver a more extensive trial than it has yet enjoyed.

Original Communications.

ON THE AIR-CELLS OF THE LUNGS.

By Thomas Williams, M.D., F.L.S., Physician to the Swansea Infirmary.

In common probably with many readers of the Journal, I have read with great interest the lectures of Dr. Edward Smith "On the Nature of Phthisis," recently published. If permitted, I will take the liberty to place before the author a few of the doubts which disturb my mind with reference even to the very groundwork of his theory.

1. It assumes as true that which is, by many very competent observers, strongly disputed, viz., that the air-cells of the lungs are lined by an epithelium. Upon the basis of this hypothesis he erects a graceful and airy fabric, itself remarkably fanciful. To this proceeding I object, that the truth and soundness of the *foundation* should first be placed beyond all doubt; in other words, I contend that that part of his general proposition should be presented *in limine* as an incontrovertible *certainty*. But of this portion of his theory Dr. Smith seems to have thought *the least*. In my article "On the Organs of Respiration" in the *Cyclopædia of Anatomy and Physiology*, I have adopted the view advocated by Schrœder, Kölliker, and many of their pupils, in opposition to that so ably and originally enforced by Mr. Rainey. At that time, from careful observations which I had undertaken, I felt very confident that Mr. Rainey was wrong; subsequent researches have diminished that confidence, but only to such an extent as to impress me with the desire that the whole question should be again calmly and impartially examined. In the last number of Siebold and Kölliker's *Zeitschrift für Wissenchaftliche Zoologie* is contained, by Dr. Carl Semper of Altona, an able article on the air breathing gasteropoda, in which, in opposition to the results which I had published on the same subject, he labours with great care to prove that the lacunose network of blood channels which line the walls of the pulmonary sac of these molluscs, being the precise situations at which the respiratory process proceeds most actively, *are not lined with any epithelium whatever*, and that the epithelium is limited in its distribution to the course of the larger blood trunks.

In Müller's *Archiv* for 1853, Leydig, a very distinguished observer, states with great stress that in the fish, *cobitis fossilis*, "die Stelle des Darmes welcher die Athem-function zuertheilt ist *eines Epitels entbehrt, und vielleicht dürfte sich eine solche Verhältniss selbst bei den Lungen höherer Thiere nachweisen lassen.*" Such a statement proceeding from such an authority should at least command respect. Since the date of my article in Todd's *Cyclopædia*, I have worked probably as industriously as any anatomist on the subject of the special histology of the respiratory organs. The results of my researches will be given at length in the first part of my forthcoming work. I wish only at present to lament that Dr. Smith should vainly expend so much talent and energy upon the construction of a pathological theory, which founds itself upon a histological question still notoriously undecided. No competent judge will accept his views, unless he adduce *proof* that the *groundwork* is beyond dispute.

2. But let it be admitted that the air-cells are really lined by a layer of epithelia, Dr. Smith's doctrine as to the nature and

origin of phthisis still assumes as unquestionable that which is more and more doubted as the science of animal and vegetable morphology advances. The cell theory of Schleiden and Schwann is every day less and less implicitly received! If this theory should be demolished, Dr. Smith's hypothesis will "leave not a rack behind" to bear even a sepulchral witness to the credulity of its author! If Mr. Wenham's recently published views with reference to the mechanism of cell-formation should be confirmed by the march of discovery, Dr. Smith's hypothesis will become at once a "dissolving view!" If, by the progress of correct observation, the highly philosophical and probable opinions of Wedl in relation to cancer and its varieties should receive further support, Dr. Smith's speculations will lose at once all bodily form!

The preceding criticism I offer with the utmost respect. Dr. Smith is capable of better things than his "Theory of Phthisis." He may rest assured that his speculations will conduct him further and further away from *that* pathway of cautious induction, along which the correct thinker on such a subject as that on which he writes should even desire to travel. He seems very skilled in weaving one vision into another. But I think that any earnest student, who during the last few years has followed the current of discovery in organic chemistry, normal histology, and pathological morphology, will agree with me, that in the present remarkably transitional state of physiological and pathological knowledge, no living man can summon to his presence *adequate materials* for the construction of even a *probable* theory either of tuberculosis or cancer.

ON CHOLERA: ITS DIAGNOSIS AND TREATMENT.

By C. W. Bell, M.D., K.L.S., late Physician to H.M. Embassy in Persia, etc., Buxton, Derbyshire.

Weary though most people are of the very name of cholera, it appears a duty to take advantage of the comparative immunity this country has enjoyed from that disease during the past year as a more favourable time for dispassionately considering the information we possess respecting it, than either while it is present, or its advent apprehended.

I have devoted much leisure to the perusal of recent contributions to the literature of the subject, as well as of works considered by the profession as authorities, and truly a less satisfactory course of reading could hardly be pointed out. So varied are the views adopted by different authors, that, though it was at first my intention to try to elicit truth by a process of exclusion, reviewing opinions and rejecting what appeared untenable or illogical, I soon became satisfied that no one would consent to wade through such a mass of inconsequential lucubration as this plan would have entailed upon the reader, or have the patience to inquire how conclusions the most opposite, arrived at by authors, according to the point of view from which their opportunities permitted them to survey the disease, were capable of being reconciled like the celebrated dispute of the two knights who each saw only one side of the shield. In many of these treatises, it might even be doubted, but for the title-page, whether we had not by mistake taken up a work on a totally different subject instead of one on cholera asphyxia, maligna, Asiatica, algida—for such are the recognised epithets bestowed on the disease in question. Upon the whole, therefore, it appeared the preferable course, as being the only one that would admit of the whole subject being brought within reasonable bounds, altogether to abstain from the citation of authorities, and to trust instead to the readers' knowledge of individual opinions when such are alluded to, and of the facts which I have made the basis of my argument.

A careful examination of the literature of cholera has satisfied me that more than one disease essentially distinct in nature, cause, course, and character, has been described under that name; and until this be fully admitted by the profession, we must despair of arriving at any settled conclusions with regard to its true nature and treatment. The evil that existed in 1831, when all Europe was turning with alarm to the East to watch the progress of the coming pestilence, still remains undiminished—we mean, the want of a definition of cholera: nor is it a definition only that is wanted, for strange and incredible as it may appear, there is not one single symptom, circumstance, or condition of the system, that all authors concur in describing as invariably present in an attack of this malady. It is a source of no small disappointment that no new light has been shed on this disease by the most recent work on the diseases of India (*Clinical Researches on Disease in India*, by Charles Morehead, M.D.: 1856); I had looked with eager expectation to its appearance, in the hope that the distinctions which I am about to attempt to draw from reason might there have been established by practical authority.

The nearest approach which I can find in all the various descriptions of the disease to agreement in noticing any single symptom as characteristic, is a kind of general admission of the existence of a remarkable condition of the circulation and of the blood in bad cases. It signifies little to my purpose that very different degrees of importance are attributed to this condition of the circulation in cholera, as a symptom, and that very different opinions are entertained as to its cause. It is much to be able to fix upon even one fact admitted by the majority as constant in this disease.

A review of the whole subject would justify the conclusion that this peculiarity consists not in primary poisoning or alteration of the blood, but in a species of paralysis of the powers which circulate the blood, and such a change in the action of the capillaries as respects nutrition, secretion, and the evolution of animal heat, as can only be referred to disorder or cessation of the agency which the sympathetic system of nerves is acknowledged to exert over these functions in health; but were we to attempt to go into the proof of this before the subject has first been disencumbered of those forms of disease which have been mistakenly described as cholera, we should only be plunging once more into that abyss of darkness and confusion we are so anxious to struggle out of.

Let us, then, in the first place, attempt to distinguish in the different maladies described as cholera all such symptoms as do not essentially belong to its purely congestive form which we regard as the type of the disease, and refer each of them to its true cause, in order that we may perfect our diagnosis, and clearly perceive the *rationale* of the treatment required in each several instance.

Almost all climates, but especially the more tropical, are liable to epidemics of diarrhœa, which attack very suddenly. These very often commence as hepatorrhœa (if the term be permitted), a copious pouring out of irritating bile. This in hot climates commonly induces inflammatory ulceration in the glands of the colon in the course of a few hours, and the case becomes one of confirmed dysentery. In this climate a similar hepatorrhœa, attacking as suddenly, is what we call English cholera; but here, instead of inducing dysentery, it generally passes off without mischief after the bile has been evacuated by plentiful vomiting and purging.

Of this nature, too, is a large proportion of the cases of diarrhœa which occur every autumn, and which in general attract very little attention; but if cholera of the true congestive type occur at the same season, all such attacks are then termed cases of premonitory diarrhœa; not because this condition necessarily, and in all cases, precedes cholera, but because a tendency to bowel complaint of any kind becomes in times when that disease breaks out epidemically, a predisposing cause of great power to induce an attack of algide cholera.

The fact is well known, that even slight attacks, such as at other times would be thought too trivial to require attention, are liable, if neglected, to be quickly followed by symptoms of fatal collapse when cholera is epidemic; but to cure this diarrhœa, and so guard the patient from becoming the subject of that epidemic influence, is quite a different matter from curing cholera. Too many people's ideas are governed by a name. The title of premonitory diarrhœa, given by authority to such affections, is considered by many to denote that such diarrhœa is an actual stage of cholera; and the practitioner who uses the term in that sense naturally concludes that in curing the purging with a little chalk, or lead and opium, he has cured a case of cholera. This is one of the greatest sources of error and confusion; for in the great majority of cases called "premonitory", the diarrhœa has in the first instance no connexion whatever with true cholera. The most ordinary means will arrest it; but this must be done at once, for if allowed to proceed, the disturbance of the circulation by excessive intestinal secretion, as well as that it produces on the whole sympathetic system, will very soon so invalidate vital resistance to the epidemic influence, that algide cholera is superinduced.

It is necessary here to observe, that cholera is not the only disease capable of being superinduced on simple diarrhœa. It is true that in this country we can hardly conceive the devastation suddenly spread over a whole district by the invasion of epidemic dysentery, to which the slightest disturbance of the bowels will then give rise; and we read of idiopathic peritonitis having been similarly epidemic, and its attacks connected with

intestinal derangement: but further illustration is unnecessary, for there are probably few medical men who have had extensive dispensary practice, or much to do with the poor in their own dwellings, who have not seen English cholera become dysentery; and that dysentery, in foul neighbourhoods, become highly contagious and endemic, in combination with putrid or typhoid fever. In these cases, there appears reason to believe that the disease is communicated almost entirely by means of the condensation of putrid particles in a state of great chemical activity, in water, milk, the saliva, or other fluid exposed to the effluvia of the exuvies; and that these particles, when imbibed, have the power of inducing the same putrefactive action in the mucus of the stomach and bowels, and of converting it into an irritant poison, producing effects like those of croton oil, and continually reproducing itself. This is a fact which the observations of Dr. Snow and his followers seem fully to have established. They have brought a vast amount of evidence together to show what a pregnant source of choleraic diarrhœa water is, when among other impurities it contains the smallest quantity of fæcal matter; or, more accurately, of intestinal mucus in a state of active decomposition. It would also appear probable from the same evidence that, where the choleraic atmosphere exists, such mucus is prone to assume an activity of putrescence not common at other times, or else that the emollient mucus of the bowels is then more than usually predisposed to be acted upon by a putrefactive excitor imbibed.* Be that as it may, however, there can be no doubt of the communicability of a putrid form of diarrhœa from the sick to the healthy, of which the following is an instance.

A woman, living in a cellar in Manchester, into which an open grid communicated with the drain, was attacked with diarrhœa; she died. Her daughter, then suffering, was sent into hospital; she too died, but introduced a most virulent diarrhœa into the ward, of which one of the women who lay in the bed next her died, and the other neighbour escaped only with life. The father at the same time, being crippled with rheumatism, was removed to the workhouse, where he died, and there also infected many with this putrid diarrhœa. In none of these cases was there the slightest symptom of an algide character. There was no Asiatic cholera prevalent that year. Had it been otherwise, probably every one attacked, as well those who recovered as those who died, would have sank into fatal collapse, and would have presented all the usual symptoms of the worst cases of cholera. The cases I have given, though of a more than usually virulent character, are by no means rare; and there is probably no filthy neighbourhood in the purlieus of a large town but can furnish similar instances of contagious diarrhœa every autumn.

It may seem unnecessary here to repeat that neither this putrid diarrhœa, nor some other kinds, however fatally they may predispose to collapse wherever algide cholera has appeared, are truly cholera; for they occur alike where cholera is, and where it is not, and multitudes recover or die without ever having exhibited a single symptom of that paralysed state of the circulation which is known as collapse, and is pathognomonic of algide cholera. These facts, however, only render it the more incumbent on us to study with care the source and *ratio medendi* of any prevailing tendency to diarrhœa whatever, that may exist where cholera declares itself, in order that by warding off this powerful source of debility from the sympathetic system, we may preserve sufficient nervous energy to resist the influence of the epidemic to which continued purging would otherwise so powerfully predispose it to succumb. Thus a practitioner in the tropics, who has mostly to deal with bilious diarrhœa, trusts to calomel and opium as his sheet anchor, and with it, he conceives, he cures the cholera; the same treatment answers very well in this country when cholera breaks out in the autumnal months; still even its champions allow that mercury has appeared in some instances to have brought on, rather than to have warded off, algide symptoms; and that, however successful the practice in general is, there do occur cases in which it does no good, and where in spite of its fullest exhibition the mildest attacks have ended fatally. Some have confidence only in sugar of lead and opium, but the same complaints are made of it as of calomel, that it is inapplicable where there is no purging (that is to say, in the purely congestive form), and does not suit every epidemic of the disease equally well.

Some authors who have mainly had to do with the putrid diarrhœa occurring in the purlieus of large towns, or in neighbourhoods supplied with impure water, have described that disease as cholera, into which since 1831 it has frequently lapsed. It has been found that deluging the bowels with castor oil cures this complaint, and the superinduced symptoms of algide cholera often disappear on the cessation of the diarrhœa; an attentive perusal, however, of the fatal cases, in which the failure of the remedy is attributed to the carelessness of the nurse, will convince the reader that these were of a totally different nature from those in which the medicine proved effectual. This is the form of diarrhœa which is often termed in India village cholera, as being engendered by filth, and distinguished by its prolonged premonitory character and apparent contagiousness, from the rapid congestive form generally met with on a march, and it is that which European authors mainly treat of as breaking out in densely peopled towns and villages. Its putrid origin requires an antiseptic treatment, and there is scarcely a substance of that nature that has not been extolled as a panacea for a time, *e. g.*, dilute sulphuric acid, nitric acid, nitrate of silver, the oxides of almost all the metals, finely powdered charcoal of peat or soft woods, aromatic gums and essential oils, have all been vaunted for their efficacy; we find, however, that the majority of cases cured by such means had never reached the stage of collapse, or had so slightly succumbed to that influence as to throw it off so soon as the diarrhœa was cured. On the other hand, we read in almost every work on the subject, of isolated cases so virulent that they sank into collapse at once without having had diarrhœa at all, or perhaps only a single purging.

Among the various kinds of diarrhœa which may prevail contemporaneously with epidemic cholera, there is one which it is particularly necessary to distinguish from those produced by bilious derangement or arising from foul water, because it is in fact *true cholera*, and will be materially aggravated by calomel and opium, will be in noways benefited by antiseptics, whereas drastic purgatives would be almost certain to convert this mild attack into fatal congestion. This may be called intermittent diarrhœa, a painless purging of a colourless, inodorous fluid, lasting for an hour or two each day, then ceasing till the same hour on the day following. This form is frequently to be remarked as preceding an epidemic of cholera by a few weeks, but never met with unless that disease be actually present or in the neighbourhood. This kind of purging sometimes goes on for a week or more, but it is rare for it to continue for more than three days without being attended with some more serious symptom. The appearance of the patient when the hour of attack approaches is characteristic. The eyes sunk, the lips livid, the nails purple, with an aguish streak upon them; the veins of the backs of the hands contracted like ink lines traced with a pen; and the tongue perfectly clean and pale, as if macerated. The dejections are unaccompanied with pain or griping. The urine is commonly scanty and of a dark porter-like colour, and pressure over the spleen causes pain.

A few doses of a grain or two of quinine and sulphate of iron arrest this at once, and the medicine is felt to be grateful to the whole system; whereas in the bilious and putrid forms of diarrhœa such a dose would prove both nauseous and injurious. But it may be asked, granting the importance of distinguishing between these three kinds of diarrhœa (and as many more as may be), in order to enable us to treat them so as most effectually to prevent the accession of algide symptoms, what after all is the difference between them *after* the algide symptoms have commenced? In all of them the lips are then livid, the eyes sunk, the nails blue, the pulse feeble or imperceptible, the extremities like wet leather, and they suffer more or less from cramps. Is there any essential difference in these apparently identical cases *now*, such as to require different treatment? And if so, how are the cases to be distinguished from one another after having reached this stage? This is, in fact, the material point in question; for if such a difference in symptoms can be distinguished as to imply the necessity for totally different treatment, the enigma which Asiatic cholera has everywhere presented to those who have written upon it, or tried to comprehend its nature or its cure, will be solved.

With respect to the putrid dysentery, after algide symptoms have commenced, there is no difficulty whatsoever in distinguishing it by the smell alone; for, on turning down the bedclothes, the nose is assailed with the most sickening odour of bad size or putrid soup—not at all feculent in smell, but pecu-

* The effects of putrefactive excitors on the secretions of various membranes, converting them into irritants and sources of inflammation of the membranes—*e.g.*, of the urethra, conjunctiva, nares, mouth, intestines, the pleura or peritoneum, or the lining membrane of the veins—which is probably the true source of what Hunter calls continuous sympathy, requires investigation by those who study the "principles of medicine". (*Vide* the latter part of Dr. Bell's "Address in Medicine".—Prov. Med. and Surg. Trans., 1850, vol. xvii.)

liar, and never to be forgotten. The purging is an incessant squirting of this foul fluid. If any doubt exist, let a dose of quinine and iron be given, and the disgust expressed will attest the nature of the attack. The other diagnostic signs are, that there is always some fur on the tongue, the pulse is generally perceptible, and the heart's action very rapid and feeble; not convulsively struggling and churning as in congestive cholera. Add to this that some urine is generally secreted, the extremities are not so cold as in the congestive disease, nor does the same amount of warmth return to them when death takes place. The previous history of the attack is, that the patient has been purged perhaps a dozen times within a few hours; at first the tongue was red and much furred, the mouth hot, the skin warm, the pulse above a hundred and sharp; then sickness came on and cramps, the skin grew cold and damp, and, exhausted by continued purging, he has fallen into the state of collapse.

It is, in the first place, of importance here to remark, that there is nothing of that oppression of the heart's action by excess of blood on the right side, and deficiency of it on the left, which to relieve is to cure, in the congestive form of cholera.

The continued purging, which is here a secretion, not an exudation, prevents that overdistension of the great venous trunks of the cava and portal system taking place, which obstructs secretion. In short, it is not venous congestion and paralysis of action in the capillaries that we have to contend with here, but a draining away of the life by the quantity of fluid poured into the bowels under the influence of the putrid irritant into which the whole of the mucus of the intestines has been converted. It is in vain that we here attack the algide symptoms, for even were we successful in restoring animal heat, etc., the *cause* remains; and as long as mucus continues to be secreted into the bowels, the purging will continue unless the putrefactive action be arrested.

It seems probable that large draughts of finely powdered peat charcoal in water will ultimately be found the best cure for this malady. Dr. Johnson uses castor oil, which answers very well if repeated sufficiently perseveringly to evacuate the decomposing mucus as quickly as it is formed. Tartar emetic in combination with calomel answers very well, or calomel alone in repeated doses, where it acts both directly as an antiseptic and in the same purgative way as castor oil. Dilute sulphuric acid drink is purely antiseptic in its operations; so is salt; and cases are mentioned where an immense draught of spirits has cured. If by any of these means the putrescent action is arrested and the purging stopped, warmth gradually returns to the surface, and the algide symptoms disappear.

It may be observed, that correct diagnosis alone can direct the cure here, for to attempt this by the means which afford the greatest relief to patients suffering from the congestive or true form of the disease only aggravates; and indeed the expression of disgust and horror exhibited by patients in the algide state of cholera induced by putrid diarrhœa when offered a second dose of solution of quinine and iron, is in perfect contrast to the thankfulness with which a similar dose is swallowed by one in the congestive stage of true cholera.

Of the bilious form of diarrhœa after algide symptoms have been superinduced, I find innumerable cases cited by Indian authorities, for example, Twining, Parkes, and others. In the first stage the attack is identical with that which, were cholera absent, would turn to dysentery; and most of the protracted cases exhibit dysenteric symptoms, if the algide stage be recovered from, along with remittent or so-called consecutive fever. Here there is no very leading symptom, unless it be the presence of a very little fur on the tongue, which is never seen in pure congestive cholera, and the absence of putrid odour on throwing down the bedclothes. The purging is very considerable in quantity, generally colourless and without smell, save when occasionally it contains bile. The treatment here is strictly that applicable to acute dysentery: calomel and opium, ipecacuanha, sugar of lead and opium, etc. Mere antiseptics, like dilute sulphuric acid, do no good; and the draught of quinine and iron, though not producing the intensity of disgust that it does in cases of putrid diarrhœa, is disagreeable to the patient, and is attended with none of the sensations of comfort and relief afforded by its exhibition in purely congestive cholera. In these cases all the adjuncts of treatment by hot air baths, stimulants, etc., may be found of value which in true congestive cholera are exactly the reverse: perhaps where the distinction is otherwise difficult, the tolerance of warm applications in the one case, and their extreme intolerance in the other, might serve as a test.

This is all that it has appeared necessary to premise respecting the diseases, which, though distinct from cholera in their essence, most frequently lead into it. Practically, they may perhaps be deemed of even greater importance than the unmixed congestive or primary disease, as being numerically more fatal.

[*To be continued.*]

ON A POSSIBLE CAUSE OF THE FIRST SOUND OF THE HEART.

By John Cockle, A.M., M.D.

I have frequently meditated upon the assertion of Bartholini, made in his *Anatomy*, published in 1673, page 379, that the ligation of the venæ cavæ arrested the action of the heart. He writes: "Unico experimento fidem assertione facio, si vinculo intercipiantur vasa cordis adferentia motus cordis desinit, reliquusque erit undulans tantum motus et palpitatio, soluta ligatura motum recipit. Recentiores curiosi novo experimento nos confirmant."

Haller (*Observation sur la Cause du Mouvement du Cœur*, 1751), in repeating this experiment, found, that unless the cavæ were opened, and the right auricle emptied, the motion of the heart was not always arrested, but that with the precaution indicated the experiment was always successful.

These experiments then, in warm-blooded animals, fully demonstrate the presence of blood in the auricle to be the *sine quâ non* of the heart's perfect systolic and diastolic motion.

Dr. Halford has more recently shown, by well devised experiment, that if the cavæ are compressed, although the heart's action continues vigorous, yet upon the application of the stethoscope "no sound whatever is heard."

I venture to suggest, therefore, taking these experiments as a basis, supported by others of my own, which I shall make the subject of a future paper, that the first sound may be principally produced in the following manner. During, at least, part of the time of the ventricular systole, the auriculo-ventricular valves are closed by the pressure of the column of blood impelled against them; but by the time the valves are brought to the plane of closure, the dilating auricles have allowed the blood streaming from the cavæ and pulmonary veins to form a layer upon the upper surface of the valves; and it is, I conceive, by the reaction of the lower column of blood upon the superimposed layer, the valve intervening, that the special character of the first sound is produced. The modifications of the sound, in part, depending upon the varying quantity of blood entering the cavity of the auricles.

63, Brook Street, Grosvenor Square, January 24th, 1857.

Inventions and Appliances

RELATIVE TO

MEDICINE AND SURGERY.

BOURJEAURD'S ELASTIC APPARATUS.

The difficulty of applying pressure, when required, to any part of the body, in such a way that it shall fully effect the object desired, without either positively or negatively doing mischief either to the parts under treatment or to those in their vicinity, has long been a source of annoyance to surgeons. Hence systematic writers on surgery are accustomed to lay down precise instructions as to the mode of bandaging a limb; and, in medical schools, a special course of instruction on this important branch of surgical practice is sometimes given.

In recent years, surgeons and mechanicians have endeavoured to make application of the elastic property of certain substances in this direction, and especially of caoutchouc or India rubber. Of those who have devoted their attention to this subject, Mr. Bourjeaurd holds the most prominent position, and has contrived a number of elastic appliances which, although they may, on further experience, be found capable of improvement in some of their details, yet far surpass in efficiency and safety the means formerly in use. It is right here to state, that Mr. Bourjeaurd has the advantage of not being a mere amateur mechanician; he is, in fact, a member of the

medical profession, having formerly served as surgeon in the French marine; and hence may be supposed to possess a competent knowledge of the anatomical requirements of the part with which he has to deal.

We doubt not that Mr. Bourjeaurd's appliances are too well known to require that their merits should be specially set forth. They have, we are aware, been employed by many surgeons and obstetricians, and have been proved productive of comfort to the patient, and of satisfaction to the practitioner. From a special report, presented last year to the Surgical Society of Paris by MM. Alphonse Guérin, Larrey, and Deguise *fils*, some extracts may be made, as showing the opinion of that learned body on the inventions of Mr. Bourjeaurd. After giving a brief description of the apparatus, the reporters say:

"We do not agree in the objection of the author to the ordinary trusses. When these are properly applied, and when the strength and the size of the pad are in proportion to the size of the hernia and of the orifice of the ring, they may keep up a hernia in the great majority of cases. We recognise their efficacy; but we do not deny that the pressure they exert may become painful. There is probably none of us who has not seen at the Central Bureau, where the patients may be supposed not to be endowed with excessive sensibility, some of the numerous hernia patients, who appear twice a week, leaving off their trusses rather than endure the pain produced by the pressure. This pressure is not only exerted on the skin; the subcutaneous areolar tissue is at last absorbed, and this renders it more and more painful to keep the truss on. Besides, the closely fitting dress of men does not hide the ordinary truss—an index of an infirmity which they would prefer to keep secret. You will at once understand that the bandage of Mr. Bourjeaurd is preferable to those which we have hitherto employed.

"Examining the question in a more elevated and more correct point of view than that of mechanicians, Mr. Bourjeaurd lays down the principle that it is necessary not merely to press on the aperture through which the hernia passes, but also to support the mass of the intestines. The abdominal aponeuroses being incompetent, in persons affected with hernia, to retain the intestines in the normal cavity of the abdomen, Mr. Bourjeaurd supplies the defect by means of an elastic girdle, applied equally over the skin, so as in some measure to form one body with it.

"This girdle, Mr. Bourjeaurd says, will fulfil its object only when applied from below upwards—from the pubes to the umbilicus. This is a condition indispensable to every compressary apparatus, whether it be applied to varicose veins, to hernia, or to a displaced uterus. All compression not founded on this principle is essentially faulty; and hence all laced stockings and bandages scarcely ever fail of aggravating the evil which they are intended to relieve. . . . .

"I could," says M. Guérin, "cite a large number of instances in which the ordinary trusses were insufficient, either because the large size of the abdomen prevented them from remaining in place, or because the patients could not bear the pressure, but in which the herniæ have been admirably supported by the apparatus of Mr. Bourjeaurd.

"Before being called on for this report, I" (M. Guérin) "had several times performed Gerdy's operation for the radical cure of inguinal hernia. After recovery, I had applied an ordinary truss; but I had observed that the absorption produced in the parts pressed on did not conduce to diminish the probabilities of a relapse; but Mr. Bourjeaurd's belt, exercising a gentle pressure on the perineal orifice, seemed to me to admirably fulfil the indications required in the year following the operation. Some months ago, I performed the operation on a young man; and I am convinced that Mr. Bourjeaurd's belt, without causing the least inconvenience to the patient, will contribute powerfully to prevent the reproduction of the hernia, by allowing the process of obliteration to go on in the ring, instead of causing removal of the plastic lymph by excessive pressure.

"In no case has this hernia bandage failed; the patients have always expressed the comfort they have felt from its application. Nothing betrays its presence through the most closely fitting garments."

MM. Larrey, Huguier, Robert, and Gosselin, when the report was presented, also spoke favourably, from experience, of the appliances of Mr. Bourjeaurd.

WILLIAMS AND SON'S GLYCERINE SOAP.

While we confess not to have made a comparative examination of all the preparations sold under the name of glycerine soap, we can safely recommend the soap prepared by Messrs. Williams and Son, as possessing in a remarkable degree the property of softness and freedom from irritation—qualities especially indispensable to applications to tender or diseased skin. The soap has been analysed by Professors Hofmann and Redwood; and the following is the statement made by these chemists.

"We have obtained the following results:—

"Fatty and resinous acids	71·2
Soda	6·2
Sulphuric acid	·4
Chlorine	·25
Glycerine	5·45
Water	16·5
	100·00

"The peculiar features of this soap, as indicated by the analysis, are, the presence of a considerable quantity of glycerine, the almost entire absence of common salt or other saline matter, and the reduction of the alkali to the smallest amount available for the formation of a perfect soap."

The glycerine soap has been spoken of with praise by several medical men who have observed its effects in diseases of the skin; and it would, in our opinion, be a valuable article of daily use in the nursery.

Periscope.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

PROTECTIVE AND MODIFYING POWERS OF VACCINATION.

A carefully prepared paper on the protective power of vaccination, read by Dr. E. C. Seaton before the Western Medical and Surgical Society, is published in the *Journal of Public Health* for the present month. Although there can be but few who have any doubt of the universal benefits conferred by efficient vaccination, yet when an endeavour is being made to render these benefits still more extensive, a labour such as Dr. Seaton has undertaken is far from being a work of supererogation. Subjoined are some portions of the article to which we refer.

Dr. Seaton shews that the doctrine of infallible prevention of small-pox by vaccination, attributed to Jenner, was never held by that distinguished man: what he said was, that vaccination, duly and efficiently performed, would protect the constitution from subsequent attacks of small-pox as much as that disease itself would. He did not expect it to do more; and he believed it would not do less. Dr. Seaton observes, that the question whether vaccination is capable of utterly exterminating small-pox can only be decided when the practice shall have become universal.

It is greatly to be lamented, the author observes, that the rules and precautions which Jenner laid down with so much care and precision, for the performance of vaccination, should have been in so many instances neglected or departed from; and that, from the very simplicity of the operation, it should not always have received that attention to which it was entitled. Had this not been so, we should at all events have been free from the difficulty arising from the necessity of determining, in cases in which vaccination is said to have failed, whether there has really been effective vaccination or not. It is not the insertion of lymph into the arm, nor the production merely of a vesicle, which constitutes vaccination: *the vesicles to be produced must have a specific character, and go through a definite course, indicative of a particular constitutional affection: and it is only when this character is perfect, and this definite course has been normally gone through, that there is protection;* or at all events a full measure of protection.

That efficient vaccination will protect the system against an attack of small-pox absolutely as a rule, even under circum-

stances of the severest exposure, is well known. It is equally certain that small-pox will sometimes occur after the most perfect vaccination; that it will occur with much greater frequency after spurious or imperfect vaccination; and that it may be met with in those who have already had the disease casually or by inoculation. But when we strive to determine and compare the ratio in which individuals, protected by vaccination, perfect or imperfect, and those protected by casual or by inoculated small-pox, are liable to take small-pox subsequently, we find the greatest possible difficulty. For this comparison we need, in the first place, that the inquiry should be made on a sufficient number of individuals similarly circumstanced as to age, condition of life, various external circumstances, and liability to exposure: where vaccination is alleged, we have to determine whether there has been real vaccination or not: and where small-pox is alleged, we have to determine that it was this disease which really had been gone through. Then, as regards the alleged small-pox occurring after such vaccination or previous small-pox, we have to be certain that we have really before us a case of variola, and not one of those many affections which have at times been mistaken for it. Such an inquiry as this can only be instituted with regard to particular classes of individuals; and as regards children under puberty, the inquiry has been made under circumstances which admit of every confidence being placed in the result.

Every boy admitted into the Royal Military Asylum at Chelsea, not bearing satisfactory marks of small-pox or cow-pox, is vaccinated. Of 5,774 boys admitted from the opening of the establishment in 1803, to December 31, 1851, 1,950 had on admission marks of small-pox, and 3,824 had either marks of vaccination, or were on admission vaccinated. Of the 1,950, twelve, or 6·15 per 1,000, had small-pox subsequently; of the 3,824, twenty-seven, or 7·06 per 1,000, had small-pox subsequently. (Dr. T. G. Balfour, in *Medico-Chirurgical Transactions*, vol. xxxv.) The result of the comparison here shews that as regards children under puberty there is scarcely any difference in protective value between cow-pox and previous small-pox, and so far the opinion of Jenner is entirely confirmed. The experience of this asylum places beyond all doubt that the recurrence of small-pox, or its occurrence after inoculation, is by no means the very rare thing it has been represented by some to be. We read statements of a vague estimate by De La Condamine that the cases which so occur are not more than one in 10,000, and we are even told to look upon this as exaggerated; but here is an example in which out of every 1,000 more than six have had a second attack in a population certainly not peculiarly exposed to infection, and before any have reached the age of manhood.

The comparison we have made in the case of the Royal Military Asylum between the protection of vaccination and that of previous small-pox is complete as far as it goes; but it unfortunately stops short at the period of life when the protection of vaccination is said by some to begin to wear out, that is to say, the age of puberty. Now the army gives a class of men, all of whom have passed this period of life, and all of whom by the rules of the service, should be, and we presume are, protected. About 78 per cent. are protected by vaccination, and the remaining 22 per cent. by previous small-pox. In a force so protected and in many instances, as Dr. Balfour has shown, considerably exposed to small-pox, the annual ratio of cases has not been greater than sixty-six to every 100,000 men, or rather more than half a case per 1,000 men.

In the navy, by the rules of which service also all should be protected, there is the same general testimony to the protecting value of vaccination. In this force the cases are slightly more numerous, having been 417 on an aggregate strength of 363,370 men, or rather more than 1 (1·148) per 1,000. This increase over the ratio prevailing in the army (115 per 100,000 as against 66 per 100,000) Dr. Balfour attributes to the crowding on shipboard, and the consequent difficulty of separating the healthy from the sick. Doubtless these causes would so operate; but on the other hand it is probable that sailors, though often considerably exposed, are less so on the whole than soldiers, who are frequently quartered for long periods together in large towns; and Dr. Seaton does not doubt that the real explanation is that the rules of the service are not so well carried out, for many obvious reasons, amongst them as in the army. In looking over the returns from the particular ships in which small-pox had appeared, he finds it stated expressly in some cases that there had been *no* protection, and in others that it is doubtful whether there had been protection or not. Even in the army it is probable there are some unprotected, especially on colonial stations. Inspector-General Dr. John Davy states that it is only by the strictest superintendence, and by returns at short intervals, that thorough vaccination can be kept up.

To understand the full value of these facts, it is desirable to compare them with the results ascertained in the Royal Military Asylum. It appears that the proportion of attacks from small-pox for every 100,000 individuals is among the soldiers, 66; among the sailors, 115; among the boys, 123. The immunity therefore is absolutely greater among the soldiers and sailors than it is among the boys.

What is the degree of immunity afforded by vaccination under circumstances of long continued and frequent exposure during epidemic influence? These are the conditions under which the greater number of failures undoubtedly occur; and it is precisely under these conditions that without protection *scarcely one* escapes. There are not observations sufficiently accurate or numerous to justify positive conclusions: but some interesting facts have been observed. During an epidemic in Chelsea in 1838-9, Mr. Marshall (*Lancet*, vol. xxxvi) inquired into the circumstances affecting 757 members of families in each of which there had been at least one case (generally a fatal one), implying, in almost every instance, a case in the room which they inhabited. Of the 757 there were only 231 reputed to be vaccinated; of this number twenty-seven only suffered from small-pox, while of the remainder every one, who had not had previous variola, had small-pox on the occasion of this epidemic, except seven. It occurred to the Epidemiological Society some time ago, that valuable information might be acquired by ascertaining the protection, which medical men themselves experienced from these two methods. Accordingly it has been ascertained that, out of 347 medical men protected by vaccination, there were 44, or 12·6 per cent., who had had variola subsequently; and out of 82 who had been inoculated n their infancy, there were 3, or 3·6 per cent., who had subsequently small-pox.

Of the 347 persons there were, having

	Number.	Attacked.	Per Cent.
No cicatrix visible	18	3	16·6
One cicatrix	62	7	
Two cicatrices	173	26	14·0
Three cicatrices	36	1	
Four cicatrices	20	1	
Six cicatrices	6	0	3·2
No mention	32	6	

Of those in whom the cicatrices are mentioned as good, there were with

	Number.	Attacked.	Per Cent.
One cicatrix	48	5	
Two cicatrices	158	21	12·0
Three cicatrices	34	1	
Four cicatrices	17	1	
Six cicatrices	6	0	3·5

Taking these facts in connection with the immense value of the cicatrices as an index of the efficiency of vaccination, they are certainly sufficiently remarkable: so far as they may be trusted to, the liability to take small-pox, in persons having more than two cicatrices of vaccination, is no greater than to take small-pox after previous small-pox: and if the observations are too few, as they undoubtedly are, to justify our drawing any positive conclusion to this effect, they require us at least to pause and to call for more facts before we acquiesce in an opposite conclusion, or admit that, duly and efficiently performed, vaccination will not protect the system, as Jenner stated, to the same extent that inoculation itself would have done.

It is a confirmation of this, that, during seventeen years, not one of the servants or nurses of the Small Pox Hospital has been attacked by small-pox, though vaccination has been the only protection of many of them.

From the facts which he has collected so far, Dr. Seaton draws the following conclusions:

1. It would seem that there is no important difference between the protecting power of variola and vaccinia during childhood, under circumstances of ordinary exposure: with regard to severe exposure, there are not facts to determine one way or the other.

2. There are not facts to determine the relative protecting power of variola and vaccination in adults under ordinary exposure; but there are abundant proofs of the enormous amount of protection afforded by vaccinia.

3. Adults severely exposed, relying on what is ordinarily termed vaccination, will probably take small-pox, though, as we shall see immediately, of a modified kind, in a greater ratio

than those having previously had small-pox, by inoculation: but—

4. If the vaccination has been thorough and efficient, it is extremely probable that the liability to small-pox under severe exposure is no greater than after inoculation.

5. Those statements, therefore, are entirely without foundation, which speak of small-pox after inoculation as a risk hardly exceeding a possibility, and never to be taken into account: while small-pox after vaccination is represented as a thing of daily and constant occurrence.

6. The representation that the protection of vaccination gradually wears out, till at length it leaves the system as liable to attack as though the protection had never been imparted, is not only unproved, but is opposed to important facts, and in all probability will turn out to be unfounded.

7. There is, however, a great proclivity to small-pox, whether natural or after vaccination, between the ages of fifteen and twenty-five,—a circumstance which will account for many of the facts, which have been cited as proof of the non-durability of the vaccine protective power.

The remarkable power of vaccination in modifying the course of an attack of small-pox, and in thus diminishing the fatality of the disease, is well known, and admits of being estimated with very considerable precision. Of 2,654 cases of natural small-pox admitted into the Small-Pox Hospital in sixteen years, in only sixty-nine was the eruption irregular or modified, and of the remaining 2,585, in 1,821 it was confluent; while of 3,094 cases reputed to be vaccinated it was modified in 2,149, and of the 945, in which the course was unmodified, there were but 570 confluent cases, 138 of which were in persons simply stated to have been vaccinated, but having no mark whatever, and 275 in persons having but one cicatrix. In various epidemics recorded by writers, and in others communicated to the Epidemiological Society, the result has been the same.

The returns from the Small-Pox Hospital give the following results:

	Cases.	Deaths.	Per Cent.
Natural small-pox . .	2654 .	996 .	35·55
Secondary ditto ditto . .	47 .	9 .	18· 9
Small-pox after vaccination .	3094 .	268 .	6·76

The ratio of mortality in the Small-Pox Hospital is high, both as regards natural small-pox and small-pox after vaccination; much greater than prevails in communities at large even under epidemical influence, from circumstances which must be obvious. In the first place, the severer cases are those naturally sent to a hospital, the milder being kept at home; or if milder are presented when the hospital is full, the severer are taken in in preference: in the next place, there are hospital diseases, as gangrene, erysipelas, and the like, to which the patient would not have been subjected at home: and lastly, there is a hospital influence, arising from the collecting together patients all infected with such a disease as small-pox, and which, independently of the production of any special superadded disease, aggravates mortality. So it happens that, allowance being made made for the superadded diseases, the mortality is still in advance of what occurs elsewhere. From the 268 deaths occurring after vaccination, Mr. Marson calculates that sixty-three should be deducted on account of superadded disease, and the rate per cent. of mortality then remaining will be 6·76 per cent. While the mortality in all reputed to have been vaccinated was 6·76 per cent., in those who were *merely stated* to have been vaccinated, but had no mark to show, it was 21·73 per cent.; and it is important to remark, that the statement which was relied on here was always a clear one, either from the patient's own recollection, or from the account of his or her friends, and their belief that it had taken effect properly, In those with cicatrices it was as follows:

		Mortality Per Cent.	Mortality Per Cent.
One vaccine cicatrix:	Well marked .	4·13	7·57
„ „	Badly marked .	11·95	
Two vaccine cicatrices:	Well marked .	2·68	4·13
„ „	Badly marked .	7·29	
Three vaccine cicatrices:	Well marked .	1·63	1·85
„ „	Badly marked .	2·32	
Four vaccine cicatrices:	Well marked .	0·99	0·74
„ „	Badly marked .	0·00	
Total mortality:	With good cicatrices . . .		3·04
„	With bad cicatrices . . .		9·77
„	With one and two cicatrices .		6·21
„	With three, four, & more cicatrices		1·30

This table, in the first place, shows how many there are who consider themselves vaccinated, and in whom lymph has undoubtedly been inserted (and in most instances, probably, with some local result), and yet who have next to no protection at all. They have been vaccinated in the popular sense of the term, *but they have never gone through the vaccine disease:* and of such Jenner held and taught that they were unprotected; and yet cases and deaths, such as these, are made to swell the lists of failures of vaccination. In the same way, in an epidemic in Ceylon, in 1830, out of 64 cases with no marks there were 18 deaths; of 69 with bad marks, unlike those of proper vaccination, there were 15 deaths; but of 127 with characteristic marks, but one death. In the same way again, in an epidemic in the same island, 1833-4, in 83 cases with no marks, or bad marks, there were 19 deaths; but in 111 with good marks, only two deaths.

The table further shows, in a most striking way, the wonderful modifying power of thoroughly efficient vaccination—the mortality in those vaccinated, and having four cicatrices, being less than one per cent. under the same circumstances, under which the mortality from natural small-pox is above 35 per cent.

Before referring to the change which has been induced in the mortality of mankind from small-pox, since vaccination was introduced, Dr. Seaton observes that the facts brought forward seem clearly to establish that vaccination is greatly to be preferred to the old process of inoculation. Vaccination involves no risk to life; and the chance is small (taking the population throughout under ordinary circumstances) that a vaccinated person will take small-pox at all, and very small, having taken it, he would die. But the process of inoculation itself kills outright, some of its advocates say five, and some three, of every thousand submitted to it: and for the survivors it has yet to be proved, that the protection they enjoy is greater than that afforded by vaccination. Of 1,000 children vaccinated in infancy, it would be an extravagant supposition that fifty should ever take small-pox afterwards; and of these fifty, how many would die? According to the vaccination, as we generally have it, not more than one and a half: but if the vaccination be thorough, as Mr. Marson has shown, the deaths would be less than a third even of this number. That is to say, on the extravagant hypothesis that 5 per cent. of all *vaccinated* should take small-pox, there would not be more than one in 2,000 vaccinated who would die of small-pox at any period of their lives; whilst of 2,000 *inoculated*, six or ten might be expected to die, as the result of the operation itself.

While vaccination has incontestable advantages over inoculation, as regards the individual, there are other considerations which still more emphatically recommend the former practice, while they render the latter, independently of any legal prohibition, and under all circumstances where vaccine lymph is attainable, little short of criminal. The inoculated small-pox is capable, like the natural disease, of being imparted from individual to individual; and thus each inoculated person becomes a focus of contagion. In this way, during those times in which inoculation prevailed, the small-pox was constantly communicated. No fewer than twenty-three instances are given by correspondents of the Epidemiological Society, in which districts free from small-pox were infected, and the infection clearly traced to an inoculated case. This was previously to the prohibition of inoculation in England. The same practice, though prohibited, goes on in Ireland at the present time with disastrous results (*Census for Ireland for* 1851, part v, vol. i); and it is pointed out by the Commissioners of Inquiry appointed by the Government in India, as one of the great causes of the diffusion of small-pox (*Report of the Small-Pox Commissioners, etc.* Calcutta: 1850). Hence, when inoculation was in vogue in England, there was no diminution, but rather an increase, in the mortality from small-pox; while, since the introduction of vaccination, there has been a diminution progressing year by year, as vaccination has become more and more diffused.

During the latter half of the last century, when inoculation was practised, the mortality from small-pox, in proportion to the mortality from all causes, was for the—

	Per 1,000.
Ten years ending 1760 . . .	100
„ „ 1770 . . .	108
„ „ 1780 . . .	98
„ „ 1790 . . .	87
„ „ 1800 . . .	88

While the proportion subsequent to the introduction of vaccination was, for the—

Ten years ending	1810	64
" "	1820	42
" "	1830	32
" "	1840	23
" "	1850	16

In foreign countries, the proportion of deaths from small-pox has fallen from sixty-five in the thousand, which it was during the period of inoculation, to seven in the thousand, which it is now, taking the average of a great variety of countries and a long series of years.

The same fact may be illustrated in another way:—For the ten years ending 1800, the average annual mortality from small-pox, within the Bills of Mortality, on a population ascertained in 1801 to be 261,233, was 1780. Immediately on the introduction of vaccination, this mortality began to decline. When the Registrar-General's office was established in 1837, a thoroughly trustworthy source of information on the causes of mortality was opened; and from this authority we find that the average annual deaths from small-pox in four years, ending 1841, on the metropolitan population, ascertained in 1841 to be 1,948,369, were only 1659; and this includes the year 1838, a year of most remarkable small-pox mortality. In 1841, the Act was passed providing public vaccination in every union, with the result, that the average annual deaths from small-pox in fourteen years, ending 1855, on the metropolitan population, ascertained in 1851 to be 2,373,799, were further reduced to 821.

We thus have the following results:—

	Population.	Aver. annual loss from small-pox.
Ten years ending 1800	261,233	1780
Four years ending 1841	1,948,369	1659
Fourteen years ending 1855	2,373,799	821

Dr. Lettsom and Sir G. Blane arrived at the conclusion, that the annual mortality in Great Britain and Ireland from small-pox was, during the last thirty years of last century, about 35,000. The whole population of Great Britain and Ireland was greatly less than that of England and Wales is at this present time: yet the average annual mortality in England and Wales for four years, 1838-41 inclusive, comprehending the very fatal year 1838, on a population ascertained in 1841 to be 15,914,148, was only 10,550; and, the Vaccination Act having been passed in 1841, the annual average mortality from small-pox, for seven years, 1847-53 inclusive, on a population ascertained in 1851 to be 17,922,768, was further reduced to 5,412.

These figures not only show the diminution of mortality from small-pox since the introduction of vaccination, but also illustrate the value of legislative interference in diffusing the blessings of that practice.

But does this result exhibit all that vaccination is capable of effecting? If it did, we should indeed be a long way yet from the extermination of even fatal small-pox. The truth is, that of this annual aggregate of deaths, the immense majority are among those in whom vaccination has never been performed, and of whom we may safely say that, had it been performed, they would, so far as small-pox is concerned, have been alive still. Three-fourths, at least, of this mortality occurred under the age of five years: now, as death from small-pox in vaccinated children under five is of the rarest possible occurrence, there is no doubt that the whole of these, with scarcely any exception, had never been vaccinated. Of the remaining fourth there are no data whatever which enable us to determine what proportion had, and what proportion had not, been vaccinated. But there can be no doubt that comparatively few of them had been vaccinated at all, and that still fewer had been well and efficiently vaccinated. Of 1,091 deaths from small pox, above the age of five, occurring in sixteen years in the Small-pox Hospital, in only 191 was there clear evidence of vaccination; and in only thirteen out of these were there more than two cicatrices. Even of these thirteen, six died of superadded disease.

There are few countries in Europe in which vaccination is so much neglected as, till within a recent period, it has been in this; and hence, notwithstanding that the regulations of most of these States fall very short of a perfect system, yet in all of them the mortality from small-pox, as compared with the total mortality from all causes, is considerably less than with us. In England and Wales, on an average of the last seven years, and in London on an average of ten years, the mortality from small-pox has been fourteen out of every thousand deaths from all causes; while in Sweden, Bohemia, Venice, or Lombardy, it has not been above two. And the statement made applies to England and Wales only, and does not take into account Scotland and Ireland. In some towns in Scotland, as Greenock and Glasgow, the mortality from small-pox has been, on an average of several years, 32 and 36, respectively, out of every 1,000 deaths; and for all Ireland, during the ten years ending 1841, it was 49 per 1,000, and in the province of Connaught, 60 per 1,000 of the whole mortality. The Census for Ireland, indeed, for the ten years ending 1851, shows some diminution in this mortality; but the commissioners expressly state their belief, that this is "in a measure owing to the general deficiency of returns for the early years over which this inquiry has extended." As it is, no less than 38,275 deaths are returned as having occurred from small pox during this period, of which no fewer than 34,377 were under ten years of age. We may safely affirm that *the whole of these latter*, and by far the larger portion of the remainder, might have been saved by proper vaccination.

Dr. Seaton now proceeds to make a few remraks on eruptions, or other diseases, occurring at the time of, or immediately subsequent to, vaccination, on account of the great misapprehension which appears to exist on the subject, and of the many misstatements which have been made. The occurrences have been cited as evidence of disease communicated to the system through the medium of vaccine lymph, and have thus been made to support a prejudice which dates from the time when vaccination was objected to, because it infected the human system with the blood of a brute—the awful consequences of which are related in pamphlets of the period, wherein we find that in one case "the face began to resemble that of an ox," while in another there were actually to be seen "patches of cow's hair."

In the first place, it is to be observed that the occurrence of any eruption or other disease along with vaccination, or so immediately succeeding it that it can with any plausibility be connected with it, is quite exceptional. The vaccine disease, under all ordinary circumstances, runs its own definite course; and when it has subsided, the system is left in every respect in the same condition in which it was before the vaccination was effected, save only that it is free from the liability to be infected by small-pox.

Secondly, it has never been pretended that any of the diseases that have occasionally been observed at the time of, or immediately subsequent to, vaccination have a special or peculiar character; they are the same diseases as are met with in children at all periods of their existence, as arising from cold, dietetic and other causes independent of vaccination, and *especially at the period of dentition, to which time vaccination is too often deferred.*

Thirdly, it is quite obvious that the mere occurrence of such eruptions or diseases as these at the time of, or immediately subsequent to, vaccination does not constitute any proof that they have been either caused by, or that their appearance has even been in any degree promoted by, the vaccination. To establish such proof it would be needful to show, on a number of persons sufficiently large to obviate any sources of error, that these eruptions are *more frequent* in children under the influence of vaccination, than they are in children of the same age, of similar constitution, and under all the same external conditions, who are not, or who have not recently been, subjected to vaccination. Mr. Marson, who, since his residence at the Small-pox Hospital, has vaccinated upwards of 40,000 persons, states that he has never seen other diseases communicated with the vaccine disease, nor does he believe in the popular reports that they are ever so communicated. If such results were really true, as stated, and formed part of judiciously conducted vaccination, they must have come under his observation in vaccinating upwards of 40,000 persons. The testimony of nearly the whole medical profession is to the same effect.

There are, however, a few medical men who state that, in particular cases, they have seen some eruptive or some strumous disease arising in the system so closely upon vaccination, as to excite in their minds the belief that it depended upon that process,—the vaccination, as they explain it, having acted as an irritant and roused into activity some latent constitutional peculiarity, as a cold might have done, or as the variolous inoculation, when it was practised, used in some instances to do, according to the testimony of many physicians of the last century. These gentlemen specially guard against the notion that these affections are caused by the introduction into the system of any source of disease along with the lymph employed, by expressly mentioning in many instances that the same lymph used on other children developed no such affections;

they believe that the occurrence is due to the constitutional predisposition of the child vaccinated, and not to the source from which the lymph was taken. Dr. Seaton thinks that what they have taken to be a consequence may have been mere coincidence, and that in constitutions such as they describe, the affections might have arisen in the same way and at the same time, had no vaccination at all been performed.

British Medical Journal.

SATURDAY, JANUARY 31st, 1857.

PROFESSIONAL CHARGES.

There can be little doubt that the system of sending in bills for medicine "as long as my arm", to use a vulgar phrase, is greatly on the decline; and the letters we publish are pretty evident symptoms of the reform coming over the profession in this respect. There can be as little question that the general practitioner would improve his position if he could write his prescription, and reckon upon his fee for attendance, like the physician; and we cannot see why, in all large towns, this arrangement should not obtain. In country places, however, the medical man is obliged by the force of circumstances to supply and dispense his own drugs. This combination of the scientific character with the trading one may not be altogether what we could wish, but certainly the medical man is not to blame for it. When the Oxford Master of Arts goes sheep-tending in Australia, he is obliged to mingle occupations which would seem incompatible enough at Christ Church or Oriel, where he could obtain all the advantages of the subdivision of labour of a large city: so it is with the country doctor; he is both scientific man and chemist rolled into one, and in most cases a very able man into the bargain. As he is known to compound and supply his own drugs, it is not unnatural that his patients should look to be charged for them; and, looking to be charged, that they should require the items. We cannot, therefore, quite agree with our correspondent of last week signing himself "One jealous for the Honour of Medical Science", in his opinion that a man who makes out such a bill does it in the spirit of a grocer. We have the highest respect for the country practitioners: the wide range of their practice, and the isolated position in which they are placed, render them shrewd and self-dependent to a degree which often surprises the town bred medical man, who confines himself to some speciality. We regret, therefore, very much, such reflections upon so able a body of men. They do apply, however, most unmistakably, to a class of men who certainly damage the social position of our body—we allude to those medical men who keep open shops and dispense with an even hand patent medicines, tooth-brushes, and deadly drugs to poison *rats* with! Granted, however, that the system of making out bills for drugs is an evil brought upon us by the public, an evil nevertheless it is, and the sooner the profession can abolish it, and establish the custom of charging for visits, inclusive of medicine, the better. Irrespective of the objection to it as leading the public to class us with traders, as we see they do in the general directories, there is this other far weightier objection, that it renders the general practitioner open to the charge of *over-drugging*. We cannot conceal it from ourselves, that the age just past was an age of over-drugging. The physician who had no interest in "doctor's stuff," erred in this respect equally with the general practitioner. We have seen prescriptions four inches long, and composed of at least twenty different drugs; and we have counted "six ounce" bottles by the score that have accumulated in the houses of sick people. All men now agree that the system which made "a doctor's shop of a man's stomach" was a bad one, and bad men have taken advantage of the error to found upon it that gross fraud—homœopathy.

With a certain portion of the public, a not unnatural reaction has drifted them from too much physic to no physic at all. It seems to us, therefore, of the utmost importance that the general practitioner should, as speedily as possible, relieve himself from even the suspicion of giving drugs unnecessarily for the sake of swelling out a bill; and he can only do this by charging for professional attendance instead of for his medicine. Our associates will read with much pleasure a letter from our respected correspondent Dr. Frederick Brown, of Chatham, on this subject. We do not quite agree with him that practitioners should affix printed labels to their bills, "showing their charges." It would be more dignified, more in keeping with the practice of a liberal profession, to let such things be understood, rather than to proclaim them upon the housetop; but it would be a very great advantage if some scheme of fees could be agreed upon by the profession generally. We see no reason why this should not be as well accomplished in the case of the general practitioner as it is in that of the physician. The legislature has, indeed, adopted for him a scale of charges for attendance upon paupers—a shabby one, it is true, but still one that serves to prove that the object is attainable. Such charges, moreover, are inclusive of medicine; it would be a great pity, indeed, if we could not manage to deal in some fixed manner with the patients of the middle classes as we deal with the parish poor. The subject, however, requires ventilation, and we shall be glad to receive any suggestions which may be useful in a further review of it.

THE WEEK.

The Medical Students of University College seem determined to shame the apathetic section of the Poor-law medical officers by the energy with which they have taken up Mr. Griffin's movement. On Saturday last, at a meeting held by them, Mr. Price Jones in the chair, they passed, not only unanimously, but, we hear, with enthusiasm, the following resolutions:—

"Resolution I. That the thanks of this meeting be cordially given to Mr. Griffin for his exertions on behalf of union medical officers.

"Resolution II. That this meeting pledges itself to support the movement commenced by Mr. Griffin, and considers that the salaries now paid to union medical officers, affording very inadequate remuneration, should be revised and increased.

"Resolution III. That this meeting regards the object sought to be obtained by it, as not only of serious importance to the welfare of the whole medical profession, but also as involving the true interests of the public at large.

"Resolution IV. That in order to secure to the scientific medical practitioner the fruits of his labour and self-denial in study, it is advisable that Government should not appoint to any public situation any but such as have by public examina-

tion proved themselves to be the fittest men to fill the post, and this principle is applicable to the appointment of the medical officers connected with the Poor-law, as this is in reality a public service.

"Resolution v. That this meeting, conside gunity of purpose and good faith among members of the profession of vital importance to the cause of Poor-law medical reform, desires to express its unqualified disapproval of the conduct of those who not only treat this movement with neglect and apathy, but even act contrary to its principles.

"Resolution vi. That this meeting shall adopt measures to form a branch association among medical students, and other junior members of the profession, in aid of Mr. Griffin's movement.

"Resolution vii. That the resolutions of this meeting be forwarded to the medical and other leading journals; and also to Mr. Griffin, with the expression of its warmest and most zealous sympathy.

"Resolution viii. That in order to testify its sympathy in a practical manner, a shilling subscription be opened, and the sum collected to be placed to the account of the Poor-law Medical Reform Association at Williams' bank.

"Resolution ix. That in order to carry out the objects of this meeting a committee be formed, consisting of a Chairman, Treasurer, Secretary, and three other gentlemen. That the committee consist of Mr. W. Price Jones, Chairman; Mr. J. Mockridge, Treasurer; Mr. W. T. Fox, Hon. Sec.; Mr. E. W. Thomas, Mr. D. Richards, Mr. C. Drysdale.

"Resolution x. That the thanks of this meeting be cordially given to the chairman (W. Price Jones, Esq.) for the able manner in which he has conducted the meeting, and for his zealous exertions in behalf of the movement.

"WILLIAM TILBURY FOX, *Hon. Sec.*

We promise to give our hearty support to this "Branch Association", and trust they will be as successful in giving a fresh impetus to Mr. Griffin's movement as the medical students were in obtaining redress for the assistant-surgeons in the navy. We trust an aggregate meeting of the London students will speedily be held, at which we should like to see a representative from each of the medical schools throughout the kingdom. The students of the Medical Schools in the provinces will not, we trust, omit to take a part, by deputy at least, in such a meeting. After the extraordinary, and, we must state, unaccountable apathy, exhibited by two-thirds of the union surgeons of the kingdom, we shall hail with no little pleasure the generous energy of the younger members of the profession who, thus early in life, stand forward to do battle on the behalf of an oppressed portion of our body.

We are glad to hear that the Medical Benevolent Fund is likely to receive further benefit from the estate of the late Mr. Camps of Fenny Stratford. This benevolent gentleman left, it will be remembered, to this excellent institution a sum of £750, free of duty. He also made the institution his residuary legatee; and the executor has, we believe, intimated to the secretary his belief that a considerable sum will be added to the Fund from this source. Mr. Camps, who formerly practised at Berkhampstead, was a member of the Society of Friends.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROP. COUNTIES. [General Meeting.]	37, Soho Square, London.	Tues., Feb. 10, 4 P.M.

ADMISSION OF NEW MEMBERS.

THE Laws of the BRITISH MEDICAL ASSOCIATION, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. WILLIAMS, Worcester; or to any of the Secretaries of the Branches.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 13TH, 1857.

JOHN WEBSTER, M.D., F.R.S., Vice-President, in the Chair.

ON THE DETERMINING CAUSES OF VESICULAR EMPHYSEMA OF THE LUNG. BY WILLIAM JENNER, M.D., F.R.C.P.

[*Continued from page* 76.]

Dr. SIBSON had in 1844 published a paper, in which he espoused the inspiratory theory—a theory opposed to that brought forward by Dr. Jenner. He (Dr. Sibson) had attempted, however, to disembarrass his mind as completely as possible of his previous views, while listening to Dr. Jenner's paper, but those views had not been in the slightest degree modified by what he had heard. It had been stated that in emphysema, during coughing, the lung rose up into the neck, and above the clavicle; but he maintained that it was not the lung that then rose, but the large venous sinuses of the neck that were greatly distended. Dr. Jenner said that during inspiration there was a falling-in of the lung at that part; but he (Dr. Sibson) contended that that arose from the opposite cause to that alleged—namely, the blood being prevented from entering into the right side of the heart. The upper part of the chest was not, as stated, that which least supported the lung during expiration, it being, as he was able to prove, the most supported part in all animals that breathed with the diaphragm. In all such animals, with the exception of the anteater (in which the first rib resembled that of birds and reptiles), the upper rib was the strongest of all. In animals that did not breathe with the diaphragm, the upper ribs were not included in the sternal set, these commencing lower down. But in animals that breathed with the diaphragm, the lung was drawn forcibly down; and were there not an enormous counterpoise, it would be drawn inwards at each inspiration, so that there would be a large chasm in the upper part of the chest and the lower part of the neck, instead of the lungs being expanded equally in every direction. The upper rib was the strongest; it had muscles of great power acting immediately upon it, inclosing the lung in a muscular case of great firmness, which, during inspiration, while it drew up the ribs (particularly the first and second), also drew up the upper part of the lung; and there was a small muscle acting upon the portion of cellular tissue outside the pleura, to draw up the apex. The muscles yielded but little during expiration. Putting them aside, however, there was but a small portion of the apex above the anterior part of the first rib, the more important part of it lying upon the first, second, and third ribs. That was a part eminently the subject of emphysema, and it would be found, by *post mortem* examination of cases of emphysema, that there were none in which so small a portion of the lung was superior

to the first rib; while in none was there so large a portion as in cases of phthisis. He was convinced that if Dr. Jenner would examine his position with increased care, he would modify the views he had expressed. The idea of the lung being variously supported during expiration was opposed to the commonest law of physics, that of the pressure of fluids being equal in every direction. It was true in reference to the ribs, cartilages, diaphragm, liver, etc., that some of them were more yielding than others; but they were all less yielding than any part of the texture of the lung itself. Dr. Jenner had rightly said that the lowest part of the lung in front was the part that fell in during inspiration in emphysema; but there was a portion at the upper part of the sternum (the whole of the two upper thirds) more emphysematous than any other, and that was the portion more expanded during inspiration in emphysema, and the most pressed out during expiration. Respiration there was only about one-five-hundredth of an inch, whereas in many cases of emphysema he had known it rise as high as one-twentieth. At the lower part of the sternum it fell in, and the expansion there, at all events, could not be by expiration. At the lower part the lung was exceedingly lengthened downwards in every case of emphysema, sometimes by an inch or an inch and a half. The form of the chest in emphysema was inspiratory, the shoulders and sternum being raised, the neck shortened, the head dropping, the scapula raised upwards away from the chest, the walls of which universally expanded, except over the lower region; and surely it was not rational to conclude, since the form was inspiratory, that the cause of emphysema was expiratory. He thought, however, that there was an expiratory cause, when the emphysema assumed a certain form familiar to pathologists, that of a peculiar sacculated projection. In those cases the cells were greatly swollen, in consequence of the impossibility of the escape of the air from the bronchial tubes during expiration. During inspiration the tubes were being widened, and the facility of expiration was gradually diminished, so that a large part of the air inspired could not get out. But he maintained that the usual cause was inspiratory. In one or two *post mortem* examinations, he thought he had traced another cause—namely, the confinement of fluid within certain lobules, thus enlarging, and sometimes bursting them. Such cases, however, were very exceptional. He did not think that the inspiratory theory was at all affected by the paper of Dr. Jenner.

Dr. Edward Smith remarked, that the author's theory was not so opposed to that ordinarily received as the antithesis of the terms inspiratory and expiratory, as the author's denunciation of the respiratory theory seemed to imply; since on both theories alike the disease is produced by the forcible entrance of air into the cells. The disease is not produced by or during expiration, since it is essential, on the author's theory, that the glottis should be closed, and hence, when expiration is permitted, the production of the disease cannot occur. The occurrence of the disease with cough (that is, under the conditions mentioned by the author) has long been admitted by the advocates of the inspiratory theory; and since the essential act in the induction of the disease is the introduction of air into the cells, he would regard the author's theory simply as a modification of the inspiratory, notwithstanding that the power employed is that which, with the glottis open, would be expiratory. The author's theory is one of compression and dislocation of the contained air, and not of expiration. In cases of chronic bronchitis, he believed the disease to be often directly induced by inspiration. In that disease there is obstruction to the entrance of the air from the retention of an excessive volume of the residual and reserve air, whereby the cells remain at all times too much distended; and the dypsnœa is mainly owing to the fact, that a sufficient quantity of tidal air cannot gain access to the air-cells, whilst the residual and reserve air become effete by reason of insufficient change. Hence the efforts to inspire are unusually forcible and sudden, whilst the movements of respiration are unusually small, so that a greater pressure must be exerted upon the column of air in the air cells than is found in health; and thus at the points the least supported, or enfeebled by disease, and also at those the most in the line of the inspiratory power, the cells will dilate.

Dr. Snow said that he had paid some attention to the subject of emphysema about fifteen years ago, and at that time he advocated the opinion that this lesion could only be produced during inspiration. At that time, however, he took it for granted that the chest was a cavity equally supported at all parts, when the pressure would of course be equal in all directions, and distension of the air-cells during expiration would be impossible. The circumstance pointed out by Dr. Jenner, that the resistance was less above the clavicles than at other parts, altered the question a little, but he still considered that the air-cells of no part of the lungs could be distended during expiration. In order that the air-cells of the upper part of the lungs should be distended during expiration, it would be necessary that the air should be entering the bronchial tubes at this part, whilst it was leaving the bronchial tubes of the other parts of the lungs, but he did not think that the structure of the bronchi would allow of air being pressed in this manner; he thought they would sooner collapse by the pressure.

Dr. West considered that previous theories as to the causes of emphysema needed some such modification as that suggested by Dr. Jenner, to account for the frequent occurrence of that condition in children in cases of hooping-cough and croup independent of bronchitis. He did not agree with Dr. Jenner respecting the occurrence of emphysema in cases of pneumonia, as he had observed it in many cases, especially in early life, and that to an extent proportionate to the rapidity with which the pneumonia had set in.

Dr. Graily Hewitt had had frequent opportunities of observing the occurrence of vesicular emphysema in infants and young children dying from bronchitis or from diseases in which bronchitis was an essential ingredient. He had not observed, however, that the emphysema was limited to the upper lobes of the lungs or to the margins of lobes. Patches of emphysema were usually scattered here and there, and almost always in close apposition with portions of the lung which had become collapsed or apneumatic. This was, according to his experience, so constantly the case, that finding certain parts in a state of apneumatosis, it might with confidence be predicted that emphysematous portions would be found near them. He therefore considered that in these cases the emphysema was a direct consequence of the other condition.

Dr. Barclay believed that both parties were in error with respect to the physical explanation. One contended that there could not be any pressure upon the interior of the vesicles during inspiration, and the other, that there could not be pressure upon the exterior of the lungs during expiration. If at any time the lung structure was not sufficiently expanded so as to fill the chest when the chest was expanded by inspiration, an unequal pressure would be exerted by the atmosphere upon different parts, and the weakest portion of the lung would give way, and vesicular emphysema be found. Dr. Sibson was in error in saying that the pressure during expiration was equally exerted by the ribs and soft structures. When the pressure was produced by the rib, the intermediate soft structure gave way and bulged, and there was nothing to prove it impossible that the lung should give way in parts where the chest was weakest, vesicular emphysema being then formed by the forcible compression of the lung structure during an expiratory effort with a closed glottis.

Dr. Sibson, in explanation, had only stated that whilst the different parts of the chest yielded in different degrees, they were none of them so yielding as the lungs themselves. He agreed with the position laid down by Dr. Barclay.

Dr. Black could not agree with the views advanced by Dr. Jenner. He stated that the apices of the lungs were the parts most liable to distension, and argued that that was attributable to the comparative immobility of the part; but he (Dr. Black) could not see how the inference drawn by Dr. Jenner could be maintained. If the lungs were spherical, they would expand equally in all directions; but as the apices were in the most contracted part, of course there would be the least expansion there, which was merely the exact harmony of the part to the substance that had to be expanded.

Mr. J. Hutchinson suggested that both the inspiratory and expiratory theories might be true, and that Dr. Jenner's theory could be more easily understood, and more likely to be received, if, instead of speaking of irregular support, he had spoken of irregular compression. With regard to the equal pressure of fluids in all directions, that law only applied to fluids at rest.

Mr. Brook remarked that the only disturbance of that law would be the momentum of the air, which was very slight, and could not be increased by any contrivance that might be attempted. Suppose an inflated lung to be enclosed in an India-rubber bottle, and subjected to pressure, that part would give way where the bottle was weakest, and would, he apprehended, become emphysematous.

Dr. Jenner did not exclude the inspiratory theory, which, he had no doubt, was applicable in certain cases, especially to those mentioned by Dr. Hewitt.

Dr. Peacock believed Dr. Jenner's views to be applicable to

the explanation of the mode of origin of some forms of emphysema of the lungs, but that there were others which were more readily explained on the inspiratory theory. He observed that Dr. Jenner regarded the acute emphysema of infants as certainly produced by violent expiratory efforts. If, however, Dr. Jenner meant his views to be extended to the acute emphysema of adults, he (Dr. Peacock) could not coincide in that opinion. The acute emphysema which occurs in acute capillary bronchitis he regarded as much more readily explained on the inspiratory theory. In that disease, one of the peculiar features is the abortive character of the cough, whereas the existence of collapse of the lungs in such cases readily explained the presence of emphysema.

Dr. JENNER replied that acute emphysema in children was not peculiar to cases of bronchitis. He had seen cases of acute emphysema, in which there was little or no collapse.

MEDICAL SOCIETY OF LONDON.

SATURDAY, JANUARY 10TH, 1857.

H. P. ROBARTS, Esq., Vice-President, in the Chair.

TUMOUR IN THE ABDOMEN. BY H. SMITH, ESQ.

The patient, a lady, aged 40, had suffered from the tumour, more or less, for years; but it had more particularly attracted attention since the period of her marriage, between two and three years previously. Some months after this event, a very distinguished physician-accoucheur had been consulted, and he had come to the conclusion that the lady was pregnant, and would be delivered in a few weeks. Many others had since been consulted, and amongst them was another physician of large experience, who considered that the tumour might be an enlargement of the spleen, of a malignant character. On *post mortem* examination, Mr. SMITH found the entire abdominal cavity to be filled with an immense tumour, which displaced everything; and on careful manipulation, this tumour was found to be totally unconnected with the surrounding parts over by far the greater portion of its surface; on the left side, however, there was a small patch of adhesions between the tumour and peritoneum, which were easily broken down by the finger; and a little above this there was a connexion between the two surfaces, which was so firm, that it was necessary to use the knife. On turning the tumour forward, it was found to be connected with the right ovary by a narrow pedicle, and to the broad ligament of the uterus by a process of peritoneum of considerable breadth. Quite posteriorly the tumour was adherent to the greater omentum, and it was necessary to cut through this with the knife. There was very little fluid in the abdomen, and the tumour itself was a solid vascular-looking mass, not unlike the interior of a softened spleen. There were two or three small cysts fringing its border.

This case was mentioned to show the difficulty of diagnosis which might be occasioned by some of these abdominal swellings. Moreover, Mr. Smith thought that it was interesting in connexion with the question of operation, if such had been suggested; for although the tumour was entirely free from adhesions over the greater part of its circumference, and could, perhaps, have been so determined during life, yet the adhesions to the omentum alone would have seriously interfered with the safety of an operation, and of course it would be perfectly impossible to diagnose adhesions posteriorly during life.

ON CASES ILLUSTRATING THE DIAGNOSIS AND TREATMENT OF CERTAIN DISEASES OF THE BRAIN.

BY J. RUSSELL REYNOLDS, M.D.

The author commenced by reading the records of six cases of cerebral disease, which bore a close general resemblance to each other, presenting epileptiform convulsions, and more or less headache, with paralysis, spasm, and diminished or perverted sensibility. A short recapitulation of the cases was then given; and this followed by an analysis of each case into groups of symptoms, classified under the three heads of altered mental, motorial, and sensorial function. In this analysis it was pointed out, that the cases differed in regard of the relative intensity, and mode of production, of the several symptoms; and the diagnostic characters of cerebral disease were shown not to differ in kind from those employed in the discrimination of lesions in other organs. Reference was made to the possibility, and frequent occurrence, of diagnosis between such diseases of the chest, as bronchitis, pleurisy, pneumonia, phthisis, etc., by a consideration of the relative intensity, and mode of production, of symptoms, such as cough, dyspnœa, pain, expectoration, and fever, common to them all. A similar mode of examining the cases under consideration was shown to result in the following diagnosis:—The 1st, as a case of simple epilepsy; 2nd, as chronic meningitis; 3rd and 4th, as tumour; 5th, as chronic softening; and, 6th, as Bright's disease, with urinæmia. It was then urged that the difference observed between these cases, though stated as the result of direct observation, was conformable with what might be anticipated from a consideration of the nature of the lesion in each. It was stated, that epilepsy did not constantly, and therefore did not necessarily (no matter how long it may have existed), include any other symptoms than those of the attacks; and it was urged, that when other symptoms present themselves, the cases he considered either as complications of epilepsy, or as some other disease. In relation to treatment, the most important point was to recognise the existence of chronic meningitis, and to treat this either as a disease in itself, or as the complication of either epilepsy, or tumour, or softening. The treatment especially dwelt upon as the most important in cases of chronic meningitis, was the long protracted exhibition of mercury.

Editor's Letter Box.

PROFESSIONAL CHARGES.

LETTER FROM F. J. BROWN, M.D.

SIR,—I. There appears to be a growing desire on the part of the medical practitioners of England to abandon the mode of charging that was employed by the apothecaries of old. Many send in their bills for "professional attendance, with medicine". A still better mode is to charge for advice only, in the following terms—"For professional advice". I recommend the affixing of printed labels, shewing the charges, to the bills, in the following form:—

CHARGES FOR ADVICE.

Fees, £1:1:0 for one visit.
„ £1:1:0 for three visits.

Charges for ordinary attendance.

Middle classes.	2*s.* 6*d.* to 5*s.* each day visit.	
	10*s.* each night visit.	11 P.M. to 7. A.M.
Working classes.	2*s.* to 5*s.* each day visit.	
	5*s.* each night visit.	

Midwifery.

Middle classes.	£2:2:0 to £3:3:0
Working classes.	£1:1:0

Vaccination.

Middle classes.	5*s.* to 10*s.* 6*d.*
Working classes.	2*s.* 6*d.*

The scale of charges that I recommend for general adoption is that in use amongst the principal surgeons residing in Manchester. There is no objection to the charge of half a guinea for midwifery in the case of poor labourers; and a portion of visits may be charged when the whole cannot reasonably be paid for.

If all practitioners were to adopt this scale, or some other one agreed upon, it would establish a set of charges that would be recognised by the public.

II. I propose that junior practitioners should be permitted by professional etiquette to charge small sums for attendance; whilst surgeons that are established in practice should adhere to the recognised scale. This would enable young surgeons to acquire practice in a legitimate way, and it would greatly benefit the public, for it would give them the advice of qualified practitioners in lieu of that of druggists. It would also confer a benefit upon the established practitioners; for the persons consulting them would know that they must pay the higher fees. The older practitioners would, moreover, be more at leisure than they now are, whilst their incomes would be equally good.

Instead of fearing the new-comer, the established practitioners are bound, even now, in my opinion, to welcome and to encourage him. It is a contemptible sight to witness jealousy and meanness in cases of this description; and it is suicidal policy in the long run. The acceptance of union appointments by established practitioners, to keep other surgeons away, is an odious practice, which punishes those that are guilty of it.

III. I recommend that the following books should be kept by every practitioner:—

1. *For Scientific Purposes.*

(*a.*) Register of cases with five columns, viz., for name, etc., for residence, for entry, for discharge, and for disease. A moveable index answers well for the register.

(*b.*) Professional journal for important cases.
(*c.*) Midwifery register.

2. *For Business Purposes.*

(*a.*) Prescription book.
(*b.*) Visit and advice book.
(*c.*) Ledger.
(*d.*) Cash book.

The advice book is a broad one. The names are entered alphabetically each month, and the dates are entered along the line against each name. It is well to distinguish visits from *advice at the surgeon's house*, by placing V. before the date in the one case, and Adv. in the other. When patients send for medicine without being seen, the entry should be M. before the date, to show that medicine had been given without advice. This is a necessary measure to prevent loss in certain cases, for country patients will often send for medicine many times in succession without receiving a visit. Midwifery and operations require special entries in the "broad sheet". With such an advice book, the posting is very easy, and the ledger requires to be only of small size.

If you deem these remarks of service to the profession, please to publish them in the Journal.

I am, etc., Fred. James Brown, M.D.

Chatham, Kent, January 26th, 1857.

POOR-LAW MEDICAL REFORM.

Letter from R. Griffin, Esq.

Sir,—I shall feel obliged by the insertion in the Journal of my letter to the Poor-Law Medical Officers. To save time and trouble to the local secretaries, I have had a list prepared of the residences of all the medical men, as far as I can ascertain them, and have forwarded a pamphlet to each. Should any gentleman be accidentally omitted, and will inform me of it, I will send him a copy immediately.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, January 24th, 1857.

"*Poor-Law Medical Reform Association.*

"Dear Sir,—In drawing up the accompanying statement, I have been guided by the replies to the questions issued in October last. Should it not meet with the concurrence of all, the fault rests with those who were too apathetic to make returns.

"The correspondence is inserted with no egotistical feeling, but simply to enable Lord Palmerston, Her Majesty's Ministers, and the members of the House of Lords and Commons (for whose perusal it is especially printed), to understand by a narration of facts the complaints of the union medical officer.

"A general meeting of poor-law medical officers will shortly be convened, of which due notice will be given in the journals. Prior to this, it is desirable to ascertain the number of medical men on whom we may depend to sign the petitions that may be sent to them. There are now 1,500 members on the books of the Poor-Law Medical Reform Association, on whom, I believe, we may confidently rely: but to prevent the possibility of error, I think it a safe course again to request each medical officer will do me the favour to inform me, *within one week*, if he will support us in the forthcoming struggle, which unanimity and good fellowship may make final. It must be obvious to all, that this is not a mere personal affair between a few medical officers on one side, and the Poor-Law Board and Guardians on the other, but a public association for the benefit of the entire body of poor-law medical men; and consequently, it becomes the duty of each to unite with his brethren for the general good. In 1855, a sum of £230,000 was paid for medical attendance on the poor; by the plan proposed, this amount will be greatly increased; it therefore is most important that all should unite to obtain so desirable an object.

"To prosecute with vigour an affair of this magnitude, requires ample funds; and it devolves upon me again to tax the liberality of my brethren, by requesting subscriptions may be forwarded without delay, either by postage stamps, when the amount does not exceed five shillings, or by post-office order. Economy of time being also an object in conducting so extensive a correspondence, I shall feel obliged by each note being headed with the name of the union to which the officer belongs.

"A copy of the pamphlet will be forwarded to each member of the Houses of Peers and Commons, in order that they may understand what we require; but I shall wait one week before doing this, to give time for gentlemen who are personally acquainted, or have influence with, any nobleman or gentleman of either House, to apply for a copy, that they may send it and a private note to insure attention.

"For the sake of the profession and sick poor, I ardently desire this movement may succeed. Personally, it is most probable I shall not reap any benefit from it, as no individual can long withstand the machinations to which I am exposed. Last month, the Weymouth Board of Guardians requested leave of the Poor-Law Board *to suspend me;* this week they have passed a vote of the *severest censure upon me*, and forwarded it to the Poor-Law Board, I presume, privately to blacken my character in that quarter, as they have not had the manliness to inform me of either of these resolutions. They endeavour to veil their actions in impenetrable secrecy. There are, however, some whose babbling propensities make them boast of their doings and their determination to get rid of me *coute qui coute;* hence my knowledge of the facts. No body of men can have done more to illustrate our grievances and damnify themselves than the Weymouth Board of Guardians:

"'quem Deus vult perdere
Prius dementat.'

"A member of this Board is a retired surgeon of ample fortune.

"The medical journals have nobly advocated our cause; the students, with all the warmth and energy of youth, are generously rising in our behalf; your old and tried friend, Mr. Lord, still continues his strenuous exertions, as will be seen by his admirable letter; and it now only rests with the Poor-Law Medical Officers to unite, and by one determined effort to endeavour to emancipate themselves from the disgraceful thraldom they have so long endured.

"I am, dear sir, faithfully yours,

"Richard Griffin.

"12, Royal Terrace, Weymouth, January 24th, 1857."

POOR-LAW MEDICAL REFORM.

Letter from Thomas Hodgkin, M.D.

I have to-day received the recent pamphlet of our zealous colleague, R. Griffin, addressed to Lord Palmerston. I regard it as highly important to the success of the renewed effort which he has so strenuously and indefatigably made in behalf of his professional brethren engaged in succouring the poor in sickness, that the present period should be turned to the best account, by the co-operation of medical men throughout the kingdom.

The meeting of Parliament will shortly bring members of the House of Commons from all parts of England; and it is very desirable that every one of them should be duly informed, by the medical man who attends his family and enjoys his confidence, of the facts afresh set forth in the able pamphlet alluded to, and be thoroughly impressed with the importance of the subject as respects the welfare of the poor, the interests of the public, and the just treatment of the medical officers. The course and tendency of any discussion in Parliament in relation to Poor-law medical relief, could not fail to be favourably influenced by the adoption of such a plan.

Impressed with this conviction, I cannot neglect to offer the suggestion, that it may find a place in the pages of the British Medical Journal.

I would further observe, that, much as we must desire improved legislation in regard to the medical profession, I feel assured that all attempts in this direction must prove more or less abortive unless medical men in different parts of the kingdom unitedly and cordially endeavour to obtain the desired reform in their respective districts, not merely by fraternal co-operation, but by the exertion of their personal influence with the guardians of the poor. The same plans are not equally applicable to all localities. The right adaptation of different plans to different situations cannot be determined by a central authority so well as by the united knowledge and judgment of the medical men and of the Poor-law guardians, sincerely and harmoniously endeavouring to obtain the largest amount of public good.

Notwithstanding the flagrant and sadly numerous instances of medical men being unjustly treated, I believe that their labours amongst the poor are often praised and valued, as I have reason to know that they ought to be; and I cannot doubt that the requisite alterations would in many instances be cheerfully effected, if advocated in the mode which I have proposed.

In poor and populous districts, it is accordant with theory and experience, and equally advantageous and convenient to the

poor and to the members of the medical profession, to employ duly qualified medical men exclusively devoted to parochial medical relief; but, in thinly peopled agricultural districts, a far larger subdivision of service than at present exists would, I submit, be attended with no small advantage both to the poor and to the profession. Thine sincerely,

THOMAS HODGKIN.

Bedford Square, 27, 1, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

AIKIN. On January 25th, the wife of C. A. Aikin, Esq., Surgeon, of 8, Southwick Street, Hyde Park, of a son.

BILLINGHURST. On January 23rd, at 41, Halliford Street, Islington, the wife of Henry Billinghurst, Esq., Surgeon, of a daughter.

KNAGGS. On January 26th, at Maldon Place, Haverstock Hill, the wife of Henry Guard Knaggs, Esq., Surgeon, of a son.

MARSHALL. On January 25th, the wife of Peter Marshall, Esq., Surgeon, of 42, Bedford Square, of twin daughters.

*SPENCER. On January 24th, the wife of J. H. Spencer, Esq., of Hallaton, Leicestershire, of a son.

SPICER. On January 18th, the wife of H. S. Spicer, Esq., Surgeon, of North Molton, Devon, of a son.

STEVENS. On January 26th, at Hoddesdon, Herts, the wife of Robert Ingram Stevens, Esq., Surgeon, of a son.

TOPHAM. On January 22nd, the wife of John Topham, M.D., of Wolverhampton, of a son.

WANE. On January 26th, at 20, Grafton Street, Berkeley Square, the wife of Daniel Wane, M.D., of a daughter.

MARRIAGES.

BURTON—PAGE. BURTON, Robert Graves, M.D., Assistant-Surgeon 77th Regiment, to Elvira, daughter of the Rev. Jas. Page, at St. Luke's, Chelsea, on January 20th.

GOODWIN—PEEL. GOODWIN, John Wycliffe, M.D., of Norwich, to Frances Emma, eldest daughter of Joseph Peel, Esq., of Singleton Brook, Manchester, at Broughton, on Jan. 22nd.

HOME—FAIRBANK. HOME, Alexander Gordon, M.D., of Whitfield, Edinburgh, to Hannah Priscilla, youngest daughter of the late Josiah Fairbank, Esq., of Westhill, Yorkshire, at Paris, on January 21st.

SIMPSON—CAMPBELL. SIMPSON, George, jun., Esq., Surgeon, of Gower Street, Bedford Square, to Jane, eldest daughter of the late Hugh Campbell, Esq., at Southweald, Essex.

STOCKWELL—TATUM. STOCKWELL, Francis William, Esq., of Richmond, Surrey, to Ellen, eldest daughter of Thomas Tatum, Esq., Surgeon, of George Street, Hanover Square, at St. George's, Hanover Square, on January 22nd.

DEATHS.

ADAMS. On January 25th, Sarah, wife of R. E. Adams, Esq., Surgeon, of Sevenoaks.

ALEXANDER, W., M.D., of Halifax, on December 31st, 1856.

*CARY. On January 23rd, Eliza, wife of William Henry Cary, Esq., Surgeon, of Woodford, Essex, aged 49.

CRICHTON. On January 20th, at the Grove, near Sevenoaks, Frances, widow of Sir Alexander Crichton, M.D., F.R.S., aged 85.

MCCLELLAND, Joseph, M.D., at Manchester, aged 45, on January 12th.

*MOREY, John Egleton, Esq., Surgeon, late of Doncaster, at Almholme, on January 19th.

NORMAN. On January 26th, at 7, Manchester Square, Henry Charles, second son of H. Burford Norman, Esq., Surgeon, aged 4 years and 10 months.

PALMER. At Ormskirk, on January 15th, Harold, infant son of Charles Palmer, M.D.

THOMSON. At Liverpool, on January 15th, Caroline, daughter of David P. Thomson, M.D.

HEALTH OF LONDON:—WEEK ENDING JANUARY 24TH, 1857.

[From the Registrar-General's Report.]

THE deaths registered in London, which in the two previous weeks had been 1135 and 1171, rose in the week that ended last Saturday to 1216. In the ten years, 1847-56, the average number of deaths in the weeks corresponding with last week was 1177. But if the deaths of last week are to be compared with the average, the latter should be raised proportionally to the increase of population, in which case it will become 1295. Hence it will be seen that although the rate of mortality has been rising lately, it is still below the average.

In comparing the results of the last two weeks an increase is observed in the deaths of old persons; for whereas 41 men and women, who had attained the age of 80 years or upwards, died in the former week, the number last week was 74. In these 74 old persons an unusual number of nonagenarians is found, namely, 14; a man and a woman were each 95 years of age, and the two oldest were women who had reached the age of 96 years.

In the present as compared with the previous return there is an increase in zymotic diseases, and also in diseases of the nervous system and the heart; whilst the numbers referred to pulmonary complaints are almost identical, and deaths by phthisis (or consumption) decreased from 152 to 135. The increase in the class first mentioned arises altogether from hooping-cough and typhus (which includes common fever), the cases in which the former was fatal having increased from 55 to 67, and those of the latter from 34 to 52. Six children died of hooping-cough in the sub-district of St. Margaret, Westminster, and 3 of these in the same house, viz., 2, Church-court. Three men died of "febris" on the 21st, 22nd, and 23rd instant respectively in the Workhouse, Mile-end New Town. Measles was fatal last week in 26 cases. This complaint appears to have prevailed in the Norwood Workhouse, as four young children died there from it between the 11th and 17th of January. A musician who resides at 117, Lillington-street, Westminster, has lately lost all his children (four daughters) from measles.

Three persons died of carbuncle. The deaths of 5 persons are recorded in the present return as caused by intemperance.

Last week the births of 904 boys and 885 girls, in all 1789 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1553.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·547 in. The highest reading was 30·20 in. at the beginning of the week; the lowest 28·97 in. on Saturday. The mean temperature of the week was 38·1°, which is 1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The *highest* temperature occurred on Sunday (the 18th), and was 49·8°; the *lowest* was 28·4°, which occurred on Thursday; the range of the week was 21·4°. The mean dew-point temperature was 36·1°, and the difference between this and the mean air temperature was 2°. The mean temperature of the water of the Thames was 39·4°. The temperature of the river was remarkably constant. The wind blew generally from the west. Its horizontal movement varied from 15 miles on Wednesday to 165 on Friday. Rain fell to the amount of 0·41 in., more than half of which fell on Tuesday. Rain fell on every day, except Wednesday.

HEALTH OF LONDON IN 1856.

IN the 52 weeks that ended December 27th the number of children born in London was 86,833. According to a rule which holds invariably in this large population, the number of males exceeded that of females, for the births consisted of 44,159 boys and 42,674 girls. In the same period 56,786 persons died, namely, 28,894 males and 27,892 females. The births increase more or less rapidly with the population; and under a reduced rate of mortality the number of deaths in 1856 was less than that of any previous year since 1852: and the result is an excess, greater than was obtained in any former year, of births over deaths. This excess is 30,047. Soldiers and seamen have returned from the seat of war; persons engaged in peaceful pursuits have arrived in the capital from other parts of the United Kingdom and from abroad; and though many have left it for other homes, it may be assumed that sustenance, clothing, and house accommodation must now be found in London for about 60,000 inhabitants more than it contained at the end of 1855.

Last year the public health was unusually good. During the last ten years the annual deaths in London have been on the average 25 to a thousand of the population; in 1856 the proportion was 22 to a thousand. The mortality was lower than in any year within the limits of this comparison, except 1850, when it was slightly less than 21 in a thousand, a reduction which, it is probable, was partly the consequence of the premature destruction of infirm persons by the cholera of the previous year. That improved state of health which last year prevailed in London as a whole was in various degrees enjoyed by each of the five great divisions of which it is composed. The mortality ranged from 21 in the Western and Northern divisions to 23 in the Eastern. But without reference to the rate of mortality—or the proportion of deaths to population—which alone furnishes a criterion of health, a comparison of deaths registered in the several *districts* will in some cases strikingly indicate the changes always in progress in the component parts of that vast "contiguity" of brick to which the term "London" is now applied. Westminster, selected for measures of improvement with some other districts, exhibits a decided decrease in the deaths; whilst in Kensington, Islington, Lewisham—desirable neighbourhoods on the outskirts—the deaths following population show a still more manifest increase.

The meteorological conditions of the year appear to have been generally favourable to health. The mean temperature at Greenwich was 49°·1, which approximates closely to the average as obtained from a long series of years. The winter, viz. January, February, and March, was mild; the mean weekly temperature was frequently above 42°, and rose as high as 44° and 47°; and in the fifth week of the year the deaths fell to 949. Diarrhœa prevailed amongst infants in summer, which to other classes of the community is the healthiest season; and hence, though the mortality was rather higher in winter than in the other quarters, its uniformity throughout the year is remarkable. An exception to this statement must be made with regard to October, which was conspicuous among the months for its low rate of mortality, the weekly deaths having been considerably less than a thousand. The mean temperature during great part of that month was 53°. The most fatal period was the first week in December, when the deaths arose above 1300, in consequence of great rigour combined with sudden change in the state of the atmosphere. Twenty-two inches of rain fell in 1856; the average of the last 40 years is nearly 26. In the second quarter the rain-fall was in excess of the average. The horizontal movement of the air was on an average 4 miles an hour.

The decline of small-pox in London may be traced through the last seven quarters. In the spring quarter of 1855 the deaths from it were 328; thereafter the quarterly numbers were 196, 177, 194, 146, 108, having decreased almost continuously till they were only 74 in the last quarter of 1856. The annual mortality from scarlatina has also been very perceptibly less since 1851. If the deaths from this disease, as they occurred in four seasons during the last five years, be compared, it will be seen that they always rose rapidly towards the close of each year; in 1854, when scarlatina was most fatal, the deaths from it were 3439, and in the last quarter of that year 1297; in 1856 they were 1795; and in the last quarter 556, having been in each of the previous three quarters about 400. Hooping-cough differs from scarlatina in this respect, that it is almost invariably most fatal in the winter quarter, viz., January, February, March, and (in the next degree) in the spring. The deaths from hooping-cough were 2078, showing a decrease on some previous years. Measles, alone of the four epidemics mentioned, exhibits an increase: in 1855 it was fatal in 864 cases, but last year in 1445.

The number of persons who died in 116 public institutions was 10,381. Nearly one person out of five who died in the year closed his days under a roof provided by public law or private charity. In workhouses the deaths of females preponderated over those of males; in hospitals for the sick, lunatic asylums, and prisons, the numbers in relation to sex are inverted, the inmates of the houses last mentioned being chiefly men and boys. The deaths of soldiers and seamen, which during the war rose each year above 400 in the London military and naval hospitals, were last year 282.

On the 25th of November the temperature suddenly fell, and after remaining amidst some fluctuations low for the following ten days, it rose again on December 5th, and continued for some days higher than the mean temperature of the year. The mean temperature of the *ten cold days* was 33·6°; and it ranged from 27·7° to 47·6°. But the mean night temperature was 26·9°; and the range was from 19·4° to 35·3°. Upon the grass the thermometer fell one night to 9·5°. Fog prevailed for the first four days, but was afterwards dispelled; on Thursday, December 4th, rain fell, and an increase of 10° of temperature took place between the hours of 6h. P.M. and 8h. P.M., followed by a nocturnal rising temperature, accompanied by a magnetic disturbance. Electricity was positive throughout the period; and volleys of sparks as well as galvanic currents were frequent at first, and became constant during the last five days.

Although the temperature was not on an average below the freezing point, and the season did not, as in the six weeks ending on February 24th, 1855, when the mean temperature was 28·4°, exhibit the effects of extreme and protacted cold on the population of London, it was held to be a favourable opportunity for investigating the immediate effects of a fall to a comparatively low temperature followed by a mild temperature.

The deaths at different ages, and of the several diseases in the Nosology, were taken out for each day from November 23rd to December 13th.

The *ten* days (November 26th to December 5th) may be called *cold days;* the ten days November 23rd, 24th, December 6th to 13th, may be called *warm days*, for the sake of distinction.

The general result is that the deaths in London during *ten cold days* were 1844; while the deaths in the ten warm days were 1505. The excess of deaths in the cold days was 339, or nearly 34 daily.

Under 5 years of age the mortality was increased by cold one *fourth* part; at the age 5 to 10 there was no increase; at 10 and under 20 the increase was one *third* part; at 20—40 one *sixth* part; at 40—60 one *fifth* part; at 60—80 one *third* part. At the age 80 and upwards no effect of cold is shown.

The deaths by consumption were increased at the age 20 and under 60.

The deaths by lung diseases and heart diseases were increased by the cold; but on the brain diseases the effect is not obvious.

WARBURG'S FEVER TINCTURE.

A correspondence, of four letters, has recently taken place between the Reverend Philip Jacob, Rector of Crawley and Canon of Winchester, and Dr. Andrew Crawford, a physician residing in Winchester. The letters are too long to be given at length; but an outline of them is subjoined.

No. 1. The Rev. Canon Jacob writes to Dr. Crawford that, having heard from a fellow clergyman of the beneficial effects of Warburg's tincture, he at once provided himself with a small bottle. Three years, however, elapsed before he used it; he then gave it in a case of remittent fever; and, within four hours, "the diaphoretic and restorative properties of the medicine were unmistakably developed." Finding that the patient did not recover so rapidly as he expected, Canon Jacob, on the sixth day, called in a medical man, who, on seeing the case, said "that there was nothing for him to do." The case went on "to a happy termination." In another case—one of typhus—Canon Jacob suggested the use of the tincture to the medical attendant; whose readiness "to take a step out of the beaten track of the accustomed treatment" the reverend gentleman holds worthy of praise. He adds that Warburg's tincture is used by Dr. Babington and Mr. Skey, and that they have fearlessly recommended it. In concluding, he says: "I do not apologise, sir, for thus addressing you; for, besides your own high medical reputation, you have the higher character for superiority to mere professional routine. I do not doubt your willingness to inquire into the properties of this new remedy. . . . . Prejudice against everything new in medical science is too common; and I could not anticipate the effect of my statement in some minds."

No. 2. Dr. Crawford replies that he possesses no actual knowledge on the subject; and that, although he had heard from extra professional sources reports as to the wonderful effects of Warburg's tincture in fever, he listened with great incredulity to the marvels related about secret nostrums. The case of typhus referred to by Canon Jacob had been seen by Dr. Crawford on the day following the administration of Warburg's tincture: she then was in the state in which fever patients generally are when the disease has "taken a turn"; and subsequently required the free exhibition of wine to aid her recovery. From a medical friend in London, he had learned that the tincture is said to be composed of aloes, aromatics,

and about six grains of quinine in each small bottle—each bottle being a dose. He objects to the assertion that medical practitioners are commonly influenced by prejudice against everything new: on the contrary, they are much more frequently too ardent in their pursuit after novelties. But they have the greatest aversion to "patent" medicines. He then remarks:—

"Few things are more discreditable, I think, to our age and country, than the countenance that is given to empiricism. The legislature is not ashamed to sanction the levying of a considerable revenue from the nostrums of the most unblushing quacks; and the Government stamps them, as it were, with the royal authority to delude, and too often to deal destruction among Her Majesty's subjects. The newspaper press, too, in very many instances, derives a large portion of its profits from the same source. The following statement on this point is taken from one of the medical journals" (Association Medical Journal, June 17th, 1853):

"'A standing order from half a dozen quacks for the insertion of their long advertisements, and an agency for their medicines, are, with nine of every ten provincial and colonial newspapers, necessary elements of existence. .... Piles of provincial and colonial newspapers are now before us, the majority of which are actually choked with the knavish and often indecent advertisements of notorious medical swindlers.'

"I cannot but consider that when a man, who professes to have discovered a new remedy for disease, associates himself with such impostors as these, and conceals the nature of his nostrum, instead of giving the benefit of it to science and mankind, he casts a suspicion over his integrity, which should cause him to be distrusted by the wise and the good. But, unfortunately, the *good* are not in every thing the *wise;* and the *wise* are not the *majority* of mankind: and, hence, in this self-styled 'Age of Reason,' we see imposture reaping such a harvest, even among the most elevated of the land—nay, among those also who are deemed the learned—that the satirist might not unaptly style it the 'Age of Delusions.'"

In a postscript, Dr. Crawford quotes part of a letter of Dr. Babington, stating that he (Dr. Babington) had some years ago used Warburg's tincture in Guy's Hospital, apparently with good effect. Dr. Warburg at the time promised that, if the remedy proved efficacious, he would make known of what it was composed; and asserted that it did not contain quinine. The performance of his promise, however, though claimed by Dr. Babington, was evaded. The tincture, on being analysed by Dr. Odling, was found to contain at least eight grains of quinine in each small bottle. From that time, Dr. Babington gave up all intercourse with Dr. Warburg, and all concern about his tincture.

No. 3. Canon Jacob thanks Dr. Crawford for his answer: which, he says, as he was fully aware that he was calling him to sit in judgment on a non-professional practice, he did not very much expect. He then goes on to add to his list of authorities. He says that the Warburg's tincture has been admitted into the Materia Medica of Austria; and that it has been recommended by fifty-five medical men, British and foreign; among whom are Dr. Babington and Mr. Skey. He extracts Dr. Babington's testimonials, which are as follows:

"Feb. 20th, 1851.

.... "Touching my experience of Dr. Warburg's tincture, I can truly say, after having tried it in numerous cases in Guy's Hospital and elsewhere, that I consider it the most potent anti-intermittent medicine (to coin a new word) I have ever employed. Its *tonic* powers are remarkable; and in a case of continued fever in Guy's Hospital, when the convalescence, in spite of wine, and serpentary, and ammonia, and some other tonics, was tedious, and indeed very doubtful, this tincture produced a remarkable and beneficial change."

"May 29th, 1851.

.... "I have met with the most strikingly successful results from the employment of your remedy. In intermittents—however severe, however confirmed, of whatever type, whether complicated with an enlarged spleen or with congested liver and jaundice—*it has never once*, out of at least twenty cases, failed to effect a speedy, nay, almost an immediate cure. The two doses of three and a half drachms each, taken according to your instructions, have in several well marked and severe cases produced the full effect of stopping at once and permanently all symptoms of ague. .... In the neuralgic cases, this remarkable remedy has been, I may say, as successful as in intermittents, so far as the removal of intensely violent pain is concerned."

The following is Mr. Skey's testimonial:—

"I will not be deterred by the fear of comment from stating my conviction of the great value of the Warburg tincture as a tonic. I have saved many lives by its administration; and so long as the ends of medical science have for their object the removal of disease, and not the welfare of the profession only, I shall continue to use it. In all exhausting diseases, it is invaluable."

Canon Jacob then goes on to suggest that "it is possible that the germ or herb from which the tincture is extracted may contain disulphate of quinine"; and to support Dr. Warburg, of whom he has heard that he is "a highly educated and skilful man, and quite a gentleman, and has been honoured by a personal introduction to Her Majesty." He then, professing to have no respect for patent medicines as a class, says that he would observe the maxim, "Try all things, and hold fast that which is good." This tincture, too, he says, has a peculiarity.

"The discoverer has appealed, unlike all other patentees of medicine, to his own profession: he is no general advertiser. Instead of spending his £20,000 in advertising his medicines, he has distributed them gratis to the profession. He has given away 60,000 bottles. He has made himself poor for others. Is it wrong he should reap some return? ....

"But, whatever your judgment be in this case, I feel I have a solemn duty to my fellow-creatures. I cannot look around me, and remember that nearly one-half of the earth fall a victim to fever in some of its complications, without the deepest emotion. I ask of the faculty if they are agreed in the modes of cure in regard to some of the types of this wide wasting malady? Is not the answer, in regard at least to one dominant phase, viz., continuous fever, '*We have no cure*'? Is not the practice most diverse and even contradictory? The noble science of medicine must be humble here. I desire to see the faculty keep its own high eminence among us. But this must be kept, not by a stern exclusiveness, but by a liberal observation of all known remedies. It cannot be denied that the Warburg tincture, irrespective of personality, has a fair amount of medical commendation. Will the medical men try it? If not, will the men of England discard it? It requires no great amount of medical knowledge to use it safely. Call it expensive? If it save one life, and it has confessedly saved many, it will more than compensate the purchase money."

No. 4. Dr. Crawford very fully replies to Canon Jacob's letter, and answers his enthusiastic allegations in favour of Dr. Warburg and his tincture. The following extract contains a very complete *exposé* of the whole concern:—

"Much more germane to the matter are the following particulars respecting Dr. Warburg's history, as published in the *Medical Times* of July 5, 1851, by Dr. John Davy (brother to Sir Humphrey). The facts were supplied to him by Dr. Blair, of George Town, Demerara, where the celebrated 'tincture' was first brought to light.

"'The opinion as to the basis of the drug being quinine is not founded on any chemical analysis of it, but chiefly on the fact that, at the time he was publishing the rare merits of his drug over any other febrifuge, he was purchasing from the druggists here large quantities of quinine. Upon one occasion, a little girl came to the drug shop of the late Mr. Cross, and asked to buy eight ounces of quinine, for which she had the money. Mr. Cross was surprised at the magnitude of the quantity asked for, and inquired from whom she came. The girl said she was not allowed to tell; but, Mr. Cross's curiosity being excited, he sent a servant after her, and traced the girl to the residence of Dr. Warburg. ....

"'It would be very difficult indeed, for any person, in this climate and country, to collect any great quantity of plants without an assistant labourer, and without the fact being known. It would be next to impossible for this to be done, and their juices to be elaborated in quantity, and secresy preserved of the entire transaction. But Dr. Warburg was not known here as a botanist, or herbalist, or working chemist, but he was known to be buying up suspicious quantities of quinine at the moment he was proclaiming the new substitute for it...

"'I have now before me six letters from H. Willson, in London, to J. S. Stutchbery, of this city, from whom I have obtained leave to copy some extracts. These will shew you, that the appellation "humbug," which I applied to Dr. Warburg and his "Drops," in my last letter, was not uncalled for or over severe.'

"The purpose of these letters was to induce Mr. Stutchbery to undertake an agency for the sale of the 'Drops,' which Mr. Stutchbery to his credit, refused—although he was offered £100 a year to accept it, and he was not at that time in a thriving business.

"Dr. Blair continues—'Dr. Warburg, having met with no

success in Demerara, went to London, and entered into partnership with Mr. Parker, a druggist, and the "Fever Drops" became the property of *Messrs. Parker and Co.*'

"The following are some extracts from the letters of Mr. Willson, referred to by Dr. Blair:—

"'Mr. Parker undertook to bring the medicine before the public, and to conduct the mercantile part of the business, finding whatever capital might be required.—Warburg bound Parker not to endeavour to discover his secret; and to allow him to store 32 puncheons of extracts (which were said to contain the effective ingredients of 3,000,000 of bottles), where he, Warburg, chose, and in a place which was to be kept secret from Parker.—Parker paid Warburg about £600 for the duties and expenses of these extracts. He furnished a house for him at the expense of the firm, costing £360. He paid him about ten pence per bottle for the other ingredients of the medicine. Fitted up a laboratory and warehouse for the sale of it, without any limit as to the expense. Introduced Dr. Warburg to his friends as a gentleman of science and property; and *advertised* the medicine, until he had advanced nearly £3,000 in the whole. . . .

"'At last—a variety of little circumstances occurred to throw suspicion on the truth of Warburg's high pretensions, till Parker is at length convinced. . . . He will not allow his capital to remain in the business, unless he is satisfied that the 32 puncheons of extracts, which were said to be shipped from Demerara, are really in existence. . . . He declares that he will not continue connected, in any way, with one who has been guilty of such gross misrepresentations. . . . He believes that the concern would yield a very good income, but says that he is prepared to face the loss of all he has embarked in it, rather than compromise his character, by continuing in partnership with . . . . Such is a meagre sketch of a romance of real life, which, in the hands of a novelist of genius, might be made very interesting.'

"With this 'romance' the discussion shall terminate, so far as I am concerned. Allow me, however, before concluding, to express my unfeigned respect for your benevolence, your zeal, and single mindedness. Alas! that these truly Christian qualities should constitute the very character of all others which cunning and imposture the most eagerly try to ensnare."

ACTION FOR RECOVERY OF FEES FOR OPERATING.

Harborough County Court, 19th January, 1857.

Ody, *v.* The Guardians of Harborough Poor-Law Union.

The plaintiff conducted his own cause. Mr. Douglass appeared for the defendants.

The plaintiff stated that he sought to recover a fee of £2, for the amputation of a finger for George Bale, whom he asserted to be a pauper, and whom he attended in his capacity of parish surgeon. George Bale had been at work in the Brick Yard, at 6*s.* per week, up to the time of the accident, which occasioned the attendance of Dr. Ody. Bale applied for relief at the next meeting of the Board of Guardians, and was ordered by them to be received into the union house. His age exceeded sixteen years by a few months, by which circumstance he was no longer chargeable on his father. Mr. Douglass, for defendants, admitted the appointment *of the plaintiff as union surgeon*, and the proper amount of the fee, which is according to the scale issued by the Poor-Law Commissioners; but contended that the plaintiff was not entitled to recover—1st, because he had not obtained an order from a relieving officer or overseer to attend upon George Bale; 2nd, because George Bale was not a pauper.

The Judge decided that although an order imperatively demanded the attendance of the surgeon, the want of it did not disqualify him from giving such attendance, or from recovering his fee, on showing that the person so attended was a pauper; and in this case he was clearly of opinion that the boy was a pauper.

Mr. Douglass then objected that plaintiff had neglected to obtain, before performing the operation, the certificate of a qualified surgeon, "that the operation was necessary, and proper to be then done", as required by Art. 178 of the New Poor Law.

This objection was held to be fatal to the cause of the plaintiff, who was therefore non-suited.

Medical Society of London. On this evening (Saturday, Jan. 31st), the committee of seven members, for the purpose of selecting candidates for the various offices in the society, will be appointed. A paper on Sterility will also be read by Mr. I. B. Brown.

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

A Village Doctor. Your letter arrived too late for insertion this week.

Communications have been received from:—Mr. F. T. Bond; Dr. Humphry Sandwith; Dr. King Chambers; Mr. R. Steel; Dr. Hodgkin; Mr. T. Holmes; Dr. O. Ward; Dr. Little; Dr. Cockle; Mr. E. Clarke; Dr. G. G. Rogers; Dr. F. J. Brown; Mr. William Gilbert; Mr. R. C. B. Holland; Mr. Owen Fox; Dr. Wade; Mr. Robert Stedman; Dr. Duncan Carmichael; Dr. Kidd; Dr. Edward Smith; Dr. Coates; Mr. Haynes Walton; Dr. Andrew Crawford; Dr. Maurice Davis; Mr. George Lowdell; Inquirer; Sir Charles Hastings; Mr. Richard Griffin; Dr. Thomas Williams (Swansea); Mr. Alexander Ure; Dr. J. C. Hall; Mr. Henry Spencer; Mr. William Fox (with enclosures); Mr. James H. Smith; Mr. James Bright; Mr. John G. Appleton; Mr. Part; Mr. McDermot; A Village Doctor; Mr. Southam; Mr. T. Holmes; and Mr. J. V. Solomon.

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1st. To provide a safe and efficient medium by which the Medical Profession may secure more certain and regular payment for their services; with every consideration for the convenience of those who are willing, but unable directly to discharge their liabilities; with rigour from those who are able, but have not the disposition, to remunerate medical men.

2nd. With the machinery necessary for carrying out the foregoing purpose to establish a means of privately negotiating the transfer of Practices and Partnerships.

3rd. A Register is kept for Assistants and Pupils.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

COMPOUND FRACTURE OF BOTH LOWER EXTREMITIES: PRIMARY AMPUTATION OF THE RIGHT THIGH: DEATH FROM LATENT PYÆMIA: ULCER OF THE STOMACH.

Under the care of G. D. POLLOCK, Esq.

JOHN W., aged 39, was admitted into St. George's Hospital, under the care of Mr. Pollock. He had sustained severe injury from the fall of a heavy iron box over both legs. There was a compound fracture of the left femur, and a compound fracture of the opposite leg extending into the knee-joint, as was proved by the presence of air in the synovial cavity. He was said to have been suffering from disease of the stomach ('*ulcer*' his medical attendant had told him), as evidenced by habitual vomiting. His complexion at the time of admission was yellow, and he was in a state of great collapse. At a consultation, it was decided that, when reaction was established, the right thigh ought to be amputated. This was accordingly done under the influence of chloroform, some hours after his admission. The pulse did not appear to be materially depressed after the operation, and next day he had rallied somewhat. On examination of the amputated leg, it was found that the tibia only was fractured: the fracture, which was very oblique, ran upwards and outwards, and opened into the cavity of the joint below the external semilunar cartilage.

It would be foreign to our purpose to note the daily symptoms of this case. No symptoms of disease of the stomach were observed, except an attack of severe pain in that region. This, however, was so transient that it would not have attracted notice but for the alleged previous disease. He sank very gradually, and apparently of weakness, caused by the profuse discharge from the stump (which was very foul, and the flaps retracted from the bone), and from the compound fracture, the wound connected with which showed no disposition to heal. A peculiar odour was noticed about his bed, which is sometimes pointed out as symptomatic of pyæmia; but no more distinct proof of this condition was present. The complexion, indeed, was yellow, but not obviously more so than at the time of his admission. He died three weeks after the operation.

On *post mortem* examination, the fractured ends of the left femur were found deprived of periosteum, separated from each other and from the soft parts, and lying bathed in fœtid matter. They would evidently have become necrosed, had the patient survived. The right femoral vein contained much adherent fibrine, which in some places was softened. The lungs also contained a few patches of secondary deposit, and there was also purulent fluid in the pleura. On the upper and posterior part of the stomach were two small oval ulcers, free from any traces of inflammation, denuding the muscular coat of its mucous covering.

REMARKS. This case is one of much interest, both in a medical and a surgical point of view. First, as to its medical bearings. In our last number (p. 82), we adduced instances of the severe symptoms caused by disease of the stomach presumed to be ulceration. The present case is an instance of the occasional inconstancy of those symptoms. The man's story of his complaint, which was afterwards corroborated by his former medical attendant, who was present at the *post mortem* examination, was, that for several months he had been troubled with severe and constant vomiting, latterly of almost daily occurrence, and attended with much emaciation. His sallow cachectic aspect partly confirmed his story; but, as no symptoms were present, and he was in a state of great prostration and suffering from the injuries he had sustained, the history of the disease was not investigated. From that time, no symptom of disease of the stomach occurred. The man ate and drank as well as most patients similarly circumstanced; he never vomited, and only once complained of some pain in the epigastrium. No reason whatever could be found for this sudden cessation of symptoms, unless it were that the pain and restlessness under which he suffered rendered it necessary to give large doses of morphia. In the fortunate cases above referred to, it will be noticed that opium was liberally given, and no doubt contributed materially to the cure.

In the surgical treatment, there was a good deal of difficulty. The extensive injuries, the extreme prostration, the probable presence of organic disease, rendered it a very unpromising case for operation; yet it seemed unjustifiable to leave the patient exposed almost certainly to the consequences of suppurative inflammation of the knee, should he survive the shock of the injury. In a healthy man who had no other injury, excision might have been thought of, but it was here obviously out of the question. The results of the amputation were at first gratifying, and during the first fortnight he appeared to have some chance of surviving; but his vital power was unequal to the task of repair; the soft parts in connexion with the compound fracture sloughed, and the bone would evidently have become necrosed. It was, therefore, perhaps fortunate for him that his sufferings were terminated by the attack of pyæmia. In reference to the latter, it will be noticed in this case how few symptoms may attend the development of this morbid condition in persons excessively reduced by previous disease. No febrile symptoms (rigors, sweats, etc.), no nausea or jaundice, were noted, although carefully inquired for. The only trace of pyæmia was, as before stated, a certain peculiar odour—a sign to which few persons attach much importance, and which indeed can hardly be relied on when, as in this case, there is an extensive suppurating cavity. Still there was something sufficiently peculiar in the smell of this person's bed to attract the attention of some of those who watched the case, and to lead to a conjectural diagnosis from this circumstance alone, which the *post mortem* examination confirmed. Cases similar to this, of latent pyæmia, are of constant occurrence. How little dependence, then, can be placed upon inferences as to the comparative frequency of this condition in this and earlier times, unless drawn from observations in which *post mortem* examination has been rigorously attended to. (T. H.)

ST. BARTHOLOMEW'S HOSPITAL.

I. LOCAL TREATMENT OF CANCER.

Under the care of E. STANLEY, Esq.

[*The notes supplied by* MR. BARKER, *House-Surgeon.*]

THE local treatment of cancer is just now receiving an amount of attention proportionate in some degree to the interest of the subject: it is, in fact, the most important question in surgery as yet left unsettled. On the one hand, there are persons (and those not without authority) who consider that the results of operation have been so discouraging, that it would be better to leave the cases to their natural course. On the other hand, various specifics are vaunted as capable of effecting that which the knife has, it is said, failed to do, viz., both to remove and to eradicate the disease. This is indeed a question of experience; but it is difficult to understand, *à priori*, how any treatment can be more effectual than the speedy removal by the knife, in situations which allow of the diseased growth being entirely sur-

rounded by the incision. This is all that would appear possible by local treatment; for that the application of an escharotic to the diseased structure should so far modify the constitution as to prevent what is called the return of the disease—*i. e.*, the reappearance of its local symptoms—is an assertion which seems so improbable as to require very convincing evidence to obtain its reception. This, however, is what is professed by those who promise the "cure" of the disease by local applications. The best known of these latter is Dr. Fell, the American practitioner, whose alleged cures have been the theme of so much discussion in London. This gentleman has been provided with ample opportunities at the Middlesex Hospital for the trial of his specific, on the understanding that he should first disclose to the medical officers of the hospital, in confidence, the nature of the application; and that either or both parties should be at liberty to publish the recipe, and the results of the cases, at the end of half a year. We shall watch this experiment, which has already begun, with great interest; and our readers may rely on being put in possession of its results, when published. At another hospital, cases are also under treatment with the same object, viz., the eradication of cancer by a painless application. It would be premature to publish the details of these cases, which will very shortly be submitted to the public in another form. At other hospitals, cases of open cancer are being treated by the application of solution of chloride of zinc. The details of one of these cases we subjoin, as far as it has yet gone. Its progress hitherto has been most satisfactory; and if the only advantage gained were the temporary relief from suffering which the poor fellow has experienced, this would be an ample recompense for the treatment. Everything seems, however, as yet, to promise a more lengthened respite (we dare not say a permanent deliverance) from the malady. Another case is under the same treatment, also by Mr. Stanley; and with still more encouraging success. This is so nearly completed, that we hope to give the whole progress of it in a very early number. The same treatment, by the application of Burnett's solution diluted, was also commenced by Mr. Curling, at the London Hospital, on a female suffering from a very large mass of soft cancer in the leg and thigh. The case, however, appeared hopeless; and, as the patient objected to the treatment, it was not persevered in. At the Westminster and University College Hospitals, the escharotic suggested by Professor Simpson (sulphate of zinc) is receiving a trial; and other caustics are being tried by different hospital surgeons, principally, however, if not solely, in cases which would not admit of operation. The peculiarity of Dr. Fell's method, if we understand it rightly, is, that it is intended as a substitute for the latter.

Edward G., aged 39, a chimney sweeper, was admitted under the care of Mr. Stanley, December 29th, 1856. Two years ago, a mass of the ordinary soot cancer was removed by Mr. Stanley from the scrotum. The disease recurred in the inguinal glands of the left side, eight months since, soon ulcerated, and has been gradually extending, accompanied lately by severe pain. On admission, there was found an excavated ulcer, nearly an inch deep, measuring three inches in breadth (along the fold of the groin), and one in length. Its surface was tuberculated, the edges everted and ragged; and it was surrounded by an indurated margin of considerable breadth, which was covered by livid skin. The discharge was of a thin sanious consistence, and very fœtid. Lotion of chlorinated soda was applied to the ulcer, on account of its foul smell; and, as he could not sleep for the pain, an opiate was given.

On Jan. 2nd, he was ordered to apply a lotion composed of one part of Sir W. Burnett's disinfecting fluid to six parts of water, on lint, adjusted to the size of the cavity, to be removed every two hours. The first application caused considerable pain; and the strength of the solution was accordingly diminished to one part of the solution in nine. On the day following (Jan. 3rd), a yellowish eschar had formed; the smell was less offensive, the pain somewhat diminished. He continued the application of the lotion for ten days, during which time large masses of the diseased structure sloughed away, leaving the cavity considerably enlarged in all directions. The pain attending the application was but slight. An attack of inflammation, of no great severity, in the neighbouring skin, now caused the suspension of treatment for a week, when (Jan. 19th), he was ordered to renew the application, and had done so up to the date (Jan. 26th) on which we had last the opportunity of seeing him. Portions of slough, in appearance like leather, continued to come away; a granulating and apparently healthy surface was exposed at the upper part of the sore; the hard margin was much diminished. His health was good. The lotion caused him no pain, and he slept quite comfortably at night without an opiate. His spirits also were much raised, and he was anticipating a speedy cure.

The escharotic appeared to respect, at least in a great measure, the healthy tissues; while the diseased parts (perhaps in consequence of their lower organisation) were freely destroyed by it. (T. H.)

II. Operation for Cicatrix of the Neck. Removal of Fibrous (?) Tumour after Recurrence. Operations for Necrosis.

A series of operations of much surgical interest, though not, with one exception, of any great gravity, was performed last Saturday at St. Bartholomew's Hospital. The first was a plastic operation by Mr. Holmes Coote, for the cure of cicatrix of a burn of the neck, in a young female. This cicatrix occupied the left side of the neck, drawing the lower lip down, and causing very considerable deformity. On a previous occasion the cicatrix had been divided by a horizontal incision at the root of the neck, and thus a broad wound had been left, and the tension on the lower lip somewhat relieved; but the contraction of the neighbouring parts exercised so much traction on this wound, that it was found impossible to produce its union; and the irritation caused by the dragging on the raw surface in each movement of the head was very painful to the patient. Mr. Coote adopted a plan recommended by Mr. Skey, which consists in making incisions into the skin in the neighbourhood of the granulating surface, with the view of liberating it from this traction, and thus allowing of the closing of the original wound. This plan, it is true, substitutes several cicatrices for one; but the tension resulting from a number of small scars is not, it is said, equal to that caused by one large one; and it will be obvious how much the scar of the original wound would be diminished in extent by the release of the tension on its edges. Free incisions were accordingly made in the neighbourhood of the wound, and left to fill up. One drawn above the wound appeared to have the further advantage of relieving, in some measure, the traction on the lip. We shall recur to this case.

Mr. Stanley operated on a small swelling, seated on the back of the fore arm of a middle aged woman. It was one of those numerous tumours which do not reveal distinctly their intimate structure from their outward appearance; and hence varying opinions were expressed concerning it. It was about as large as a walnut, was livid and lobulated on its surface, freely moveable on the fascia, of a soft consistence, and had, on one or two occasions, been the seat of hæmorrhage—probably the result of friction. It had been growing for two years, and eight months previously a ligature had been passed round its base; but the tumour had reappeared in a short time afterwards—probably not having been entirely removed. An incision was made surrounding the tumour, and it was removed, together with the piece of skin supporting it. On examination it was seen that the skin was only secondarily affected, the tumour having sprung from the areolar tissue. It appeared to be of a soft fibrous character.

The next two operations were for the removal of necrosed bone, by Mr. Stanley. The cases presented a forcible contrast in the situation of the disease, and the consequent feasibility of an operation. One of the patients was a female, rather advanced in age, who had laboured for four years under necrosis of part of the shaft of the tibia, the result, it appeared, of syphilitic aberration. The bone was not loose; but as a large portion was lying directly under the skin, part of it exposed to the air, it was thought that the cure would be expedited by gouging it away, so as to expose healthy bone. This was of course easily effected. The next patient was a young man who had been suffering for some time from disease of the femur at its lower and back part, which had caused him so much pain that he had come into the hospital desirous of the removal of the limb. It was thought better, however, notwithstanding that the seat of the disease was in the immediate neighbourhood both of the popliteal artery and of the joint, to endeavour first to effect the removal of the dead bone. Accordingly, a sinus which existed at the inner part of the limb just above the condyle was enlarged by an incision, curving away from the course of the artery, and the bone was exposed by careful dissection. The operation, which was necessarily tedious and bloody, was perfectly successful. Three small pieces of necrosed and loose

bone were extracted, and the neighbouring bone carefully examined. It appeared to be healthy. In Mr. Stanley's work on diseases of the bone (p. 129) the difficulties attending this operation are well pointed out; and it is mentioned that the consideration of them, in many of the cases he has seen, "led to the conclusion that in preference to undertaking a protracted operation for the removal of the dead bone, with the uncertainty of effecting it, and with the risk of doing serious mischief in the attempt, it is better to amputate the limb." The bolder course pursued in this instance will probably avoid this *opprobrium chirurgiæ*. (T. H.)

III. RUPTURE OF THE BLADDER.

[*From Notes supplied by* Mr. Barker *and* Mr. Callender.]

Peter A., aged 26, was admitted Jan. 20, under the care of Mr. Stanley. He had been drinking, and was intoxicated at the time of admission. It appeared that some quarrel had taken place, and that he had been kicked by one of his companions on the abdomen. This was shortly before his admission. At that time his aspect was anxious; the abdomen was tense, and very tender about the umbilical region. The urine was retained. On a catheter being passed, ten ounces of urine were drawn off, and some blood escaped as the instrument was being withdrawn. No injury appeared to have been done to the urethra. During the next few days he continued to get weaker, and his countenance to exhibit increasing anxiety; but no distinct symptoms of peritonitis showed themselves. The bowels continued costive. The urine was still retained, and he used to complain of increased pain when it was allowed to remain any long time in the bladder. Accordingly an instrument was passed every four hours. It was noticed that as soon as the bladder had been nearly emptied, the handle of the catheter was always tilted towards the right side. Towards the end of the case, the abdomen became more tender and tympanitic (but no fluid could be detected in the peritoneum), and the legs were drawn up. The treatment was directed to supporting his strength, relieving the pain, and latterly also to the removal of the inconvenience which he suffered from flatulence. He died on the sixth day.

On *post mortem* examination, twenty-two hours after death, no distinct traces of peritonitis were detected. The cavity of the peritoneum contained a small quantity of turbid fluid, which was unfortunately lost before having been examined. The bladder was found firmly contracted behind the pubes. At the point where the peritoneum turns from its upper wall to the parietes of the abdomen, was an opening about an inch long, passing through all the coats of the bladder, and on the inside of this viscus the lower part of the principal rent was joined by two or three lateral fissures, extending through the mucous membrane only. The mucous membrane, both of the bladder and intestines, was slightly congested. The other organs were healthy. There were no marks of contusion in the walls of the abdomen. Microscopic examination of the rectus abdominis muscle showed its fibres loaded with the parasite named trichina spiralis.

Remarks. This case is adduced as an example of the occurrence of rupture of the bladder, and the consequent effusion of urine into the peritoneal cavity (for there can be no reasonable doubt that the fluid which was unfortunately lost was urinous, as the laceration must have been produced when the bladder was full, and the communication between the latter and the peritoneal cavity was perfectly free), without the occurrence of any peritonitis. Hence one of the principal means for forming a diagnosis of the nature of the injury was wanting. This is not, however, by any means an unheard-of circumstance; other cases have fallen under our notice, in which the extravasation of healthy urine into the peritoneal cavity has been unattended with any amount of inflammation recognisable during life. The persistence of blood in the urine, the great prostation and retention of urine, together with the irregularity in the contractions of the bladder, as evidenced by the twisting of the catheter, formed together a body of symptoms sufficient to lead to a satisfactory idea of the nature of the injury. The latter symptom may be worth remembering, as confirmatory of a diagnosis which it is not always easy to establish. (T. H.)

LONDON HOSPITAL.

INGROWING TOENAIL.

Under the care of T. B. Curling, Esq.

Ingrowing toenail is a complaint extremely troublesome, both to the patient and his surgeon; and not unfrequently leads to results not very creditable to the latter. Any method, therefore, which is both easy, quick, and not extremely painful, and which has been known to succeed, is worth trying in the severer forms of this painful affection. It is quite true that the ordinary method (by thinning the centre of the nail and raising its side) is sufficient for the simpler cases; and will, if persevered in, and managed with dexterity, succeed in a great majority, if not all, of the others; but it is at best a tedious and painful process in these latter, and in incautious or bungling hands may do more harm than good. The old operation of evulsion of part of the nail is a very rough unsurgical procedure, acutely painful (though that objection may not be of much weight in these days), and, more than this, too often fails to cure the patient. We had the other day an opportunity of seeing a patient treated by Mr. Curling on a plan new to us; and which recommended itself, both by its simplicity and its perfect success, in what had been a very obstinate case. The patient, a young man, was admitted about three weeks before with ingrowing of the nail of the great toe, the inner part of which had been removed before his admission. The disease had, however, progressed in spite of this, and the mass of fungous granulations at the side of the nail was very large. Mr. Curling's plan consists simply in slicing off these granulations, and the adjacent soft parts of the toe, down to below the level of the offending nail. The wound is then left to cicatrise, the nail grows over the scar, and the cure is completed. In the present case the wound was, as nearly as possible, closed, and the patient was just about to leave the hospital. Mr. Curling had tried the same plan in several other severe cases, with equal success. It had been suggested to him by some one in the course of conversation, and is no doubt practised elsewhere, but appears less known than so simple and apparently effectual a procedure deserves to be. (T. H.)

CENTRAL LONDON OPHTHALMIC HOSPITAL.

ENTROPIUM: INVERSION OF THE LOWER EYELID: PECULIAR SUSCEPTIBILITY OF THIS LID: THE MECHANISM OF THE AFFECTION: REASON WHY THE EYE SUFFERS LESS THAN IN ENTROPIUM OF THE UPPER EYELID: OPERATION.

Under the care of Haynes Walton, Esq., Senior Surgeon to the Hospital.

[*Reported by* Maurice Davis, M.D.]

In our last report (p. 1), we gave a slight sketch of the manner in which the upper eyelid is influenced by entropium. We now proceed to treat of implication of the lower lid.

The inferior palpebra is more frequently inverted than the superior; for besides being subject to the same disturbing circumstances, it is peculiarly influenced by old age—that is, advanced old age—a cause from which the superior is, according to Mr. Walton, exempt. This alone should be, we think, sufficient to set aside the theory of looseness of the skin producing the affection; not to add, that the integument in the aged is more baggy over the superior tarsal cartilage, and often hangs in a degree materially to influence the angle of vision. But this point has been sufficiently disposed of in the preceding communication. Then when implicated, it is more likely to escape detection than its fellow, because its effects are fortunately, for the most part, very much less severe; and also on account of the peculiar and generally unknown manner in which the eyelid is rolled up.

The following case illustrates all the characteristics of this complaint, and well shews its mechanism.

The patient was sixty-five years of age, robust, and without any general ailment. He was incessantly winking the left eye, the ocular conjunctiva of which was much injected, and the edge of the eyelid was covered with a sud-like secretion. He complained of a peculiar irritating feeling about the eye, which obliged him to wink so frequently. There was intolerance of light, and much lachrymation. Between two and three years he had suffered, but the severity of the symptoms had passed. After the secretion was cleared away, the integument of the lid was observed to bulge in a remarkable manner, while the tarsal margin was not apparent. With this, there was a degree of

depression or shortening of the part, by which the eyeball was unnaturally exposed. Mr. Walton pointed out the remarkable contrast between this and the affection of the upper eyelid; it was clear that the difference was due only to the dissimilar physical conditions of the lids themselves, and not to different primary causes, as the essential character in each was one and the same. He recommended the studying of the inverted lower lid especially to the student, because that lid offers a greater facility for observation, as the border is outwards and away from the eyeball, and any change in its direction can be better appreciated than in the upper, where the margin inclines somewhat inwards. Besides, there is a very marked difference in the size of the two cartilages, which throws additional light on the inquiry, the upper being broader than the under. In the most marked or aggravated stage of inferior entropium, the tarsus does not rest against the globe as though it bound it, but the lid is so completely turned on itself that the cilia are hidden, and the narrow cartilage rolled up, and its position completely reversed.

The method of operating adopted by Mr. Walton was in all respects like that described for inversion of the upper eyelid. Two incisions were made, one along the margin of the tarsus, the other above it, forming an ellipse, and the skin and the corresponding portion of the orbicularis were removed.

An attempt had been made to remedy the defect by the removal of skin, but fruitlessly. It has been said that the loss of integument alone from the lower lid will suffice. It is quite possible to restore the eyelid to its natural position, by removing skin enough to produce such tension on the remaining integument as shall overcome the preternatural action of the orbicularis palpebrarum, but it will be at the expense of depressing the part, and thus, by displacing the punctum lachrymale, causing the tears to fall over the cheek, as well as exposing the eyeball. When the operation is performed on a lid that has not been previously interfered with, there is generally no trace of what has been done.

Cases of entropium in general are aggravated, through the mistaken idea of mitigating the suffering, by pulling out the eyelashes. Many of these are not in reality pulled out, but are broken off, and the stumps so left are peculiarly fitted, especially in the upper eyelid, to irritate the eyeball. Moreover, when they are pulled out, after the frequent application of the forceps, abortive hairs are produced, and these for the most part grow irregularly, and direct their points inward, and become very injurious. Therefore, directly that entropium is detected, the proper operation should be done; it is useless to delay it, and waste time, by the application of plaster, collodion, and such like.

As a rule, when patients will not submit to this, Mr. Walton does not touch the lashes, more particularly in the severe cases of the upper eyelid, because from the habit the person gets of frequently wiping the eye, the points of them are turned out and away, while the less injurious parts, their convexities, are in contact with the eyeball.

HULL GENERAL INFIRMARY.

ON THE VIRTUES OF ACETATE OF POTASH AS A REMEDY FOR RHEUMATIC FEVER.

By Humphry Sandwith, M.D., one of the Physicians to the Infirmary.

Having recently treated ten cases of rheumatic fever by acetate of potash with unusual success, at this institution, I feel warranted in calling the attention of the profession to it, as a remedy, which I have found to be superior to any other. This superiority consists in the rapidity of its action as a febrifuge, which is probably owing to its power in carrying off from the blood the specific poison, which has excited the febrile commotion. I have premised a suitable cholagogue of calomel, followed by a rhubarb or senna draught, in those cases in which there was reason to suspect congestion of the portal system, as shewn by an arrest both of the biliary and urinary secretions. After this, in the majority of cases, I employed no other internal remedy than one drachm or a drachm and a half of the acetate of potash, to be dissolved in half a pint of water, and drunk during the day. The addition of a little lemon-juice and sugar is much relished by the patients. The remedy has acted freely on the kidneys, abated the fever, and moderated the anguish of this very painful disorder. It has not been necessary, except in one or two cases, to leech the inflamed joints.

The following tabular view shows the duration of the disease under this plan of treatment:—

Three cases cured in	.....	7	days.
One " "	.....	10	"
One " "	.....	13	"
One " "	.....	14	"
One " "	.....	15	"
Two " "	.....	17	"
One " "	.....	20	"

In the above cases there was no endocarditis, so that we may hope that a further trial of the remedy will shew its powers in resisting this fearful complication.

In another case, that of a young woman, aged 18, who came into the hospital with an endocardial murmur accompanying rheumatic fever, acetate of potash was given, six leeches were applied over the heart, and calomel was administered, so as gently to affect the mouth. All the symptoms yielded in about a fortnight.

In another case, the patient had a quick recovery from rheumatic fever under the use of the acetate, and then resumed work too soon, and in bad weather. He returned to the hospital with a severe relapse, accompanied by a slight endocardial murmur. The rheumatic fever was again quickly relieved by the acetate; but a mercurial course, with twice leeching and blistering, was necessary to complete the cure of the heart affection.

In two other cases, after the prompt removal of the acute symptoms, we had to combat a chronic affection of one knee-joint, resembling synovial rheumatism. This, of course, protracted the cure.

I have employed the acetate of potash, in the same doses and manner, in a still greater number of cases of chronic rhematism, and in many of them with marked advantage.

Original Communications.

DISLOCATION OF THE THIGH BONE INTO THE FORAMEN OVALE, REDUCED WITHOUT THE AID OF MECHANICAL APPLIANCES.

By Richard Steel, Esq., M.R.C.S., Surgeon to the Blaenavon Iron Works.

On April 19th, 1856, John Corfield, a hale, muscular man, aged sixty-eight, was crushed by the fall of a bank of earth which he was excavating. He received the following injuries: fracture of the neck of the *right* femur, fracture of the right tibia and fibula, and dislocation of the head of the *left* femur into the foramen ovale.

I reduced the dislocation in the following way. Standing on the same side as the dislocated limb, and grasping the knee with my left hand, I used the thigh as a lever, the fulcrum being my right hand placed close up to the fork, so as to make a powerful outward traction of the upper part of the limb; the knee was pressed forcibly inwards towards the middle line, and at the same time backwards, *i. e.*, towards the bed on which the patient was lying on his back. Reduction took place on the first attempt and at once; as soon as the previously immovable limb yielded to the pressure a loud snap was heard, the knee became straight, the form of the hip was restored, and the man at once began to move the joint freely in his delight at being relieved from the previous pain. No traction was made, nor any force whatever used except as above described as applied by my own two hands. The dislocated hip gave no farther trouble.

For the fracture of the neck of the femur and of the leg on the opposite side, I employed Liston's double-inclined plane. The man's recovery was complete; he walks with a moderate amount of limp, with the assistance of a stick only. I diagnosed the fracture of the neck of the femur to be partly within and partly without the capsular ligament.

Remarks. I have been induced to send this case, by reading Dr. T. Walker's communication in the Journal of January 24th. He therein alludes to a previous case of dislocation into the foramen ovale converted into one into the sciatic notch by manipulation. In the year 1847, I saw in consultation a case of dislocation into the foramen ovale, which had resisted the efforts of two surgeons to whose skill I can bear the fullest testimony. The usual method, most carefully carried out, had failed. Under the idea that the head of the

bone might be hitched against a muscle from which change of position might liberate it, I flexed the thigh on the pelvis and adducted the limb gently; total change of position suddenly took place, so much as to make me hope that reduction had taken place. One of the gentlemen to whom I have alluded, in examining the limb in its new position, repeated the manipulation, when luxation into the sciatic notch followed, from whence it was reduced with comparative facility with the assistance of pulleys.

The accident would occur if the thigh were too much flexed on the pelvis, and at the same time brought too much across the opposite limb. I believe the proper way to avoid it is to follow the course employed in the reduction of the case detailed above, viz., to keep the thigh well backwards, and to avoid bringing it across the middle line. Repeating both forms of manipulation by means of a pelvis and femur, will explain the reason better than a written description.

I am happy to be able to confirm Dr. Walker's views by these cases, which I hope may contain some practical points, while they will at all events illustrate the kind of cases which occur not unfrequently in the practice of iron-works surgeons.

ON CHOLERA: ITS DIAGNOSIS AND TREATMENT.

By C. W. Bell, M.D., K.L.S., late Physician to H.M. Embassy in Persia, etc., Buxton, Derbyshire.

[*Concluded from page* 87.]

Having now sufficiently considered the nature and symptoms of those complaints which most predispose the system to an attack of cholera, and which have most frequently been mistaken for that disease, we may proceed to examine more minutely what symptoms, etc., specially belong to it, in its true congestive form. These are, first, blueness of the nails and contracted veins of the extremities, which appear like dark narrow lines, in consequence of their retaining in them a small quantity of blood adhering to their interior by capillary attraction; for though this force is not exercised between the coats of the vessel and its contained blood during health (but appears, on the contrary, to be exchanged for electrical repulsion), it certainly is operative during the blue stage of cholera; the features are sunk, the eyes look hollow, the lips are bloodless, the tongue is as clean and bloodless as if it had been macerated in water for days, and as cold; the breath is cold, the voice is without tone—all these symptoms occur in a more or less marked degree *before* any rice water stools are voided. In slight cases, a sudden fluid dejection, unexpectedly copious, but without pain, now takes place, and is perhaps followed by cramp in the legs. At this stage a sharp stimulant, such as brandy or sal volatile, will often cure at once; for it is remarkable how completely the tendency of this formidable disease to return seems to be broken, if the incipient congestion be arrested by any means. This is the only stage of true cholera in which stimulants do not do more harm than good. The blood has been forced into the interior veins by the contraction of the capillaries of the extremities; the passage of the blood through the lungs is just beginning to become arrested by the same cause; but the congestion thus produced has been greatly relieved by the rapid fluid exudation into the bowels. A stimulus to the stomach, acting through the sympathetic, gives a fillip to the heart's action, the failing vital activity of the capillaries is restored, and all goes on well again; the circle of morbid action thus broken has little tendency to recommence, and the attack is cured. The case is very different, however, if there be no natural relief at this stage of the disease by purging. The most anxious oppression of the heart then comes on, and it may be heard in violent and convulsive action, as if churning the blood within it. There is no want of stimulus to its action here; on the contrary, at each repetition of a stimulant the tumultuous noise increases, and along with it the agony of the patient, who, bathed in ice cold perspiration, is tossing restlessly from side to side, and throwing up his arms. To open a vein now, while yet the congestive stage is on the increase, and succeed in getting the blood to flow until it changes from its first dark tarry condition that requires to be squeezed out, and regains the red fluid state that belongs to health, spouting freely from the orifice, is to achieve a triumph for medicine that has no parallel; for the cure is as perfect as it is immediate.

Supposing, however, that the patient has not been bled and saved at this critical period, the struggle continues, and very often in the course of eight hours the powers of life fail; the feet, hitherto intensely cold, become warm, and the patient dies. But this is an extreme case; for, in the majority, about the eighth hour after the commencement of the attack, the symptoms begin to become somewhat mitigated, and from the eighteenth to the twenty-fourth hour the patient, though not asleep, lies so tranquil as to appear to slumber. Suddenly, precisely at the expiration of the twenty-fourth hour, he sighs, tosses up his arms again, and in a few minutes is a second time in all the agony of suffocation. Now again an opportunity is offered to save the patient's life with the lancet; but it much more quickly passes away than in the first accession, and then bleeding will only hasten the end.

The great error in practising bleeding for the cure of cholera lies in waiting till the pulse becomes distinct. It has been observed that about eight hours after the commencement of the attack, symptoms begin to become mitigated, the pulse then becomes perceptible, and continues pretty steady. Let us mark the consequences of bleeding after this stage, which is that of attempted reaction, has recommenced. Twining unwittingly gives several examples of this, and also some cases in which he tried arteriotomy. These too well illustrate the effects of acting on a rule in ignorance of those principles of physiology on which the practice of bleeding in cholera and ague is founded. If, instead of bleeding while yet congestion is increasing, we draw blood about the twelfth hour when the pulse is somewhat steady, and the skin comparatively dry and warm, the consequences are most appalling; the blood flows, indeed, without any of the difficulty that would have been experienced in the first stage; but it does not do so long; it suddenly becomes black and tarry and stops, the ice-cold exudations again bathe the extremities and forehead, jactitation recommences, and nothing will then save the patient. In these cases of pure congestive cholera there can be no greater cruelty than to persist in employing stimulants and heat. It is remarkable that the congestive form which we have assumed to be the true type of algide cholera, when uncombined with any other malady, is now much less rarely met with in this country than was the case in 1832 and the four following years. In recapitulating its essential symptoms, it will be no departure from our expressed intention of confining ourselves in this paper to the endeavour to deduce the principles of treatment required in the various diseases classed under the head of cholera, if we venture somewhat dogmatically to lay down rules of practice in this case; for the *modus medendi* will no less illustrate the nature of the constitutional disturbance it is intended to remove or obviate than will the symptoms.

We recognise the case, then, by the peculiar colour and wet coldness of the extremities and brow, the cold breath, and the perfectly clean cold tongue; by the absence of odour in the dejections, if any, but more than all by that unmistakable symptom, the churning sound of the struggling heart, which once heard will never be forgotten. Our first duty in such a case is, with the utmost accuracy, to ascertain if possible the first moment of attack; and if it be *clearly ascertained* that not more than four hours have elapsed since the commencement, we should bleed at all hazards if the attack be severe; but if it be at all doubtful whether the attack have not lasted longer, we should not run the risk we have described as attendant on mistimed bleeding, but await a second opportunity some hours later, which we must endeavour to secure by the unremitting exhibition of quinine and sulphate of iron; say a grain of each dissolved in an ounce of water by the aid of sulphuric acid every quarter of an hour at first, and afterwards given at longer intervals. In the large majority of cases that set in with little or no purging, this treatment will cure always, provided that the feet have not become warm while the thighs and knees remain cold; for that is the invariable harbinger of death. If, however, a complete cure have not been effected, or at least such improvement as shows the danger to be past before the twentieth hour from the commencement of the attack, life or death will depend on the accuracy with which the hour of its first setting in has been estimated; for between the twentieth and the twenty-fourth hours is the period during which the lancet may be used with the greatest certainty of success. The blood will then flow more freely than it would have done in the first eight hours, or than it will do after the twenty-fourth hour, and there will be no danger of producing the collapse that attends phlebotomy between the eighth and eighteenth hour. It will sometimes bring on a regular shivering fit; but, if so, the patient is safe, for a full rigor is always evidence of commencing reaction. It ought to be a rule of practice to bleed only before the fourth hour or after the eighteenth in

congestive cholera.* In the other forms which set in with active diarrhœa, there is no object to be gained by bleeding—no congestion to relieve, and nothing but mischief can be caused by it.

To return now to the case in which purging accompanies the setting in of that derangement of the circulation which we called algide symptoms. The fluids passed or vomited are colourless and inodorous, like true rice-water; and the effect of these large liquid exudations from the vessels of the bowels is to effect a great reduction in the mass of blood driven in upon the abdominal viscera, and so to prevent those agonizing fits of dyspnœa, which are even more distressing than the cramps that often accompany the purging. It will be obvious to all who watch such a case attentively, that this kind of purging is very different from that which occurs in the kind of cholera that commences in putrid diarrhœa or dysentery; for it is an *exudation* of serum squeezed, as it were, out of the veins by the force of pressure, and is an effort of nature to afford relief to the congestion; whereas, in the other case, it is a wasting muco-serous *secretion*, with the production of which congestion has nothing to do. In these latter cases the cure of the purging is the cure of the disease, for that being effected, the algide symptoms disappear; but in the other the purging being the direct effect of the congestion, it can be cured only by overcoming that congestion. In short, the cure of pseudo, superimposed, or secondary cholera, is only effected by first curing the purging; whereas, in the true congestive or primary cholera, the *cholera* must be cured before the purging can be arrested. Space does not admit of the proof being gone into here, that cholera asphyxia is truly a quotidian intermittent; but an attentive study of the type of disease exhibited by the mass of patients at any of our larger Hospitals, will soon convince the most sceptical that every disease is in some degree altered in its symptoms when cholera is present or near, partaking more or less of a quotidian character. Our experience of many epidemics of cholera, both at home and abroad, has convinced us that its approach may always be predicted a considerable time before a "case" is reported, by the number of anomalous symptoms complained of by persons in a feeble state of health, all of which are referrible to derangement of the sympathetic system; and most of them present a quotidian intermittent type. The extreme prevalence of ticdouloureux in times when cholera appears is well known. Among the numerous out-patients of a Hospital for a week perhaps, the majority complain of unwonted constipation; next week perhaps all are purging. But one of the most frequent complaints at such a time is that at a certain hour the hand and foot of one side goes to sleep, and remain numb or paralized for hours. Very often for two or three days in succession complete coma comes on for an hour or two, most commonly at midnight; violent palpitations of the heart are frequent; sudden deaths from spasm of the heart are unwontedly numerous. Cases of decided quotidian ague, a most rare complaint in this country, are not unfrequently met with; and one of the most distressing and even dangerous effects of this epidemic influence when cholera is approaching is, when it gives rise to incessant dry vomiting. The symptoms of this latter affection are so like those of a bilious attack, that we have most frequently found them treated with calomel and opium, which only aggravates the mischief. The cause is congestion of the splenic and gastric veins; and the most immediate relief is afforded by a grain or two of quinine and of sulphate of iron in solution.

The diagnostic signs which unite in one category, all these and other anomalous attacks, such as are seldom or never met with when cholera is not epidemic, or about to become so, are remarkable. In all there is a certain lividity of lips and nails, the small veins of the extremities are dark and contracted; and when a portion of one of them is emptied by pressure, so as to leave the space between the part compressed and the next valve empty, the blood is seen to move sluggishly and slowly on when the pressure is removed, instead of springing actively forward to fill the vacant space as in health. The tongue is in all unusually clean and pale, and almost invariably there is pain on pressure over the spleen; but the most remarkable fact is that all these various symptoms are effectually relieved by a few doses of the same medicine, the solution of quinine and sulphate of iron.

When we see the functions of so many various organs thus affected by what we have no better term for than that given to it by Sydenham, "the epidemic constitution of the air;" the brain causing coma; the spinal marrow producing temporary paraplegia or hemiplegia; the heart affected by palpitation or spasm; the capillaries disturbed in their actions of secretion, nutrition, and the evolution of animal heat; the bowels by diarrhœa or constipation; the kidneys by suppression or altered secretion; the nerves of motion by spasm or partial paralysis, and those of sensation by neuralgia, it is impossible not to marvel how one and the same cause could produce all these various effects. This becomes more especially striking when we see the greater number of these symptoms combined in a severe attack of primary cholera, and at the same time witness each of them occurring separately in different individuals. It would appear inevitable to conclude that whatever the exciting cause may be, the sympathetic system of nerves presents the only means by which it is possible for such various effects to be produced; for a single case, cured as described by bleeding, of itself affords ample proof that the cause is not proximately in the blood. If antimony produce vomiting, strychnine convulsions, nicotine the opposite condition of the muscles; if croton induce catharsis, opium constipation, and digitalis or aconite cessation of the heart's action, etc., only through the agency of the sympathetic, why should we hesitate to believe that similar effects resulting from an epidemic cause are produced through the same agency? The bearing of epidemic influence on the incessant changes that take place from month to month, and year to year, in the character of our most familiar maladies, and the proneness of certain organs to succumb to that influence at one time, and of others at another, is a subject we can now only venture to glance at as a great field for investigation; and one of infinite interest, if taken in connection with the operation of such causes upon the sympathetic system. For the present, all that could have been hoped for in this paper will have been effected, if it have afforded some confidence to the reader that the mystery of cholera is not past finding out.

The preceding sentence was intended to have concluded this paper, but the writer has since received the whole of the reports published by the general Board of Health, respecting the cholera epidemic of 1854, together with the report of the cholera outbreak in the parish of St. James's, Westminster, during the autumn of the same year.

The latter pamphlet cannot be too strongly recommended to the profession for the ability with which it is drawn up, and the clearness of the proofs adduced, that water contaminated with intestinal mucus (in a state of peculiar decomposition) may become a source of fatal (putrid) diarrhœa to those who drink it. At the same time the strong desire for truth rather than effect that has actuated "the Enquiry Committee," who have the merit of its authorship, is manifested by the pointed manner in which cases are instanced which it was impossible to trace to impure water, and which are classed as belonging to the general epidemic. Perhaps *we* might have called these cases of (originally) bilious diarrhœa. Page 32 of the report also contains an important remark; for it is there stated as "certainly true that in the cases occurring at the commencement of the great outburst, premonity diarrhœa was of short duration, or altogether absent;" that is to say of the true congestive type. In the reports of the Board of Health we look in vain for any information calculated to advance our knowledge of cholera as a disease. They contain papers of great research, detailing several series of valuable meteorological, chemical, and microscopical investigations of the atmosphere, water supplies, etc., of the metropolis, all which, if continued, will no doubt result in a very complete knowledge of the influences which combine in the production of that large class of diseases attributable to putrefactive elements in the air and water, which constitute the cachexiæ of large towns; but in so far as cholera is concerned, a very few words will express the whole of the information conveyed so scientifically, viz., that while the disease was at its worst, the weather was very close, and favourable to putrefaction. At page 18 of the report on the results of different methods of treatment pursued in the metropolis, it is stated that "in thirty-five cases the stages of simple and choleraic diarrhœa are reported as absent;" and in the supplemental report of treatment pursued in the provinces at page 10, ten cases are mentioned in which diarrhœa was reported to have been absent. This is the only notice which this remarkable and all-important fact receives throughout these volumes; and there does not appear to have existed in the minds of the medical council the shadow of a doubt that choleraic diarrhœa, without any algide symptoms, and algide symptoms without any diarrhœa, are the same disease, and to

* See this subject more fully discussed in two lectures on "Cholera and Ague", by Dr. Bell. (Prov. Med. and Surg. Journal of November and December, 1848.)

be judged by the same rule as respects their treatment. So, also, putrid diarrhœa, communicable by water, and bilious diarrhœa (or English cholera), widely as their sources, etiology, and *ratio medendi* differ, are riddled through the same sieve of interrogation with unmixed algide cholera; and from the general success or non-success attending the medication of the heap, composed of all three without distinction, it is attempted to deduce a rule of treatment applicable to all. To say more on this subject might be deemed presumptuous; but we believe that this attempt of the "Treatment Committee" of the medical council, to deal statistically with the materials submitted to them, will only be remembered as a failure.

There is yet one point more we would shortly advert to in connection with these reports, viz., the desire expressed for more information respecting the treatment of the consecutive fever of cholera. We would suggest that it must needs be extremely difficult to collect statistics of any real value on such a subject, unless, along with the enquiries issued, certain principles be stated, which it is desirable to prove or disprove, by the investigation. If it be true as we have indicated, that cholera is in its essence a congestive disease of quotidian type, then is it only one degree removed from remittent fever; and of this type consequently will be its consecutive fever. Such has always been the case within our own observation; and from long and varied experience we may venture to assert, that wherever cholera is present, or in the neighbourhood, every kind of fever partakes more or less of the quotidian congestive type of remittent fever: witness especially the congestive scarlatina of late years, and the black-tongued typhoid. We would add that we have invariably found mercurials aggravate the congestive character of all these fevers; while salines, combined with minute doses of quinine and sulphate of iron, in general fulfil satisfactorily every indication.

Should the attempt to investigate statistically the best plan of treatment ever be renewed, we shall hope to see a decided line drawn between diarrhœa and cholera, and between those cases in which the algide symptoms are primary, and those in which they are consecutive or superimposed.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS PULMONALIS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture III.

TREATMENT FOR THE ARREST OF THE DISEASE; DIRECTLY, BY VOLUNTARY DISTENSION OF THE AIR-VESICLES; AND INDIRECTLY THROUGH THE GENERAL SYSTEM. EFFECT OF SLEEP, FOOD, TEMPERATURE, TONICS, COLD BATHING, AND ATHLETIC EXERCISES.

In the last, and also in a part of the first lecture, we were occupied with the consideration of the two great processes whereby life and health are maintained, and with which both health and disease must be connected, viz., alimentation and aeration, as causative of phthisis. We arrived at the conclusion that alimentation is not at fault, since the quantity of food taken is equal to that in health; the digestion is good, and the waste of material is not greater than in health: and hence we believed that that subject might in future be altogether excluded from the inquiry. In reference to aeration, we found a marked diminution in that process as a condition both anterior and subsequent to the deposition of tubercle, and ascribed it essentially to a lessened action of the air-vesicles of the lung, originating in themselves, or conjoined with an atonic condition of the general nervous system; and we proved that all the circumstances considered as causative of phthisis are of a depressing nature. The influence of age and sex was shown to be rather that of the circumstances attending the patient, than any peculiarity of organisation dependent upon them. This condition, it was believed, was always anterior to the deposition of tubercle, and ought to be considered as the first stage of phthisis. The deposition of tubercle was accounted for by regarding the inactive cell as a proper nidus for diseased material, and the tubercle as a degeneration of a natural occupant of the cell, or the epithelial scales. The extension of it was believed to be due both to the severity and extent of the first causes, and also to the pressure mechanically produced on the adjoining cells by the deposited tubercle. We now proceed to make some deductions from the preceding inquiry, in reference to the treatment of the disease.

The plan of treatment which I venture to recommend is based upon the view which I take of the essential nature of the disease; the latter being a diminution in the action of the air-vesicles of the lung, and the treatment consisting in the increase of that action. Whatever may be the various modes by which the disease is to be combated, it appears to me that this leading idea must be kept in view, and that all other objects are to be considered as second and subservient to it. It is not my plan to enter upon the whole subject of the treatment of phthisis, but to select such parts as have reference to this theory and to my own investigations. The treatment will naturally divide itself into two parts: 1. The arrest of the disease; and 2. The removal of the effects of the disease.

1. *Arrest of the Disease.* This treatment is applicable to every stage, but manifestly much more to the early than to the later stages. It is not too early to apply it before there is any evidence of tubercular deposition; for, as there is a condition anterior to the deposition, upon which the subsequent deposition depended, it is surely of the highest moment to direct our attention to that early period. I think it a serious mistake to so far limit our view of phthisis as to consider it to begin when tubercle is first deposited; for by so doing we have permitted a period to pass over when the difficulty of arresting the disease is comparatively little, and have allowed our patient to pass into a state which is so often irremediable. Whenever, then, there is lessened respiratory murmur at the apex of the lung, with shorter and more feeble inspiration, and, as a consequence, some degree of flattening above or directly below the clavicles, it is high time to apply our remedial measures. It is probable that even then, and before any tubercle is deposited, there will be found diminished resonance on percussion; but this will be due to the absence of the air which should cause the resonance, and not to the deposition of any substance foreign to, or of a denser nature than, the lung-tissue. This slightly lessened resonance may readily escape the notice of those whose ears have been practised only in the flat sounds which indicate the total absence of air and the presence of a dense material; and, moreover, as the term dulness is a relative one, it is necessary that the examiner should be able readily to appreciate the sound in health. This I conceive to be less frequently attained than we are led to imagine; for the pupil is taught auscultation almost exclusively on the diseased, and not on the healthy chest; and, further, of those patients who are not suffering from apparent chest-disease, a large proportion have the lessened vesicular murmur to which attention is now directed. Hence there are two sources of fallacy, viz., the frequency of lessened resonance in persons apparently healthy, and the inability to detect slight variations in the degree of resonance. To this may probably be added a physical incompetency in some persons; for nothing is more certain than that the keenness of all the senses, and consequently of hearing, varies much in different individuals. I have ventured to make these remarks, both because I have seen errors made, and because errors may easily be made: and it is of importance to give close and careful attention to the character of the resonance. Whenever, then, there is the slightest dulness on percussion, with lessened vesicular murmur, less forcible and deep inspiration, and flattening of the apex of the lung, there is probably the first condition of phthisis, and the stage anterior to the deposit of tubercle: and, since the only change existing is atrophy with lessened use of the air-vesicles, it is manifest that the arrest of the disease may be more readily effected, than when it is complicated by the addition of further adverse conditions.

It is, however, probable that the tendency to the filling up of the effete cells exists coincidently with the diminution of vital action in those cells; but a period must elapse before the vesicles can be filled with any substance, and much more with so resisting a material as the tubercle which is evident to the naked eye; and still more so, as it is probable that the tubercle is a result of the degeneration of the accumulated natural product—the epithelial scales. How long this period may be, we cannot tell; but, from the length of time during which persons appear to be prone to, without actually falling into, phthisis, we may infer that it is commonly long. That must, however, depend much upon the intensity of the causes which

induced the atrophy of the cells, the power of resistance existing in the constitution, and the circumstances in which the individual is placed; but it is fair to infer that the duration of the disease before tubercle is deposited so largely as to be unmistakably present, is long enough to permit of the use of remedies.

Now, are there grounds for believing that the deposit of tubercle interferes materially with the rapidity of the progress of the case; and hence that the deposition adds seriously to the gravity of the case? I think that there are grounds for this belief; for it would accord with all experience that the duration of the case after tubercle is cognisable is far less than that of the evident proneness to phthisis which is truly the condition prior to tubercle. Tubercle may undoubtedly remain in the lungs for many years, and not induce any evident disposition to its increase; but, notwithstanding the almost universality of this deposit, such is not its ordinary state. I have no doubt but that, as a rule, when tubercle is really deposited, it promotes in an increasing ratio the liability to further deposits; and not merely that it is coincident with a state of things which induced this increasing tendency to further deposition. It is in itself a cause of further deposit. The proof of this, I think, is found in the greater rapidity of the progress after tubercle is manifested: and the explanation is in the pressure which the distended cells and lobules exercise upon the adjoining lobules, and consequently the interruption to the action of the air-vesicles which is thus induced. Thus, to the general cause inducing the atrophy of the cells, must now be added the ever present and acting one of a local kind. As the tubercle is deposited in various parts at the same period, so will this local action, *cæteris paribus*, be more or less effective for the rapidity of the progress of the phthisis.

Now, so far we may assume that a large portion of the lung is competent for its duty, and that the general system has not greatly suffered from the reaction of the disease, however much it may be injured by or with the condition which first gave rise to the earliest conditions of phthisis. The attempts at arrest may hence have a more single aim than could be the case at a later period, and the hope of success be so much the greater.

What, then, are the plans of treatment which seem the most fitted to bring about this end? The theory propounded is, that the disease essentially consists in the lessened action of the air-vesicles, and that it is commonly due to anterior conditions of the general system of a depressing nature. These general conditions are in part, probably, certain atonic states of the nerves of organic life, and more particularly of the sets of those nerves and of the communicating branches of the cerebro-spinal system which preside over the involuntary and also the voluntary action of the lungs. Hence the remedy would be some direct mode of preventing the further decrease of action and the closure of the cells, as well also as the indirect one of action upon the general system. Hitherto the latter has been the one more commonly practised (although not on the theory referred to), and it has the merit of being based upon good physiological reasoning; but, as we too constantly prove, its action is too slow to be usually efficacious, and consequently it is uncertain and often ineffective.

a. The *direct mode* to which I refer is that of mechanical distension of the air-cells to a degree beyond that which takes place perhaps in health, but certainly in the state of enfeebled respiration in which we find the patient. This may be effected by bodily exertion, which tends directly to increase the frequency and the depth of inspiration; and, as this mode is so consonant with our knowledge of the laws whereby health is maintained, no objection will be urged to it. But to my mind there is the objection that, in phthisis, whether before the manifest deposition of tubercle, or afterwards in the early stages of the disease, the pulse is frequent proportionately to the respiration; so that the respiration is to the pulse, not as 1 to 4, but as 1 to 5, 6, or 8. I have paid much attention to this matter in a long inquiry which I have prosecuted at this hospital, and am assured that, in the early stage of phthisis, the proportion of the two functions is commonly reduced. Now, the pulsation is at least frequent enough, and it is not uncommonly too frequent; and hence we do not need to apply any remedies which may increase the rapidity of the blood-current. But exercise of body, and even the sitting and standing postures, do increase the blood-motion; and, although they at the same time increase the rapidity of breathing, they do it in a less ratio than the former. Whilst, therefore, bodily exertion may be useful, and is indeed necessary in giving more rapidity and depth to the inspiratory effort, it is not an unmixed good. But we must not forget that the quiet motion of the body, which is now said to be bodily exercise, does not excite the depth of inspiration sufficiently for our purpose; and it is only when it becomes so great as is needful in athletic exercises that the desired result is attained. Hence the directions which we commonly give are of little avail, although the tendency of them is right. Yet, with the violent bodily exertion referred to, the rapidity of the blood-current is greatly increased, and at the same time there is a proportionate diminution in the deposition of material in the tissues, and in the due action of the air upon the blood in the lungs. Thus lessened growth of body occurs, with, at the same time, less vigour of vital processes, and a waste of material through the eliminating organs. This must result when the body is in health; but then the temporary evil is either easily borne, or is compensated by good; but when, in phthisis, at least in the tubercular stages, we find a tendency to a constant rapidity of current, and consequently to lessened growth of tissues, we must attach a greater degree of importance to it. The effect of much exercise in phthisis is, therefore, evil certainly, although, at the same time, it may be, but less certainly, good.

Now, is it possible to meet this difficulty, and to find a mode whereby the depth of the inspiratory act shall be increased, and yet the rapidity of the blood-current not sensibly promoted? Perhaps not, in the fullest sense of the inquiry; but I think it may in a limited yet important sense. I refer to voluntary attempts at deep inspiration. This cannot be continually effected, since volition cannot be at all times directed to that end; and if it could, the very act would fatigue the system; but it may be for a limited period at a time: and the very instruction thus given, if properly explained, will induce the patient to guard against that shallow respiration which is so constant a feature of the complaint. Thus the mind would be directed to an object of value; the spirits would be excited by hope; and the evils attending a listless and enfeebled habit of respiration would be in some degree guarded against. This object is doubtless attempted when the patient is directed to use calisthenic exercises, as the use of the dumb-bells; and there cannot be a doubt that the vigorous employment of such means may excite inspiration. But it is one thing to throw the arms about, and another to make that conducive to the deep inspiration. We must admit that, whilst the object is good, the practice has commonly defeated the object, and that perhaps in a great degree from the want of knowledge on the part of the patient to enable him to make his efforts efficient. Moreover, I am not clear but that sometimes, and perhaps frequently, the effort now referred to lessens the frequency, and without increasing the depth, of inspiration; for nothing is more common than for us to hold our breath when making any unusual voluntary exertion.

I think that nothing less than direct voluntary attempts to breathe deeply would effect the object which we have in view; and even this is certain to fail unless it be carefully effected. The seat of mischief is chiefly in the upper lobe and the apex of that lobe. Now, if we take an ordinary inspiration, we find that the expansion of the chest is disproportionally greater in the lower than in the upper half of the chest; and when the respiration is unusually feeble, this disproportion is so much the greater that scarcely any breath-motion may be detected under the clavicles. But, on deep inspiration, the first sensation of fulness is at the base of the lungs; and that sensation gradually rises as the depth of the effort increases, until, at the very end of the deepest inspiration, the sensation is felt at the apex. This may be readily proved by any one who will take the trouble to try it carefully upon himself. Now, in this very fact lies the difficulty of the matter. It is almost impossible to persuade a phthisical patient to take an inspiration of the depth referred to; for his habitual shallowness of effort induces him to consider *that* a deep inspiration, in which the lung is by no means fully distended. It is my habit to show the mode and the required depth by my own inspiration, and to inform them that it is only the *very end* of the deep inspiration which is of service to them. Our aim should therefore be to have the deepest inspiration performed as often as we think right, with a view of thus preventing the process of closure, which is, in my belief, the mode of action of the disease. If there were not a serious objection to the introduction of any instrument as a part of medical treatment, I should advise the employment of a spirometer, which would measure the amount of air inspired; and this, whilst engaging the patient's attention, would enable him to regulate his voluntary efforts, and to ascertain the result. I have several in use; and, after a repeated employment of them in determining the amount of vital capacity at various periods, the patients have expressed much gratification in the

assurance that they felt much better from this forcible attempt to inspire deeply.

I fear that this may be thought too mechanical a plan of treatment; but I beg to observe, that the very existence of the air-cells themselves is in part due to the mechanical introduction of air within them. There are no developed air-cells in uterine existence; and even during the first early period of extra-uterine life they are so slightly developed as to be said not to exist at all. When the air is first admitted into the bronchi, there are no true cells such as may be found in later life; and the period of their development is that of breathing, and their maturity is due to the continuance of the effort. Thus the development of the air-cells may be said to be due to the mechanical agency of inspiration. Moreover, we know how greatly the depth of inspiration is due to volition, to the thousand necessary occurrences of daily life, and to the effect of other diseases; and we admit at once that the effort of inspiration varies under these several conditions. Hence it is not unphysiological to direct an effort to make the act of inspiration perfect (as we daily do to render the digestion of food perfect), and to keep in a due state of distension, or to increase the existing degree of distension, of the air-cells of the lung.

I do not know if any difficulty would present itself to any mind in reference to the limitation of the lessened action, or of collapse to isolated small portions of the lungs, as is believed to exist on this theory. Perhaps it is more easy to understand how the whole organ may be influenced, rather than a part of it; but, in addition to the special disposition which must exist in the upper lobe, and especially of the apex, from the direction and depth of the air-current in inspiration, I may refer to the fact that the atelectasis of the newly born is always partial, and may be even limited to one or to several isolated and separated lobules. Hence it may be said to act only on individual cells, and is a fair illustration of that which is believed to exist in the earliest stage of phthisis. The one is not more difficult of belief than the other.

To show that voluntary inspiration not only may, but has been defended on physiological grounds, I would refer to a remark made by Lehmann, vol. iii, p. 382. In reference to excretion of carbonic acid largely, he says: "We may perhaps aid a tuberculous patient quite as much by recommending him to respire warm moist air, as if we prescribed lichen or cod-liver oil. Instead of tormenting an emphysematous patient suffering from congestion, and of hæmorrhoidal tendencies, with aperients and saline mineral waters, we might relieve him far more effectually by recommending him to practise artificial augmentation or expansion of the chest in respiration (filling the lungs several times in the course of an hour), or to take exercise suited to produce this result; while we should forbid the use of spirituous drinks, and not prescribe tinctures, which might hinder the necessary excretion of carbonic acid."

In advising this course, I do not for a moment refer to any increased chemical influence which the increased volume of air may or may not have upon the blood; neither do I make use of the theory that, by this means, we effect pressure upon tubercle, and promote its absorption; I only claim for it, that it will tend to prevent the decay and the closure of the cells from inaction, and thus prevent the further deposition of tubercle in cells which are not already rendered useless by or with it. But it is fair to infer that there must be by this means a more complete renewal of the residual air, and thereby a further benefit be obtained. It may, however, be proper for me to refer to the experiments of Vierordt in reference to the influence of voluntary respiration in promoting the evolution of carbonic acid. He ascertained that the more frequent the respiration, the less per centage of carbonic acid was evolved; but, as the total quantity of air taken into the lungs was increased by an increased number of inspirations of an uniform depth, the total quantity of carbonic acid evolved in a given time was greater than with fewer inspirations. Thus—

With 12 inspirations per minute, 13½ cubic ins. were evolved.
" 24 " " 24·2 " "
" 48 " " 42·5 " "

And, in reference to variation of depth, the frequency being constant, he proved that, with an inspiration twice as deep, the quantity of gas evolved was the same as when the inspirations were three times as frequent, the depth then being constant. Thus the objection which is so commonly raised to voluntary attempts to respire, viz., that it does not increase the vital force, is incorrect; for, in practice, we are not concerned with the percentage evolution of carbonic acid, but with the total evolution in a given period.

The reason for the large increase in the amount evolved by an inspiration simply twice as deep as an ordinary one, is, that the air in the air-cells is richer in carbonic acid than that in the minute bronchial tubes, in the proportion of 5 to 3; and hence, as a deeper inspiration causes more movement in and exchange of the residual air, the air-cells must lose a larger quantity of the products of respiration. Hence the remedial influence of deep voluntary inspiration is both mechanical and chemical.

The effort now recommended may weary the patient; and hence I have thought it enough if the patient thus deeply, slowly, and gently respire for five minutes at a time, and on three or four occasions in the day, at the same time explaining the object, and recommending him to avoid shallow breathing in his ordinary respiration. Thus fatigue is avoided, and yet probably the effect is obtained.

It is, however, essential to the success of this plan that it should be fairly carried out: and if, from other causes, no success results, I do not know of any mischief which could possibly arise from this. Success will of course be dependent upon many causes, and hence neither this nor any other single plan of treatment can be exclusively relied upon. It has, however, this merit, that it is of almost universal application, has evidently a tendency to improve the health, and cannot do harm. When there is no tubercle deposited, I am of opinion that the plan, if fairly carried out, can hardly be inefficacious; but, in the last stage of phthisis, the possibility of arresting the disease by any means is very small.

b. Indirect means. In these also the aim should be to increase the respiratory function; and there are several which may be proved to exert this influence. In the investigations at this hospital to which I have already referred, several of these influences were under consideration; but the results of the inquiry were as to the frequency, and not as to the depth of respiration. It is to the latter that I wish to direct attention more particularly; and for that purpose I shall detail the results both of that inquiry and of one on the depth of ordinary inspiration now in progress.

Sleep was the most powerful cause of increased frequency of respiration in this disease, contrary to the occurrence in health. Thus I found that a sudden increase of eight or ten respirations per minute occurred from sleep, with a corresponding decrease on again waking; but the amount of the increase depended apparently on the soundness of the sleep, and consequently it varied with the hour of the night. As a rule, it was the greatest in the first hours of sleep; but, in instances of second sleep, it was as great at 6 or 7 A.M. as at 11 P.M., although in the interval the frequency was greatly diminished. A similar increase occurred in the occasional hours of day sleep; and hence it appears that the cultivation of sleep in many phthisical patients would greatly tend to increase the amount of respiration. This influence has also the great merit of not increasing the pulsation; for the rule was, that sleep lowered the pulse and increased the breathing. Its employment, therefore, is much to be commended.

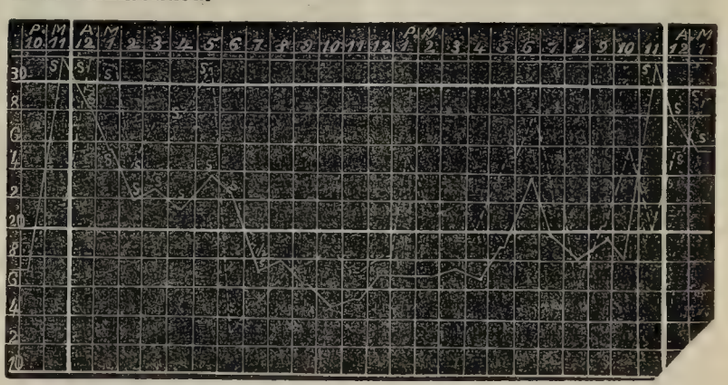


Fig. 1.—This diagram represents the rate of respiration in each of twenty-eight consecutive hours in two patients, male and female, in the Hospital for Consumption, etc., at Brompton. The hours are placed at the top, and the scale of rate at the side of the diagram. Each column therefore records one hour; and where the letter S. is placed, it signifies that the patient was then asleep, and ½ S. signifies half asleep. It is thus seen that in both cases the rate increased greatly with the first hours of sleep (11 and 12 P.M.), and in both it then fell. But the case represented by the dotted line had a further increase at 5 A.M., shewing the influence of second sleep. In the latter case more particularly there was a great fall in the rate with the first waking hour of the morning (6 A.M). Throughout the day, the rate was much lower than during the night, and especially before meals. (Extracted from Medico-Chirurgical Transactions, 1856.)

Early retiring to rest, and consequently *early rising*, are of great moment. As the evening advances, both the functions of respiration and pulsation are greatly reduced; and hence any

bodily or mental exertion, or even mere consciousness, must be attended with unusual wear and tear. In the morning, after a long night's rest, the respiration has greatly fallen, and then attains the minimum of the whole twenty-four hours; and hence the stimulating influences of food, exercise, and excitement are then imperatively called for.

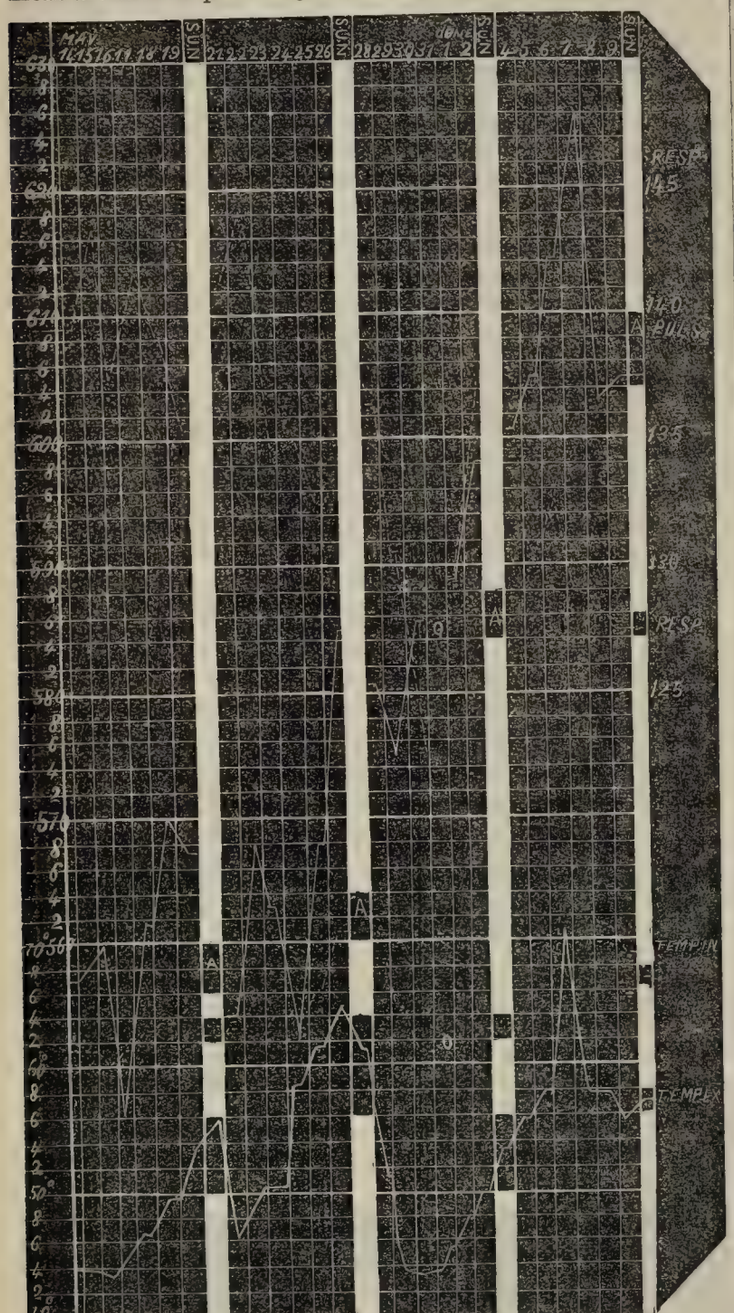


Fig. 2.—This diagram represents the result of 3,000 observations on twelve phthisical patients in the hospital on each day (except Sunday) for one month, in May and June; and shews the relation of the rate of pulsation and respiration to temperature. The lower line (temp. ext.) records the average daily temperature at Greenwich. The second line (temp. int.) records the same fact as observed in the hospital wards. The third line (puls.) gives the average daily return of the rate of pulsation *in the three postures combined*; and hence to obtain the average, it is needful to divide the recorded quantities by three. The fourth line (resp.) indicates the same facts in relation to respiration; but as the totals of the three postures, and at two periods of the day, are given in order to shew the variations more perfectly, the totals must be divided by six. The column for the Sunday is used to represent the averages of the preceding week as it respects pulsation and internal temperature. On comparing the course of the lines of pulsation and respiration with that of temperature, it will be seen that as the temperature rose the pulsation rose and the respiration fell; and in three of the four weeks the returns of Monday were the reverse of those of the Saturday. (Extracted from Brit. and For. Med. Chirurg. Review, April and July, 1856.)

Food also powerfully excites respiration; and, although it at the same time excites pulsation, it acts upon the former in a greater ratio. The effect is, however, temporary; and hence frequent meals must be indicated. With regard to the kind of food which excites respiration the most, it appears that tea or coffee is the most powerful; but animal food is also extremely efficacious. The administration of food, therefore, in the hours preceding the night sleep, is very valuable, as also in the early morning; for at the latter, and then at the former periods, the frequency is at or near the maximum.*

The effect of increased *temperature* of the air is to lessen the frequency of respiration as the heat increases; and the same is also true of the influence of *dryness* of the air. Vierordt's inquiries are again *à propos* to our subject; for he ascertained that both increased temperature and dryness of the air lessened the amount of carbonic acid evolved; whilst, in a moist atmosphere and a moderate temperature, the evolution was at its maximum. Hence a moderately cool and moist atmosphere is the most beneficial in phthisis, and is a most important desideratum in institutions such as this, in which an attempt is made to obtain uniformity of temperature by artificial means. In the inquiries before referred to, I investigated both these circumstances with care, and found that it was almost impossible to obtain an atmosphere sufficiently moist when it was subject to artificial heat. The difference between the dry and wet bulb thermometers indicated the same degree of *moisture* as that which was manifested in the external temperature on the average of the whole quarter, but a much less degree than was at that time contained in the external air. This also, both within and without a hospital, must be influenced by the season of the year. Both of the former conditions, viz., *high* temperature and dryness, also induce more frequent pulsation—a circumstance which adds to their evil influence. (See diagram opposite.)

A fair flow of spirits, and moderate excitement of both mind and body, must doubtless increase respiration; and hence variety of scenery and changes of a pleasant character must be proper.

The influence of *posture* of body over the respiration may be well seen by the following results of an investigation in which the lying posture succeeded to the standing, and that again was succeeded by the standing. After *standing* upwards of an hour, the respirations were—

	No.	Cubic in. each.	Cub. in. per min.
Standing . . .	19·4	20·3	395
Lying	16·	19·5	312½
Standing . . .	18·8	19·2	361

So that the standing posture increases the frequency of respiration, and the quantity of air admitted into the lungs; the depth remaining much the same. Very gentle exercise, such as could be obtained by walking to and fro for a few feet, had marked influence. Thus, as to the period when all influences are less potent, the respirations were—

	No.	Cubic in. each.	Cub. in. per min
Sitting	17·2	27·3	470
Standing . . .	16·6	29·1	484
Walking . . .	17·3	36·	625

And in another case, the quantity per minute was—

Sitting, 470; standing, 471; and walking, 612 and 640.

Thus the effect of this gentle exercise was to increase the quantity of inspired air fully one-third more than the quantity breathed in the standing posture, and also to increase the depth or extent of inspiration. The quantity of air inspired differs however according to the rate of walking; and at the rate of four miles per hour, the quantity is about 2,000 cubic inches per minute.

In reference to the influence of medicinal agents, I think there is reason to believe that tonics of every kind act in the mode under discussion. It is quite certain that their tendency

* On a large average in both sexes in phthisis, I found that the frequency of respiration was increased by breakfast 1¼, by dinner 3, and by tea 2¼ respirations per minute.

The effect on myself from one cup of tea on an empty stomach was to increase the respiration as follows:—

	No.	Cub. in. each.	Cub. in. per hour.
Before the tea.....	18·5	21·2	393·5
After (maximum within 55 min.) ..	20·6	21·9	434·

That of a moderate dinner at 6 P.M. was—

	No.	Cub. in. each.	Cub. in. per min.
Before dinner.....	16·8	23·	387·
After (maximum within 90 min.) ..	21·6	22·3	456·

Thus in health, although the quantity of air introduced with each inspiration is not increased, but rather lessened, by food, the frequency of respiration and the total quantity of air inspired per minute, are greatly increased. *Wine* has a contrary result, for although it may slightly perhaps increase the frequency of respiration, it lessens the quantity of air inspired; so that in my own case, at 5½ P.M., after a fast of four hours, one glass of pale sherry reduced the quantity within twenty-eight minutes from 23 to 20 cubic inches per inpiration, and from 442 to 402 cubic inches per minute, or a reduction within a few minutes of one-eighth of the total volume. Should these results be confirmed by the further investigations now in progress, it would raise a very serious question as to the propriety of administering such fluids in phthisis: but it has long been known that spirituous liquors decrease the quantity of carbonic acid evolved, a circumstance opposed to their employment in this disease.

is to improve the health by giving more strength to the system; and since, as the health improves, the ratio between the pulse and breathing is increased, without any great change in the rate of pulsation, it is fair to infer that the increased ratio is due to the increase of the rate of respiration.

The employment of *cold baths*, properly administered, is doubtless of use, by causing deeper inspirations; for we all know that this is the ordinary effect of the sudden application of cold. It is, however, essential that the application should not occupy too much time, lest the continued exposure should lower the temperature of the body considerably, and with it the nervous power; and thus induce a state of exhaustion which the application was intended to avert. It is, therefore, needful that the patient should be limited to one or two plunges, or to a rapid sponging of the whole body.+

Such, then, are some of the most powerful positive means within our reach for the arrest of phthisis; and they may be summed up in the following sentence:—Forced inspirations, out of door exercise, good and frequent food, sleep, early rising and retiring to rest, cool moist air, cold washing, moderate excitement of the mind, and medicinal tonics. There is also another, which may rather be considered a prophylactic of phthisis, and which, in my opinion, is of far greater value than the community at the present day admit; viz., athletic exercises, and country sports and games. One of the greatest evils attending upon the state of society at the present day is the entire absence of this healthful, yet more or less severe bodily and mental recreation. The attempts to lessen this want by encouraging country rambles is valuable, by enticing the individual from impure into pure air, by lightening his mind of pressing cares, and inspiriting him by the sight of new scenes and objects; but it fails in the want of the rough athletic sports of former days, which directly increased the depth of respiration, and also in the very rarity of its occurrence. It appears to me that we cannot duly appreciate the prophylactic power of such amusements and exercises as were practised constantly by our forefathers, and that in the present day we can offer no efficient substitute for them. Now, without entering more fully into this question, if they may fairly be regarded as conducive to health, they would be preventive of phthisis; and if preventive, then they would be of service in the early stage of the disease. The encouragement of such exercises as cricket, ball-playing, and rackets, for males, and the skipping-rope and hoop for females, cannot fail to be a step, however small, in the right direction.

The negative means to be employed for the end proposed are doubtless as important as the positive ones just described; for we thus strive for the absence of those very influences which, when present, gave rise to the disease. I need not enter into this part of the subject with any minuteness, and shall therefore simply enumerate them. Such are the prevention of abuse of the body, as by excessive repletion, whether by solids or intoxicating fluids; by sexual excesses and masturbation; by too long continued labour; by the absence of impure, hot, and dry air; great anxiety; undue exposure to cold, and any other depressing cause; also by the correction of indolence of body and mind, and the due supply of nutriment in quality, quantity, and frequency; with the correction of functional derangement of the alimentary and excretory organs. The removal of these and similar conditions must be at least concomitant with the employment of the more positive agencies before described; but, as so many of them are inextricably mingled with the necessities or the vices of mankind, it must be that their influence upon society in the production of phthisis can never be eradicated. To these must also be added another, and that perhaps the most widely spread and the least remediable of all these agencies; viz., the defective system handed down from father and mother to child—the result of accumulating vices of life, and of injudicious marriages. With all these circumstances opposed to the physician, one cannot wonder at both the frequency and the pertinacity of the disease; and so long as mankind are exposed, or do expose themselves, to the action of so many depressing agencies, so long must the vital energies be reduced in vigour, and the lungs, from their very structure, be the most constantly subjected to the results of deficient respiration.

+ As evidence of the precise effect on the inspiration, etc., in health due to cold bathing, I offer the following results, from an experiment made upon myself:—

	No. of resp. in a minute.	Cub. inches evolved in each resp.	Cub. inches per minute.	Pulse.	Temperature of Breath.	Temperature of Air.
At 10.18 P.M., 4¾ hours after dinner, 2 hours after coffee, while sitting by the bath.....	14·6	31·4	459	77	—	61·5
During first five minutes after complete and quiet immersion in water at 62°	16·2	33·8	542	80	5·5	61·5
Twenty-six minutes after immersion, with sensation of great cold and shivering	20·2	37·8	764	76	6·	61·5
After lying in bed 40 minutes, and still feeling very cold	15	27·6	415	69	5·	64
I then took a glass of moderately warm weak brandy and water; and in 50 minutes after leaving the bath	14·4	27·8	401	76	4·5	64
In ten minutes later, still feeling very cold, although buried in blankets	14·8	27·5	407	74	3·75	64

For some hours afterwards, I was unable to feel warm. Thus the effects were most remarkable in increasing the frequency of respiration and the quantity of air inspired per minute, and in lowering the temperature of the breath and that of the body to an extent probably very injurious to health.

Reviews and Notices.

On Poisoning by Strychnia; with Comments on the Medical Evidence given at the Trial of William Palmer for the Murder of John Parsons Cook. By Alfred S. Taylor, M.D., F.R.S., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital. pp. 152. London: Longmans. 1856.

The trial of William Palmer must ever hold a prominent position among the *causes célèbres* of medical jurisprudence; not as a triumph of chemical skill, for chemistry, whatever may be said, proved nothing on either side; but as opening the question whether pathological symptoms can be justly taken as evidence of poisoning, in the absence of the positive proofs which an examination in the laboratory might be expected to afford. The excitement attendant on the progress of the case having in a great degree passed away, scientific men are now in a position to examine the question carefully, and to determine more accurately how far the modes of chemical analysis with which we are acquainted, are sufficient for the detection of poisons, and how far we must be content, in some cases, to recognise as our only guide the evidence presented by symptoms. To declare his opinion on these points, with special regard to strychnia, is the object which Dr. Taylor has in view.

After giving an outline of the circumstances connected with the death of Cook, Dr. Taylor proceeds to examine in order certain prominent questions contested at the trial. In support of his opinions on each question, he brings forward a large amount of authority, bearing both on the general subject and on the particular instance. This is indeed required in writing on a subject so full of doubts; and especially it is incumbent on Dr. Taylor, for the sake of science and justice, as well as for his own justification, to prove the correctness of his views by reference to the evidence afforded by other cases than the immediate subject of his remarks.

The first question which Dr. Taylor takes for consideration is:—

Were the symptoms and appearances in the case of Cook caused by strychnia, or might they have arisen from some natural disease?

This inquiry, it will be seen, is capable of being resolved into two parts; *first*, whether the symptoms and *post mortem* appearances were such as are commonly known to attend strychnia poisoning; *second*, whether, supposing this to be the case, they might not so closely resemble those of natural disease as to be undistinguishable?

With regard to the first part of the inquiry, Dr. Taylor adduces the evidence afforded by three undoubted cases of poisoning by strychnine; and, comparing them with the case of Cook, he infers that the symptoms were sufficiently alike to justify the opinion that they arose from a similar cause. In

arriving at his conclusions, he mainly confines himself to cases observed in the human subject, being of opinion that the same poison may affect man and animals differently in some respects; and this *quasi*-rejection of the evidence afforded by experiments on animals is a prominent feature in his essay. Still, we opine, the failure in the evidence from experiments on animals arises rather from all the accessory circumstances not being parallel, than from essential differences. Thus, Dr. Taylor himself, in speaking of the alleged distinction sought to be derived from the great sensitiveness observed in animals poisoned with strychnia and the toleration of rubbing observed in the human subject, quotes some expressions of Drs. Lawrie and Cowan of Glasgow, which in fact reconcile the apparent differences. These gentlemen say:—

"It is the sudden first impression on touch, and not the *continuous pressure*, which causes the shock and the renewal of the spasm. We have uniformly found that rubbing any part of the surface in dogs does not cause spasm; and that, so far as we could judge, rubbing or scratching their necks was agreeable to them."

Another objection to the theory that Cook had taken strychnia, was that he had vomited; which, it was alleged, could not occur in poisoning by strychnia. Of this objection Dr. Taylor disposes by adducing four cases of known strychnia poisoning in man, in which vomiting occurred.

It was also objected, that the length of time which intervened in Cook's case before symptoms came on were inconsistent with poisoning by strychnia. On this point, the evidence in well observed cases in the human subject shews distinctly, that the period of first accession of the symptoms may vary from an hour to two hours and a half, or even longer. On the other hand, there can be no doubt that the symptoms may appear at a much earlier period; and this will be evident on reference to a table of cases of poisoning by strychnia, published at p. 78 of Dr. Taylor's essay. Sixteen cases are given, of which some clue as to the first notice of symptoms is afforded in twelve, which may be thus arranged:—

Above one hour	2
Forty-five minutes	1
Thirty minutes	1
Twenty minutes	3
Fifteen minutes	2
Five to ten minutes	1
Less than five minutes	1
"Soon"	1

In experiments on animals, the time was stated at the trial to vary from two to forty-five minutes; but Drs. Taylor and Rees have found no symptoms to appear for an hour and three quarters; and some cases have been communicated to Dr. Taylor in which the symptoms were delayed for five or six hours. In respect to time, then, there does not seem to be any great difference between animals and man; and to both may be applied the observation made by Dr. Taylor with regard to animals: "In fact, it generally depends on the dose, on the rate of absorption, on the mode in which the poison is given, and on other circumstances." In regard to the special case under consideration, although the majority of the cases which we have tabulated above shew that strychnia is generally more rapid in its effects, yet, as there is in some distinct evidence of delay of the symptoms, Dr. Taylor is correct in drawing the negative inference "that there was not the slightest justification for the statement that the interval which had elapsed before the symptoms shewed themselves in Cook, was so great as to be any real objection to their having arisen from strychnia."

As to the state of the heart, Dr. Taylor adduces a number of instances of strychnia poisoning in which, in common with the case of Cook, it was found empty; while the results of his experiments on animals agree with those of other observers, "that the right side of the heart is full of blood." But there is also evidence afforded by Mr. Startin, that both the full and the empty conditions of the heart may be met with in animals; and, on again turning to Dr. Taylor's table (p. 78), we observe that the heart is, in at least four cases, stated to have contained blood. The state of the heart cannot, therefore, be regarded as pathognomonic of poisoning by strychnia.

The second part of the inquiry is, could the symptoms in Cook's case have arisen from any other disease? In some elaborate notes at pp. 27-30, Dr. Taylor draws a contrast between the symptoms of idiopathic tetanus and tetanus from strychnia; as well as between hysteria and strychnia tetanus. He dismisses briefly the idea of traumatic tetanus, of the cause of which there was no evidence: but we would prefer that he had dealt somewhat more philosophically with the causes of death assigned in the defence (however absurd many of them were), than by the absolute assertion that the symptoms produced by strychnia are characteristic. There is some justice in the words which follow: but there runs through them a dogmatism which is not calculated to lead to conviction.

"The other witnesses who were examined for the defence, did not agree among themselves respecting the cause of death;—thus the jury were left to make their selection from some convulsive disease, modified epilepsy, hysteria, arachnitis, epilepsy with tetanic complications, and angina pectoris; one witness professed that he was unable to assign any cause for the symptoms, either natural disease or poison; but he thought that 'some peculiarity of the spinal cord, unrecognisable except the examination be made immediately after death, might produce symptoms like these;' a very convenient hypothesis for covering any kind of death from poison affecting the nervous system, when from circumstances the poison cannot be discovered in the dead body. It simply implies that a *recent* examination of the spinal cord sets all questions at rest respecting the pathological seat of convulsive diseases; and that hydrophobia, hysteria, tetanus, and epilepsy, are at once indicated by the inspection of this organ, while the body is recent!" (p. 37.)

The conclusions which Dr. Taylor draws from his inquiry on the preceding point are:—

"1. That the symptoms and appearances observed in the case of John Parsons Cook are not only consistent with death by strychnia, but such as from experience in other cases in the *human subject* we may commonly expect to find as a result of the action of this poison.

"2. That the symptoms and appearances, taken as a whole, are not reconcilable with death from any other cause.

"3. That the objections urged to this cause of death by the witnesses for the defence have no real foundation, and are directly opposed to observations hitherto made in cases of death from strychnia."

On these conclusions a few remarks may be offered.

1. The first conclusion is one to which no objection can be made. 2. The second, however, appears to us too absolute. There is no doubt that a deal of absurdity was uttered in the defence with regard to some of the diseases from which, it was said, Cook might have died; but at the same time it must be allowed that some of the witnesses described cases of disease closely resembling those of poisoning by strychnia. Instead of pooh-poohing this evidence, Dr. Taylor should have demonstrated its inapplicability to the case. Anomalous cases of disease do sometimes occur; and this must be borne in mind, especially when, as fortunately happens, the opportunities of comparing cases of strychnia poisoning with other diseases are rare. We do not throw the least doubt on the conclusion that Cook died from strychnia; but we must say that, in the absence of the circumstantial evidence which formed so strong a point in the case, we should be very cautious in coming to any conclusion on the strength of the scientific evidence, chemical or pathological.

3. In this conclusion, we think, every one must at once agree. It is one which Dr. Taylor fully supports; but care must be taken not to assign to it more than its negative value.

The next question examined by Dr. Taylor is:

Can a person die from poison, and no poison be found by chemical analysis of the body?

On this point but one opinion can be held by any one at all conversant with chemistry; viz., that expressed by Dr. Taylor,

"that there are many poisons which may cause death under circumstances in which they cannot be detected by chemical analysis in the body." This is quite true: and it is a view in which Dr. Taylor is supported by eminent authority; but it appears to us that he sustains his argument in a great measure by adducing what could *not* be done twenty or thirty years ago. Chemistry is advancing in progress; and if a time should arrive—as it may—when the detection of all ordinary poisons (unless under most unfavourable conditions) will be a matter of certainty, it will be then absurd to speak of what could not be done in times past as a reason why it cannot be done then. But in the present state of science, the following remarks are admirably to the purpose.

"But has organic chemistry, with all its modern advances, yet reached a point that no death can occur from poison, speaking generally, except the poison be still found either in the stomach, the tissues, the blood, the excretions, or in all of these parts at one and the same time? Is the viper-poison easily revealed by tests? Can the poison of rabies, producing one of the most formidable convulsive affections known, namely hydrophobia, be detected in the tissues? Is there any chemical process by which the poison of the ordeal bean of Africa, or even of the common laburnum, the seeds of the *Ricinus communis*, the poisonous fungi, darnel, and the sausage-poison of Germany, the poison of the œnanthe crocata,—can be separated and demonstrated to exist after death in the blood and tissues? If not, then the allegation that no person can die from poison except the poison be found in the body is a mockery, a delusion, and a snare, admirably adapted to cover a multitude of deaths from poison, which, but for this dogma, might be revealed by pathology and physiology. It is all the more dangerous, because the history of crime shows us that the arts of the murderer, especially of the scientific or professional murderer, are daily becoming more refined. I could add largely to the list of poisons which either by their nature, by their tremendous power in very small doses, or by the mode in which they are introduced into the system, might infallibly produce death without leaving a physical or a chemical trace of their presence in the body. I forbear to do this." (pp. 48-9.)

And, further on, Dr. Taylor very justly says:

"Chemistry may detect a poison; but it fails, without the aid of physiology and pathology, to show whether it was or was not the cause of death; and, in some instances, it cannot enable us to determine whether the poison was introduced into the body during life or after death. Even with regard to the poison in question in this particular case,—*strychnia*,—this substance is now so extensively employed as a medicine, that the discovery of traces of it in the stomach, blood, and tissues (assuming that the processes used are satisfactory), would not justify an allegation of death from poisoning by it. *The symptoms must be made known.* The 'tetanic complications' which it ordinarily produces in the body when taken in poisonous doses must be clearly established, and a judgment must be based on these symptoms. We are not, therefore, to suppose, as the public have been erroneously led to imagine, that toxicology and chemistry are convertible terms, that the finding of poison in a body is a proof of death from it, and the not finding the poison is a proof of death from some natural cause." (p. 50.)

The third question, and indeed the main one in the inquiry is:

"*Can a person die from strychnia, and no trace of that poison be found by chemical analysis in the body?*"

On this subject, in reference to the case of Cook, Dr. Taylor observes:

"The principal reasons for the non-detection of strychnia in the body of a person who has died from its effects may depend on—

"1. *The quantity taken.* If the dose be small, from one half to three quarters of a grain, it may be rapidly absorbed and removed from the stomach. It is only the *surplus* of a fatal dose which is found in the stomach after death. If a man swallows a dose of ten, fifteen, or twenty grains, and dies quickly, without vomiting, then the residue, or some portion of it, may be found.

"2. *On the time which has elapsed after taking the strychnia, until the symptoms commence.* The longer this interval, the greater the quantity of poison removed from the stomach by absorption. The poison has been found to be diffused through the circulation in nine minutes. If the person dies in ten or twenty minutes from the time of swallowing the strychnia, some may be found. If he lives an hour or longer, the greater portion may be removed by absorption.

"3. *On the careful preservation of the stomach and its contents.* If the fluid or solid remaining in the stomach at the time of death is not carefully preserved, there is a great probability, if the residuary quantity be small, that it will not be found.

"In testing the case of Cook by these propositions, we may remark—

"1. The doses were probably small: on Monday night the quantity was not sufficient to prove fatal. On Monday and Tuesday nights a long period elapsed on each occasion before the symptoms commenced. This is not in accordance with the taking of a very large dose. A dose of from three quarters of a grain to a grain would have sufficed to produce the effects on Tuesday night.

"2. An hour and a quarter had elapsed before any symptoms manifested themselves in Cook. If absorption commences in a few minutes, and continues throughout, there was time for the removal of the greater part by this process during the hour and a half that he survived.

"3. The stomach of deceased was delivered to us in a condition most unfit for analysis, or for the detection of such a poison as strychnia. I am informed that it was accidentally cut during the examination of the body, and some of the contents had escaped. If put into the jar in the mode described by the witnesses in evidence, it is perfectly clear that there must have been some tampering with it subsequently. When it reached us, it was laid open from end to end, and *turned inside out.* No person making an inspection for the purposes of a chemical analysis, with the slightest knowledge of his duty, could be guilty of an act of this kind. If he had unfortunately lost the contents, wholly or in part, during the examination, as a rational person he would have preserved as much of the stomach as it was in his power to do: or would have placed it in the jar with the ends secured, and in a different condition from that in which we found it." (pp. 66-8.)

The length to which this review has already extended precludes us from saying much on these important topics: but one or two points may be briefly noticed.

As regards the non-discovery of strychnia in the body of Cook, all that can be said is that chemistry here afforded no evidence in either one direction or the other. The stomach had been cut open, and its contents poured out; and a complete chemical examination of the body was not made.

In reference to the general question whether strychnia undergoes change in the body, and may thus escape detection, or, if capable of detection, be no longer the poisonous substance which was introduced, Dr. Taylor adduces, on the authority of Dr. Macadam, a curious fact.

"Dr. Macadam killed a horse with thirty-two grains of strychnia, which can hardly be called a minimum dose. He fed a large-sized terrier dog for two weeks on the flesh of this horse; the animal eating every day during this period two pounds of muscle. The terrier dog, he says, lived and throve on the flesh, and did not betray the faintest shadow of tetanic symptoms. He states that, on analysis, he found distinct evidence of strychnia in the muscle and blood of the horse.

"These results appear to me to favour the view that strychnia, when absorbed and diffused through the circulating system, undergoes some change, by which, although part of it may still exist as strychnia, a portion is so altered or decomposed, that it no longer possesses a poisonous action on animals. Either this view must be adopted, or we must be prepared to say that strychnia, unabsorbed or as it is lying in the stomach, is a poison; but when absorbed and deposited in the tissues, although still existing entirely as strychnia, it ceases to exert a poisonous action." (p. 127.)

This observation is very curious, and ought to be again and again tested as to its correctness, especially as it is contradictory of other statements.

Dr. Taylor recognises the general opinion that strychnia produces some change in the blood; and argues that therefore it must itself undergo a change.

"The extraordinary changes of colour which strychnia undergoes by contact with sulphuric acid and the peroxides in the application of the colour-tests, are properly ascribed to its

combination with nascent oxygen. In taking oxygen from these substances, is it to be supposed that it undergoes no change in itself? Is it in accordance with the laws of chemistry, that A can affect B, without B affecting A? Are the coloured compounds of strychnia and oxygen still in the form of strychnia the poison, or have they undergone a change? The amount of this conversion in the application of the colour-test, is well known to be dependent on the relative proportions of strychnia and nascent oxygen produced from the substances employed. An ignorant or careless manipulator might, it is true, on finding strychnia to be present, affirm that the alkaloid had undergone no change; when, in fact, part of it only was there, and part of it had become converted into other compounds, no longer possessing the properties of strychnia in its pure state. The application of this reasoning is obvious. There is in the blood, nascent oxygen or oxygen in a state of high chemical tension for combination with the carbon and hydrogen of the waste tissues of the body. Strychnia, as it passes into the blood by absorption, must have its molecules split infinitesimally. These molecules there meet with oxygen. Considering the remarkable affinity which strychnia shows for oxygen out of the body, would it be a matter of great surprise that it should combine with, and remove from the blood a portion of that element on which all vital actions and the proper secretion of nervous force depends? If the oxygen of the blood can combine with the carbon and hydrogen of the tissues, there is nothing to prevent its combination with the carbon and hydrogen of part of the strychnia. It is not necessary that the whole of the absorbed strychnia should be thus changed."

These remarks are interesting and important; but they are merely hypothetical, and should not be allowed to interfere with a full scientific investigation of the question whether strychnia, in all its integrity and potency, can or cannot be detected in the blood and tissues.

In concluding this notice, and in recommending Dr. Taylor's book to the favourable notice of our readers, we must make one more extract, in the sentiments of which we entirely concur.

"After all, it must be remembered, the medical opinion refers to the cause of death, rather than to the criminal. The medical facts may admit of only one reasonable interpretation, namely, that the person died of poison; it must be the conduct of another, his motives and his actions, irreconcilable with innocence, which will ultimately fix the perpetration of the crime upon him. The medical opinion of the cause of death in Palmer's case, had no relation to the prisoner's conduct—in his assigning a false cause for the illness; in his endeavouring to procure a hurried interment of the body; in his interfering at the *post mortem* examination, and cutting into the jar containing the viscera; in his attempting to bribe a postboy to overturn the carriage and break the jar; in opening, or causing to be opened, letters having relation to the results of the analysis; in writing to his friend the coroner, expressing his desire that the inquest might be brought to a close with a verdict of death from natural causes, etc. I might add to these circumstances the possession of strychnia, without any assignable or reasonable motive for procuring this formidable poison, by gifts as well as purchase, on two different occasions within twenty-four hours of Cook's death. It was not the medical opinion respecting the cause of death, or any medical theory regarding the operation of strychnia, which led to the conviction of the prisoner at the trial, so much as these portions of his conduct, for which the subtle and overstrained arguments of his counsel could afford no reasonable or satisfactory explanation. They were, in fact, left without an answer." (p. 35.)

A Descriptive Catalogue of Preparations illustrative of the Diseases of the Ear, in the Museum of Joseph Toynbee, F.R.S. pp. 127. London: Churchill. 1857.

Since the year 1839, Mr. Toynbee has applied himself with care and industry to the investigation of diseases of the ear; and in all that relates to the physiology and pathology of this organ he has gained for himself a good reputation. Prosecuting the study of aural pathology with a view to its improvement, he has from time to time collected morbid specimens bearing on the subject; and these, eight hundred and fifty-six in number, are described, in proper anatomical order, in the catalogue which he has lately published. The descriptions for the most part refer only to the pathological conditions of the part mentioned; but to several of the cases a brief outline of the history is appended, and, in some, reference is made to the published writings of the author for further information,

To those interested in the study of aural pathology, Mr. Toynbee's catalogue will be a source of instruction; and especially to those who may be enabled to examine the specimens. Mr. Toynbee has very liberally expressed his willingness to show his museum at all times to members of the medical profession: of this opportunity, we trust, many will avail themselves.

It must not be omitted, that an appendix to the catalogue contains directions for the removal of the ears for investigation and for their dissection.

British Medical Journal.

SATURDAY, FEBRUARY 7th, 1857.

MEDICAL REFORM.

In noticing, the week before last, the reply of the English department of the Medical Conference Committee to the proposal made to them by the Reform Committee of the Association, it seemed to us only necessary to give the resolution introduced in it which accepted the proposition of Crown nomination, merely touching in general terms upon the other portion of the document. It seems, however, that our words were open to some misconstruction; and, in order to put the matter more clearly before the associates, we publish *in extenso* the document, as received by the Secretary of the Reform Committee.

"*Reply of the English Department of the Medical Conference to the Reform Committee of the British Medical Association.*

"The London Committee of the Conference for promoting a Medical Bill beg to acknowledge the communication of the Reform Committee of the British Association; and they will, without delay, invite the Corporate Bodies of Scotland and Ireland, with which they are acting, to the favourable consideration of the proposal of the Reform Committee, to admit to the proposed General Council members to be nominated by the Crown, whose names appear on the register, and who do not belong to the Governing Bodies of the Medical Corporations and the Universities.

"At the same time, the London Committee of Conference are of opinion that the proportion of members of Council to be nominated by the Crown, proposed by the Reform Committee of the British Association, is too great; that it would render the Council too numerous for the dispatch of business, and would increase those expenses of the Council, which may have to be defrayed by the profession in the shape of registration fees.

"Resolved:

"That the principle of nomination by the Crown, urged by the Reform Committee of the British Association, be entertained, and submitted to the Corporate Bodies of Scotland and Ireland, with the expression of a favourable opinion on the part of the London Conference Committee."

We cannot but repeat our satisfaction that the Colleges have agreed, by the foregoing resolution, to admit the proposition of the Reform Committee; but we must candidly confess that we should have viewed their reply with much more satisfaction, if this resolution had been forwarded without any qualifying remarks. The Reform Committee, for the sake of unanimity, agreed to meet the corporate bodies with a proposition which fell far short of their own ideas with respect to the composition of the Council: they gave ground in a frank and liberal spirit, and expected to be met in the same liberal manner; and we hope still that they will not be deceived in that expectation.

The London Colleges, in their admission of the principle of Crown nomination, undoubtedly go some way with us on the same road; but, in the carrying out of that principle, they seem inclined to hesitate. We may have Government nominees, but they are of opinion that we ask for too many; for the double reason, that it would render the Council too bulky, and its expenses too great. But, if we mistake not, the Reform Committee does not bind itself to any particular number; it only asks for a certain proportion of Government nominees in the Council. That this proportion should be one-third in a governing Council which is to take upon itself the supreme direction of medical affairs in this country, is surely only a humble request, when it is remembered how vastly preponderating are the numbers of medical men who would have no other representatives to look after their particular interests.

When we said in our late leader that the objection of the Corporations to the number of Crown nominees was a matter of "minor importance," we certainly did not mean that the Reform Committee would be willing to accept any number that may be offered them: that is a matter for the Committee itself to decide. Our only intention was to convey the idea that the principle having been accepted, the objection raised by the Conference Committee would probably be removed in future conferences, by the explanations of the Reform Committee. As yet neither of the parties to the late conference, as far as we can see, is pledged by what has taken place. A definite proposition has been made on the one hand, and an indefinite but still a hopeful reply has been returned on the other. We hear that the Scotch and Irish Colleges have agreed to the principle of the proposition, as submitted to them by the London Conference Committee, and that a conference of the Corporate bodies of the three kingdoms will be held in the College of Physicians, on Monday, the 9th instant, to discuss the details of the Bill. If such really be the case, we trust the members will at once agree to accept the proposal of our Reform Committee without any reservation whatever. It surely cannot be of much importance to the Corporations whether the number of Government nominees be two or three more or less, but to the Association it is of the utmost importance that an equal and effective share be given to the voice of the profession at large in an assembly which will have the entire control over their interests. We now almost touch the goal of Medical Reform; and we should regret exceedingly to see any course taken, which may lead to further impediments in the path of those who have so long and so earnestly striven to attain it.

PATENT MEDICINES AND THEIR PATRONS.

The correspondence, of which an abstract was given in last week's Journal, between the Reverend Canon Jacob and Dr. Crawford of Winchester, on the merits of a secret remedy known by the name of Warburg's Tincture, illustrates several points on which a few remarks may with propriety be made. The history of the case is, briefly, the following. The Reverend Canon Jacob, fortified, as he supposed, by the benefits which he had observed to be produced by Warburg's tincture, and by the fact that some of our most eminent hospital physicians and surgeons had testified to its remedial properties, besought Dr. Crawford to give the support of his name to the medicine, valuable, though of unknown nature. This Dr. Crawford very properly refused to do; and in the course of the correspondence, he not only gave excellent reasons for not countenancing patent medicines in the abstract, but he also brought forward a mass of evidence, not very creditable to the inventor (if he deserves the name) of this famous nostrum. In itself, the case would furnish a theme for comment; we prefer, however, to treat of some points in connexion with patent medicines and their patrons in the abstract, using the facts to which we have above referred in illustration.

Without attempting to exhaust the subject, we would on this occasion comment on two classes of persons who act as patrons of patent medicines.

The first class of patrons consists of persons of standing in the social world, whose position gives to them a degree of importance which causes them to be looked up to as the helpers and advisers of their dependents, when these are in distress or difficulty. To this class belong the members of the aristocracy and the landed proprietors, to whose ranks generally belong the Ladies Bountiful of our towns and villages; and especially the clergy, who, in their frequent and legitimate intercourse with the sick, are tempted often to usurp the functions of the physician. Not uncommonly, the clergyman and the Lady Bountiful act in combination; the former suggesting, and the latter furnishing the articles suggested. So long as this action, whether carried on singly or in combination, is confined to the relief of want; so long as the clergyman directs his energy to the judicious provision of the ordinary necessaries of life for those who are destitute of them, then he is carrying out in practice the principles of that religion which he professes to teach; but when he hesitates not to recommend medicines of which he knows nothing, for the removal of disease in the human body of whose nature he is equally ignorant, then, we must say, he is transgressing the bounds of his calling.

That such conduct is the manifestation in all or even in many cases of a wrongheaded and wilful mind, we do not believe. We can quite join Dr. Crawford in giving the clergy all credit for "benevolence, zeal, and single-mindedness"; but we further most deeply join in his lament "that these truly Christian principles should constitute the very character of all others which cunning and imposture the most eagerly try to ensnare". The clergy are, in fact, with all their alleged superiority of education, and with all their theological power, for the most part utterly incompetent to deal with any question involving even a superficial knowledge of natural science, and especially of the physiology of the human body. Hence they are at once imposed on by accounts of wonderful cures performed by some medicine of high sounding name; and forthwith they hold it a matter of duty to disseminate by word and by deed the beneficial knowledge they have received. It is true that some profess to exercise discrimination in their patronage. The Reverend Canon Jacob has no respect for patent medicines as a class, but acts according to the precept, "Try all things; hold fast that which is good"; not seeing that in trying all things in that blind manner in which they were never intended to be tried, he is perhaps causing a sacrifice of that life which it is his wish to preserve. Indeed, the precept cannot be applied to patent medicines: before a thing is tried, its proximate elements at least, and the nature of that to which it

is to be applied, must be known. If one patent medicine be admitted to use under this precept, there is no longer ground for excluding any. Why should not Canon Jacob, for instance, recommend a trial of the "Retired Clergyman's" recipe for nervous diseases, which contains a dangerous dose of nux vomica?

The clergy, we have said, are utterly unqualified to detect the impostures practised on them by designing men in regard to patent medicines. This arises from their defective education —defective in regard to phenomena which must come under their daily notice. Their university education may be nearly included in the words—Latin and Greek: it is antiquated and essentially limited. With such training, what idea can they have of the problems of natural science?

We can deal in the spirit of charity with those who do wrong because they know nothing better, and have been taught nothing better; but what shall we say of those whom we place in a second class of patrons of patent medicines, who err in spite of their knowledge and their teachings? What can be said, when men holding the positions of physicians and surgeons to our largest hospitals lend their names to countenance imposture? We must look about for extenuating circumstances, and rejoice, for the credit of the men and of our profession, if we can find any. The correspondence between Canon Jacob and Dr. Crawford reveals the names of two culprits in this matter—Dr. Babington, formerly physician to Guy's Hospital; and Mr. Skey, surgeon to St. Bartholomew's Hospital. Both these gentlemen gave testimonials in favour of Warburg's Tincture; but the manner of the documents, and the evident *animus* of the givers, are so different, that they may be taken as representing distinct types of their class. Dr. Babington, it seems, gave a testimonial under the provision that the nature of the medicine, if it appeared to work beneficially, should be made known to him. When the promise made by Dr. Warburg was evaded, and when, moreover, Dr. Babington detected that person in a direct falsehood, he ceased to take all interest in him and his nostrum. Dr. Babington acted with indiscretion in giving any testimonial whatever in favour of an unknown medicine. He was doubtless misled by the promise that the nature of the medicine should not be kept secret from him; and thus his good nature led him to commit an act which he no doubt, as a honest man, regrets. The case of Dr. Babington is a warning to others who may be placed in a similar position.

It is to be trusted that Mr. Skey is the type of himself alone as a giver of patent medicine testimonials. This is what he writes, in sublime disregard of all the petty punctilios of professional honour and of all the principles of medical science:—

"I will not be deterred by the fear of comment from stating my conviction of the great value of the Warburg Tincture as a tonic. I have saved many lives by its administration; and, so long as the ends of medical science have for their object the removal of disease, and not the welfare of the profession only, I shall continue to use it. In all exhausting diseases, it is invaluable."

What justification can be pleaded for such language?

To all in our profession who give testimonials in favour of secret medicines, whether they do it inadvertently or wilfully, we say this—that they are acting in contravention of the dictates of professional honour and of medical science. Mr. Skey would separate these principles; but they are, in truth, intimately connected. Hippocrates administered an oath, containing an excellent code of ethics, to his followers; and in one of its clauses the disciple swore "never to administer noxious drugs". In our days, members of the medical profession do not indeed give noxious drugs; but they testify as to the properties of medicines, of the innocence or noxiousness of which they can only have a very vague idea. If evil results follow, surely they are accessories before the fact; and this must be injurious to the honour and welfare of the profession. In regard to medical science, we will merely say that it is quite obvious that the blind employment of unknown drugs must only render more difficult of solution those complicated problems to solve which endeavours are being made. In this way too, the honour of the profession is endangered; for in its scientific advancement lies one of its greatest claims to respect.

The conduct of those who, like Dr. Crawford, at once see and resolutely follow the path of duty, demands now a few words of praise. Conduct like that of our respected associate is worthy of the admiration of the profession. Firmly has he supported its honour in refusing the solicitations of Canon Jacob; and yet the correspondence has been utterly free from any expressions which the writers might desire to withdraw. If any of our readers should at any time receive a request to support a patent medicine, we hope they will remember the conduct of Dr. Crawford, and do likewise.

DR. FELL'S TREATMENT OF CANCER.

The public is hard to please. Our profession, at least, has ever been unfortunate enough to fall from time to time under the displeasure of the task-master. Sometimes we are reviled as being dusty antiquarians, bigoted to the worn-out habits of past generations and ancient systems; simply because we refuse to endorse with our approbation each novel nostrum that flashes its ephemeral reputation on the credulous senses of the many. And then, again, we are at other times wretched experimentalists, and our hospitals merely medical crucibles, wherein poor humanity is scarified and pounded, and sacrificed to the theories of scientific refiners.

For once, at least, let us hope that the public will be satisfied, and that our incredulous profession will be spared the very biting sarcasms, involved in the somewhat stale jokes about Galileo and Harvey.

Dr. Fell, an American physician, has the reputation of being a successful treater of cancer, both in the New and in the Old World. In this country, the public, at least in London, redounds with tales of marvellous cures performed by him, and "great ones of the city" belonging to our profession have given their testimony, we hear, to the success and skill of the operator. Dr. Fell is now about to submit his method, in a very candid manner, to the judgment of the profession. This is as it should be. The experiments are to be tried in the Middlesex Hospital; and thus the real value of Dr. Fell's secret will be properly put to the test by competent and authoritative observers.

One remark, however, we must here suggest, without detriment to Dr. Fell, who has acted honestly and well. The remark springs from what we have heard of this matter in the profession. We confess to some surprise here. One might imagine, from the manner in which we have been obliged to hear this remedy spoken of by learned doctors, that pathology

was a sham, and that we had no more of principles to guide us in the managing of diseases than has the daintiest of reverend dilettanti, who dabble in physic to cure the bodies of those of whose souls they have especial charge. But pathology *has* a few useful facts in store; and we shall venture to mention two or three of them as applicable to the present purpose. They will enable us to define with complete precision the exact state of the case before us; they will tell us what Dr. Fell has to do to preserve the position he assumes.

Cancer is something more than a local disease. What is the value of his life, in whom the smallest item of cancer exists? How long do they live from whose bodies cancer-masses have been removed? Removing the local disease, then, is not curing cancer. This is all trite enough. Now, Dr. Fell does not, we presume, pretend to do more than attack the local disease. He does then just that which, heretofore and now, surgeons have done and do. But his method contains an especial virtue, and its speciality lies in this, that his means of ablation act more surely, safely, pleasantly, and completely, than do those means heretofore used for the removal of the tumour, viz., the knife and ordinary caustics.

Here then is the fact reduced to its simplest terms, and stripped of all hazy romance. The situation of Dr. Fell before the profession is clear and definite. *He has no new cure for cancer, but only a new method of removing the local tumour*—one more perfect and effective than the methods in daily use. If the doctor has such a remedy, he is happy in his generation, and deserves well of the public and of the profession—not better, indeed, than, as we understand, the public have treated him.

We have spoken this word of caution to our metropolitan brethren, and we think it was needed. We are not of those who are willing to receive as authentic long histories of cases done in private by a secret agent; we trust we have studied the history of our profession to a better purpose. A remedy is like a friend; it requires much testing before it be admitted to great intimacy. We promise Dr. Fell that we will treat his remedy as a friend—that is, we will hold to it and stand by it—if it bear the strain and test to which it is about to be subjected.

THE NEW PRESIDENT OF THE BOARD OF HEALTH.

The medical profession are tersely informed, through the medium of the papers, that Mr. Cowper retires from the Board of Health, and that his place will be taken by Mr. Monsell. We do not think that any of our body will much regret the retirement of Mr. Cowper, inasmuch as he clearly was unequal to the post. Gentlemanly and well-meaning, without doubt, he was; but he never clearly grasped the great and growing department of Government over which he was called upon to preside; and it must be confessed that, in Parliament, his talents were used rather in damaging than in upholding preventive medicine. We all remember his unaccountable conduct in dropping the Vaccination Bill, and his still more unaccountable speech in which he spoke of Jenner's great discovery as a matter upon which the profession differed. In fact, he gave a colour by his language to the declaration of Dr. Michell, of Bodmin, that vaccination, as at present practised, was a monstrous sham! It is clear, then, the great science of preventive medicine has lost nothing by the retirement from the Board of Health of Mr. Cowper. It is not equally clear, however, that it will gain anything by the appointment of Mr. Monsell, late a clerk at the War Office.

What we wish to draw attention to, is the monstrous system of making such an office a mere shelf for the convenience of displaced Government officials. Mr. Monsell may be well acquainted with the details of that science dedicated to take away life; but what can he know of the far higher one which preserves it?

We shall be told, we know, that this office is a branch of Government and represented in Parliament, therefore a civilian should fill it. But this is no answer at all. The Bar and the Bench have long been identified with the Government of the country; but we do not find these powers of the state represented by civilians! Since medicine is wedded to the state by the creation of this office, the post of president should have been given as one of the prizes of our profession; and we feel convinced that, until a medical man is appointed to the chief place, the Board of Health will not be looked up to with that respect which it otherwise would be entitled to. Why should all the real labour of the post be assigned to Mr. Simon, and all the official dignity to some gentleman well known at clubs—but no where else?

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [General Meeting.]	37, Soho Square, London.	Tues., Feb. 10, 4 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen & Chickens Hotel, New Street, Birmingham.	Thursday, Feb. 12th, 6 P.M.
Bath and Bristol. [Ordinary Meeting.]	White Lion, Bristol.	Thurs., Feb. 19, 8 P.M.

ADMISSION OF NEW MEMBERS.

The Laws of the British Medical Association, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. Williams, Worcester; or to any of the Secretaries of the Branches.

YORKSHIRE BRANCH.

RESIGNATION OF MR. MATTERSON.

At a meeting of the Council of the above Branch, held on January 31st, 1857—J. Allen, Esq., President of the Branch, in the Chair—It was resolved:

1. That the Council, sincerely regretting the state of Mr. Matterson's health, which has compelled him to resign the office of Secretary to the Branch, which he has held for several years with credit to himself, and to the great satisfaction of its members, cannot allow such connexion to be severed, without a warm expression of their grateful acknowledgment of the services rendered to the Branch by Mr. Matterson, and of a fervent hope that improved health may enable him to enioy many years of future happiness and usefulness.

2. That Mr. Husband, having consented, at the desire of the Council, to undertake the office of Secretary to the Branch until the annual meeting, be hereby requested to enter immediately upon the duties of the office.

W. D. Husband, *Secretary pro tem.*.

Reports of Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 6th, 1857.

J. M. Arnott, Esq., President, in the Chair.

REPORT OF COUNCIL.

The eleventh Annual Report of the Council was read by the Honorary Secretary, Mr. Mitchell Henry. After congratulating the members on the present very prosperous condition of the Society, it stated that there are now 283 members, twenty-eight of whom were elected during the past session. Three members had resigned, two retired, and one had died. The report then alluded to the great importance of conciseness on the part of those members who exhibited specimens. The retirement of Dr. Quain from the office of Honorary Secretary, which he had held for five years, was then alluded to. During that time Dr. Quain edited the annual volume of *Transactions*, and of the manner in which he has discharged his trust the Society was witness. The Society was happy to think that his energy and judgment would still be secured to the Society in his new office of Treasurer; but they desire to join with the members in tendering to him the expression of their warmest thanks for his past services. The expenditure had fallen short of the receipts, and some of the surplus had been funded.

The Report was received and adopted.

Mr. Erichsen, in eulogistic terms, referred to the valuable services of Dr. Quain. He thought them deserving of some more substantial mark of the Society's regard than a mere vote of thanks. He moved that the subject should be referred to the consideration of the Council.

Dr. Brinton seconded the motion, which was carried by acclamation.

Dr. Quain said that, as he had merely done his duty, he had no wish to have a higher reward than had already been given to him.

The matter was eventually referred to the Council.

GANGRENOUS (?) ABSCESS OF THE LUNG. BY JOHN COCKLE, M.D.

The abscess occupied the ordinary seat in the majority of such cases, the lower lobe of the right lung, and the periphery rather than the central portion. The specimen was removed from the body of a middle aged man, of delicate constitution, and cachectic appearance. He had been under treatment nearly a year, with symptoms of emphysema. About ten days before his death, he was seized, without premonition, with symptoms of pleuropneumonia of the right lung, of low intensity, his constitutional state being that of marked adynamia. Nearly coincident with the local symptoms, profuse expectoration occurred, of somewhat viscid, albuminous sputa, of almost milky whiteness, amounting to nearly a pint in the twenty-four hours, and highly offensive. On a physical examination of the chest, about three days subsequently to the attack, obvious dulness existed over the middle and lower right antero-lateral portions of the chest, and a large mucous râle was heard during inspiration. The patient rapidly sank, without further change. Upon examining the body, the left lung was found unadherent, large, distended, extending beyond the mesian line, and covering the superficial area of the heart. No *post mortem* stasis existed, even at its root. The right lung also, free and distended above, was strongly adherent to the costal pleura, at its middle and lower portions, by old and recent adhesions. In detaching the lung at this situation, the outer wall of the abscess gave way, and about two tablespoonfuls of dirty-grey pus escaped. The cavity was, perhaps, large enough to hold a pigeon's egg; it was lined by false membrane in parts, hanging in dark, discoloured shreds. The parenchyma was extensively solidified around the abscess, particularly above. Neither the pus nor the walls of the cavity participated in the excessive fœtidity of the expectoration. No effusion was found in either pleural sac. The heart appeared congested; its walls were very dark, and readily torn. The right chamber contained dark grumous blood, and a small, decolorised, unadherent plug extended from the right auricle into the pulmonary artery.

TUMOUR FROM THE FLEXOR TENDON OF A FINGER. BY T. SPENCER WELLS, ESQ.

Mr. Wells had removed the tumour from the forefinger of an old lady a month before. It had been of slow growth, but had returned after removal by another surgeon. Mr. Wells dissected it carefully from its firm attachment to the sheath of the flexor tendon. The wound healed by the first intention; but, from an examination of the structure of the tumour, Mr. Wells had prepared the patient for its probable recurrence. It was about the size of a walnut; of a soft, gelatinous consistence and ruddy hue, very fine bloodvessels traversing its substance in considerable abundance. The substance was uniform, but arranged in lobules having very fine enclosing membranes. Its specific gravity was 1·022. Mr. Wells said that he was indebted to Dr. Aitken for the preparation, which would show that, in general microscopic appearance, the texture of the tumour was very like the young nucleated blastema of fibrous tissue in the earlier and progressive stages of its development; yet there was no general resemblance to fibrous or to recurrent fibroid tumours obvious to the naked eye. It specific gravity also was peculiar, most varieties of fibroid tumours being described as hard, heavy, and dense; and Mr. Wells repeated a suggestion of Dr. Aitken's, that the specific gravity of tumours should be more frequently determined after their removal, as surgeons lay great stress on the weight and firmness of tumours, when forming an opinion as to their character in the living body.

PIN SWALLOWED THIRTEEN YEARS AGO. BY T. S. WELLS, ESQ.

Mr. Wells had that morning removed the pin from the left mamma of a female twenty-nine years of age. Twenty-seven pins had been removed by Mr. Jones, a Welsh surgeon, at various intervals; twenty-five from the mamma, one from the left wrist, and one from the left knee. Mr. Henry Thompson had also removed one from the left mamma about two years ago, and Mr. Wells believed he had brought the case before the Society.

Mr. Birkett, in allusion to the last case, referred to an instance in which pins were removed from the breast of a female, who appeared on several occasions at Guy's Hospital. It was ascertained that the pins had been previously thrust into the gland.

DISEASED PROSTATE. BY T. B. CURLING, ESQ.

The parts exhibited were taken from a man aged fifty-five, who was admitted into the London Hospital with symptoms which raised the suspicion of the existence of stone in the bladder. On careful sounding, no stone was detected; but the prostate, when examined by the rectum, was found to be enlarged, tender, indurated, and nodular. No difficulty was experienced in passing the instrument, but it gave pain, and was followed by slight bleeding. The pain on micturition increased and became intense, and was succeeded by pain in the lumbar region. Retention of urine occurred, the patient became typhoid, and died. Both kidneys were found diseased, the appearances being those of old Bright's disease with recent acute inflammation. The bladder was thickened, and its mucous lining congested. The prostate was enlarged, its middle lobe prominent, and it was also much harder than natural. On section, it had the appearance and feel of scirrhous disease. The cut surface was dotted with opaque yellow spots, from which there issued, on pressure, an abundant quantity of a thick, homogeneous-looking juice. The juice was examined microscopically by Dr. A. Clark, who found, with the exception of a few suspicious cells, no appearance of scirrhous disease. Notwithstanding Dr. Clark's examination, and the rarity of scirrhus of the prostate, Mr. Curling, forming his opinion from the history of the case, the excessive induration of the gland, and the appearances exhibited in the section, was inclined to regard the disease as of that character. The man died chiefly from acute nephritis, but his symptoms on his admission were all referrible to a morbid state of the prostate.

MELANOTIC TUMOUR GROWING FROM THE OUTSIDE OF THE EYEBALL. BY T. B. CURLING, ESQ.

A man, aged forty-eight, was admitted into the London Hospital on account of a large tumour and projection of the right eye. The disease commenced about four months previously. Mr. Curling excised the globe and tumour, and the man recovered favourably from the operation. A section being made of the tumour, a melanotic mass, about half an inch in thickness, was observed on the outside of the eyeball, closely connected with the posterior half of the sclerotica. This part of the sclerotica was much thinned, and at the extremities of the tumour split, as if the morbid growth had been developed between its layers. The optic nerve was nearly surrounded by melanosis, and compressed and partially atrophied by this

morbid growth. The tumour was composed of distinct masses of different shades of black. In the microscope, the appearances were indicative of cancer. Mr. Curling remarked, that melanosis occasionally attacked the internal structures of the eye, but that he knew of no recorded case in which that disease, or medullary cancer, had grown from the outside of the sclerotic without further implicating the globe, as in this instance.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Richard Griffin, Esq.

Sir,—Permit me thus publicly to thank the students of the several hospitals who have so nobly come forward to aid the cause of the Poor-law medical officers. I cannot advise an aggregate meeting, as it would entail serious loss of valuable time. Let them assemble in their respective theatres, and record their opinions in the medical journals. Arrangements are now making for a general meeting; and, when that takes place, they will have the opportunity of manifesting by their presence the interest they take in our cause.

Officers from twenty unions, whose names have not been before published, have joined the Association within the last few days; and the number of fresh names I daily receive proves that our proceedings meet with the concurrence of my brethren. Gentlemen must excuse my not replying at length to all their suggestions, as I receive from forty to sixty letters daily; they may rest assured I will not fail to bring before the Committee all valuable remarks. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, February 2nd, 1857.

P.S. The following correspondence with the Poor-Law Board, having reference to the last letter in my pamphlet, may interest your readers.

I. *The Secretary of the Poor-Law Board to Mr. Griffin.*

"Poor-Law Board, Whitehall, January 31st, 1857.

"Sir,—I am directed by the Poor-Law Board, with reference to your letter of the 12th ultimo, to transmit to you for your information the accompanying copy of a letter which they have addressed to the Clerk to the Guardians of the Weymouth Union, respecting your claim to remuneration for the services which you rendered in the case of a poor man named Brownsea. "I am, sir, your obedient servant,

"Courtenay, *Secretary.*

"To Richard Griffin, Esq., 12, Royal Terrace, Weymouth."

(*Copy of Letter.*)

"Poor-Law Board, Whitehall, January 28th, 1857.

"Sir,—I am directed by the Poor-Law Board to inform the guardians of the Weymouth Union that they have given their consideration to Mr. Griffin's claim to the sum of £2:2 for the services which he rendered in the case of the poor man named Brownsea, of Nottington. The Board have deemed it proper to communicate with Mr. White, the relieving officer; and they learn from him that his attention was first called to this case by Mr. Dade, a justice of the peace, who told him that Mr. Puckett, the medical officer who was then attending Brownsea, could do no more for him; that he (Mr. White) then went to Mr. Puckett, and informed him that, if he considered there was danger, or that further advice was necessary, he had better send for another medical man. It appears that Mr. Puckett, acting upon the authority which he had received from the relieving officer, then called to his aid Mr. Griffin, intimating to him that the relieving officer had pledged himself to remunerate him for his services. On referring to Article 215, No. 3, of the General Consolidated Order of the 24th July, 1847, the guardians will observe that it is the duty of the relieving officer, 'in any case of sickness or accident requiring relief by medical attendance, to procure such attendance by giving an order on the district medical officer, or such other means as the urgency of the case may require.' The Board thinks that, looking to the duties of the relieving officer, as prescribed by this article, it was competent to him to adopt the course which he pursued. The Board therefore directs me to inform the guardians that (without expressing any opinion as to the precise amount of the fee which Mr. Griffin should be paid) they are of opinion that he is entitled to be remunerated for the professional services which, by the authority of the relieving officer, acting on behalf of the guardians, he was called upon to render in this case. "I am, etc.,

(Signed) "Courtenay, *Secretary.*

"Philip Dodson, Esq., Clerk to the Guardians of the Weymouth Union, Weymouth."

II. *Mr. Griffin to the Poor-Law Board.*

"12, Royal Terrace, Weymouth, February 2nd, 1857.

"My Lords and Gentlemen,—I have the honour to acknowledge the receipt of your letter of the 31st ultimo. I regret you have entirely passed over the first two cases. Legally, perhaps, I have no claim, as I had not an order from the relieving officer of the district: but, had I refused attendance in the case of the poor woman in labour, what would have been said? The words of an honourable and reverend gentleman ('S. G. O.'), in a letter on a somewhat similar case, published in the *Times* a few years since, are most appropriate: 'The women would curse him; the parson's wife say, piously, she hoped he might be forgiven; and the squire's wife would call him a monster.' Had I insisted on having an order, the messenger, who had already walked rather more than four miles to request my *immediate* assistance, must have proceeded three and a half miles further before he could obtain one, and then probably might not have found the relieving officer at home, or, even if he did, he would have had to retrace his steps to me, and, before he could reach home, would have travelled rather more than fifteen miles. Thus hours of valuable time would have been lost, and possibly the lives of the mothar and child sacrificed.

"The reduction of the dislocated humerus, after eight days standing, entitles me equitably, though perhaps not legally, to a fee of one guinea; and, as the law gives the absolute power to your honourable Board to fix the remuneration of the medical officers, I trust you will order these fees to be paid to me. Formerly, when extras were allowed in this union, it was the custom of the district officer to share his fee with the practitioner called in: these cases show the importance of their being restored. It may possibly be said the extras have been commuted, and now form a part of the salary; but your honourable Board will scarcely think it possible for me to squeeze a fee out of the 1*s.* 2¼*d.* per case I receive, should I require the aid of a colleague.

"Personally, the fees in the above cases are of little moment; but I contend for them on the broad principle of justice, and on the plea that 'the labourer is worthy of his hire', and that it is wrong to withhold it from him. In order to guide my future conduct, and that of the union medical officers generally, I will thank your honourable Board to inform me if it is a part of the duty of my office to render gratuitous medical assistance to the poor who reside beyond my district.

"Having understood that the Board of Guardians of the Weymouth Union have requested that I 'may be suspended', I shall feel greatly obliged by your favouring me with a copy of their letter, as I am anxious to know what could induce a public body of men privately to assail my character, without saying one word to me of the charge preferred against me. I need scarcely tell your honourable Board that it is not pleasant to have suspension hanging over one's head like the sword of Damocles, not knowing when it may fall. I court the fullest investigation; and, if I deserve censure, I shall bow with meek submission to the stroke. "I have the honour to be,

"My Lords and Gentlemen, your obedient servant,

"Richard Griffin.

"The Poor-Law Board, Whitehall."

POOR-LAW MEDICAL REFORM.

Letter from F. J. Brown, M.D.

Sir,—Allow me to urge upon the whole profession the propriety of supporting the Poor-law Medical Reform Association by pecuniary contributions as well as by other means. I appeal more particularly to my brother-associates, because they constitute a well organised force ready for good works. Two thousand men can readily subscribe £500, which would strengthen the hands of those engaged in the righteous cause of poor-law medical reform. We may repeat this subscription, annually, for the next seven years, should the war against the oppressors of the poor and of the poor man's doctor continue so long. I should not feel dejected by repeated failures. Success will crown the *continued efforts* of the profession. This I know.

In addition to subscriptions, I counsel my brother-associates,

and, indeed, every member of the profession, to give efficient aid to the cause by enlightening members of Parliament, clergymen, lawyers, the gentry, and the guardians of the poor law unions; and, furthermore, to petition Parliament on the subject. The medical body is like the *corpus humanum:* the interest of one part is the interest of the whole. The whole profession should move to redress the injuries of a portion, aye, of even a single individual.

We greatly need a course of instruction in medical ethics at our colleges and hospitals. The professor of medical jurisprudence, or the professor of hygiene, might take up this subject. Great praise is due to the students for their admirable behaviour in the matter of the naval assistant-surgeons, and for their springing to the front ranks in the present contest.

I am, etc., Fred. James Brown, M.D.

P.S. Those that will listen to my appeal can send their subscriptions to Richard Griffin, Esq., Surgeon, Weymouth. This letter is written without the knowledge of Mr. Griffin and his colleagues. They do not ask for pecuniary support from the whole profession; but *I think* that the profession should volunteer to assist the poor-law surgeons in this matter. F. J. B.

Chatham, Kent, February 3rd, 1857.

PROFESSIONAL CHARGES.

Sir,—I fully agree with "One jealous of the Honour of Medical Science" in the cause he assigns in the week's Journal for January, for the "indignities heaped on the medical profession", and in the remedy he proposes; but I fear it is one not easily to be adopted by very many general practitioners, especially those who live in towns, and all of the older members of our profession. The latter have mostly become so accustomed to the old system of sending medicines indiscriminately, that it is with them "too late to mend"; while among the general practitioners of most towns, I fear there is seldom sufficient unanimity to enable them to carry out the change. The remedy may most easily be adopted by those of our brethren who live in villages, who are generally more independent in their practice, being less fettered by the fear of competition. For the information of those who wish to try the remedy, I subjoin some quotations from a letter in the *Medical Times and Gazette* of May 7th, 1853, signed "M. R. C. S. and L. S. A.," which I copied at the time, and was much pleased with. "My charges vary from 5*s.* to 2*s.* 6*d.* a visit, *including medicines*, according to the circumstances of the patient: these charges include applications, but not minor operations. My bills are sent in as one sum, and the rate of charging is added, so much a visit. This plan enables me to practise my profession more agreeably, as it places me above the suspicion of over-dosing my patients, and there is no quibbling about the frequency of my visits: the dispensing, too, is much more easy. I have a respectable connexion, but never send draughts, and my bottles are green glass. My bills last year amounted to nearly £1,400, and only one complaint has been made, which an explanation satisfied. The law allows a general practitioner to charge for medicines, *or* attendance, but not for both: so he must make his choice. The maximum for attendance is 5*s.* . . ." I should like to know if there is good authority for this last paragraph; of course the charge mentioned would be exclusive of mileage, where the patient lives out of the village. I am fully convinced, from my own experience, of the advantages of this system; the mere saving of time and trouble is no slight recommendation, for it causes less dispensing, less bill-writing, and less book keeping, as there is no real need to do more than enter each patient in the ledger; and then, if a medical case, when your attendance is ended, to count the visits entered in your daily visiting-list, and put down the total number in the ledger. This "last but not least" advantage of the system I have not yet adopted myself, but I intend doing so, as I can see no valid objection to it; and as I have no assistant, I shall be very thankful to escape that very unpleasant task of "posting the ledger." I should be very glad if these few remarks induce any of my country brethren to try the new system, and would willingly give them any further information in my power, if necessary. I enclose my card.

I am, etc., A Village Doctor.

THE AIR-CELLS OF THE HUMAN LUNG.

Letter from Edward Smith, M.D.

Sir,—Dr. Williams, of Swansea, has taken two objections to my theory of phthisis; the first of which is, that he has very slightly changed his mind as to the fact of the existence of epithelium in the air-cells of the lung; and the second is *a* consequence—"*if* Schleiden and Schwann's theory of cell-development should be abolished," and if two other contingencies should happen!

Dr. Williams was "confident" from his own "careful investigation", as well as from the writings of "Schrœder, Kölliker, and many of their pupils," that he had sufficient information to warrant him in writing an important article in the most expensive and authoritative medical work of the day; and in that he recently affirmed the existence of the epithelial lining of the air-cells. After having thus become a teacher, he has doubts as to whether he has taught truth or error; but they are very little ones, and not even yet sufficiently grown to enable him to say which is truth and which is error. Dr. Williams should have an opinion before he becomes either a teacher or a critic; and, until he arrives at that desirable point, it would be as premature in me to reply to his remarks as it was in him to object to mine. I am convinced that there is an epithelial lining in the air-cells of the human lung; and, although I may have thought of this part of my "graceful and airy fabric" "the least", I have not *seen* it the less; and, when I add the witness of my own eyes, *and the printed testimony of Dr. Williams of Swansea*, what could a world require more!

As to the second objection, I am not aware that my theory must stand or fall with that of the cell-development of Schleiden and Schwann (and I take Dr. Williams's *present* denial of this statement as evidence of its correctness); but, as that cell theory has not yet fallen, I will reserve my reply until that event happens. I am, etc., Edward Smith.

63, Grosvenor Street.

INTESTINAL OBSTRUCTION FROM GALLSTONE, ACCOMPANIED WITH INTUSSUSCEPTION OF THE SMALL INTESTINES.

Letter from J. G. Appleton, Esq.

Dr. Andrew Wynter,—In the Journal of January 3rd, 1857, a letter from S. H. Swayne refers to a notice, in a recent number, of a communication from Dr. Marrotte to the Medical Society of the Paris Hospitals, "on intestinal obstruction from gallstone." On reading this gentleman's communication today, which was the first notice that I had seen on the subject, a few particulars of a case that occurred in my practice at Evesham, more than twenty years since, were brought forcibly to my recollection.

The patient, a female, about fifty years of age, had not, previously to her last illness, enjoyed good health. She had been often subject to severe pains in the epigastrium. In this illness her pains were very severe; and the symptoms early assumed the character of those arising from intussusception: the measures used proving ineffectual, she sank exhausted after a few days illness. The late Dr. Beale Cooper saw the case with me, and was present at the *post mortem* examination of the body. We found the small intestines in a state of intussusception, with a biliary calculus of the size of a small walnut impacted in the intestines just above the obstructed portion. In common with our valued correspondent, I was not aware that such cases were so rare, or I might have recorded at an earlier period more minute details of this case. I am, however, obliged to him for the perusal of his interesting letter, which records the names of Drs. Mayo, Monod, Renaut and Reignier, Broussais, and Puyroyer; also of Drs. Abercrombie and Oke, who had observed the eight cases referred to. Having, to the best of my knowledge, recorded the case which came under my notice so many years since, I have pleasure in adding my mite, if by such means any advantage may accrue.

I am, etc., J. G. Appleton.

Luton, Bedfordshire, 27th 1st month, 1857.

PATHOLOGICAL RESULTS OF RHEUMATISM.

Letter from Francis T. Bond, Esq.

Sir,—In the British Medical Journal for January 24th, a case of renal degeneration, rheumatism, fibroid formation on peritoneum, etc., is reported by Dr. Handfield Jones, to which are appended some valuable and instructive remarks. With Dr. Jones's statement as to the nature of the peritoneal affection, and the causation of the dropsy, I fully agree; but my object in writing this is to inquire if a more satisfactory explanation of the origin of these phenomena than he has offered may not be suggested. From the statement that the patient

"had had many and severe attacks of rheumatism, but never rheumatic fever," I think that it may be legitimately inferred, that the indications of the existence of the rheumatic dyscrasia must have extended further back in point of time than two years and a half—the probable date, according to Dr. Jones, of the commencement of the renal degeneration. That period is too limited for the repetition of "many and severe" rheumatic attacks; and I think that we are, therefore, justified in looking at rheumatism as the first link in the chain of events which subsequently followed. From the way in which this tendency to rheumatism is described, we may also conclude that, although none of these rheumatic attacks were of sufficient severity to merit the name of rheumatic fever, yet the patient must have been, during this period, on the very brink of such a manifestation—that the rheumatic dyscrasia had at this time fully established itself in the constitution. Now, if we look upon this dyscrasia as one characterised by a marked tendency to the deposit of exudations in and about the fibrous structures—as one which, in its most acute localisation, preeminently consists in an affection of those structures, we cannot well deny the preexistence in the blood of a plasma distinguished by this affinity for the fibrous tissues, and carried about by the circulation into every organ into whose conformation they enter. Under these circumstances the whole sequel of this case becomes very explainable.

Influenced by that great law of normal nutrition in accordance with which each tissue attracts from the blood the elements out of which it is formed, whilst on the other hand each element of the blood has a correlative affinity for the tissues with which it is homologous, we can understand how this hyperinotic blood-plasma, probably incapable of the highest kind of fibrous development, should attach itself to the fibrous structures of a secondary type of formation, *e.g.*, the peritoneal investments of the abdominal viscera, and, depositing itself on them, tend, by its contraction, to compress their structure and destroy their functions. Perhaps in this patient there had been, in addition to the blood disease, at some time a certain amount of local excitation, in the shape of a slight peritonitis, to give a predominating attractive power to the fibrous tissues of the abdomen: certainly the fibrous deposit would seem to have been contemporaneous and co-extensive on all the abdominal viscera. Its principal and most obvious effect upon the kidney would of course be, as in the liver, contraction of the most vascular portion of the organ, and abolition of its functions: hence the atrophied condition of the cortical portion described in the autopsy, and hence, too, the albuminuria, and the establishment of a secondary crasis, manifesting itself by dropsy in different portions of the body. It is not impossible, also, that the dropsy might have been more readily induced by fibrous hypertrophy of the coats of the large veins, and consequent diminution of their calibre; this being especially the case in the fibrous tissue surrounding the veins at the root of the lung, thereby facilitating œdema of that organ. The valvular cardiac alteration is, I think, undoubtedly referrible to the same fibrinous dyscrasia, and may possibly have occurred during an acute attack of rheumatism, but was more probably of a chronic character. How it can in any way be referred to the renal disease, as Dr. Jones seems to think, I am at a loss to imagine.

Thus the order of sequence in the phenomena will be: establishment of the rheumatic dyscrasia and tendency to fibrous exudation: thickening and contraction of the kidney and other abdominal viscera, and development of vegetations upon the cardiac valves: abolition of the renal functions: diminished spasticity of the blood: dropsy. This view, I think, affords a more satisfactory explanation of the whole series of events than the supposition that the rheumatism and cardiac affection were induced by the renal disease. With Dr. Jones's idea that the fibroid thickening of the peritoneum was not of an inflammatory character, but rather the result of perverted nutrition, I fully agree; in fact it may be looked upon as perfectly analogous with the thickening of the articular membranes so common in chronic rheumatism: but the question might be raised whether its apparently almost complete isolation to the abdominal viscera does not indicate the existence, at some time or other, of a certain amount of inflammatory action in the peritoneum, thus constituting, as it were, a *point de depart* for the more chronic process.

But there is another and more interesting question still opened up by this case, viz., is this the way in which the rheumatic dyscrasia occasionally, or even frequently, reaches its *denouement?* May we suppose that the crasia, which ordinarily affects the fibrous membranes of the joints and pericardium, or the fibrous investments of the muscular and neural tissues in this case, was, by a kind of degradation of its type, obliged to exhaust its power upon the less highly organized group of fibrous structures? Such, I think, seems to be the indication derivable from a study of the case—in no way an extraordinary one in its termination—but in every way noteworthy in its pathology. If this be so, what a valuable hint it is towards the connection of rheumatic and renal diseases, so apparently different in their nature, etiology, and results! Viewed in this light it will form a by no means contemptible aid to the development of a more rational theory of rheumatism than we at present possess; and as such may be recommended to the notice of all who are interested in working out the pathology of that disease.

I am, etc.,

Francis T. Bond, B.A., M.R.C.S.

27, Drummond-place, Edinburgh.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Frampton. On January 29th, at 151, Westbourne Terrace, Hyde Park, the wife of Thomas Frampton, Esq., Surgeon, of a son.

*Gravely. On January 22nd, at Newick, Sussex, the wife of Richard Gravely, Esq., Surgeon, of a son.

Harrison. On December 19th, 1856, at Calcutta, the wife of James Harrison, M.D., Professor of Anatomy in the Medical College, of a daughter.

Hood. On January 28th, at Bethlehem Hospital, the wife of W. C. Hood, M.D., of a son.

Howell. On January 26th, at Wandsworth, the wife of Thomas Symonds Howell, Esq., Surgeon, of a daughter.

Makenzie. On December 7th, 1856, at Dhoolia, Bombay Presidency, the wife of Malcolm M. Makenzie, Esq., Civil Surgeon, of a son.

Powell. On February 1st, at Cobham, Surrey, the wife of John James Powell, Esq., Surgeon, of a son.

Priestley. On February 2nd, at 16, Somerset Street, Portman Square, the wife of W. O. Priestley, M.D., of a son.

*Steele. On January 22nd, the wife of John Sisson Steele, Esq., Surgeon, of a daughter.

Tulk. On January 28th, at 2, Radnor Place, Hyde Park, the wife of Alfred Tulk, Esq., Surgeon, of a daughter.

MARRIAGES.

Caddy—Tompson. Caddy, John, Esq., Surgeon Royal Navy, to Florence, only daughter of the late J. C. Tompson, Esq., of Gibraltar, at the Catholic Apostolic Church, Gordon Square, on January 29th.

Holman—Carey. Holman, William Henry, M.B., of Chalcot's Villas, Adelaide Road, to Lucy Elizabeth Sarah, second daughter of W. H. Carey, Esq., of Adelaide Road, at St. Saviour's, South Hampstead, on February 3rd.

King—Lumley. King, Richard, M.D., of Savile Row, to Elizabeth, eldest daughter of the late Oswald Joseph Lumley, Esq., at St. Marylebone, on January 31st.

Pyrke—Evans. Pyrke, Duncombe, jun., Esq., of Dean Hall, Gloucestershire, to Susan, eldest daughter of Thomas Evans, M.D., of Gloucester, on February 3rd.

Tearne—Stephen. Tearne, Theodore S., M.D., to Macdonald, youngest daughter of T. Stephen, Esq., Medical Librarian, King's College, at St. Pancras Church, on Jan. 30.

Wallis—White. Wallis, Joseph Haythone, Esq., third son of George Wallis, M.D., of Bristol, to Frances Emily, third daughter of the late Captain C. H. White, 8th Bengal Light Cavalry, of Ambleorde, at Rosherville, on January 27th.

DEATHS.

Amphlett, Samuel Holmden, Esq., Surgeon to the Birmingham General Hospital, at Heath Green, near Birmingham, on January 28th, aged 44.

Atkins. On January 4th, at Grove House, Stoke Newington Green, Louisa Anne, eldest daughter of James Ramsey Atkins, M.D., aged 20.

Blackman. On January 26th, at the Greenway, Gloucestershire, Harriet, relict of James Blackman, M.D., of Ramsbury, Wiltshire, aged 79.

Gardner, William, Esq., Surgeon, formerly of Streatham Common, at Cambridge Terrace, Greenwich, aged 78, on February 3rd.

*Jeston. On January 25th, at Malmesbury, Wiltshire, Barbara Caroline, second daughter of Alfred F. W. Jeston, Esq., Surgeon, aged 19.

Price. On January 18th, at Margate, Julia Bella, youngest daughter of D. Price, M.D.

Scanlan. On January 27th, at 21, Upper Seymour Street West, Kate Mary, second daughter of Edward Scanlan, M.D., aged 10.

Webb. Lately, at her residence, Woolwich Common, Jane Theodosia, Lady Webb, widow of the late Sir John Webb, C.B., K.C.H., late Director-General of the Ordnance Medical Department, aged 80.

APPOINTMENTS.

*Edwards, James, M.D., of Benarth, Conway, has been appointed High Sheriff of the county of Carnarvon.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, January 15th, 1857:—

Spencer, George, Ramsgate

Thursday, January 22nd:—

Costerton, Horatio, Australia
Hall, Cornelius S., Henfield, Sussex
Pitman, Edward Hanbury, Eastbourne, Sussex

Thursday, January 29th:—

Daniell, William Cole, Newport Pagnell
Hughes, William Evan, Bond Bach, Llanrwst
Knaggs, William Angelo, Brompton
Smith, William, Preston
Woodward, Alfred, Bicester, Oxon

East India Company's Service. The following gentlemen have recently passed the examination for medical appointments in the East India Company's Service. The names are arranged in the order of proficiency. There were forty-six candidates.

Cayley, Henry, M.R.C.S.Eng.
Vans Best, Alexander, M.B., M.R.C.S.Eng.
Gillet, Carthew, M.R.C.S.Eng.
White, James Henry, M.R.C.S.Dub.
Penny, James, M.D.Lond.
Simpson, Alexander, M.A., M.D., M.R.C.S.Eng.
Hilson, A. A., M.R.C.S.Ed.
Carney, John, M.R.C.S.Ed.
Dickinson, James Charles, M.R.C.S.Eng.
Ross, James, M.B., M.R.C.S.Ed.
Smith, William C., M.D., M.R.C.S.Ed.
Raddock, Charles Edward, M.R.C.S.Eng.
Powell, Thomas, M.R.C.S.Dub.
Shiel, John, B.A., M.B. Trin. Coll., Dub., M.R.C.S.Dub.
Kelly, William P., M.R.C.S.Dub.
Heard, Samuel J., M.D., M.R.C.S.Ed.
Lalor, James, M.R.C.S.Ed.
Smith, Arnold, M.D., M.R.C.S.Ed.
De Fabeck, William, M.R.C.S.Eng.
Whitton, George E., M.B. Trin. Coll. Dub., M.R.C.S.Dub.
Byramjee, Rustomjee, M.D., M.R.C.S.Eng.
Beaumont, Thomas, M.R.C.S.Dub.

HEALTH OF LONDON:—WEEK ENDING JANUARY 31st, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in the week that ended on Saturday were 1209, which is nearly the same as the number returned in the previous week. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1167; and if this is raised for the purpose of comparison, proportionally to increase of population, it will become 1284. The rate or mortality that now rules is not high, as compared with that of previous seasons, although it has lately shown that tendency to increase which is to be expected at a period of the year usually the most fatal to human life.

The deaths caused by diseases of the respiratory organs were last week 288, being rather less than a fourth part of the total number returned. The average rate of mortality from this class of diseases at this season would have produced nearly the same number. The number referred to bronchitis in the present return is 166, which exceeds the average, and is double the number referred to pneumonia. Seventy-three of the deaths caused by bronchitis occurred to persons who were 60 years old or more, whilst 70 of the 84 from pneumonia occurred to children. Phthisis, which is not included in the above class, was fatal to 146 persons (being almost the same as the corrected average); and of these, 107 died in that period of life which extends from 20 to 60 years. Hooping-cough is at present decidedly the most fatal disease included in the zymotic class; 57 children died of it, whilst 29 died of scarlatina, and 28 persons at various ages of typhus and common fever. Two children of a dock labourer died of "febris" at 4 Crown Court, Whitechapel. Three children died of measles in the Workhouse St. George-in-the-East. A mother, and her son aged four years, died of dysentery at Hammersmith. The death of a seaman who had been expelled from his ship when in a state of illness, was accelerated by exposure to cold; and that of a young woman by want of food.

Of 60 persons who had attained the age of 80 years or more, 7 were nonagenarians. The oldest was the widow of a tailor, who died at 1, Boddy's Bridge, St. Saviour's, at the very advanced age of 97 years.

Last week the births of 879 boys and 883 girls, in all 1762 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1572.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·602. The highest reading occurred on Thursday, and was 29·77 in. The mean temperature of the week was 31·2 deg., which is 7 deg. below that of the previous week, and lower by 6·8 deg. than the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was below the average on every day of the week, and on Thursday, when it was 26·2 deg., the amount of depression below the average was nearly 12 deg. The *highest* temperature in the week was 39 deg. (on Sunday the 25th), and the *lowest* was 20 deg. (on Friday). The range of the week was consequently 19 deg. The lowest on grass on Friday was 8·9 deg. The mean dew-point temperature was 28·1 deg., and the difference between this and the mean temperature of the air was 3·1 deg. The wind blew generally from north-north-east till Thursday afternoon, when it began to blow from the south-west. The amount of rain (or melted snow) was 0·44 in., of which 0·25 in. fell on Saturday. Snow or rain fell on every day except Thursday and Friday.

"QUACKERY UNMASKED"!

Clerkenwell Police Court, Thursday, January 29th.

Dr. John Sutton, *alias* Dr. Sidney Hall, *alias* Dr. Manning, a short, well-dressed young man of gentlemanly manners, apparently about 24 years of age, described as a surgeon, residing at No. 15, Frederick-place, Goswell-road, Clerkenwell, who was charged on the preceding Friday on a warant with unlawfully attempting to extort money by publishing a libel against Mr. William Harman, a farmer residing at Sleaford, in Lincolnshire, was again examined.

Mr. Haines attended for the prosecution, Mr. Robinson, barrister, defended the prisoner, and Mr. Wakeling attended for another person interested to watch the case.

The complainant, it appeared, some time since saw in the newspapers the prisoner's advertisements; and having entered into a correspondence with him, communicated to the prisoner, in his medical capacity, certain facts of a strictly private nature. For some time the prisoner sent and was paid for his advice and medicine; but Mr. Harman, who, it would seem, was not blessed with too much wit, he having consulted a planet reader and astrologer in connection with the prisoner and the case, finding that he received no benefit from Dr. Sutton, left off communicating with him. The prisoner then wrote to say that if the prosecutor did not at once send him 25*l.* he should publish the whole of the private letters that had passed between them. The defendant has published a pamphlet of sixteen pages, entitled "Quackery Unmasked, being a complete exposition of the frauds, impositions, and deceptions practised by those who advertise a speedy, safe, and effectual cure of a particular disease." After stating that he has devoted many years to the consideration of the subject, he has the following remarks on the frauds and impositions of quacks, which are so connected with the charge against him that they are worthy of reproduction here:—"Many who read these pages will respond to the truth of this; will remember, doubtless, the tempting

offer, the flattering promise, the guarantee of a cure, which caused them to send pound after pound, in the vain hope of obtaining ultimate relief. The frauds and impositions practised by those unprincipled and ignorant men know no bounds, and are of the most extravagant kind. 'Extortion' is a word which but mildly expresses their ordinary boundary. '*Robbery*' would be a more fitting term. And how do they escape punishment? By having the audacity to threaten *exposure*." (The italic is Dr. Sutton's.) "It is then that the victim awakes to the true character of him whom he had imagined to be a faithful medical adviser, and finds him only an ignorant impostor, in whom every particle of honour, principle, and uprightness is entirely lost. Unfortunately for the sufferer he has no remedy. Fear of the disgrace with which he is threatened induces him to stoop and gratify the robber's demands; and thus he finds health is lost, his purse lessened, and the villain escapes unpunished, and serves many others in the same manner." It was under these circumstances that a warrant was granted for the person's apprehension.

Mr. Haines said that since the last occasion the prisoner had written to his client a note stating that he was extremely sorry for the course he had pursued, and expressed a hope that if he made a full and ample apology in open court the charge would not be proceeded with further. Under these circumstances he, on the part of Mr. Harman, was prepared to accept that apology, and to withdraw from further proceeding with the prosecution.

Mr. Robinson said he was there on the part of the defendant, and was quite willing to make the most full and ample apology that could be required, and to state that the defendant was extremely sorry for the course he had pursued. He might, however, state that, according to his instructions, the defendant never had the slightest wish nor intention of publishing Mr. Harman's private communication, and he wrote the note complained of under great excitement, caused by a communication received from the complainant. There had been a civil action in the Clerkenwell County Court, and he thought the matter would have ended.

Mr. Haines might be allowed to remark that Mr. Harman in that case was awarded his costs of travelling from the country.

Mr. Tyrwhitt said it was a very serious thing for persons to have the confidential notes which they sent to their medical men made public. As all parties appeared satisfied, the prisoner would be discharged; but he had better be careful how he got in such trouble again.

The prisoner, who seemed to have suffered from his incarceration, was then discharged.

Long before the hour appointed for the re-examination of the prisoner, the court and its avenues were crowded by respectably dressed persons who had been swindled by quack doctors, and they seemed very much disappointed at the prisoner's dismissal. (*Times.*)

ACTION FOR RECOVERY OF FEES.

County Court, Chipping Norton, Monday, Dec. 22nd, 1856.
(Before J. M. Parry, Esq., Q.C.)

HOLMES *v.* GARLICK.

The plaintiff, a surgeon at Chipping Norton, sued the defendant, a commercial traveller residing at Devonshire Road, Upper Holloway, for £3, for medical attendance and medicines supplied to his daughter, when at school in the above named town. The defendant did not dispute the attendance, or charges, but contended that he was the wrong person sued; the person with whom his daughters were placed at school was the proper person to pay his daughter's liabilities while under her care, and then charge it against him in her school-bill. The plaintiff argued that he had the choice of action either against defendant or the schoolmistress. His Honour said the usual way was to charge medical attendance in the school-bill; but there was a question whether the plaintiff could not sue either the child's parent or the schoolmistress. As both plaintiff and defendant were unsupported by professional assistance, he was placed in an awkward position; and he should defer his decision till the next Court.

On Thursday, Jan. 22nd, 1857, his Honour was of opinion that when the terms of a school did not include medical attendance, a child could pledge its parent's credit for medical attendance, and a surgeon could proceed against him for such attendance. He would therefore give a verdict for the plaintiff, with costs.

POOR-LAW MEDICAL REFORM.

MEETING OF STUDENTS OF KING'S COLLEGE.

At a meeting of the medical students of King's College, held in the operating theatre of the Hospital, J. W. Hulke, Esq., in the chair, the following resolutions were unanimously agreed to:

1st. Proposed by Mr. Way, and seconded by Mr. Wood:—"That this meeting regards the existing regulations affecting union medical practice as imperatively demanding readjustment, sympathises with the movement set on foot by Mr. Griffin, and concurs in the principles adopted by the Poor-law Medical Reform Association."

2nd. Proposed by Mr. Meadows, and seconded by Mr. Walters:—"That among the regulations especially requiring revision are those affecting the present rates of remuneration afforded to medical officers; and that the system which leaves the fixing of these rates under the control of district Boards of Guardians, and the entire management of the appointments in the hands of non-professional authorities, is radically defective, and detrimental alike to the welfare of the medical profession and the public at large."

3rd. Proposed by Mr. Griffin, and seconded by Mr. Mason:—"That this meeting views with deep regret the apathy of some, and with unfeigned displeasure the unprofessional conduct of those who, forgetful of the broad interests of their profession, have unmanfully accepted offices thrown up by others on principle, thus selfishly helping to perpetuate the existing grievances, and to clog the exertions of those who seek their redress."

4th. Proposed by Mr. Swain, and seconded by Mr. Day:—"That this meeting is of opinion that a general conference of the students of all the medical schools should be held, and that this should take place in London at the earliest practicable period."

5th. Proposed by Mr. Hartley, and seconded by Mr. Siddon:—"That a shilling subscription be opened for the purpose of assisting in carrying out these resolutions."

6th. Proposed by Mr. Anstie, and seconded by Mr. Watson:—"That a committee be formed of the following gentlemen: Messrs. Lawrence, Way, Meadows, Wood, Swain, and Griffin, with power to add to their number, who shall co-operate, on behalf of the students of King's College, with those of other schools, and with the Poor-law Medical Reform Association."

The Middlesex Hospital and Treatment of Cancer. Dr. Fell, the American physician, whose treatment of this disease has of late been so much spoken of in London, has made an arrangement with the authorities of the Middlesex Hospital, by which he has taken charge of a certain number of cases in the cancer wards of that establishment, for the purpose of subjecting them to the action of his remedies. Dr. Fell has communicated, in confidence, the particulars of his treatment to the surgical staff, who will watch the cases, and report upon the results.

A Madman in the Vatican. *Rome, January 15th.* While sanguinary tragedies have saddened the inhabitants of Paris and Naples, eccentricities of a less homicidal character have amused the inhabitants of Rome, and especially the nocturnal pranks of a madman who recently gained access to the Vatican Palace, notwithstanding the scrutinizing glances of the Swiss halberdiers stationed in the grand corridor leading to the *scala regia*. It appears that this unfortunately aberrated individual succeeded in secreting himself in the precincts of the palace until the night was far advanced, when he suddenly aroused and alarmed the inhabitants of the apostolic residence by vociferating in stentorian tones that the Pope was dead, following up this startling piece of intelligence by another vague assertion, that he himself was about to succeed his Holiness on the Pontifical throne, and that, as first fruit of his authority, he should order the Cardinal Secretary of State to be shot. It may be easily imagined with what consternation these overwhelming announcements were received, until the ill-omened individual was laid hands upon, and the state of his intellects discovered. The great gates of the Vatican have been closed at nightfall since this untoward occurrence. (*Express.*)

Hospital for Drunkards. A movement is on foot at New York to establish an institution for these persons.

Board of Health. The Hon. W. Cowper retires from the Presidency, and is succeeded by Mr. Monsell, of the Board of Trade.

EAST INDIA COMPANY'S SERVICE:

QUESTIONS PUT AT THE WRITTEN EXAMINATION FOR ASSISTANT-SURGEONS, JANUARY, 1857.

Anatomy and Physiology. Monday, January 12th.—10 to 1 o'clock. Examiner, Mr. Busk. I. *Descriptive Anatomy.* 1. Describe the duodenum; its structure, relations, functions, vessels, and nerves. 2. Indicate the limits of, and describe the parts exposed by, dissection in the space circumscribed by the borders and attachments of the masseter muscle, including the zygomatic fossa. 3. Describe the dissection of the popliteal space. 4. Enumerate in order of superposition the parts divided in cutting down upon the first rib, above the clavicle, the incision being parallel with the clavicle. 5. The pons Varolii and medulla oblongata having been removed, describe the base of the brain, as thus exposed; tracing the remaining nerves to their true origins. II. *Minute Anatomy and Physiology.* 6. Describe the minute anatomy of the spleen, and the peculiarities of the splenic blood. 7. Describe the structure of the walls of the larger and smaller arteries, veins, lymphatics, and capillaries. 8. Enumerate the various excretions, indicating the average daily amount of each in an adult man; and indicate the sources whence they are derived, and the channels through which they are eliminated.

Surgery. Monday, January 12th.—2 to 5 o'clock. Examiner, Mr. Paget. 1. Describe the malpositions of the lower extremity which are usually observed in the successive stages of scrofulous inflammation of the hip-joint; explain the differences between the apparent shortening and the real shortening of the limb; and say in what other diseases any of the same malpositions may occur, and how these diseases may be distinguished from that of the hip-joint. 2. What are the chief caustics employed in the treatment of phagedænic, rodent, lupous, cancroid, and other allied forms of ulcer? Give account of the methods of applying at least three of them. 3. Give an account of loose cartilages in the knee joint,—of their probable origin, seat and manner of formation, and effects. 4. In a large general hospital, would you, or would you not, set apart wards exclusively for the treatment of patients after operations? State both the advantages, and the disadvantages, of the plan that you would adopt. 5. What diseases within the skull are likely to occur in connection with chronic suppuration or ulceration in the internal ear? How would you endeavour to prevent them; and what symptoms would make you suspect the occurrence of any of them! 6. Give an account of the disease generally called fissure or irritable ulcer of the anus; mention its chief diagnostic symptoms, and the best means of curing it. 7. Enumerate the causes of retention of urine. 8. What are the most characteristic signs of fracture of the neck of the femur? and how would you distinguish this injury from fracture of the pelvis, from dislocation of the femur on the dorsum ilii, and (when there is no shortening of the limb) from the consequences of a severe blow on the trochanter major producing neither fracture nor dislocation?

Medicine. Examiner, Dr. Parkes. Tuesday.—2 to 5 o'clock. 1. Describe the symptoms of an apoplectic fit. What are the chief structural lesions of the brain or vessels which precede cerebral hæmorrhage? What treatment would you adopt during the fit? 2. A woman, aged 30, was ill for three years with well-marked symptoms of phthisis pulmonalis. She then became extremely depressed in spirits, irritable, and odd in manner, and occasionally lost for a time the memory of persons and things. After this had continued for two or three months, she began to complain of severe frontal headache, and was soon afterwards attacked with occasional violent vomiting; there was some intolerance of light; the pulse was quick and the skin was hot. Eight days before her death she became extremely confused, ceased to know her relatives, declined to answer questions, and gradually became comatose. For five days before her death, she had retention of urine, but there were no other paralytic symptoms. Describe the appearances which would be present in the brain and lungs on *post mortem* examination. 3. What are the symptoms of acute pericarditis? 4. A man, aged 33, suffered for six years from cough, expectoration, and occasional slight hæmoptysis. For nine months before the date of the following attack, the cough had increased, and he had rapidly lost flesh. On the 16th December, he was suddenly seized with a sensation of great constriction, and then of intense pain in the left side and the left front of the chest; the breathing became very quick; the pulse frequent and feeble; the extremities cold; the skin clammy with cold sweat. The patient could only lie on the left side, though formerly the position on the right side had been easiest to him. On the following day the pain was less, but was still excited by every respiration and movement; the left side was found to be enlarged, and the heart was displaced to the right. From what causes could such an attack arise, and which cause was the probable one in this case? What physical signs must have been present? What treatment would you have adopted? 5. What are the causes of enlargement of the spleen? How would you recognise such enlargement? What microscopical conditions of blood may be coincident with it? 6. How would you distinguish between the diarrhœa of typhoid fever and that of dysentery? Mentions the signs derived from the characters of the stools, as well as from the other symptoms. 7. Enumerate some of the principal diseases in which albumen may be found temporarily or permanently in the urine. 8. What are the symptoms and treatment of placenta prævia? 9. What are the chief officinal preparations of iron? Under what circumstances would you employ iron as a remedy? 10. If you were appointed surgeon to a crowded troop or emigrant ship, what measures would you take in order to preserve the health of those on board?

Natural History. Tuesday, 10 to 1 o'clock. Examiner, Dr. Hooker. I. *Botany, etc.* (Answer five or more of the following questions.) 1. What are the different layers of the bark of a tree, and how are they developed? 2. How are epiphytes distinguished from parasites? Give examples of both. 3. What are the characters of the natural orders gramineæ, compositæ, and umbelliferæ? and give examples of each used in medicine. 4. Describe the roots of ipecacuanha, orchis, smilax, and ginger; give the names and natural orders of the plants to which they belong. 5. Give the names, natural orders, and native countries of the plants producing gamboge, hemp, tamarind, benzoin, scammony, and jalap. 6. Describe the structure of an orchideous flower. 7. What does a grain of wheat and barley consist of? 8. What is yeast, how is it developed, and what are the chemical changes it effects? 9. Mention some natural orders and genera of plants which abound most in saline and in nitrogenous soils. 10. Mention some of the most abundant products of the cells of plants, and their chemical composition. 11. What is starch chemically and microscopically; and how is it converted into sugar? 12. Define the terms protoplasm, cytoblast, and primordial utricle. 13. What are the changes which vegetable food undergoes when assimilated by animals; and how does it supply animal heat? 14. Why is a knowledge of vegetable physiology essential to a right understanding of animal physiology? 15. What are mist, dew, and hoar-frost? 16. What are monsoons and trade-winds? II. *Zoology.* (Answer three or more of the following questions.) 1. Describe the process of fecundation in fish and in insects. 2. What are the principal races of men? how are they distinguished and distributed over the surface of the globe? 3. What animals yield oil used in commerce and medicine? and to what genera and families do they belong? 4. What is the economy of an ant-hill and of its inhabitants? 5. Define the terms species, genus, organ, function, instinct, anatomy, and physiology. 6. Describe the respiratory apparatus in birds, fish, reptiles, insects, and arachnida. 7. What are tapeworms and ascarides? how are they developed and propagated?

Royal Medical Benevolent College. The late Sir Hugh Richard Hoare, who was during his life-time a liberal friend to the College, has bequeathed £500 to it by his will.

Medical Society of London. A paper will be read this (Saturday) evening, by G. Ross, Esq., "On the Secondary Eruption following Vaccination".

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Dr. Montgomery.—We have not forgotten our promise; and will shortly fulfil it.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. VII.] LONDON: SATURDAY, FEBRUARY 14, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HOSPITAL FOR SICK CHILDREN.

FATTY TUMOUR CONNECTED WITH THE INTERIOR OF THE SPINAL CANAL: OPERATION.

Under the care of ATHOL JOHNSON, Esq.

THE patient was a male child, aged 10 months. It was born, according to the mother's account, with an ulcer over the sacrum, but no perceptible swelling below the ulcer. At three weeks old, it was brought as an out-patient to the hospital, and put under the care of Mr. Johnson. There was then an ulcer, of about the size of a half-crown, over the sacrum, rather to the right of the middle line. Beneath this was a slight ill defined swelling, and by its side a small pendulous excrescence of fat, covered with integument. The ulcer gradually healed, and has remained soundly cicatrised. The swelling beneath it, however, slowly but steadily increased in size; but without being attended with any inconvenience to the child, whose general health was excellent until the beginning of January. At that time the swelling enlarged rapidly, and the child suffered from repeated twitchings, or convulsive movements, affecting the *right* leg only. This made the parents anxious to have something done to remove the swelling. A grooved needle was introduced, but no fluid was found.

Feb. 3. After consultation, it was determined to operate. At this time the swelling was of about the size of a small orange, but broad and ill defined at its base. No separate tumour could be distinctly felt; but underneath a soft doughy mass there seemed some more defined hardness. It was seated over the sacrum, rather to the right of the middle line. There was no tenderness, nor any inflammation of the skin. The pendulous excrescence, above referred to, was of about the size of a large pea. The child's general health remained good.

Chloroform having been administered, an incision was made through the swelling into the midst of a mass of subcutaneous fat, not circumscribed, nor contained in any distinct capsule. After cutting through this, to the depth of more than an inch, and removing as much of it as was necessary, the smooth and glistening surface of a capsule surrounding a distinct fatty mass, which constituted a separate tumour, was found; and, on proceeding to remove it, it was found to adhere to the parts beneath, requiring careful dissection. After removing it, an aperture, large enough to admit the end of the finger, was seen in the posterior wall of the sacral canal, through which the tumour seemed to have made its way. Rising up to the level of this opening was a soft mass, apparently formed by the membranes of the cord, and which exhibited a very distinct pulsatory movement, visible to the eye, especially when the child cried, as it now began to do, having partially recovered from the effects of the chloroform. The tumour seemed to have been partially adherent to these membranes, from which it was dissected off (a little granular fat, however, being left adhering), without any opening having been made in them. The parts were then brought together with sutures, and a compress and bandage applied.

Six days after the operation (Feb. 9th), the child had gone on without a bad symptom, and a considerable part of the wound had healed by the first intention. The mother stated that there had been no convulsive movements of the leg since the operation.

It may be mentioned, that the father of this child had had a fatty tumour removed from his back some time since.

REMARKS. The singular case of which we have given an account has no exact counterpart, as far as our observation has extended, in the records of surgery. No such complication is mentioned in numerous authors on the subject of spina bifida, whose works we have looked over. The nearest approach to it is a case reported in the *Transactions of the Pathological Society*, 1851-2, p. 248, by Mr. Obré, in which a collection of fat was found in the spinal canal. The subject, a child, had, when a year old, suffered from partial paralysis of the right arm and leg, following after convulsions. The symptoms had disappeared, without obvious cause; and the convulsions recurred at the age of three years. The child died before being seen by Mr. Obré. At the *post mortem* examination, a deposit of fat was found in the upper part of the spinal canal, lying between the theca vertebralis and the bodies of the last cervical and first dorsal vertebræ. It was two and a half inches in length, about half an inch in thickness, and occupied about the whole breadth of the canal. The fat was more solid and granular than usual, and this, it may be mentioned, appeared to be the case with the small portion of fat left on the membranes in the case above reported. The membranes of the brain and cord above the disease were congested. This case, although it agrees with Mr. Johnson's in the particular of the existence of a deposit of fat within the canal, differs from it in that which gives the latter its peculiar surgical interest; viz., that that deposit coexisted with the deficiency of the bony canal necessary for the formation of a spina bifida, and occupied the opening in that canal, thus rendering it hopeless to establish an exact diagnosis; for, besides the situation of the tumour, which would probably in any case have prevented the opening in the bones from being made out, the depth at which it was situated below the abundant subcutaneous fat rendered this wholly impossible. That the parts exposed by the removal of the tumour were the spinal membranes, raised up by, and receiving the pulsation of, the subarachnoid fluid, admits of no doubt. This pulsation is very minutely described by Magendie, *Recherches sur le liquide céphalo-rachidien*, Paris, 1842, pp. 40 *et seq.*, as being synchronous with the respiration. At p. 44, he says: "At the time of expiration, when the thorax contracts by its own elasticity, and the forces of expiration drive the air out of the lungs, the arterial and venous trunks of the thorax are compressed, and the venous blood flows back towards the organs. This reflux is particularly sensible and rapid in the intra-rachidian venous plexus, which, from its proximity, feels the first effects of the repulsion of the blood. Thus disturbed, this plexus itself exerts compression on the subarachnoid fluid, which mounts towards the cerebral cavity." And in another place, p. 41, he says that he has observed, in cases of spina bifida, that the pouch is distended during expiration, and collapses partially in inspiration. Cruveilhier also (*Anat. Descriptive*, 1836, vol. iv, p. 552) describes, from experiments made on a dog, a double movement in the subarachnoid fluid, one synchronous with the pulse, and another with the respiration. The latter was the only pulsation distinctly perceived in the case above described; though some of those who assisted at the operation believed that the other was also present. If so, however, it was very slight; and, as the parts were left exposed only for a very short time, it was not possible to come to a distinct conclusion on this point. It may, however, be doubted whether at that part of the canal this pulsation, which must be derived there, if it exist, solely from the arteries ramifying in the membranes,* could be perceptible, especially in so young a subject. (T. H.)

* For the wave of pulsation in the fluid above would surely be insufficient to produce motion.

ST. GEORGE'S HOSPITAL.

IMPERFORATE VAGINA: PUNCTURE: PERITONITIS.

Under the care of R. Lee, M.D., and T. Tatum, Esq.

Mary F., aged 18, was admitted on November 5th, under the care of Dr. Lee, on account of imperforate vagina. She had been in the hospital before for several weeks, in the early part of the year, when, as there were no urgent symptoms, it was decided to abstain from operation. At the time of her present admission, there was considerable swelling of the lower part of the abdomen (which had increased much since her previous stay in the house), with distinct fluctuation. The vagina was closed, about three inches from the external parts, by a septum or band, which entirely cut off all communication with the os uteri. She had therefore never menstruated, but for about a year had suffered pain at the monthly periods, and had noticed a gradual enlargement of the hypogastrium. Examination *per rectum* showed the uterus much distended with fluid. Latterly these pains had been getting much worse, and recurred more frequently (about every fortnight), sometimes accompanied by severe fits, probably of hysteria. There was no pain on pressure. The sensation of fluctuation was easily communicated through the vaginal septum by pressure on the parietes of the abdomen. She was kept in the house some time, in order that the case might be watched; and on December 2nd, as the swelling was steadily increasing, and the pain becoming more constant and more severe, Mr. Tatum's assistance was requested; and the septum was perforated with a trocar. This allowed the escape of about six ounces of dark brown treacly fluid, which was evidently accumulated menstrual secretion. She complained of great pain at the time, and for several hours afterwards, for which a course of calomel and opium was prescribed. Similar fluid continued to drain away for the rest of the day. She slept well with morphia, and complained of no pain till next evening, when she was suddenly seized with intense pain in the abdomen, aggravated by pressure. The discharge had ceased. The pulse was quick, irregular, and irritable; the thirst great. The mercury was continued, and leeches applied to the abdomen, which was assiduously fomented. A large dose of morphia was given. The pains after this became more intermittent, and appeared to be relieved by the occasional reappearance of the discharge. For the next few days, however, she remained in a rather critical state, vomiting frequently, with very low pulse, and great tenderness on pressure. A week after the operation, the dark coloured discharge ceased, and was replaced by one of a leucorrhœal character. On the sixth day after the puncture, the discharge was extremely copious, and very offensive; as much as three or four pints were computed to have come away. The pains for the next few days were severe, but intermittent, and were referred to contractions of the uterus, and not to peritoneal inflammation.

She remained in the house till the end of January, and during that time had one access of the catamenia, as was supposed. The menstrual discharge, however, was but scanty. The opening made by the trocar remained patulous, and the uterus was found to have recovered its proper size.

Remarks. Cases of imperforate vagina are rarely seen in our hospitals, although many instances of this deformity are recorded by various authors. The case cited above is the only one remembered to have occurred at St. George's during a period of several years. Some years ago, a similar case occurred under the care of Mr. Cutler, in a young child about seven years of age, in which Mr. Cutler succeeded by careful dissection in finding the os uteri, and, by means of a sponge-tent, preserving the canal of the vagina during the healing of the wound. In a child, however, before menstruation has commenced, such a proceeding is much more feasible than in a case like the above, where the uterus is distended by a large accumulation of the retained menses, where the irritation may have spread to neighbouring parts, and where the mere exposure to the air of such a mass of fluid occupying the cavity of the uterus may have the effect of setting up a dangerous inflammation. It was probably under the influence of some such considerations that, on the occasion of this young woman's former stay in the hospital, her medical attendants, after consultation, decided on not attempting anything while no more urgent symptoms were present; and it was not till the persistence and steady increase of the accumulation, and of the consequent pain, showed that something must be done to relieve her, that surgical interference was permitted. It was then limited to the most prudent extent; for not only is there great risk from the mere fact of making an opening—a risk which, in the given circumstances, must necessarily be incurred—but it is not easy to feel confident that, in so unnatural a state of parts, some further deformity may not exist; that, instead of the vagina being merely closed by a septum, that tube may not have been partially deficient, and even that the peritoneum may not be brought lower down than in the natural condition. In either case, great mischief may be done by a free incision: in the former, such an incision would lead into the deep cellular tissue of the pelvis, into which the fluid evacuated from the uterus would thus be introduced, leading to the subperitoneal inflammation so often met with after operations about the pelvis; and, in the latter, this fluid would be effused directly into the peritoneal cavity itself. It is not without reason, accordingly, that the best writers (Dr. Davis's *Obstetric Medicine*, vol. i, 110) recommend caution in dealing with cases of this kind—a recommendation which the history of such operations abundantly justifies. Instead, therefore, of the free incision which would have been made into an imperforate hymen, this case was treated merely by the puncture of a trocar; yet the sequel showed that the dangers even of such an operation are not slight; and, after her recovery from it (which seemed at one time precarious), her attendants were fain to be content with having left a passage to the os uteri, without attempting to enlarge that passage by any mechanical means to the calibre of the rest of the tube. In fact, this dilatation is not absolutely essential. Fecundation is always possible where there is a passage, however small, to the uterus; and many cases are on record (in the work referred to above, for instance) in which parturition has been safely effected, notwithstanding partial constriction of the vagina. It seemed better, therefore, not to expose the patient to a risk which was certain and imminent, in order to avoid a subsequent and uncertain danger, the results of which might after all prove trifling. (T. H.)

UNIVERSITY COLLEGE HOSPITAL.

I. LOCAL TREATMENT OF CANCER: APPLICATION OF THE SULPHATE OF ZINC AS RECOMMENDED BY DR. SIMPSON.

Under the care of J. Erichsen, Esq.

Sulphate of zinc has been applied in two cases at the above Hospital, for the opportunity of observing which, we are indebted to the courtesy of Mr. Erichsen. One was a man, who had been admitted with an ulcer of the leg, rendered intractable by a mass of fungous unhealthy granulations connected apparently with the periosteum of the tibia. These had been destroyed by the application of the sulphate of zinc paste, and the ulcer was healing kindly. Of the other, a case of epithelial cancer of the clitoris and inguinal glands, we subjoin a few notes supplied by Mr. Tevan, the house-surgeon. In both cases the application of the escharotic appeared to have been followed by pain, acute for the first few hours, and lasting (at least in the man's case) for more than a day. No other bad effect, however, had followed; and the caustic appeared not to have acted on the healthy tissues in the neighbourhood. A minor advantage of this substance is that, as it acts only on parts divested of cuticle, it may be freely handled by the operator without any risk of "burning his own fingers."

The case which we reported in our previous number from St. Bartholomew's, as well as the other to which we alluded, as being under treatment with Burnett's solution diluted, are progressing very favourably, but are not yet sufficiently advanced to render it advisable to publish more details at present. We have thought it worth while, however, to give the notes of a few cases, although as yet imperfect, in order to induce those of our readers who have opportunity and inclination to test some of the plans now under trial, and shall esteem it a favour to be furnished with the results of any such cases.

Hannah W., aged 58, was admitted Jan. 10th, under the care of Mr. Erichsen. She was married, but had had no children. She seems to have had irritation and ulceration inside the labia for a great many years, but no distinct tumour till some time ago (unknown, but less than two years). About a month ago, she noticed a swelling in the right groin, which increased rapidly, and soon became painful. On admission, a raw ulcerated surface, with very hard base, was found inside each labium, extending upwards to the symphysis, and downwards into the vagina. It was very tender, and there was profuse discharge. There was also a large mass of malignant disease in the right groin, and this also was very tender to pressure. There were marks of old sores about the thighs. She was in bad health, and had been insane about a year before. Slept

badly. A few days after admission, an abscess presented in the right groin, and was opened. As some suspicion of syphilis was entertained, the pus from this abscess was inoculated on the thigh, but did not produce a chancre.

Jan. 21st. She was brought into the theatre, and an attempt was made to narcotise her with amylene. This, however, could not be done, though she inhaled it for about a quarter of an hour. The extent of the disease rendering it impossible to remove it with the knife, the caustic recommended by Dr. Simpson, viz., an ounce of sulphate of zinc (previously carefully dried) made into a paste with a drachm of glycerine, was applied. This produced severe pain for a few hours, but on the sloughs caused by it separating, which they did five days after, the surface exposed was healthier. The patient also expressed herself somewhat relieved from the pain, and slept better.

Feb. 4th. The application of the caustic was repeated.

Feb. 6th. When last seen, the parts were covered by a dense, dry slough. She expressed herself as being much relieved, better in health and spirits, and the disease had certainly not extended in the deeper parts.

II. PLASTER OF PARIS BANDAGE.

We had an opportunity of seeing the application of this bandage at University College Hospital lately. It is intended as a substitute for the starch bandage in ordinary use at present, the advantages attributed to it being that it dries much more quickly, and is lighter. The former quality causes it, as is said, to sit more accurately, as the patient finds it easier to maintain the same position during the shorter period, so that it is free from the creases which are apt to be produced in the starch bandage by involuntary movements; and the patient is ready to be moved much sooner than when the starch is used. This is a point sometimes of importance in military practice. The bandage was applied at Mr. Erichsen's desire by Mr. Gamgee, who had seen it used abroad. It is said to have been in much favour with Pirogoff at Sebastopol. It is made by rubbing dry plaster of Paris well into an ordinary bandage; a number thus prepared can be kept ready for use. The patient's limb is first enveloped in a roller, and over this the plaster of Paris bandage is applied, slightly wetted (to prevent the plaster from shaking off.) As each turn is laid on it is more thoroughly moistened, and then lies quite evenly and comfortably. At any part where more support is required, additional strips of the same can be laid on and supported by turns of the principal bandage. The patient was seen two days after the application. The apparatus was described as very comfortable, and appeared to answer, in all respects, as well as the ordinary bandage. (T. H.)

ST. GEORGE'S HOSPITAL.

THREE CASES OF HEPATIC ABSCESS.

Communicated by G. Goddard Rogers, M.D., Medical Registrar to the Hospital.

Case I. Under the care of H. Bence Jones, M.D., F.R.S. G. E., aged 58, an emaciated person, who worked as a porter in some establishment in Bond Street, was admitted on 31st August, 1855, with dyspnœa, livid countenance, and severe pain below the right costal cartilages. He stated that his health had been very good until about five weeks ago, when he suddenly felt acute pain at the pit of the stomach and between the shoulders. At this time, he noticed short hacking cough, but he did not expectorate; and his breathing was not at all affected until a week before admission. He had been carefully watched by an eminent physician in the neighbourhood, who applied various counterirritants to the epigastrium, and treated him likewise constitutionally; but his circumstances did not allow him the necessary conveniences for a protracted illness, and he therefore left his medical adviser, after being three weeks under treatment. Ether and ammonia were given, and he was well purged. On the following day, tincture of bark was added to the mixture. He expressed himself as feeling much relieved, took his food well, and passed a fair quantity of healthy urine.

Sept. 2nd. This morning, whilst on the night-stool, he had a severe rigor, which lasted three quarters of an hour. At night, he shivered again, but the attack was milder. During each of the paroxysms, his body became of a red colour, giving him the appearance of a person suffering from scarlatina. Throughout the day, his tongue was much coated. Some brandy revived him, and for three days he had no return of the shivering.

Sept. 6th. During the night he had slight chilliness, and in the morning a severe rigor, which lasted half an hour. He expressed himself as feeling much worse. His pulse was feeble and rapid; the palms of his hands hot and dry; tongue thickly coated with brown fur; and all his body was of a deep red hue. Some calomel and Dover's powder were prescribed; and as towards evening he complained of much abdominal uneasiness, a dose of castor oil was ordered for the morning of the 7th. Throughout the night, he was very restless, and three distinct rigors attacked him.

Sept. 8th. The gums were somewhat tender from the mercury. He was rapidly approaching a typhoid condition. His lips were blue and skin very cold.

On the morning of the 10th, erysipelas appeared over the face, and no doubt hastened his end, as he sank at 6 P.M.

Post Mortem Examination eighteen hours afterwards. A slight amount of bloody fluid existed in both pleural sacs and in the pericardium. The bronchial lining membrane was vascular. In the apex of the left lung was a small amount of scrofulous matter. The heart was soft, and the right ventricle rather thin. On raising the liver, the duodenum was found adherent to it by its middle portion. At this point the duodenum presented internally a large ulcerated opening admitting the little finger, and communicating with an abscess occupying the position of the gall-bladder, *of which no trace existed.* The abscess also penetrated into the lobulus Spigelii, and its entire contents were dark ash-coloured matter. Nothing like a biliary calculus was found, though probably the cystic duct and gall-bladder had been destroyed by ulceration from arrested gall-stones at some previous period. The lining membrane of many branches of the portal vein was coated by fibrinous deposit of a reddish-brown colour.

Case II. Under the care of H. Bence Jones, M.D., F.R.S. T. J., aged 48, a stableman, of intemperate habits, and sallow complexion, had been an out-patient of the hospital for some time for bronchitis. He applied for admission into the house on the 14th of March, 1855, on account of severe paroxysms of pain in the region of the liver. There was also dull aching pain in the loins, and his urine was scanty and slightly albuminous. With the exception of a few moist râles, there was nothing much amiss with the breathing. He was well purged, and ordered a demulcent mixture. For the first ten or twelve days there was very little change in his symptoms.

March 28th. He experienced about this date much gnawing pain at the epigastrium, and he was unable to lie down. His appearance was more cachectic; and he had harsh dry cough. Sinapisms and opium liniments were successively tried; but he was not at all benefited. At times he was bent double with the pain. Opium in its various preparations was given, and he began to feel easier again.

April 14th. Vomiting was now an urgent symptom. His countenance was sunken and cadaverous. The epigastric pain was not so severe; but the chief uneasiness was in the right hypochondrium. A blister was laid across this part, and seemed to give great relief. He had very little vomiting until the 10th of May. Then it again troubled him; and as he had been daily getting weaker he was soon prostrated by the sickness. The abdominal pain was more widely spread, although the old spot (the hepatic region) was most tender upon pressure. He became unable to converse, and sank in about a fortnight.

The examination was made twenty-nine hours after death. The heart and lungs were quite healthy. There was a large abscess in the back part of the right lobe of the liver which had opened into the peritoneal cavity; but the adhesions contracted between it and the ascending colon had circumscribed the purulent effusion. Several very large firm masses of encephaloid deposit were disseminated throughout the substance of the organ. The gall-bladder was of enormous size, and full of bile. The mesenteric glands to some extent were infiltrated with encephaloid matter.

Case III. Under the care of R. Nairne, M.D. M. W., aged 24, was under a surgeon's care on first coming to the Hospital, but was, on the 6th April 1855, placed in a medical ward owing to a feverish attack, coupled with pain in the chest, headache, and uneasiness across the loins. About a week later, cough came on, with dyspepsia, and tenderness over the right loin. She was treated with saline febrifuge draughts, Dover's powder at night, and counterirritation to the chest and loins. There was some pneumonia on the left side at this time, from which she soon recovered. On the 18th, her as-

pect changed in a remarkable manner to the depressed look of fever. She complained of pain over the cæcum, and the bowels were relaxed. Wine, and starch and opium injections were ordered. This depressed and listless appearance increased, and profuse perspiration with vomiting and abdominal tenderness came on. On the 23rd, she had several rigors, and complained of acute pain in the right hip and thigh. The urine was scanty and albuminous. Every day up to the 3rd of May, the shiverings returned at uncertain intervals. The succeeding perspirations were most profuse, and gradually wore her down to extreme emaciation before death took place.

At the examination, which was made twenty-two hours afterwards, the lower part of the left lung was found hepatised. A considerable quantity of yellow fluid existed in the peritoneal cavity. The right lobe of the liver contained a very large abscess, and the right kidney was adherent to its under surface, so that on separating the two organs the abscess broke. Another abscess existed in the same kidney, which probably bore some relation to that in the liver, but the connexion could not be clearly traced. The left kidney was large and rather softened. All the other organs were natural.

Remarks. The most interesting feature in these cases is the total absence of ulceration or other unhealthy appearance in the intestines; unless, indeed, we look upon Case II as one of abscess of the liver consequent upon ulceration of the duodenum. I am, however, of opinion that the correct view is that taken in the account of the autopsy, which attributes the lesion of the intestine to arrested gall-stones. This explanation is to some extent strengthened by the statement of Mr. Curling (*Med.-Chir. Trans.*, 1842) founded upon careful examination after deaths from burning. He considers that abscess of the liver never occurs as the result of ulceration of the duodenum in these cases.

Annesley looked upon pain in the right shoulder as a tolerably sure indication of suppurative inflammation of the right lobe of the liver. In Cases II and III this symptom was absent; at all events, the patients made no complaint of it; whereas in Case I, where the suppuration involved the lobulus Spigelii, and the right lobe was unaffected, constant pain was experienced between the shoulders.

In Case II, the malignant disease had probably been making progress for some time before the man's admission. His sallow and cachectic look led us to diagnose *this*. On the 14th April, exactly a month after he had been under treatment, the pain was more localised, and accompanied by vomiting. It is not unlikely that some peritoneal inflammation was caused at this period by the cancerous growths, and that the inflammation and suppuration of the adjacent hepatic tissue were secondary to this peritonitis.

Original Communications.

LECTURE ON THE SOUNDS OF THE HEART,

DELIVERED IN THE LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

By A. T. H. Waters, Esq., Lecturer on Anatomy and Physiology, etc.

Gentlemen,—In the present lecture, I propose to consider the causes of the sounds of the heart. The subject is one on which the minds of physiologists seem to be by no means settled; and a careful and candid inquiry into the different causes which have been, or still are, considered to be equal to the production of the phenomena, will, I venture to hope, not be unattended with benefit.

If you place your ear over the præcordial region, you will hear two sounds: one heard most distinctly towards the apex of the heart, dull and somewhat prolonged; the other heard best at the base of the heart, less prolonged and sharper in its character. These sounds are called the *first* and *second* sounds of the heart. The first is synchronous with the contraction of the ventricles and the propulsion of the blood into the aorta and pulmonary artery, and slightly precedes the pulse at the wrist. The second immediately succeeds the first, and is synchronous with the relaxation of the ventricles, and the attempt of the blood to regurgitate from the aorta and pulmonary artery.

Experimental investigation into the causes of the sounds of the heart is of recent date; and at this we shall not be surprised, when we learn that, up to the close of the last century, so little was known even of diseases of the organ, that the only two recognised were polypus and palpitation—the latter being considered a nervous affection.

The first object which I propose to myself is, to trace down from the earliest periods to the present time the history of the different theories which relate to the subject of the lecture.

The theory that muscular contraction, or, in other words, the successive shortening of the muscular fibres, produced the sounds, appears to be the oldest, and is the one advocated by Galen, Senac, Haller, Bichat, and Corvisart. The immortal Laennec embraced the same opinion as his predecessors. He attributed the sounds to the alternate contraction of the auricles and ventricles. "One of the sounds," he says, "is clear and rapid, and corresponds with the systole of the auricles; the other is more dull and prolonged, and corresponds to the systole of the ventricles."

This theory of Laennec remained unquestioned for some years, until it was shown—which would have been at once apparent, if the rhythm of the heart had been better understood—that the contraction of the auricles precedes that of the ventricles; whereas the sound that Laennec attributed to their action—viz., what we call the second sound—immediately succeeds it.

The physiologist who first disproved Laennec's view was Mr. Turner; and he endeavoured to account for the second sound, by supposing that it was produced by the heart falling back on the pericardium, after the ventricular systole. This is disproved by the fact, that the sounds are heard when the pericardium is removed; and further, that the pericardium, in a state of health, is always in close contact with the heart, so that the latter cannot fall back upon it.

Another theory, for which we are indebted to Dr. Corrigan, was, that the impulse and first sound were produced by the rush of blood into the ventricles during the auricular contraction; and the second, by the ventricular systole, which he considered instantaneous. These conclusions are incorrect, because the first sound takes place not synchronously with, but subsequently to, the auricular contraction; and with regard to the second sound, the conclusions are untrue, because the ventricular systole, and the pulsation in the arteries near the heart, do not coincide with, but precede, the second sound.

M. Pigeaux expressed an opinion similar to that of Dr. Corrigan, with regard to the first sound; and of the second, he says: "it is caused by the collision of the blood against the walls of the aorta and pulmonary artery." This is disproved by the fact, that the pulsation in these vessels precedes the sound.

The celebrated physiologist Magendie has given us the following view of these sounds. "The first sound," he says, "is produced by the apex of the heart coming in contact with the ribs during systole; and the second by its anterior surface coming in contact with the sternum during diastole." These conclusions are evidently incorrect, inasmuch as both sounds are distinctly heard after the sternum and ribs are removed.

M. Marc d'Espine says: "The first sound is due to the pure and simple effect of the ventricular systole." This is a recognition of *bruit musculaire*, to the exclusion of all other sources of sound. "The second sound," he says, "is the pure and simple effect of the ventricular diastole." This recognises the power of the muscle to produce sound in relaxation, and excludes the valvular sound.

We are indebted to Mr. H. Carlile for another theory, viz.: that the first sound is produced by the rush of blood into the arteries during the ventricular systole. This is a view held at the present day, and to which I shall have again to refer. He says that the second sound is due to the closure of the semilunar valves.

In the year 1832, Dr. Billing published a view of the causes of these sounds, which he had previously taught to his class, and which has been lately proved to be correct by actual demonstration; viz., that they are both produced by the forcible closure of the two sets of valves; the first, by the closure of the mitral and tricuspid valves; the second, by that of the semilunar valves.

This view was afterwards adopted by Rouanet and Mr. Bryan, and with some slight modification by Bouillaud.

Dr. C. J. B. Williams, who performed many experiments with reference to these sounds, has adopted the muscular theory to account chiefly for the first sound. To this, I shall again have to refer.

In the year 1830, Dr. Hope performed a number of very interesting experiments, with the view of proving what were

the causes of these sounds. The conclusions he came to were, "that the first sound was caused by the systole of the ventricles; and the second by their diastole." From subsequent experiments, he had reason to alter his opinion with reference to the cause of the second sound; and in 1835, he published the following view. "That the first sound was compound; viz., consisting—1st, of valvular sound; 2nd, of the sound of extension, 'a loud smart sound, produced by the abstract act of sudden jerking extension of the braced muscular walls'; 3rd, a prolongation and possibly augmentation by *bruit musculaire*. That the second sound was produced by the sudden expansion of the semilunar valves, resulting from the recoil upon them of the column of blood in the aorta and pulmonary artery."

If you consult the different works on physiology and medicine, where reference is made to these sounds, you will find that the views of authors of the present day are by no means settled on the subject. The difficulty seems to be with the first sound; for the experiments of Hope proved that which Billing propounded with reference to the second sound—viz., that it was due to the closure of the two sets of semilunar valves.

Let us next examine into the events which are taking place in the heart at the time when these sounds are produced, and then ascertain the opinions most generally entertained with reference to their causes at the present day.

The events which correspond with the first sound are—first stage of dilatation of auricles; contraction of ventricles; closure of auriculo-ventricular valves; opening of ventriculo-arterial valves; propulsion of blood against auriculo-ventricular valves, and through the orifices of aorta and pulmonary artery; impulse of heart.

The events corresponding with the second sound are—relaxation of ventricles; dilatation of auricles; backward flow of blood in aorta and pulmonary artery towards ventricles; closure of semilunar valves.

From the time of Laennec up to the present day, as many as twenty-nine theories have been proposed to account for these sounds. To some of them I have alluded; and I now proceed to give you the principal ones held at the present day.

We have, as alleged causes, 1. Impulse; 2. *Bruit musculaire*; 3. Tension of the auriculo-ventricular valves; 4. The rush of blood throughthe narrowed orifices of the great arterial trunks; 5. The collision of the particles of blood with one another, and with the parietes of the heart; and, lastly, the pressing back of the semilunar valves. Such are the theories with regard to the first sound. With regard to the second, scarcely any difference of opinion exists; it is acknowledged to be due to the closure of the semilunar valves.

Let us now examine the various causes above alluded to. That impulse has nothing whatever to do with the first sound, is most satisfactorily proved by the following experiment; viz., that on removal of the anterior part of the thorax, and on placing the stethoscope on the surface of the heart itself, the sound is in no way whatever diminished in intensity, but if anything more distinctly heard than before. This observation was made by Dr. Hope, and has been confirmed by all subsequent experimenters. Independently of this demonstrative proof, it is difficult to imagine how the impulse could produce a sound, inasmuch as the heart does not strike the chest, always being in contact (in a state of health) with its anterior wall; but simply makes it bulge, as the ventricles during contraction assume a globular form.

I pass over for the present the second and third causes assigned, and come to the fourth, viz., the rush of blood through the narrowed orifices of the great arterial trunks. This view is assumed from the fact that sound is produced by pumping fluid through tubes out of the body, and further that whenever the calibre of a vessel in the body through which blood is circulating is diminished, a sound is produced. That such an analogy as is here assumed, exists between the forcible and sudden pumping of fluid through an inert tube out of the body, and the action of the heart in impelling its blood into the elastic and yielding vessels situated at its base, I cannot admit; nor is the condition of these vessels at their origin at all similar to that of a compressed artery. There is no natural impediment to the onward flow of the blood, the parts leading to the vessels are perfectly smooth, and the vessels themselves are of so elastic and yielding a material, that they dilate in every direction when they receive the blood, as can be readily felt if they are grasped during systolic action of the ventricles. If the arterial orifices were compressed during the time the blood was passing through them, so that their shape would be altered and their calibre diminished, then the same result would take place as in the arteries elsewhere; but no such compression occurs, nor is there any augmentation of sound, over the base of the heart as there ought to be if this view were correct; on the contrary, when the heart is exposed, and a stethoscope applied to it, the sound is found to be most intense over the situation of the auriculo-ventricular valves.

That the fifth cause assigned, viz., the collision of the particles of blood amongst themselves and with the parietes of the heart, a view advocated by some physiologists, can be an element in the production of the first sound, I can scarcely imagine. It appears to me that if such were the case, it would produce an almost continuous murmur, for there must be collision equally during diastole of the ventricles, and especially when the contents of the auricles are propelled into them, as during systole, and sound ought to be produced during the one act, as well as during the other; but such is not the case; no audible sound is produced by the propulsion of the blood into the ventricles, and it is but fair to infer, that none is produced by its propulsion from them.

I pass to the consideration of the muscular sound, the *bruit musculaire*. It has always been the opinion of physiologists that the contraction of the muscular walls of the ventricles, was either the sole cause, or an element in the production, of the first sound. Dr. Hope adopted the latter view, and it is generally entertained at the present day.

If you place your ear or a stethoscope over a muscle during its contraction, you will hear a sound, but in its character it differs entirely from the first sound of the heart. Perhaps you cannot have a better example of the sound produced by muscular contraction, than that afforded by the action of the masseter muscle. If, when your head is resting on a pillow, you forcibly contract your masseter muscle, you will hear a rumbling noise—a noise which continues during the contracted condition of the muscle, and is also heard during its relaxation. The exact cause of this sound I am unable to tell you. It may be due to the change in shape of the muscular fibres—it may be due to the alteration of the circulation—or to some other cause; but the more you examine it, and all other muscular sounds, the more will you be convinced, that they bear no resemblance to the first sound of the heart.

Before alluding to the experiment which some of you have witnessed, and which proves beyond all doubt that the contraction of the ventricles produces no sound, I think it right to bring under your notice, other arguments which tend to prove the point. If the ventricles during contraction produced sound, it is but fair to infer that the auricles would do so. We find, however, that such is not the case. If it be said that the muscular substance of which the walls of these cavities are composed, is so slight, that no audible sound could be expected from its contraction, I maintain that such an argument is unsound, and I would ask, what is the exact amount of muscular fibre necessary to produce an audible sound? Are not the auricles of a full-grown man as large, and do they not contain as much muscular fibre, as the ventricles of a *fœtus in utero*?—and shall we admit that the contraction of the latter will produce the clear audible click, with which many of you are familiar, and deny that the former can have any such effect at all? Again, presuming that the auricular fibres in man are not sufficient in number to produce a sound, are there not animals which possess auricles larger than the ventricles of some adult men?—but yet, if you listen to the sounds produced by their hearts (as, for instance, the ox or the horse), you find that they are the same in number and character as those of the human being—during the auricular contraction no sound is heard. These facts seem to me conclusive against the muscular theory, and to render it perfectly untenable.

We are not, however, without positive evidence of the truth of the assertion, that the ventricular contraction produces no sound. To Dr. Halford, who has lately brought the subject under the notice of the profession in London, and who has performed his experiments in this theatre, we are indebted for the beautiful experiment which some of you have witnessed.

The experiment consists in depriving an animal (dog or donkey) of sensation by means of chloroform; and, whilst artificial respiration is kept up, the anterior part of the thorax and the pericardium are removed and the heart exposed; on listening to the heart, the two sounds are heard. For the remaining part of the experiment, I quote Dr. Halford's own words.

"The superior and inferior venæ cavæ, and the pulmonary veins, were now compressed between the fingers, and the heart continuing its action, a stethoscope was again applied, and neither first nor second sound was heard. After a short space of time, the veins were allowed to pour their contents into

both sides of the heart, and both sounds were instantly reproduced. The veins were again compressed, and all sound extinguished, notwithstanding that the heart acted vigorously. Blood was again let in, and both sounds restored. All that is claimed for the above experiment, is its exemption from any rude interference with the mechanism of the heart's action. The cavities of the heart are untouched; there is no finger thrust into the auricle or ventricle; no hooking back of valves: in fact, not one source of sound substituted for another. Both sounds are destroyed and reproduced by the same means; the strongest argument for their both depending on the same cause, which is simply the backened current of blood, first against the auriculo-ventricular, and second against the ventriculo-arterial valves."

Now what is the value of this experiment? It proves unquestionably that there is no such thing as *bruit musculaire* in connection with the systole of the ventricles, and it disproves all the theories founded on a contrary supposition; it proves, moreover, that whenever the blood is allowed to play upon the valves, the sounds are produced.

Before Dr. Halford performed his experiments, in the original of which I assisted him, a very ingenious experiment had been performed by Mr. Brakyn, which consisted in propelling, by means of bladders and tubes connected with the left side of the heart, air through the cavities, so as to represent the flow of the blood. His experiment proves that when the auriculo-ventricular and the ventriculo-arterial valves are thrown into a state of tension, by air acting on them in the same way as the blood, sound is produced. This experiment I have frequently repeated—the original apparatus used by Mr. Brakyn being still in my possession—and the sounds resemble in every respect, considering the nature of the fluid in which they are produced, those of the living heart.

These two experiments seem to me to settle entirely the question which has so long agitated the minds of physiologisis. Mr. Brakyn's proves that the tension of the valves is equal to the production of the sounds, and Dr. Halford's that muscular contraction has nothing to do with them.

The pressure of the semilunar valves against the sides of the great vessels is said to assist in the production of the first sound. This requires but slight consideration. Against what are they pressed? Against the *yielding* walls of the vessels, and can there be any element of sound in such an occurrence? I think not.

I think I have now proved that all the phenomena synchronous with the first sound, except the closure of the valves, are unequal to its production, or even to assist in it; and also, that such closure is equal to produce the effect. It is then to *the tension of the mitral and tricuspid valves, produced by the blood being forcibly propelled against them*, that this sound is due.

With regard to the second sound, there is but little difference of opinion; the experiments of Hope proved that it was solely due to the semilunar valves. When the arteries recoil after being distended by the ventricular systole, the blood in them is forced back towards the ventricles, the semilunar valves then come into play, they are stretched across the vessels, and suddenly made tense, and then sound is elicited.

If you listen to the sounds carefully, you will find that they do not differ in *kind*, but only in *degree*. The auriculo-ventricular valves are large, thick, and strong; consequently their vibrations are slow, and the sound they produce prolonged. On the other hand, the ventriculo-arterial valves are small, thin, and comparatively weak, and their vibrations are rapid, and the sound they produce short. Both sounds may be illustrated by making tense two pieces of membrane of different size and thickness.

If the theories I have mentioned require any further confirmation, they receive it from the sounds which result when there is disease of the heart. If you hear a murmur, you know there is something wrong with the valves, you do not think of the muscular walls; you know that there is some deposit in connexion with the valves, which either from its roughness causes a sound as the blood passes over it, or else prevents the valves properly closing, and thus allows of regurgitation.

Moreover, consider the alteration in the sounds, which is the result of a change in the muscular walls. When the ventricles are hypertrophied, the first sound is less distinct, and of a muffled character; it has to pass through the thickened muscle, and necessarily comes less sharply to the ear. Again, when there is dilatation of the ventricles and thinning of their walls, the sound is clear and sharp; it has to pass through a smaller space and is less altered in its character. If the sound were due to muscular contraction, surely, in obedience to the law of physics, that if you increase the cause you increase also the effect, the sound of a hypertrophied heart would be louder and more distinct than that of one in which the muscular fibres are diminished; but the contrary obtains, and this fact affords an additional proof of the valvular theory.

REMARKS ON DR. HALFORD'S EXPERIMENTS CONCERNING THE SOUNDS OF THE HEART.

By W. O. Markham, M.D., Assistant Physician to St. Mary's Hospital, London.

Dr. J. B. Halford has lately performed a series of experiments at different medical schools in London, for the purpose of demonstrating, amongst other things, that the opinions long ago laid down by Dr. Billing, respecting the nature and causes of the sounds of the heart, are correct; viz., that both the sounds are entirely and alone produced by the valves of the heart.

It would appear from remarks, which have been made in some of the medical periodicals, upon those experiments, that they have been by many persons received as positively demonstrative of the opinions above mentioned. As I happened to be a witness of the experiments which were made at St. Mary's Hospital, and as I could not convince myself of the correctness of the above conclusion from what I then and there observed, and as I think them quite untenable on other grounds, perhaps I may be permitted to state, in a few words, my reasons for being so unfortunate as to differ from many others, who have assisted at these vivisections.

The position assumed by Dr. Halford is this:—When no fluid—liquid or gaseous—passes through the cavities of the heart, the valves are not called into action, and no sounds are produced. Hence, the sounds of the heart depend upon the action of the valves. In order to demonstrate this position, Dr. Halford rapidly opens the thorax of a dog under the influence of chloroform, and by the aid of a bellows inserted into the trachea keeps the animal alive by sustaining the respiratory functions. He then skilfully cuts off all the sources through which blood, venous or arterial, can find its way into the heart's cavities. When this has been effectually accomplished, Dr. Halford finds that the sounds of the heart are no longer audible.

In the two cases in which I saw Dr. Halford operate, I could not admit the correctness of his views; and for the reason, that I still heard two sounds associated with the movements of the heart, although he assured me that all sounds were at the moment inaudible.

Certainly, the sounds I heard differed vastly from the healthy and natural sounds of the heart; they were weak, dull, and muffled, resembling rather the obscure flutterings of a heart rapidly and feebly beating in the last agony; but, nevertheless, of such a character, there they were to be heard, at least by the evidence of my sense.

I am well convinced, from the very nature of the experiment, and from the difficulty of rightly manipulating with the stethoscope under such circumstances, that the sounds might be readily overlooked; and I can quite understand that many persons might not be lucky enough to catch them. However this may be, it is clear that the negative evidence of numbers cannot destroy the positive evidence of one's own senses; and therefore I cannot admit, on this ground, that Dr. Halford's experiments prove the correctness of the position which he takes up.

Admitting, however, the incorrectness of my own observation, and assuming the correctness of Dr. Halford's—viz., that in the cases before us no heart's sounds were audible—I really think some objection may be very fairly taken to the sweeping views thence deduced by him. Is it right, one might ask, to assume that in an animal thus mutilated, and subjected to sudden and violent shocks of the nervous, arterial, and respiratory systems, *all* the elements which may possibly conduce to the formation of the heart's sounds can be left in undisturbed action? Surely, all the other possible causes which may form, or assist in forming, the heart's sounds, as they are heard during healthy life and under a natural condition of existence, must be eliminated from the calculation, before Dr. Halford can assume, as he does, that to the motion of the valves, and that to it alone must be ascribed the cause of the sounds in question. What becomes of the impulse of the heart against the thoracic walls? How is the muscular bruit to be got rid of? How is the rush of blood through the heart's orifices and

over the roughened surfaces of its cavities to be explained away upon such an assumption as this? Dr. Halford may ignore the muscular bruit, and declare the impulse of the heart's apex against the thoracic walls a creature of the imagination; but I am sure that he will not persuade many stethoscopic observers to agree with him herein.

Dr. Halford's, as well as Dr. Billing's views, are surely in this matter too exclusive. No one can doubt that the valves have a most important share in the formation of the heart's sounds; but certainly Dr. Halford's experiments do not prove that no other causes may contribute to their formation; most assuredly, they do not disprove the possibility of the existence of a sound from the impulse, of a sound from the muscular contractions of the heart, and of a sound from the rush of blood through the heart.

It must be admitted, that we have gained a great deal of knowledge concerning the sounds of the heart from observation of their alterations in diseased conditions of the organ; and we may, I think, safely assume from a fair consideration of the same class of facts, that much obscurity still involves the question of the nature and origin of the sounds. The pathologist at the bedside of the patient is continually meeting with facts which seem repugnant to his received theories, and even to what seem to be demonstrated facts. I will here mention one, because it seems to show in a very striking manner the great difficulty which hangs over the subject.

It is generally admitted by observers, that the second sound depends altogether upon the falling together, during the heart's diastole, of the semilunar valves of the aorta and pulmonary artery; this is a fact, which would appear to be placed almost beyond the reach of discussion, being readily demonstrable and decisively so. Notwithstanding, however, the demonstrations of physiological experiments, pathology steps in to throw doubts upon their correctness. How comes it, for instance, that in certain cases of mitral valvular disease, very frequently to be met with, no second sound at all is heard at the apex and about the left side of the heart? A loud *bruit* is heard accompanying the first sound at the apex, but no second sound or *bruit* is audible there. How comes this, when at the same time the second sound is heard loud and clear over the situation of the aortic valves; and loudly intensified, it may be, over the base of the pulmonary artery? Why is the second sound, as usually heard over the apex of the heart, not heard now, if its cause is always to be sought in the semilunar valves? What should prevent the sound being conveyed downwards to the apex during the heart's diastole in this case, as well as during health? I certainly cannot see.

How, again, are we to account, on Dr. Halford's theory, for the reduplicated beat so often heard over the ventricles during their contraction? How also are we to explain the fact, of the second sound being occasionally loud and clear over the ventricles, when at the same time it is very weak and almost inaudible at the base of the heart, if we are in every case to attribute its formation entirely to the closure of the semilunar valves?

Pathological and physiological considerations thus justify us in believing that the causes of the heart's sounds are complex, not simple; that they are produced by no single act, but that several acts are associated in their formation; and that in fact, there is much truth in the assertion made by Skoda, viz., that the ventricles, the aorta, and the pulmonary artery, severally contribute in the production both of the first and of the second sounds of the heart.

CLINICAL OBSERVATIONS ON THE SPECIAL APPLICATION OF LIQUOR PEPSINIÆ IN CERTAIN DISEASES.

By David Nelson, M.D.Edin., formerly Physician to the Queen's Hospital, and Professor of Clinical Medicine, Birmingham.

Since my last remarks upon this subject, I am glad to observe, from the discussions called forth, and the attention paid to the preparation of the medicine by chemists, that it is now taking that hold upon the professional mind which its value deserves. In papers previously published, I have adverted to the successful treatment of certain cases of diabetes several years ago by means of this remedy, and also to its general value as a natural solvent of the food within debilitated stomachs. In regard to diabetes, I have now about a dozen patients in whom there has occurred a complete arrest of that usually deadly malady; but I do not intend at present to treat of that particular disease, or to enter upon any theoretical discussion thereon, but to lay before my brethren of the British Medical Association some evidences of the special value of this agent in chronic complaints, and in those forms of disease which are viewed as malignant, or which are of so obstinately destructive a kind that their ultimate results are quite as bad. I would wish it to be understood at the outset, that, in citing such evidence, I have no intention of making perfect reports of the cases, in their rise, progress, treatment, and termination; but mean simply to mention such salient features of the ailments as may tend to illustrate the beneficial action of pepsine in arresting or retarding their advance.

I would also premise, that the form of the agent employed has been that of the *liquor pepsiniæ præparatus*, or *medicinal rennet*, as made in Birmingham, the ordinary dose of which is one fluid drachm. I shall also endeavour to classify the cases so as to exhibit its effects methodically, beginning with those of a milder character, and proceeding to others of a more formidable or fatal tendency. With this view, I shall illustrate its effects, *seriatim*, upon patients labouring under simple chronic dyspepsia; upon others labouring under dyspepsia associated with affections of the heart, lungs, uterus, or brain; upon some with abdominal tumours; upon some with ulceration of the stomach; upon others with malignant disease of the liver or stomach; upon others of a tuberculous habit, but especially young children with tabes mesenterica; upon one with diabetes, recently treated with success, but not included in any former report; and on another with albuminuria.

A. SIMPLE CHRONIC DYSPEPSIA.

Case I. Mr. G. G., of Staffordshire, was a farmer, advanced in life, and had suffered for many years from indigestion; otherwise, as regarded all his vital functions, he seemed perfectly sound. His circulation and respiration were good, his complexion was ruddy, and he was strong and active in all his limbs; but he never ate a meal, however simple, without suffering from distension, severe pain, protracted eructations of flatus, and sometimes vomiting. I had formerly prescribed for him vegetable bitters, with alkalies, bismuth, and hydrocyanic acid, with only limited and temporary benefit; but, on taking the three latter medicines with the liquor pepsiniæ, an immediate and continued favourable change was reported. Afterwards, he took the peptic liquor only, with a little alkali; and, as he expressed it, he "ceased to know he had a stomach."

Case II. Mrs. S. C., of Walsall, corpulent and unwieldy, 45 years of age, had been troubled with indigestion for years past. She never had pain; but her bowels were irregular in their action, and she had constant eructations day and night. She was muscular, but her muscle was imbedded in fat; and the abdomen was immensely large, pendulous, and tympanitic. She had used ordinary remedies without much change, and had never restricted her diet, as she had a good inclination for food, and regularly ate four full meals a day. On using the liquor pepsiniæ with an alkali, and taking two aloes and assafœtida pills at night, instead of supper, her uncomfortable feelings left her, and, with continuing the occasional use of the medicine, and the avoidance of pastry and beer, and the adoption of a meat and bread and wine diet, she has ceased to complain.

Case III. Mrs. A. C., of Staffordshire, was a lady of tall and firm frame. She consulted me for an obstinate attack of rheumatism, which had specially seized on the tendons of the neck, so as to induce stiffness and great anguish on moving the head or arms. On inquiring into her general health (the state of the stomach included), she said that, eat what she might, for some time past, the food not only lay heavy, but turned sour, and produced at least once a day, and very often in the night, a violent and protracted attack of spasm. She added, that hot water and mustard plasters, with brandy, ether, opium, and chloroform, had all been used, with only transient benefit; and therefore concluded that she must put up with it for life. A soothing and absorbent liniment was prescribed; and she took first fifteen grains of bicarbonate of soda, ten grains of bismuth, fifteen drops of wine of colchicum, one drachm of liquor of pepsine, and twelve drops of solution of muriate of morphia in water, three times a day, after meals. Her rheumatism subsided entirely in from two to three weeks, all the fibrinous swelling having left her neck; and, from the time that she took the first dose of her mixture, she had no spasm of the stomach. She sent her cook, a few weeks ago, to me, requesting the favour of my attending to her for sundry anomalous symptoms, which disappeared after the expulsion of a large round worm eight inches long; and, on my asking how her mistress was, she

said, "Quite well, sir: we are never now roused up at night for hot water and so on."

B. DYSPEPSIA ASSOCIATED WITH AFFECTIONS OF THE HEART, LUNGS, UTERUS, OR BRAIN.

Case I. Mrs. F., a lady of 36, first consulted me at the acme of an attack of hepatic congestion, with its consequences. The head was hot, and ached severely; the appetite was gone; the tongue was covered with a thick fur; the bowels were constipated; and the urine was thick with lithates. She was more than usually short of breath, owing to an asthmatic tightness. There were tenderness and fulness in the region of the liver; the heart paused from time to time; there was a rough murmur in the course of the pulmonary artery; and the legs were swelled. Although some fear of tubercle had been expressed both here and in London, the fulness of the abdomen, along with the breadth and shortness of the chest, and other signs, dispelled that idea from my mind; and I rather inferred that all the train of symptoms were primarily traceable to flaccidity of the heart and obstruction at the pulmonary vessels. The first treatment consisted in the application of leeches to the right side, and the exhibition of purgatives, along with antispasmodic diaphoretics and ammonia. Under these appliances, the gastro-hepatic symptoms disappeared, and the respiration became easier: still the pulse was faint and intermittent, and the *bruit* continued; and she could not move into the cold, or go up stairs, or dress or undress, or partake of such food and drinks as her debility required, without bringing on heartburn, with asthmatic wheezing, faintness, and violent palpitation. Quinine and steel were now ordered with the food, and alkalised pepsine after it, as well as powerful antispasmodic stimulants, as an extra support when required by the urgency of the distress. After a short period, the pulse became more regular, and the asthma left; she was able to drive and walk about with ease; the legs regained their natural tapering form; she could eat beef, and take a glass or two of port wine at dinner, without heartburn or palpitation; the action of the heart became steady and strong; and, in short, she was well, except for the medical perception of what existed in the pulmonary artery, threatening, of course, a return of all the old evils, whenever the directions as to diet, etc., might be neglected. Her brother had been found dead in bed, and the *post mortem* examination had revealed some heart disorder in his case.

Case II. Mrs. S. D., a married woman, 40 years old, had been afflicted with asthma for many years, always much aggravated under attacks of cold, to which she was exposed in her occupation of shopkeeper. It was associated, as usual, with habitual dyspepsia. Her diet was irregular, and often improperly cooked, frequently consisting of hashes, for the sake of convenience. She consulted me for an acute attack of bronchitis. There was extreme dulness on percussion over the whole chest; the respiration was labouring and very sibilant; and the secretion of tenacious mucus, which could not be cast off except by vomiting, was immense. There was dull pain in the region of the liver, and great tenderness at the epigastrium, the slightest touch of which induced cough and increase of the dyspnœa. She was first treated with emetics and purgatives, conjoined with soothing and antispasmodic diaphoretics; and, when the chest and stomach, etc., had thus been relieved of their loads, she commenced the pepsine after food, which of course was ordered to be simple. Since then she has been very much less troubled with her asthma, which was wont to be a regular nightly visitor, and a torment for weeks together when she caught cold, or when anything disagreed with the stomach. When an attack threatens, an emetic, with a short course of liquor pepsiniæ and diaphoretics, now cut it short.

Case III. Mr. G. D., a firework maker, and exposed to fumes of sulphur, etc., consulted me in an extremity of distress, arising from extensive bronchitis and asthma. He was considered as going fast in phthisis; but, although he was thin and pale to an extreme degree, with a shrunken chest, dyspnœa, and hæmoptysis, I was not disposed to adopt that opinion, on account of the slowness of the pulse and the duration of the disease. His respirations, under the slightest exertion, were then 60 in the minute. Percussion over the chest proved general dulness; and all pulmonary sounds, whether sibilant, snoring, chirping, creaking, crackling, or gurgling, could be heard in one or other part of the chest, the respiration being also highly cervical and abdominal. I considered that repeated attacks of bronchitis had thickened the mucous membrane universally, caused the proper tissue of the lungs to shrink, induced adhesions, and brought on both organic and spasmodic asthma, with consequent retention of morbid mucus. There was neither appetite for much food, nor power of digesting the little taken. He described himself as alternately ready to faint and sink from a sense of suffocation. He was ordered first an emetic, which was followed up by antispasmodic and stimulant diaphoretics; and the pepsine was administered after meals. The chest was also blistered. Under a course of this treatment, he gradually recovered to the extent of reducing his respirations to 24; but, from the first, he said that the medicine after food had done him much good by relieving him of those dreadful attacks of asthmatic dyspnœa which had formerly invariably ensued upon meals, and which made him afraid to eat even while he felt inclined. He continues pale, thin, and weakly; but the chest-sounds are merely universally rough, and he can work and walk about with tolerable ease. He takes the pepsine liquor with his food, and lobelia at bedtime when required.

Case IV. Miss J. S., of Worcestershire, 48 years of age, unmarried, and exposed to no privation, having a cottage of her own and a small independency, consulted me in regard to habitual indigestion of some two or three years standing. It was accompanied with violent attacks of pain, sometimes in her stomach, and sometimes in the lower part of her abdomen. The latter spasms radiated from a point just behind and under the pubes, and extended to the sacrum, down the thighs, and up to the umbilicus. She reported that she had previously seen consulting practitioners, who, after treatment, had usually come to the final conclusion that the symptoms were hysterical; but, hysterical or not, they had not left her. She was ruddy in complexion, and not excitable, but of good sense and calm demeanour; and, finding nothing organic to lay hold of at first, I suspected a worm, and prescribed accordingly. No worm appeared, and the symptoms continued as before. A digital examination of the uterus was then made, when the os was found to be exceedingly tender, and somewhat puffy and flaccid. She said that, for some time past, menstruation had been very painful, and that griping pains had continued in that quarter even after the flux had stopped. She was ordered a mixture containing liquor pepsiniæ and bismuth, with muriate of morphia for her stomach and other pains; and leeches to the vulva. This treatment gave relief to the digestion, and for a time abated the uterine pains; but, as they recurred in force as before, a specular examination was made, which resulted in the detection of a small protruding polypus, brilliant in colour, narrow, and about a half-inch in length. A skilful surgeon, who afterwards examined, stated his inability to remove it, on account of the rigidity of the parts, the smallness and softness of the growth, and the depth and narrowness of the passage. In a short time, however, it was freely treated with nitrate of silver, on sundry occasions; and, although there seemed no change at first, it ultimately disappeared, with a complete relief to all the local pains. The stomach does continue weak, and she lately remarked, "I feel so well that it almost seems foolish to be taking medicine; but as soon as I stop this for the stomach, I begin to have pain and flatulence as before."

Case V. Mrs. J. M., a married woman, aged about 35, and without family, consulted me for a swelling and severe pains in her abdomen. She said that all her food disagreed with her, and so added to the ordinary distension of the belly that the agony was almost insupportable, and she could scarcely breathe. She had previously taken pills, which relieved the pain by making her stupid and drowsy; but they bound her bowels; and, when they did not produce sleep at night, she was haunted with horrible visions. On examination, it was clearly a case of immense ovarian disease, the tumour occupying nearly the entire abdomen. The pressure of this gave rise to the disturbed digestion, flatus accumulated, and so came the paroxysms of pain and distension. She was ordered to evacuate the bowels daily by means of a warm decoction of poppy in full quantity. She took a stomachic mixture containing the liquor pepsiniæ; and, instead of any opium, had muriate of morphia at night when she did not sleep. This led to a subsidence of the paroxysmal attacks. The solid tumour, of course, remains as before; but she is able to work at a lathe, and feels nothing beyond the sense of weight and oppression, and an occasional lancinating pain through the tumour.

Cases VI and VII. M. H. and J. H., brother and sister, were brought to me from Walsall, both labouring under epileptic fits of very frequent occurrence. The girl was 16 years of age, of ruddy dark complexion, short and round in her make, and her upper and lower extremities fully developed, and remarkably solid and firm. The lad, aged 12, was quite of the same robust organisation. The heart and lungs of both were sound; the

intellects clear; the abdominal organs vigorous; and, in fact, the only thing the mother could see was, that they were of a very "consumptive nature" as regarded food, which, however, seemed to make them sleep heavily, yet restlessly; and they also had the fits. They both confess to always feeling "blown out" after their meals. In case of any worms, they were first ordered a succession of calomel and aloes purges, followed up by the exhibition of male fern. This latter agent expelled no worm; but, on the other hand, fits occurred shortly after its being taken. On the next visit, purgative pills were prescribed at night, with quinine, zinc, and silver, thrice a day; and the liquor pepsiniæ after each meal. Of course these meals were ordered to be reduced and made simple. From that time, through a period of between two and three months, no "blowing out", nor night restlessness, nor epileptic fit, took place. They continue well, and are instances of epileptic convulsions occurring in robust bodies from over-charging of the stomach, in which cases all that is wanted is restoration of digestive power.

Case viii. Mr. T. J., aged about 70, and who had once before had an attack of apoplexy, had ventured upon an excursion into the country, with two or three of his sons. He was in good health and spirits in the morning, and, before departure, partook of a hearty breakfast of meat and eggs. He enjoyed himself, and felt well appetised after reaching the place of destination by horse-carriage, and dined almost voraciously, and without much chewing, as he was defective in his teeth. He also enjoyed the return home, felt again hungry, and had some roast veal. Before going to bed, he began to feel sensible of the weight at his stomach; but no alarm arose. In the course of the night, his wife remarked that his snoring was remarkably loud and deep, and, on endeavouring to rouse him, she could not succeed. Her experience of the former attack excited her fears. The family were summoned, and first a surgeon, and afterwards myself, were requested to attend. The poor old gentleman was quite insensible, and his eyes fixed. The pulse was slow and full, and the only thing that excited a groan was pressure of the epigastrium. The first appearance and the history of the case reminded me much of that of the late Duke of Wellington—stupefaction supervening upon a heavy meal in an aged subject. Leeches were ordered to his head, and powerful injections by the bowels; while it struck me that the liquor pepsiniæ might aid the favourable issue by dissolving any crude food, an emetic not being justifiable, under the impression of cerebral congestion, in so old a man. The leech-bites bled freely; and, while the injections were acting, vomiting also spontaneously occurred, and he ejected from the stomach an immense quantity of solid material, including vegetable fibre, and especially masses of hard gristle belonging to the veal. He was now able for a few times to be got out of bed, but afterwards relapsed into stupor, from which he only partially emerged to move his right hand over his right eye, and groan deeply; while his left arm was paralysed, and his mouth drawn to one side. He was now blistered over the forehead, put under a course of mercury and iodide of potassium, and went on with liquor pepsiniæ and spoon-food. His first exhibition of improved consciousness consisted in a desperate warfare of the right hand against the blister; and his first essay in the use of the tongue was in answering "yes" to every possible question. He next observed objects fixedly, but without recognising them. One of his earliest blundering attempts resulted in his calling his wife "the old clock"; and, on another occasion, after attentively studying the face of my watch, he first said "twelve"; then, carrying his finger on to the 1, and 2, and so midway to the 3, he exclaimed, "Twopence halfpenny to 12 o'clock;" and seemed exhausted with the effort. From this condition, however, he gradually and slowly recovered, with the loss of vision in one eye, and some impairment of memory. On my meeting him lately, he lifted his hat and repeated my name. He can walk the streets by himself, and, with care, remains in good health. Though liquor pepsiniæ can have no power over the essential nature of apoplexy, yet I believe life may often be saved by its solution of crude food, and maintenance of a sound digestion, while more active means are being carried out.

[*To be continued.*]

Medical Society of London. On this (Saturday) evening, a paper will be read by H. Hancock, Esq., "On a Case of Excision of the Floor of the Acetabulum and Head of the Thigh-bone, where Carious Perforation existed with Pelvic Abscess."

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	White Lion, Bristol.	Thurs., Feb. 19, 8 P.M.
Metrop. Counties. [Adjourned Meeting.]	37, Soho Square, London.	Tues., March 3, 4 P.M.

ADMISSION OF NEW MEMBERS.

The Laws of the British Medical Association, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. Williams, Worcester; or to any of the Secretaries of the Branches.

British Medical Journal.

SATURDAY, FEBRUARY 14th, 1857.

THE NEW COUNTERBLAST TO TOBACCO.

There is a class of persons who employ themselves with all the energy of despair in raising some cry of alarm, and making everybody about them unnecessarily uncomfortable. They parade their bugaboo with a desperation which ensures a temporary public attention, and, as soon as this dies out, they start another of a still more attractive appearance. The vegetarians would reduce mankind to live upon sky-blue and an apple, or at best an egg; the Maine Law liquor men would legislate all spirituous and malt liquors off the face of the earth; and now we are to have an anti-tobacco-smoking agitation, which is to end in the entire demolition of the "Stygian weed". It is quite clear that this restless class of individuals will not "let a body be", and we may think ourselves lucky if hereafter we are not reduced by them to have our diet regulated by act of Parliament. The anti-tobacco-smoking agitation is the last issue of the not very unpleasant brood, and we believe we are indebted to Mr. John Lizars, of Edinburgh, for the hatching, rearing, and sending it forth in a little pamphlet, termed *Practical Observations on the Use and Abuse of Tobacco*, which has already gone through six editions. Upon taking up this publication the other day, we were certainly not a little surprised at some of the statements therein contained, which are calculated, we must confess, to shake the nerves of all smokers already enervated by the abuse of tobacco. The art of making an immediate and startling impression has, however, its drawbacks. Accuracy of detail and sequential reasoning must be sacrificed to a breadth and startlingness of effect. When the urchin sets up his turnip-ghost in the churchyard, he cares little for the Phidian accuracy of its countenance, so long as its goggle eyes at once prostrate Tommy as he comes round the corner.

This little work of Mr. Lizars is open, we fear, to hostile criticism in this direction, as we shall endeavour to point out. Of course it would not be worth the while of the writer to show that the habit of smoking affects only a few isolated individuals, so he at once elevates it into a great and pregnant cause of the destruction of peoples and empires. "Excessive smoking has had no small share in degenerating Spain," he tells us in the preface to his fourth edition. Portugal and Germany are pretty nearly as bad as Spain; but Turkey is "a gone coon", all along of tobacco smoke.

"There can be no doubt, from what has occurred in the war just ended, that, had the Turks never indulged in the vicious habit of smoking tobacco, they would not have required the assistance of the French, Sardinians, and British. They would have been as powerful as in the days of the Sultans Othman, Orchan, Amurath the First, and Bajazet; and would have sent such a message through Menschikoff to the Czar Nicholas as the Sultan Bajazet said to the Count de Nevers of France, when taken prisoner, after his celebrated unsuccessful cavalry charge (like that of Balaklava) near Nicopolis."

Thus the better part of Europe and Asia has sunk from its high estate, chiefly in consequence of this vile weed! When Gibbon toiled and *smoked* and thought over the *Decline and Fall*, in his little garden at Lausanne—when he penned the last line of that remarkable work, and looked out upon the calm lake—he little thought how the labours of future historians would be simplified by the discoveries of science. Even his prophetic eye could scarcely have penetrated to the time when the philosopher, instead of looking to the passions of men working through ages as the causes of the decay of peoples, should seek for them in the narrow compass of the pipe he haply smoked! Mr. Lizars is undoubtedly entitled to the thanks of all future slaves of the lamp for so grand a discovery. Nevertheless, we must remind him that nations were just as apt to degenerate in the patriarchial times, before tobacco-smoke was known, as nowadays.

Tobacco, according to Mr. Lizars, having slain so many nations in the Old World, he anticipates a new victim in the West: at least, he quotes with approval an extract from the *Spectator*, in which the Yankees are described as "undergoing a process of physical and moral degeneracy"; and further, that "the people are like medlars—rotten before they are ripe"—principally in consequence of "smoking and chewing tobacco to excess". Now, we always imagined that the defect of the Anglo-American character was an extravagant go-a-headism—an uncontrollable energy which would stop at nothing. If this effect is caused by tobacco-smoking, we should like to be informed by Mr. Lizars how the same weed can have the effect of steeping the Turk in apathy and idleness! The narcotic must be affected by longitude in some very remarkable manner, which we should like to hear explained.

Mr. Lizars having desolated and overthrown empires with a whiff of smoke in this remarkable manner, we expected to find a fitting figure for his grim landscape. Here he is—a monster such as Frankenstein never could have imagined.

"I once travelled with a gentleman from South America, who first filled his nostrils with snuff, which he prevented falling out by stuffing shag tobacco after it, and this he termed 'plugging'; then put in each cheek a coil of pigtail tobacco, which he named 'quidding', in this country called 'chewing'; lastly, he lit a Havannah cigar, which he put into his mouth—and thus smoked and chewed, puffing at one time the smoke of the cigar, and at another time squirting the juice from his mouth, as so graphically described by Dickens in the boat story, on its way to the Far West. This gentleman was as thin as a razor, with an olive-coloured countenance, and frightfully nervous."

What a creature! Imagine shag tobacco hanging from his nostrils as long as the King of Sardinia's moustaches! But this, the reader will say, is simply an allowable exaggeration, in keeping with the previous picture. Not a bit of it. Here are his own consecutive remarks upon it:—

"The preceding is neither a caricature, nor an exaggerated account of the fearful extent to which the use of tobacco is carried, not only in Europe, as we know, but as there is every reason to fear, in every quarter of the globe, where it either grows, or is unhappily conveyed."

Pray remember, good readers, Mr. Lizars deliberately affirms that *the preceding is neither a caricature, nor an exaggerated account!*

So much for the accuracy of Mr. Lizars' descriptions as a philanthropist. They are somewhat inconsequential, and over coloured, it must be admitted; but still, when gentlemen deal with large problems out of their own direct line, allowances may be made for them. But let us now listen to what he says with respect to tobacco as a direct agent in propagating loathsome and disgusting surgical diseases:—

"Many cases of syphilitic virus, introduced into the healthy constitution by smoking a cigar or pipe, used by a diseased person, have come under my notice. The practice is by no means uncommon, in some ranks of life, for two individuals to smoke the same pipe or cigar alternately, the one taking a puff or *draw* after the other, and in this way the morbid poison produces a similar effect to what is exemplified in the communication of yaws or sibbens, by drinking out of an infected cup or vessel. I have often been consulted by gentlemen having marked syphilitic ulcerated throat, which they could not account for, having had no primary symptoms on the genitals. On interrogating them, they have admitted lighting a pipe used by another, or having accepted of a puff of a friend's cigar."

Labouring men may pass round the cutty pipe, but we never heard of gentlemen smoking a cigar alternately. However, we will take Mr. Lizars' word for it, that some people are dirty enough to do so, and that the virus of syphilis is thus passed on with it. What does this prove, however? That tobacco is therefore pernicious? Certainly not. He might as well, on the same plea, object to water-closets or drinking-glasses. Tobacco not only inoculates the blood with a deadly poison, but it is, according to Mr. Lizars, the cause of carcinoma in the tongue! some horrible examples of which he gives in the book before us in excessively highly coloured plates.

"I have received several communications from professional friends, strongly indicating the strength and extent of medical testimony against the use of the poisonous weed, and out of these I have selected one sent to me by a physician who has long enjoyed extensive opportunities of witnessing the very prejudicial effects which tobacco smoking exercises on the digestive organs. 'In the course of my professional experience', he writes me, 'two or three cases of decided carcinoma of the under lip, all of which terminated fatally, have come under my care, and which could be unmistakeably traced to a sore, occasioned by a burn from a hot cutty pipe'."

Now this extract, from the friend's pen, may be translated to mean nothing more than what has long been suspected but never proved, namely, that the sore created by the corrosive action of a tobacco-pipe may act as an exciting cause in producing epithelial cancer in a person so predisposed. Even here tobacco is only an accidental offender; but at page 14 Mr. Lizars, in commenting upon a case of cancer which had so arisen, would seem to set the weed up as the *cause* of cancer.

"Here I may remark, how many narrow escapes of having cancer of the tongue must *every smoker* have had, when we

consider that every one with a disordered stomach has had one or more pimples on his tongue, which, had they been irritated with pungent tobacco smoke, as in Dr. B——'s case, would in all probability have ended in ulceration, becoming cancerous, and ending fatally."

Does Mr. Lizars mean to aver that cancer may be induced in *every* smoker who happens to have a pimple on his tongue, which the pungent tobacco-smoke irritates? If this is his position, our inquiries into the causes of carcinoma have received an immense impetus. We fear, however, that our author means no such thing. No other interpretation can be put upon his words, however; and we therefore draw attention to the statement, in order that it may be either disavowed or more deliberately affirmed. We are far from saying that tobacco-smoking is at all times a wholesome habit, or one that can be indulged in with impunity by every individual. That it has an injurious effect upon the nervous systems of individuals out of health, and on those of a particular idiosyncrasy, there can be little doubt; but so also has tea. Indeed, we believe that green tea, universally adulterated as it is, has much more to answer for in producing nervousness than tobacco. Be that as it may, however, what we wish to insist upon is, that glaring exaggerations will never serve the truth; and we feel convinced that not one cigar the less will be smoked in consequence of the highly coloured statements of Mr. Lizars, to whom we would apply his own phrase with respect to tobacco, only a little altered—*Throw away exaggeration for ever.*

We shall return to this question.

TESTIMONIAL TO WILLIAM NEWNHAM, ESQ.

It is with feelings of the greatest pleasure that we are enabled to announce that it is proposed to make a public recognition of the services of the excellent and indefatigible founder and treasurer of the Medical Benevolent Fund. From the period of the establishment of the Benevolent Fund—"that jewel in the crown of our Association"—in the year 1835, Mr. Newnham has been, as is well known, its animating and guiding spirit. It is now proposed to purchase immediately, and present to Mrs. Newnham, the capital portrait of Mr. Newnham by Mr. James Andrews, which was exhibited last summer in the rooms of the Royal Academy. In order that the opportunity of paying this compliment to Mr. Newnham may be enjoyed by many, it has been determined that no subscription shall exceed one guinea. In carrying out this project, a Committee has been formed, consisting of the following gentlemen:—

Sir James Clark, Bart., *President of the Medical Benevolent Fund Committee.*
James Bright, M.D., *Secretary to the Medical Benevolent Fund Committee.*
Joseph Toynbee, Esq., *Assistant-Treasurer to the Medical Benevolent Fund Committee.*
Sir Charles Hastings, M.D.,
Sir John Forbes, M.D.,
John Churchill, Esq.,
} *Members of the Medical Benevolent Fund Committee.*

Sir John Forbes has kindly consented to act as Secretary and Treasurer of the Testimonial Committee; and it is requested that all subscriptions and inquiries be addressed to him, at 12, Old Burlington Street, London.

THE WEEK.

The Representatives of the different Universities and Colleges of Great Britain and Ireland have held several meetings during the week in the Council Chamber of the College of Physicians, at which the different provisions of the Medical Reform Bill to be laid before Parliament were agreed upon, with the single exception of the number of independent members to be nominated to the Council. We are given to understand that "the parties to the Bill" consider that, as the power of nomination is to be given to the Government, it would be only respectful to leave the numbers to be selected to its consideration. We state this much, in order that the associates may be placed in full possession of the present state of affairs. We leave the rest to the careful watching of the Reform Committee, which will, we doubt not, take care that the general interests of the profession are duly considered during the passage of the Bill through Parliament.

From intimations in the public press, we are led to believe that the subject of Sanitary Legislation will receive a good share of the attention of Parliament during the present session. One of the daily papers (the *Morning Post* of February 11th) says:—

"It is proposed, we learn, on an early day, to bring in a Public Health Bill, continuing the Board of Health for five years, and giving to it and to local boards powers for regulating in a sanitary point of view all that pertains to sewerage, the cleansing of streets, houses, and factories; the supply of water to towns, the police of slaughter-houses, the regulation of burials, the formation and maintenance of pleasure-grounds, and the management of public baths and washhouses. The Bill to be introduced will be in accordance with the recommendations of the Select Committee; and will, it is supposed, embody the results of valuable evidence and thoughtful deliberation."

We trust that the news may be true; and shall earnestly look for the appearance of the proposed Bill, in order that we may have an opportunity of making more extended comments on the important subject with which it deals.

The body of Mrs. Ann Bacon, mother of Thomas Fuller Bacon, at present in custody on the charge of murdering his two children, has been exhumed at Stamford, in consequence of a suspicion that her death, which occurred in May 1855, was caused by arsenic administered by her son. An inquest has been instituted, at which the fact that Bacon bought arsenic in Stamford at about the period of his mother's death, and other circumstantial evidence in support of the suspicion, have been brought forward. The viscera have been placed for analysis in the hands of Professor Taylor, who was present at the exhumation of the body. Pending his report, the inquest is adjourned till Wednesday next, the 18th instant.

A Meeting of the Committee of the Poor-Law Medical Reform Association, numerously attended by members from various parts of the country, was held at 37, Soho Square, on Tuesday last, R. Griffin, Esq., in the chair. Several letters were read from noblemen and other members of Parliament, expressive of their sympathy and willingness to cooperate with the Committee for an improved system of poor-law medical relief. The present position of the question having been considered, it was resolved to convene a general meeting of the union medical officers, and other members of the profession, to petition the Legislature for a redress of the grievances complained of. A sub-committee was appointed to frame a petition for presentation to the House of Commons, as well as one to be signed by the magistrates, clergy, and other ratepayers, who feel that the present system is unjust both to the poor and to the medical officers.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 27th, 1857.

Cæsar Hawkins, Esq., F.R.C.S., President, in the Chair.

ON DISPLACEMENT OF THE SCAPULA UPWARDS THROUGH PARALYSIS OF THE SERRATUS MAGNUS MUSCLE, AND CONSEQUENT RETRACTION OF THE RHOMBOIDEI, LEVATOR ANGULI SCAPULÆ, AND TRAPEZIUS MUSCLES. BY BERNARD E. BRODHURST, ESQ.

The author stated this to be a very rare affection. The patient was sixteen years of age, tall and robust. The right shoulder was two inches higher than the left; and the inferior angle of the right scapula was five inches higher than that of the left side. The postero-superior angle of the scapula projected immediately beneath the skin on the anterior surface of the neck, one inch and a half above the clavicle. Immediately above this point, the trapezius formed a thick prominent cushion. The serratus magnus muscle of the right side could not be distinguished even during forced inspiration. The motions of the right arm were limited—that is to say, the elbow could be raised only seven inches beyond a right line with the trunk, and violent movements of this arm occasioned pain, in consequence of the projection of the scapula. Paralysis of the serratus magnus muscle had been produced when the patient was two years old, by her being caught by the arm when falling from the arms of a relative. Weakness of the limb was observed soon after the accident; and in the course of some months the shoulder was observed to be unduly prominent. A weight of five pounds was fastened upon the shoulder, and this was subsequently increased to eight pounds, which was worn during several years. The rhomboid muscles, the levator anguli scapulæ, and portions of the trapezius muscles, were tensely retracted. These muscles were divided subcutaneously; and after the fracture had healed, pressure was made above the spine of the scapula, to endeavour to depress that bone. This was so far successful that the normal position of the scapula was in great measure regained, the motions of the shoulder were rendered more free, and pain on motion was entirely removed.

Mr. Lonsdale did not agree with the author as to the rarity of paralysis of the serratus magnus muscle. He had previously seen cases of the kind; and others were quoted by Dr. Laycock, in his work on the *Nervous Diseases of Women*. He believed the elevated position of the scapula depended a good deal on curvature of the ribs at the upper part of the thorax, the existence of which was indicated by the cast, which showed a convexity on one side, and a concavity on the other, with a marked spinal curvature existing also. The success of the operation he would not dispute, not having seen the patient.

FIVE CASES OF TRACHEOTOMY IN CROUP, WITH REMARKS ON CERTAIN POINTS CONNECTED WITH THE OPERATION. BY HENRY WM. FULLER, M.D., F.R.C.P.

The author began by narrating the particulars of five cases of inflammatory croup, for the relief of which tracheotomy was performed in St. George's Hospital. In each instance, the operation was deferred until the last stage of the disease, when every remedy had failed, and death was imminent. In two of the cases, the operation was successful in saving life; in three, it failed of its object. Four of the patients coughed up a considerable quantity of mucus or false membrane through the artificial opening, and received immense relief from the operation; whilst the fifth was nearly moribund at the time of its performance, and expired almost immediately afterwards. Dr. Fuller remarked, that the success thus obtained is highly satisfactory; and that, unless these recoveries are quite exceptional, tracheotomy ought to be had recourse to when other remedies have failed. He admitted, however, that the inferences derivable from such a limited number of cases are not of themselves sufficient to determine the propriety of the operation, and he therefore proceeded to discuss the question generally, and endeavoured to bring together such facts as should lead to a decision—1st, as to whether the operation of tracheotomy is justifiable in any case of croup? 2nd, if so, under what conditions, and at what stage of the complaint? 3rd, whether the existence of certain symptoms or other circumstances ought not to cause us to hesitate in recommending its performance? 4th, whether any, and what, medical treatment is necessary after an opening has been made into the trachea? With a view to a correct appreciation of the subject, Dr. Fuller began by referring to the difference existing physiologically and pathologically between idiopathic inflammatory croup and the diphtheritic form of the disease which commonly prevails in France, and he pointed out that the objection usually urged against French statistics of tracheotomy in croup—viz., that diphtheritic cases are much more favourable for the performance of the operation than are the croup cases usually met with in this country—has no foundation in fact. He called attention to the circumstance that diphtheritis is often accompanied by glandular swellings in the neck and œdematous fulness of the throat, whereby the operation is rendered much more difficult than in inflammatory croup; and that the type of the accompanying fever is so low as often to destroy life, quite independently of any affection of the air-passages. He then proceeded to show, by reference to 483 cases in which tracheotomy has been performed for the relief of croup in France, that the operation has proved eminently successful in the hands of French surgeons; and he reminded the Society that, inasmuch as the condition of the throat externally, and the nature of the accompanying fever in diphtheritis, are by no means favourable to the operation, the success which has attended it can be explained away only on the supposition, often put forward by English writers, that in France the disease seldom extends into the trachea and bronchi, and is rarely accompanied by bronchitis or pneumonia. The fallacy of this supposition he then proceeded to demonstrate by reference to the writings of French authors, and to the recorded results of the *post mortem* investigation of 311 fatal cases of croup in France, and he showed that in regard to its pathological effects, diphtheritis, when accompanied by croupal symptoms, does not, as compared with inflammatory croup, present any greater prospect of success for the operation than it does in the character of its accompanying fever, or the condition of the throat externally. Having thus established the success of the operation in the hands of French surgeons, and the absence of any special cause for that success, Dr. Fuller proceeded to inquire into the circumstances which have led to the disrepute of the operation in England. These he traced to theoretical objections founded on the pathological results of the disease, to the almost unanimous and unqualified condemnation of the operation pronounced by successive English writers, and to the ill success which had attended the operation in the few cases in which it had been practised prior to the publication of their respective works. He insisted, however, that theoretical objections are of little value as compared with the results of practical experience; and he therefore appealed to that source for information on the subject. He showed, by reference to statistics derived from the Hôpital des Enfans Malades at Paris, that whereas, out of the first 100 cases operated on at that institution, one only recovered, a more extended experience in the mode of performing the operation, in the precautions requisite to ensure success, and in the carrying out of the necessary after treatment, has led, since 1850, to the saving of 47 out of 215 cases; or, in other words, to the rescuing from death of nearly one out of every four patients. He argued thence against those persons in this country who condemn the operation simply because it is opposed to their preconceived notions, or has proved unsuccessful in the few instances of which they are personally cognisant. Further, he showed that, even in Great Britain, the recorded results of the operation afford a fair amount of success. Twenty-two cases only have been recorded in England, and in no less than eight of these life was saved by the operation; and, although doubtless many unsuccessful cases have occurred which have not been placed on record, still Dr. Fuller argued that, if life can be saved by operative interference, even in a small proportion of instances, the chance afforded by the operation ought not to be withheld where all other means have failed, except under some peculiar circumstances. Dr. Fuller next proceeded to dispute the propriety of having recourse to tracheotomy at an early stage of the disease. He showed that patients, in the second stage of croup, will sometimes recover under proper medical treatment, even when those symptoms appear to be desperate; and, on the other hand, that the theoretical objections commonly urged against deferring the performance of tracheotomy until the third stage of the disease, have no foundation in fact. In proof of this, he appealed to the results of the five cases which have fallen under his own observation at St. George's Hospital, as also of many of the other cases on record; and, further, to the corroborative evidence afforded by the recent change of opinion evinced by MM. Trousseau, Bretonneau, and others who formerly were most zealous in their advocacy of an early per-

formance of the operation, and who now defer it until a much later stage. Dr. Fuller condemned the indiscriminate performance of tracheotomy in croup. So much danger and difficulty attend the operation, even in favourable cases, that he considers it almost necessarily fatal if the patient is of very tender age, or has been out of health prior to his attack of croup; if his illness has been preceded by pneumonia or severe bronchitis; if he is suffering from exanthematous or other disorder; and, further, if he is in such a position of life that his parents are unable to secure for him proper skilled attendance night and day. He spoke of the gradual sinking sometimes observed in fatal cases, many hours after the operation, whilst all the symptoms are progressing favourably, as analogous to the sinking which occasionally takes place, under similar circumstances, in persons who have been partially asphyxiated; and he attributed it in part to pulmonary collapse, and in part to nervous exhaustion consequent on the long continued struggles for breath. He referred to the use of tracheal tubes of too small a calibre, or of improper construction, as one great cause of the failure of the operation; and, as another, to the neglect of proper after treatment, or to the administration of improper remedies. He pointed out that, in almost all the fatal cases on record, wine and brandy had formed the chief, if not the sole, medicaments; whereas, in almost all the successful cases, calomel, antimony, and the measures which are considered useful before the operation, were steadily persevered in afterwards; and he called attention to the fact, that the depression which accompanies the last stage of the disease, in which alone he recommends the operation, is the depression of asphyxia, which is to be relieved by the free admission of air, and not by the administration of stimulants. He recommended that the trachea-tubes be made somewhat larger, shorter, and less curved than those in common use; that the outer canula be shorter than the inner one, and that both be of the same diameter from one end to the other, but that the outer one, instead of being made of one piece as at present, should be divided longitudinally into two blades, flattened towards their inferior extremity, so as to come into close apposition, and to admit of easy introduction into the trachea. These blades should be made to open like the blades of a dilating bivalve speculum, so as to admit, when fully expanded, an inner tube of uniform diameter throughout. This arrangement could not only conduce to keeping the inner tube clear of mucus, but would render serious obstruction to the respiration well nigh impossible, inasmuch as, if the inner tube were to be clogged in any way, and the extremity of the outer canula were to be also choked with mucus, the chink existing between its expanded blades would provide a free passage of air immediately on the withdrawal of the inner tube.

Dr. West wished to set Dr. Fuller right upon one point in his paper, from which it would appear that he (Dr. West) was altogether opposed to the operation of tracheotomy in cases of croup. In his lectures, he had advanced certain facts to show why the operation was more successful in France than in this country. He had said that the objections to the operation advanced by Dr. Cheyne and others were not satisfactory. He had further said, that amongst other causes of the non-success of the proceeding was the neglect of precautionary measures, and the inattention to the administration of medicine and to the preservation of an equable temperature both before and after the operation. Still, his own experience was not favourable to the proceeding. Ten cases had been operated on under his immediate superintendence, and in no instance was the operation followed by a good result. In all these cases it had been resorted to sufficiently early—that was, before the patient was in such a condition that death was imminent from the disease; and was skilfully performed. The patients were placed in a favourable position in regard to temperature, had the advantages of the attendance of a special nurse, and every attention was paid to them. With regard to the size of the canula to be employed, similar remarks to those made in the paper had been also advanced by M. Trousseau. He had instanced a person breathing through a quill placed in the mouth. At first, the breathing was easy; but the supply of air soon became inadequate; and it was necessary to throw the quill away, and to take in a sufficiency of air to support respiration. M. Trousseau had insisted upon the necessity of a large canula, and with this opinion he (Dr. West) concurred. The last publication of M. Trousseau indicated that his opinions had undergone a change in reference to this operation. He would not now resort to the proceeding so frequently nor so early, but would limit it to those cases which Dr. Fuller had indicated as proper for the operation—namely, in the latter stages; and in this opinion he (Dr. West) agreed. He still thought that cases of diphtheritic inflammation extending to the larynx were more favourable to the operation than cases of true croup; for in the first the mischief travelled downwards, whilst in croup there were usually complications, such as bronchitis, etc. In most cases of croup, the symptoms were ushered in with catarrh and fever, and the laryngeal symptoms went on *pari passu* with these. Of thirty cases of croup which he had examined after death, in by far the larger number of cases the disease was not limited to the trachea or larynx, but the larger and even smaller bronchi had become affected, and in some instances the substance of the lung itself was diseased. These symptoms, he believed, went on in spite of the temporary relief afforded by tracheotomy. Notwithstanding all these drawbacks to the operation, and the general non-success of its performance in England, he should still recommend it in a large proportion of such cases as those indicated in the paper of Dr. Fuller.

Dr. Webster remarked, that in all the boys mentioned by Dr. Fuller, and on whom tracheotomy had been performed, the operation proved unsuccessful; whereas, the two cases which recovered were girls, aged five years and upwards. This coincided with the ordinary termination of croup, which was usually most fatal in patients from two to three years of age and under; besides being oftener followed by death in male than in female infants. Dr. Webster believed these circumstances influenced considerably the success of tracheotomy in croup. The author had quoted also an expression implying that croup was not very common in Paris. This he thought erroneous. The disease prevailed very frequently in that capital, the mortality thereby being double the ratio of London, although recently it had been much more fatal here than ten years ago. In France, tracheotomy was oftener successful than in England. This, Dr. Webster considered, partly arose in consequence of the operation being generally performed at an earlier stage; as also, he could not help believing, from some of the cases being instances of diphtherite. When at Tours, several years since, he had heard read an important paper, by M. Bretonneau, strongly advocating tracheotomy, and speaking of its marked success in croup; but, since then, that celebrated practitioner, it was said, had somewhat modified his opinions. Still there was no question that opening the windpipe in tracheal diseases was more commonly employed in France than in this country, and with better results.

Dr. Fuller was glad to know that the opinions of Dr. West substantially coincided with his own. He still thought, however, that the opinions which had been expressed by eminent authorities against the operation, had made practitioners hesitate to resort to it. These opinions had influenced himself, and in the first case, as related in the paper, he was induced to resort to the operation, upon the remark of a bystander that it was the only chance for the patient, and that he must inevitably die unless this proceeding were resorted to. He (Dr. Fuller) agreed with Dr. Webster as to the difficulty and danger of performing the operation on very young children—difficulties which arose from the fits of dyspnœa which come on, and from the necessarily small size of the canula which must be used. The great number of successful cases in England were performed on children from four to seven years of age.

MEDICAL SOCIETY OF LONDON.

Saturday, January 24th, 1857.

W. D. Chowne, M.D., President, in the Chair.

INSUFFICIENT SIZE OF THE OPENING IN TRACHEOTOMY.

BY EDWARD SMITH, M.D.

Dr. Edward Smith drew attention to the insufficient size of the opening usually, or perhaps invariably, made in tracheotomy. He thought it very probable that the ill success of the operation might in part be attributable to that circumstance. In many cases there is constant relief afforded on the opening having been made, and then soon afterwards that relief disappears; and he accounted for it by showing that when the glottis was very nearly closed, as is commonly the case before the operation is performed in this country, any additional volume of air, however small, would afford relief; but unless that volume were nearly as large as that commonly passing through the healthy glottis, it would be insufficient to sustain life. It would not be a material circumstance if the glottis were not quite closed; for the presence of the tracheotomy tube in the trachea would so impede the passage of air

through the glottis, that probably no air would enter the bronchi but that passing through the artificial opening. The size of the opening should therefore be that of the glottis; but since the area of the glottis constantly changes with respiratory movements, it cannot be estimated and taken as a guide. The trachea, however, has a tolerably constant size, and must have an area corresponding with that of the glottis above and the bronchi below, and thus it may be taken as a safe guide for this purpose. In an adult, therefore, he would recommend that the clear opening should not be less than five-eighths of an inch, and in a child not less than three-eighths to half an inch, according to its age. In an adult it must be competent to pass twenty to thirty cubic inches, and in an infant of two years old from twelve to fifteen cubic inches at each inspiration. If the area of the opening be less, then the patient would not live, although the operation might be very proper, and fitted to succeed with a large opening.

THE MEDICINAL EFFECTS OF AMMONIA AND ITS PREPARATIONS. BY T. OGIER WARD, M.D.

Ammonia had never been considered to be a normal constituent of the blood, as its presence had not been detected except after death in cases of typhus, cholera, melæna, and other diseases of a putrid character, until Dr. Richardson's recent discovery that healthy blood owes its fluidity to the presence of ammonia, which is given off during its coagulation, which process may be arrested, and the fibrine re-dissolved, by the restoration of the alkali. An interesting inquiry here suggests itself: how does the ammonia escape from the body during the coagulation of the blood, and how is it retained in those instances in which the blood remains fluid after death? Assuming the truth of Dr. Richardson's views, Dr. Ward had examined and compared the therapeutic effects of the various preparations of ammonia. He had found that, whether applied externally or taken inwardly, they possess in common the property of dissolving the proteine elements of the blood, whether in the vessels or effused into the tissues. This similarity in the effect of ammoniacal medicines is owing to their ready decomposition, the ammonia being separated, and forming the chief curative agent, though it is aided by the other substances originally combined with it. Thus its stimulant and solvent action is similar in kind, if not in degree, when used either externally or inwardly in the form of gas, liquor ammoniæ, or combined with carbonic acid, etc. From the utility of these preparations in the treatment of venomous bites and stings, inflammatory swellings, diphtheritis, croup, etc., we may suppose that they will be equally efficacious in urticaria, erythema nodosum, and erysipelas, in which there is an effusion of the fibrinous elements of the blood. In these and other inflammatory diseases and conditions, it is probable that the benefit of the salts of ammonia is owing to their preventing or removing the effusion of fibrine from the inflamed parts. In this way, although the primary action of ammonia is stimulant, its remote effects are sedative or debilitant, as it not only arrests inflammatory action, but, by its resolvent and secernent power, carries the products of inflammation out of the system, and hence its utility in all active febrile complaints. It is to this attenuating property that its use as an antidote to drunkenness and to the stupor of opium is to be ascribed. Its stimulant powers are of use in poisoning by hydrocyanic acid, in the cold stage of ague, and in the retrocession of gout, rheumatism, and the exanthemata, as well as in syncope, hysteria, epilepsy, and convulsions. The hydrochlorate, which is the least easily decomposed, is probably the most useful of the salts of ammonia, as it not only possesses the stimulant, resolvent, and secernent properties of the others, but owing to its combination with chlorine, is endued with tonic powers, by which its prolonged use, unlike that of the other preparations, it attended with invigorating effects both to mind and body; and thus it forms an excellent substitute for mercury in cases where this medicine is inadmissible from its tendency to produce cachexia.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 6th, 1857.

J. M. Arnott, Esq., President, in the Chair.

ABDOMINAL ORGANS CONNECTED TOGETHER BY COLLOID AND ENCEPHALOID DISEASE, ASSOCIATED WITH SCIRRHUS OF THE PYLORUS. BY W. O'CONNOR, M.D.

The parts were removed from a man, aged forty-six, a native of Milan, by trade a picture-frame maker, who was admitted into the Royal Free Hospital on the 20th of October last. When first seen, he complained of severe pain in the epigastric region, rather to the right side, with oppressed and difficult breathing, the abdomen was swollen, and he was slightly jaundiced. The pulse was small and frequent—110 in a minute. The patient was rather thin, and had an anxious expression of countenance. On examination of the chest there could not be detected any evidence of disease of the lungs or heart. On the 23rd the symptoms were very much relieved by the treatment adopted, which consisted of purgatives, composed of compound powder of jalap and calomel (the bowels being very much confined) and diuretics, with hydrocyanic acid and sesquicarbonate of soda. On the 30th the symptoms became more urgent, the pain in the epigastrium was excruciating, and there was general dropsy, with jaundice. Mild mercurial treatment, with moderate purgatives and diuretics, together with a blister to the painful part, were had recourse to; and by the 7th of November the dropsy and jaundice entirely disappeared, the only symptoms existing were pain in the epigastric region, but to a trifling extent only, and tenderness on pressure to the left of the umbilicus. The great size of the abdomen being now reduced, on a careful examination a hardness was felt occupying nearly the whole of the epigastric region, extending from the under surface of the liver to the left hypochondriac region, from thence descending to and filling up the left iliac fossa. On inquiry, it was found that the patient had suffered more or less for nearly two years, from severe pain in the epigastrium, with frequent attacks of nausea and retching, and that he had once before had an attack of jaundice. He was, during these attacks, alternately an out-patient at St. Bartholomew's Hospital, and under the care of Mr. Pollock, of Hatton Garden. Mr. Pollock attended him some months back for an enlargement of the right testicle, which ultimately did well. Dr. O'Connor now viewed the case as one of malignant disease, which he supposed to be primarily connected with the stomach, and from thence extending throughout the abdomen.

On the 18th of November, the patient complained of more severe pain all over the abdomen, intense and frequent thirst, constant retching, pain, and starting of the left lower extremity; the pulse was 140; the urine scanty, and loaded with urates; the tongue furred, skin hot, and the bowels constipated. Effervescing medicines, with anodyne fomentations and mild purgatives, and afterwards anodynes internally, were had recourse to with benefit. In a few days the patient vomited a quantity of fœtid purulent matter free from fæces and the coffee-ground character usually present in these cases. The urgency of the symptoms was now very much lessened: the enlargement in the left iliac fossa became less, and the starting and painful condition of the left lower extremity nearly disappeared; the tongue was clean, and the urine was clear and abundant. On further examination of the abdomen, nodulated masses could be felt distinctly over the whole of it. The retching became more frequent, and nothing could be retained on the stomach; even a teaspoonful of cold water or a little ice gradually dissolved in the mouth was rejected as soon as it reached the stomach, and it was necessary to sustain the patient by enemata of brandy and beef-tea. During this time there was frequent vomiting of the same purulent matter as before. In this state the patient continued until the 16th of December, when he died a mere skeleton.

A *post mortem* examination was made thirty-six hours after death. Nodulated masses could be distinctly felt through the abdominal walls. On opening the abdomen, which contained about three pints of serum, and reflecting the parietes, the following structures presented themselves, as seen in the model and drawing, from above downwards. The thickened diaphragm; the ensiform cartilage displaced upwards, and to the right side; a small portion of the left lobe of the liver; a nodulated mass in the situation of the omentum, concealing all the other structures, excepting the left iliac fossa, where a small portion of the sigmoid flexure of the colon touched the abdominal parietes. The reflected parietes presented nodules of colloid cancer. The organs of the abdomen were removed *en masse*, being all connected together by a large apparently colloid and encephaloid growth. Their relations to each other were altered in various ways by pressure of the growth, which had not infiltrated their structure. Thus the pyloric extremity of the stomach was dragged down, so that the longitudinal axis of that organ was more vertical than usual. When opened and viewed posteriorly, a large mass of cancer was seen, the central portion of which was scirrhus and the peripheral portion colloid. The mucous membrane of the pylorus was to a small extent destroyed. At this part there was a very small opening, which appeared to be recent. The peritoneal

surface of the stomach presented nodules of colloid, but the mucous membrane was entire, except at the pylorus. The liver, especially the right lobe, was much compressed by the diaphragm, which was itself much thickened, throughout its entire extent, by a layer of cancerous deposit; this layer had not superseded the muscular and tendinous structure of the diaphragm, although, from pressure, it would appear that the muscular portion was atrophied. The right lobe of the liver reached up to nearly the third rib. The inferior cava and hepatic duct were surrounded and compressed by the general mass, and the gall bladder was therefore much engorged. The structure of the spleen was condensed from pressure of the surrounding cancer, which had encroached into the hilus, with which it accurately corresponded; but the interior of the spleen was free from cancer and otherwise healthy, excepting two buff-coloured spots, the nature of which could not be made out. The kidneys and suprarenal capsules were healthy, but the latter were compressed and atrophied. The pancreas was identified with the general mass, which extended downwards throughout the omentum; and the transverse colon lay in a groove surrounded, but not infiltrated, with cancer. The remaining portion of intestines, large and small, were free and unobstructed; but a few convolutions which lay across the lumbar vertebra were reduced almost to the size of a quill. The bladder was healthy, and so were the lungs and heart, but the veins of the latter were very turgid. On microscopical examination, the growth proved to be made up of schirrus, colloid, and encephaloid.

Dr. O'Connor observed that there are two cases recorded in the "Transactions of the Pathological Society of Dublin," one by the late Dr. Greene and the other by Dr. Lees, very much resembling the case brought forward by him. In Dr. Greene's case, however, there was no retching or vomiting until about ten days before death, when a coffee-coloured fluid was thrown up; but there was ulceration of the stomach. The patient had been complaining nine months. In Dr. Lees's case the patient had complained only for five weeks; there was no pain or tenderness on pressure; there was frequent vomiting, but no ulceration of the mucous surface of the stomach. In the current number of the *Glasgow Medical Journal* there is a similar case recorded by Dr. J. Bell, occurring in a woman thirty years of age, who died in eight months after the first symptom was complained of. In Dr. Bell's case, besides the pylorus being a mass of scirrhus, and the omentum being also attacked, the cancerous matter infiltrated some of the abdominal organs.

Dr. Brinton said he had examined portions of the diseased masses of these specimens. The yellow, transparent, jelly-like, and tremulous nodules which occupied the peritoneum, had all the characters of colloid or alveolar cancer—consisted, that is, of a sparing, delicate fibrous network, enclosing in its meshes cells of equal delicacy. Some of these cells contained highly-refractive (oil?) globules; a few, pigment; many, cytoblasts. The stomach offered appearances which were interesting as an example of a condition which he (Dr. Brinton) thought was not uncommon, and sometimes led to ambiguity of description. Though offering to the naked eye all the characters of scirrhus, the pyloric disease was shown by the microscope to possess much of the structure of colloid, differing from the colloid present in the peritoneum chiefly in the larger quantity of fibrous network between its cell-growth—a complication of the two varieties of cancer which, in some degree or other, was rarely absent from the later stages of these gastric cancers of rapid growth. The diaphragm seemed affected chiefly by its peritoneal covering sharing in the general involvement of this serous membrane; and it was difficult to avoid conjecturing that such a wide spread of the colloid deposit was often brought about by the effusion of a cancerous juice into the peritoneal cavity. The striking immunity of the liver, as well as that of the lungs, kidneys, and other organs, appeared, from his researches, to be rather favoured by diffuse secondary deposits in the peritoneum, like that seen in this case.

Extensive Invagination of the Small and Large Intestine: Post Mortem Destruction of the Posterior Wall of the Stomach by the Gastric Juice. By J. H. Baller, Esq.

The subject from whom this specimen was taken was a female infant, aged six months. She had been fed at the breast entirely until the last week of her life, during which she had daily eaten some bread-and-butter. She had never had diarrhœa or taken any aperient medicine, the action of the bowels having always been regular and natural. On the evening of December 30th she was suddenly seized with vomiting and apparently great pain, which continued, but appeared to become easier during the night. Mr. Baller first saw her about noon on the following day; she seemed then to have pain in the abdomen, vomited occasionally, and passed frequently a small quantity of blood-stained fluid from the anus, but no fæces whatever. The symptoms continued, with little variation, for four days, although the pain seemed to have been modified, probably by the opiate enema which was used daily. On the 3rd of January a larger enema was administered, containing some olive oil and two drachms of castor oil, which, according to the nurse's report, was succeeded by ten stools. There certainly was a little feculent matter on some of the napkins shown to Mr. Baller, and now no blood, but some transparent and glairy mucus. The skin was pale, and the countenance exhibited distress. There was much tenesmus. Death occurred on the morning of January 4th, being the fifth day of the illness. The peritoneum contained a few drachms of brownish serum; the bloodvessels of the small intestine were much congested, the intestine being distended with air. The cæcum could not be discovered; but, on tracing the small intestine, the ileum was found to terminate in the descending colon. The latter was much puckered, and, together with the rectum, was distended to within two inches of the anus, with a volvulus consisting of a portion of the ileum and the whole of the superior part of the large intestine. The volvulus was of a very dark colour, from congestion; and the presenting portion afforded to the top of the finger the same sensation as the adult os uteri. The posterior wall of the greater curvature of the stomach was reduced to a soft gelatinous state, and it allowed the contents of the organ, about three ounces of partially digested milk, to escape on the first attempt to raise it from its position.

Hydatid in the Anterior Chamber of the Eye of a Horse. By J. Hutchinson, Esq.

The eye had been forwarded to Mr. Hutchinson by post in an unopened state, and without any note of explanation as to who had sent it, or whence it had been obtained. It was quite fresh, and showed, on section, a most interesting condition. The cornea was thickened and opaque; the vitreous humour was yellow, and of the consistence of syrup, running out when the sclerotic was divided: the retina was detached, and hanging in folds; the lens was hard, and of a yellowish-brown colour. The eye, in fact, although retaining its natural shape, etc., was completely disorganised. The cause of this mischief seemed to be found in the presence in the anterior chamber of an hydatid cyst. This cyst, which consisted of two concentric laminæ of beautiful translucency and extreme thinness, occupied the whole of that chamber, and pushed back the iris. Around its lateral margin it was in several parts firmly united to the adjacent textures. Its contents were a clear fluid and some portions of a solid material resembling isinglass. A careful microscopic examination had failed to detect either echinococci, or that lamination of the cyst-wall which is characteristic of the echinococcous hydatid. Surrounding this outer hydatid cyst, in every part, was a tough membrane—thick and corrugated in parts, in others thin and flexible—which appeared to be the inflamed and thickened membrane of the aqueous humour. It accurately lined the whole of that chamber, and was adherent at its circumference to the ciliary ligament; passing in front of the iris, it dipped through the pupillary aperture to become united to the capsule of the lens. The posterior chamber was so much obliterated by the pushing back of the iris, that it was impossible to say whether or not it were also lined by the membrane alluded to. Mr. Hutchinson adverted to the improbability of this membrane having resulted from inflammatory changes, although in a lost eye such a mode of production must be admitted to have been possible. He thought the specimen militated very strongly against the opinion held by Mr. Bowman and others, as to the non-existence of the membrane of the aqueous humour, and in support of that of the older anatomists.

The specimen was referred to Mr. Haynes Walton, to report upon to a future meeting.

Right Direct Inguinal Hernia. By John Birkett, Esq.

A male, aged 81, had been the subject of strangulated bowel about seventy-two hours, when Mr. Birkett was called upon to relieve the constriction by operation. He died of acute peritonitis. He had been ruptured for about eight or nine years, according to his statement. The preparation exhibited the characteristics of this variety of hernia very distinctly.

The protrusion extended into the scrotum, the external abdominal ring. The spermatic cord was attached to the outer and inferior border of the tumour, just before it traversed the external ring. The fibres of the cremaster muscle, the conjoined tendons of the internal oblique and transversalis muscles, and the pubic portion of the fascia transversalis assisted to form the coverings of the peritoneal sac. The neck of the sac, viewed from within, was about one inch and a half to the inner side of the internal abdominal ring, and half an inch inside the course of the internal epigastric artery.

Editor's Letter Box.

ENCOURAGEMENT OF HOMŒOPATHY BY LEGITIMATE PRACTITIONERS.

Letter from James Long, Esq.

Sir,—The letter of Mr. A. G. Field in the British Medical Journal of the 3rd ult., in reference to the above subject, accords so much with my ideas in most of the points which he has so ably brought forward, that I have determined, now that the subject has rested for a time, to inform Mr. Field, and through him, those who wish to know the truth of the matter, the circumstances which led to the letter which appeared from Mr. J. R. Humphreys, dated December 3rd, and to the editorial remarks thereon, in the journal in which Mr. Humphreys' letter appeared. I do not find fault with the facts stated by Mr. Humphreys so far as they were known to him, nor yet with the conclusion he might feel disposed to draw from them, but the latter part of his letter indisposed me to enter into any explanation to him, and the editorial remarks founded upon his letter decided me not at all events for a time to give any explanation.

In Mr. Humphreys' letter, a surgeon in Shrewsbury, with whom I am on terms of intimacy, and for whom I have a great esteem, is alluded to: as his name has not appeared in connexion with this subject, and as I shall have occasion to allude to him, and as I conceive I have no right to bring any man's name unnecessarily forward, I shall throughout this statement call him Mr. A.

On the 25th November, just before I left my house in the morning, the following telegraphic message arrived. George Wilkin, Shrewsbury, to James Long. "Can you come this evening to see Mr. Corbet, Sundorne Castle, if required; a surgical case." I telegraphed back, the boy waiting for an answer: "Yes. State what hour, and nature of case." Between five and six in the evening, the following message arrived: "Leave landing stage at 7.20, here by ten. Sleep at Sundorne. Abscess and phagedenic ulcers of heel."

At the time when I received and replied to this message, I had no recollection who George Wilkin was, but in the course of the day was reminded by one of my family that he was the Dr. Wilkin with whom I had been acquainted in Liverpool, and was now settled in Shrewsbury; he had some years ago, in conjunction with Mr. A. of Shrewsbury, assisted me to remove a scirrhous breast

Arriving at Shrewsbury between ten and eleven, I found Dr. Wilkin waiting for me with a car; on our way to Mr. C.'s, a distance of about four miles, I received further information about the case, and on inquiring if I were to meet Mr. A., which from the circumstance just mentioned I had anticipated, he informed me that Mr. A. had been requested to meet him, but had refused, on the ground that he was a homœopathist, which he was not. That Mr. C. had, from circumstances which it is unnecessary to specify, taken a strong prejudice against medicine; that he had been treating him almost entirely on dietetic principles; that the case required, in its present state, the superintendence of a surgeon; and as the family could not obtain the serviees of Mr. A., they had sent for me.

This led me to remark that I regretted to find myself in such an unexpected position, especially as regarded a gentleman for whom I had a regard and esteem, but as it was too late to recede, I should now, independently of him (Dr. Wilkin), after seeing the case, do what I thought right, and give an unbiassed opinion upon it.

On arriving at the house, I made the same statement to Mr. C. and other members of the family; and to the remark, that Mr. C. had a strong prejudice against medicine, I replied that, unless my views were in all respects acted upon, I should decline interfering or taking any responsibility in the case. I saw Mr. C., and found him weak and excitable, his nervous system much shaken, with an irritable ulcer on the heel, and sinuses running in various directions. These I laid open, applied a large poultice, recommended the diet (which was a generous one) to be continued, and prescribed bark and nitro-muriatic acid. On adjourning to the drawing-room, I explained that, whatever might be the feeling respecting medicines, or their notion about homœopathy, this was obviously no case for it; and I had a reasonable hope, now that the sinuses were laid open, the generous diet, aided by what had been prescribed, would lead in a short time to a favourable result. Mrs. C. then read me a portion of a letter (the second, I believe, received from Mr. A.), in which, so far as I recollect, it was stated that, being President of the Medico-Ethical Society of Shrewsbury, he could not meet Dr. Wilkin as a homœopathist. I gave my full approval to the sentiments expressed in that letter, and pointed out the impossibility of Mr. A., if he considered Dr. Wilkin to be a homœopathist, meeting him in consultation. I suggested that Mr. A. might meet me, for I neither approved of of nor practised homœopathy. I urged this point so strongly, that I was styled Mr. A.'s advocate.

This suggestion was declined, partly on the ground that this step would involve the dismissal of Dr. Wilkin, in whom, from his kindness and attention, the family had the greatest confidence;—a step, moreover, which they felt assured would not, with the feeling entertained by Mr. A. to him, be submitted to. Dr. Wilkin, I may here remark, was in constant attendance upon Mr. C., slept in the same room with him, was at once nurse and medical attendant, and appeared, so far as I could judge, to be treated as one of the family.

I returned to Liverpool between six and seven the following morning; and, a few days afterwards, fearing, as the time I had spent in the house had been so short, that my views might not be properly understood or carried out, I wrote a letter explaining fully the nature of the case, and urging the necessity of giving the medicine I had ordered; stating that, if the acid disagreed, the chlorate of potash was to be substituted for it; that I feared, unless plenty of support were conjoined with the medicine, we might find purulent deposits occurring elsewhere.

On the 2nd and 3rd of December, so far as my recollection serves me, I received other telegraphic message, stating that matter had formed in the hand. On both occasions, I telegraphed back that I was so circumstanced that I could not possibly attend. On the 4th, I received a most pressing message, urging me to visit Mr. C. without delay. I did so. I found matter in the palm of the hand, on the dorsum, and in the fingers: these I laid open. I found, moreover, an abscess on the lower part of the calf of the leg: this was laid open also. The heel was nearly well: the general symptoms were worse. The case was now clear enough; its nature was fully explained, and its probable issue predicted. I found that Mr. C. had taken the medicine prescribed for a time, but had declined to take more of it. I ordered quinine. I left, as before, early on the following morning (Thursday), having previously agreed, at the request of the family, to visit him on Saturday, and, if necessary, to remain in attendance upon him until Monday morning.

On arriving at the Shrewsbury station on Saturday night, and learning from Dr. Wilkin that Mr. C. was not so well, after ascertaining from Dr. Wilkin that the family would approve of it, I telegraphed to London for Sir B. Brodie, or in case he could not come, to send Mr. Fergusson. This procedure met with the entire approval of the family, to whom I stated that after the unfavourable view I had taken of the case, I could no longer grapple with it single handed. Mr. Fergusson arrived on Sunday night. Matter had now formed in the calf of the leg higher up, and in the thigh, and Mr. C. was obviously sinking. Mr. Fergusson was requested by me to state to the family whatever he had to say upon the case, without either Dr. Wilkin or myself being present. What he did say, or how he said it, I don't know, except that he gave the family to understand that the case was a hopeless one. The rest is soon told. I left as before, between six and seven on the following morning, Mr. Fergusson, I believe, at eleven, and poor Mr. C. died at four p.m. On Sunday I went to Shrewsbury to see Mr. A., but found he had gone into the country to a considerable distance. I left a note stating my regret at not seeing him, informing him at the same time of Mr. C.'s hopeless condition.

On the 12th of December I received a Shrewsbury paper, containing the paragraph quoted by Mr. Humphreys in the Journal of the 10th of January: this was accompanied by a

letter from Dr. Wilkin, in which he stated that he knew nothing of that paragraph until his attention was directed to it: that he trusted I should think little or nothing of having my name associated with homœopathy in my attempt to save life. In concluding his letter, he adds, "Homœopathy I have nothing to do with; as a man, and responsible for my acts and deeds, I do what I conceive right." I fear the foregoing statement may appear unnecessarily and tediously long; but having decided to bring the case before the profession, I have felt anxious to do justice, not only to myself, but to all parties interested in it. Those only can judge of the feeling it has excited in the neighbourhood of Shrewsbury who know the value of the gentleman who is the subject of it, and the esteem in which he was held. I think the feelings of a family who have sustained so great a loss should receive some consideration; and I trust the statement I have made will set the matter at rest. I might, on some points, have entered more fully into particulars, but I have been anxious throughout to do unto others as I would that they should do unto me.

I think, notwithstanding that appearances were so much against me, and that those appearances were strengthened by the statement in the *Shrewsbury Chronicle*, you will now feel satisfied that I neither approve of, sanction, nor practise homœopathy; and that I neither went to meet a homœopathist, nor approved of homœopathy, nor consulted with a homœopathist; in fact, there was no consultation in any sense of the word; and I believe most conscientiously that whatever course Dr. Wilkin may pursue in other cases, that in this case he was not accessory, either directly or indirectly, to its fatal issue.

I am, etc., James Long.

3, Hardman Street, Liverpool, February 2nd, 1857.

ON THE AMOUNT OF MORTALITY FROM CHLOROFORM.

Letter from James Arnott, M.D.

Sir,—There have been published lately, in the British Medical Journal, two papers on the mortality from chloroform, animadverting upon certain opinions which I have expressed on the subject, and which were inferences from extensive statistical inquiries. I trust you will give me the opportunity of offering some explanation.

The first of these communications contained a return of the mortality amongst the whole of the surgical cases, for certain periods before and after the introduction of etherisation, in St. Bartholomew's and Guy's Hospitals. As there appeared little difference in this respect between the two periods, it is inferred that chloroform could not have affected the mortality after certain operations in the manner I have stated. But I conceive it impossible to form an accurate judgment on the question from such generalities; for chloroform might prove fatal in half the number of capital operations, and yet a decrease of the mortality of the whole number of the surgical cases in these large hospitals be shown, in consequence of improvements in their general management, or in other departments of surgery. The only practicable mode of settling the question is to confine the comparison to the operations specified.

The other paper professes to give a list of the deaths which have occurred during and from the administration of chloroform, or from its immediate effects. As I conceive that these deaths constitute a very small amount compared with those occurring long after the drug has been administered, and in consequence of certain morbid affections to which it has caused a predisposition, I do not attach much importance to such lists; they are chiefly of use as affording indisputable proof of the poisonous nature of the agent. I shall only observe, with respect to that now brought forward, that it differs materially from others which have been published. It shows, for example, that chloroform had proved fatal in only twenty-six cases before October 1852; whereas, in Dr. Crisp's return on the same subject, published in June 1853, the sudden deaths are stated as having then amounted to forty-two.

The framer of this list is of opinion that no deaths from chloroform have been concealed. In this opinion I believe he is singular. The framer of the first part of the list, published in the Association Medical Journal in 1853, expressly states that he "cannot suppose that all the deaths which have occurred have been made public", and allows that the number given by him may on this account be doubled. I have more than once expressed the conviction that much more than half the number have not been published, and given several reasons for thinking so. Though, for obvious reasons, we do not often hear of actual deaths occurring suddenly from chloroform, we hear very frequently of patients being rescued from imminent danger incurred by it. When Dr. Crisp read the paper containing the catalogue just referred to before the Medical Society of London, M. Ricord, as we are informed in the paper, had already saved four patients by the mode of artificial respiration which he invented; and Dr. Marshall Hall relates, in the last number of the *Lancet*, that "three persons, apparently dying from the effects of chloroform," were lately rescued by *his* peculiar method. Although cases of death from chloroform are very rarely published in France, one of the medical academicians, M. Guérin, informs us (*Gazette Médicale*, 1853) that "he believes that consecutive deaths from chloroform are very numerous; and that, on making inquiries of many surgeons both in Paris and in the provinces, most of them have confessed that they have had occasion to regret the occurrence of these accidents." The surgeons of whom he made these inquiries evidently did not consider that they were bound to divulge such unfortunate occurrences, more than the accidents which must always arise from the use of other powerful and highly useful medicines.

It is important, however, to make a distinction, in respect to this publicity, between chloroform and the other anæsthetic vapours of similar character that are now being substituted for it. There is no longer any necessity for distressing the relatives of those cut off by chloroform by divulging such accidents, as we require no further proof of its fatal properties; but, although it is most probable that sulphuric ether, amylene, etc., are equally dangerous if administered so as to produce an equal degree of anæsthesia, it is very important that we should have no doubt on this point, and that every information should be afforded. The system of concealment which has lately, and not improperly, obtained with respect to chloroform, would be highly blamable as regards these substitutes.

The most important question in connexion with the subject of sudden death from chloroform is, whether we are not justified in using it notwithstanding such accidents, on account of the saving of life upon the whole, in consequence of the supposed beneficial influence of chloroform on the results of operations. I believe that the statistics which I have recently published have definitively answered this question. I have brought better proof than can be brought in support of half of our universally received medical opinions, that, instead of there being a saving, there has been an enormous loss of life from the influence of chloroform on operations. Three months have elapsed since this exposition was made, and up to this time not a single fact has been brought in contradiction to it. The same gentleman who has furnished the catalogue of sudden deaths above commented upon has very recently published a return of the deaths from amputation under chloroform at St. George's Hospital, which, instead of opposing, as strongly confirms my views as any such limited document can do. His average mortality of 29·9 must be increased, as he has included the amputations of the forearm, which have been excluded in the other comparative lists; and his preference of other statements of average mortality before the use of chloroform to since cannot be allowed. One of Mr. Phillips' averages was founded on data rejected by the Council of the Medico-Chirurgical Society, and the other makes the mortality from amputation of the arm greater than that of the thigh! M. Malgaigne's statements of the mortality of the Parisian hospitals can furnish no useful comparison with London; for our hospitals have for a very long period formed, in respect to salubrity, and particularly recovery from amputation, a striking contrast to those in Paris.

The table which I constructed, showing the mortality from the principal amputations before etherisation was introduced, was founded on all the reports which had been published of the mortality from amputations in the London hospitals; but the difference between it and the tables of Dr. Simpson and Mr. Phillips is too insignicant to affect the inference. That of Dr. Simpson, showing the highest rate of mortality before chloroform, or 24 per cent., shows also, when compared with the uncontested statement of the mortality since, that there has been an increase of 10 per cent., or that 100 more now die from amputations in every 1000 operated upon than formerly.

I am, etc., James Arnott.

Feb. 11th, 1857.

ON THE CONTRACTION OF THE BRONCHI DURING INSPIRATION.

Sir,—I have long delayed replying to Dr. Bell's able communication of Nov. 29th, 1856, in which he advances the original idea of bronchial contraction in inspiration, to which I offer the following as explanation; long expecting that, before I did so, some one might have advanced one better.

During inspiration the capacity of the chest is increased in every direction, therefore the bronchi become elongated (in the same ratio as the capacity of the chest is increased), and contraction must necessarily ensue in proportion to the elongation of the bronchi; and I would suggest that, during the elongation and contraction, the air present in the tubes is drawn along towards the air-cells, which could not take place if the tubes dilated during inspiration. It is not unreasonable to suppose that the involuntary muscular fibres, passing from one extremity of the cartilages to the other, may, by their contraction, assist to lessen the diameter of the tubes.

Dr. Bell considers the prolonged expiration in phthisis to depend in a great measure upon the tissue of the lungs being interspersed with tubercle, thus rendering partially inert the elastic tissue of the bronchi, which we suppose to assist in expiration.

I am also led to notice a few remarks made by Dr. Smith in his Second Lecture, published 17th January (page 47). He says: "We have also yet to learn more in reference to the varying capacity of the bronchi, before we can fully account for the continued reception of the usual quantity of tidal air, after the destruction of so large a portion of the air-cells."

My explanation of Dr. Bell's original remarks, together with the knowledge that the bronchi still remain patulous after destruction of the air-cells, will show why the quantity of tidal air varies so little in phthisis from the healthy state, as we should at first be led to expect. And it is very questionable whether what Dr. Smith asserts be true, that the bronchi serve no better purpose than "iron tubes" do to convey water; for, if the bronchi were inelastic, like "iron tubes", they would prevent the alternate expansion and contraction of the chest.

It is true that, in proportion to the diminished vital capacity or degree of expansion of the chest during inspiration, so would the number of inspirations be correspondingly increased also, shewing the amount of healthy surface destroyed, and *vice versâ*. The practice of wearing the stays tight, or any other means that may hinder the due expansion of the chest, and thus, according to Dr. Smith, the lessened vital capacity of the chest thus acquired, acts as a great cause of the disease; thus causing an increased number of inspiratory acts to become necessary, much more than would occur if the inspirations were of the full depth. Dr. Smith says: "As the air vesicles are endowed with especial nervous power, there would be special liability to disease." It follows that the part most used, or subject to increased inspiratory action (when the vital capacity is lessened), would be the most liable to disease. And, as Dr. Smith says the lower lobes are most used, it would follow that they should become the first affected with the disease, which is not the case: therefore, as the upper lobes are first affected with deposit, it follows that they are the most used.

Dr. Smith also says: "The direction of the bronchi and trachea is downwards; the direction of the expansion of the chest and of the indrawing of the air is downwards; and the greatest degree of expansion of the chest is downwards, or at the base: and hence it would follow that the air would more readily pass from the trachea to the lowest part of the lungs, and those parts would be most readily distended with air."

I submit that the direction of the bronchi is influenced by the shape of the chest; that the amount of breathing surface and tubes exists in a large amount in proportion to its capacity at the apex, as at the base; but, as the lower lobes are larger, so must the vital capacity or expansibility of that part be likewise increased: but this expansibility is only apparently greater at the base, not actually, when compared with the small size of the apex.

The air-cells of the apex might, *à priori*, be expected to be first filled, the distance from the bifurcation of the trachea being least: and, again, the vesicular murmur is most audible at the apex, thus receiving a greater part of the inspiratory force than any other part, when compared to its bulk.

I beg you will insert these remarks, if you consider them deserving. I am, etc., J. R.

DR. FELL'S TREATMENT OF CANCER.

Letter from J. W. Fell, M.D.

Sir,—In your article of February 7th, while you state with much candour and perspicuity the prominent features of my mode of treating cancer, you are mistaken when you assert that I employ no general or constitutional treatment. While I admit that cancer is in many cases a local disease, still for its development there must be a predisposition. To remove this, I invariably employ internal remedies; and to the administration of these I impute much of my success in the treatment of these cases. I am, etc., J. W. Fell.

70, Warwick Square, Belgrave Road, Feb. 10th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Wednesday, February 4th.

Mr. E. Ball presented a petition from medical officers, praying for relief from the Poor-Law restrictions.

Thursday, February 5th.

POOR-LAW MEDICAL RELIEF.

Mr. Rice asked the President of the Poor-Law Board if it was his intention to propose, during the present Session, any measure on the subject of medical relief.

Mr. Bouverie said he had no intention of bringing in such a Bill.

POISONOUS DRUGS.

Mr. Brady asked the Secretary of State for the Home Department, if it was the intention of Her Majesty's Government to introduce any measure this Session for the better regulation of the sale of poisonous drugs.

Sir G. Grey said it was his intention to bring in such a Bill; indeed, the Bill had been prepared. [*Cheers.*]

Friday, February 6th.

CRIMINAL LUNATICS.

Mr. Floyer asked the Secretary of State for the Home Department whether it was his intention to take any steps in the present Session of Parliament towards making adequate provision at the public expense for the maintenance and care of criminal lunatics?

Sir G. Grey hoped a beginning might be made in providing such an establishment, but was unable to say whether a vote would be taken in the present Session. Inquiries were being made with regard to the site and the expense.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

*Colebrooke. On February 9th, at Southborough, Tunbridge Wells, the wife of Henry Colebrooke, M.D., of a daughter.

*Crompton. On February 8th, at Cavendish Place, Manchester, the wife of Samuel Crompton, Esq., Surgeon, of a son.

Day. On February 8th, at 38, Kensington Park Gardens, the wife of Charles Day, Esq., Surgeon, of a son.

Mennie. On December 27th, 1856, at the Fort, Bombay, the wife of John Mennie, Esq., Assistant-Surgeon H.E.I.C.S., of a daughter.

Nourse. On February 9th, at West Cowes, Isle of Wight, the wife of William E. C. Nourse, Esq., of a daughter.

Squire. On February 1st, at Brightlingsea, Essex, the wife of Samuel Nathaniel Squire, Esq., Surgeon, prematurely, of twin sons.

MARRIAGES.

Arnold—Workman. Arnold, the Rev. Dr. John Muehleisen, Chaplain to St. Mary's Hospital, to Maria, daughter of *Thomas Workman, Esq., of 10, Inverness Road, Bayswater, at St. James's, Paddington, on February 10th.

Baillie—Graham. Baillie, James, M.D., of Brook Street, to Margaret, daughter of the late James Graham, Esq., of Lancefield, Glasgow, at St. George's, Hanover Square, on February 4th.

Bianchi—Doubleday. Bianchi, Robert, Esq., Surgeon, of 43, Stamford Street, to Catherine, only daughter of the late John Doubleday, Esq., of Long Clawson, Leicestershire, and niece of *Edward Doubleday, Esq., Surgeon, Southwark.

Keys—Kemp. Keys, George Francis, Esq., Surgeon, of Warwick Street, Regent Street, to Caroline, widow of John Kemp, Esq., late of H.M. Inland Revenue Office, and Acton, Middlesex, at St. Mary's, North End, Fulham, on Jan. 31st.

DEATHS.

Coull. On January 27th, at Elgin, Mrs. Coull, widow of the late James Coull, M.D., of Ashgrove.

Seaman. On January 29th, at Bradford, Yorkshire, aged 69, Mary Ann, widow of the late Charles Seaman, Esq., Surgeon, of London.

Watson, James C., M.D., H.E.I.C.S., Bengal Presidency, in London, aged 34, on January 27th.

APPOINTMENTS.

*Propert, John, Esq., has been appointed High Sheriff for Cardiganshire.

Sandwith, Humphry, M.D., late of Kars, has been appointed Colonial Secretary of the Mauritius, in the room of Mr. C. J. Bayley, now Governor of the Bahamas.

Velpeau, M., the celebrated Parisian Surgeon, has been elected a Honorary Member of the Royal Medical and Chirurgical Society.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, February 6th, 1857:—

Askham, Henry Francis, Eckington, Derbyshire
Bradshaw, Alexander Fredk., Bishopsgate Street Within
Fuller, Charles Chinner, Osnaburg Street, Regent's Park
Huntley, William Albert, Brixton
Hutcheson, Robert William, Eleuthera, Bahamas, West Indies
Mackenzie, John Thomas, Toronto, Canada West
Mason, Benjamin Earnshaw, Calcutta
Meredyth, Adolphe Aschele William Leodore Colomiati, Angers
Noyes, Alfred William Finch, Stokesbay, Gosport, Hants
Scott, Walter, Tasmania
Skinner, Frederick, Hendon, Middlesex
Times, Henry Gorsuch, Thayer Street, Manchester Square

At the same meeting of the Court—

Evans, Richard, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date the 20th of February, 1850.

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 7th, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which had been in the first week of January 1135, and in the last week of the same month 1209, rose in the week that ended last Saturday to 1368. In the years 1847-56, the average number of deaths in the weeks corresponding with last week was 1180. If this average is raised for the purpose of comparison, proportionally to increase of population, it will become 1298; and hence it appears that the rate of mortality which prevailed last week was higher than the average rate in the beginning of February.

The increase, which the present return shows, on the deaths in January, arises from the recent depression of temperature, which commenced towards the end of that month, and continued till near the end of last week. The weather was generally mild in the first three weeks of the year; the mean temperature was 37°; in the fourth week it fell to 31·2°, and last week it was 32·3°; and on two days since the 28th ult. it has been 12° below the average.

The deaths from diseases of the respiratory organs, the class which more than others rises and falls with the fluctuations of heat and cold, rose last week to 359; they had been for some previous weeks about 280. The average of this class, corrected for increase of population, for ten weeks corresponding with last week, is 285. The deaths from bronchitis in the last four weeks were 170, 164, 166, and 224. The increase of pneumonia in the last week is much less considerable. Phthisis, which was fatal in the previous week in 146 cases, numbered last week 184. Hooping-cough carried off 61 children; and as regards the extent to which it was fatal, showed little change on recent weeks. A child died of hooping-cough at 2, Church-court, Westminster, being the fourth fatal case of this complaint in the same house. Four children died of measles in the Marylebone workhouse; the total number of deaths from this disease was 38. Only 3 deaths from small-pox were registered last week in London.

The deaths of four nonagenarians were returned; the two oldest of these aged persons, namely, a widow in Queen-street, Ratcliffe, and a lady in Southampton-row, had attained the age of 96 years.

Last week the births of 976 boys and 915 girls, in all 1891 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1620.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·762 in. The lowest reading in the week was 29·41 in.; the highest occurred on Wednesday, and was 30·14 in. The mean temperature of the week was 32·3°, which is 5·7° below the average of the same week in 43 years. The mean temperature of Sunday (the 1st), was 24·5°, which is 12·7° below the average of the same day; the *lowest* temperature on Sunday, which was also the lowest in the week, was 20°. The mean daily temperature continued below the average till Friday, on which day it was 42·2°. The *highest* reading in the week was obtained on Friday, and was 47·7°. The range of temperature in the week was 27·7°. The mean dew-point temperature was 29°, and the difference between this and the mean air temperature was 3·3°. The wind blew at the beginning of the week generally from the south-east, on Wednesday from the north-east, and on the last three days from the south-west. Scarcely any rain fell; on Monday and Wednesday there was snow, but of small amount.

Munificent Bequests. We stated some time ago that the late Sir Hugh Richard Hoare, of Stourhead, Wilts, and Lillingstone Lovell, Bucks, who died on the 10th ult., upon entering his 70th year, in November last, presented £1,000 to the Bucks Infirmary. We have now the pleasure to state that he has, by his will, made the following munificent bequests, viz.; To the poor of Stourton, Wilts, £2,000; Westminster Hospital, £2,000; St. George's Hospital, £1,000; Middlesex Hospital, £1,000; Cancer Hospital, £1,000; Consumption Hospital, £500; Medical College, £500; Sarum Infirmary, £500; Wilts Friendly Society, £500; Society for the Propagation of the Gospel, £500; Corporation of the Sons of the Clergy, £500—making a total of £11,000. (*Oxford Journal.*)

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Honeyman; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Longsight. The Royal College of Surgeons of England has no power to prevent a member of the Royal College of Surgeons of Dublin, or any other College, from practising in England.

Mr. Barber's Letter shall appear next week.

Communications have been received from:—Dr. James Arnott; Dr. Hayes Jackson; Mr. T. Holmes; Mr. Charles Coates; Mr. Walter John Bryant; Mr. Joseph Godden: Mr. G. Reedal; Mr. James James; Sir Charles Hastings; Dr. Bower Harrison; Sir Henry Cooper; Dr. G. Webster; Mr. Thomas Nunneley; Dr. G. G. Rogers; J. R.; Mr. A. T. H. Waters; Dr. W O. Markham; Mr. R. J. Metcalfe; Mr. Henry Duncalfe; Dr. David Nelson; Mr. J. V. Solomon; Mr. George Ross; Dr. Fell; Mr. McDermot; Mr. Edward Barber; Mr. Lancelot Newton; Dr. J. R. Nicholson; Sir John Forbes; Mr. James Long; Dr. Radclyffe Hall; Mr. James Scholfield; Mr. Westall (with enclosures); and Dr. Edward Smith.

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London Hospital, March 17th, 1852.

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HENRY LETHEBY, M.B.,
Professor of Chemistry, etc., in the London Hospital.

January 21st, 1856.

Sir,—I hereby certify that I have this day terminated a careful examination of the loaves (one of which was Brown Bread) which you left with me for the purpose a few days ago; that they were all perfectly free from alum, and in every respect genuine, each according to its kind. I feel, therefore, much pleasure in giving you this certificate under the conditions which you have accepted, and which are recited in your letter to me—namely, that you have undertaken to forfeit £50 in behalf of a Provident or Charitable Institution should Bread or Flour in any way adulterated be subsequently found exposed for sale in your shop.—I remain, Sir, yours respectfully,

Mr. Billings, Baker, Sawbridgeworth. DR. NORMANDY.

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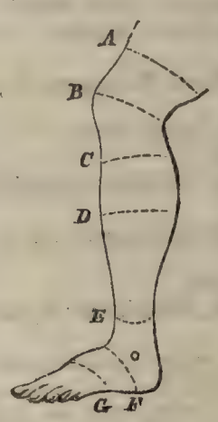
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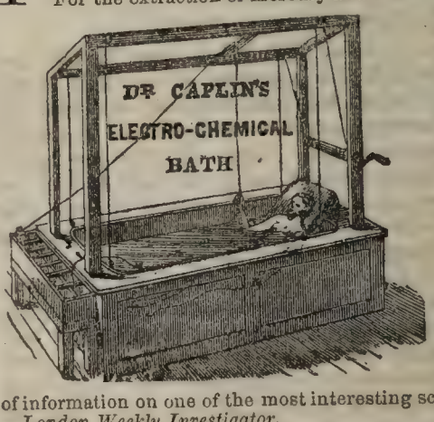
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

TUMOUR OF A PECULIAR NATURE IN THE PECTORAL MUSCLE.

Under the care of E. CUTLER, Esq.

AUGUSTUS K., aged 29, a foreigner, who had led an active life, having lately served both by land and sea, was admitted as a patient at St. George's Hospital about a month ago, on account of a swelling in the left pectoral region. There was no history of any accident or sprain, or in fact anything which could lead to the suspicion of the muscle having been ruptured. The swelling was increasing gradually, according to his account; and it continued to do so during the time that he was kept in the hospital under observation. It presented to the touch a lobulated surface, and an irregular knobby consistence, very similar to a breast containing "milk-knots". On examining the tumour more minutely, it appeared to be situated in the substance of the muscle itself, since the skin was freely movable upon it; and, on taking the muscle between the fingers, and desiring the patient to put it into motion, the swelling could be felt moving about with it. It gave him no particular pain, but interfered with the movements of the arm.

On consultation, it was determined to cut down upon it, in order to ascertain its nature, and, if necessary, remove it. This was accordingly done on February 12th. The first incision revealed healthy muscular fibres covering the swelling; and, when these had been divided and turned aside, a large lobulated mass of fat and fibrous tissue, mixed up with and infiltrated between the muscular fibres. This was removed from the deeper part of the muscle. It extended from a little above the mamma to the commencement of the tendon of insertion of the muscle. The bleeding was very free, requiring the ligature of a large number of vessels. On a section, numerous nodules, as it were, of fibrous tissue were found deposited among the muscular fibres; and there was a great amount of fat between their bundles. Microscopic examination did not show anything worthy of notice. The muscular fibres, where seen, were perfectly healthy in texture; and the fibrous tissue and fat exhibited their usual appearance. The tumour (if it is correct to describe it as a tumour) was traversed by numerous large vessels, most of them veins.

REMARKS. Much doubt had been expressed, by those who saw this patient before the operation, as to the exact nature of his disease; nor was that doubt entirely set at rest by the removal and examination of the part. It still remained questionable whether the infiltration was the result of some diseased action around the muscular fibres; of interstitial change in these fibres themselves; or of accidental rupture of a portion of the muscle. If, in favour of the first supposition, it might be urged that, in the numerous violences to which the patient, from his calling, was exposed, and which might easily escape his memory, a chronic inflammatory action might have been set up, leading to the deposition of lymph and thickening of the areolar tissue, yet that would not account for the extraordinary amount of fat discovered among the muscular bundles, nor was it consistent with the rapid yet painless increase of the swelling. Degeneration of the muscle, little as such a process is understood, might have been expected to attack the whole of its substance—not a limited portion in its middle, covered on all sides by healthy tissue. Besides which, all the muscular fibres, seen under the microscope, presented a perfectly clear outline and healthy contents, without any trace of degeneration. The last hypothesis, therefore—that of a partial rupture of the muscle—was adopted generally as the least improbable, although there was no history of any such injury, or of any accident likely to produce it, nor any trace in the part removed of an antecedent separation of one part of the muscle from another.

Another question which occurred was as to the propriety of interfering with the disease surgically. Cases have been observed in which swellings, similar in appearance, and situated in the substance of the muscles (usually the sterno-mastoid), have disappeared when treated by a prolonged course of iodide of potassium; but, on the whole, as the swelling in this case was of considerable size, as it was increasing, and interfered a good deal with his comfort, it was thought better to subject the man to an operation, which, without any great risk, would remove the disease radically, than to a prolonged course of medicine, which would entail lengthened seclusion from work, would probably injure his general health, and might fail to make any impression on the local affection.

HOSPITAL FOR SICK CHILDREN.

EXCISION OF THE ELBOW-JOINT.

Under the care of ATHOL JOHNSON, Esq.

THE patient, a little girl, aged 3½, had been for some time under Mr. Johnson's care, on account of abscess connected with diseased elbow. The joint was exposed by the abscess, and sinuses led directly into its cavity. The olecranon also was partially dislocated inwards, and the joint was almost immovable and fixed at a very unfavourable angle, nearly a straight line. The movements of the radius were unimpaired. The disease had appeared arrested at one time, and the child in a fair way of recovery; but an attack of measles had supervened, and since that, although the child had recovered her general health, the local symptoms showed no disposition to yield to the treatment. There were two sinuses, one at the back, the other at the inner part of the joint, from each of which the probe passed into the joint, and from the latter into a cavity in the lower end of the humerus. In neither of them was any dead bone felt, although the parts were repeatedly examined.

It was decided to cut down upon and expose the diseased bones, and remove so much of the articulation as should seem necessary. A long incision was accordingly made, parallel to the inner side of the olecranon; and, on account of the great thickening, it was necessary to join this by another running outwards, perpendicular to its middle, over the olecranon. The tip of the latter was then cut off. It was perfectly healthy in structure, and covered by healthy cartilage. The joint was found full of pulpy degenerated synovial membrane and pus. There was a large cavity in the end of the humerus, completely perforating the bone, and containing two large loose pieces of dead bone. When these were removed, a hole was left in the bone, almost large enough to receive the end of the little finger. The articular extremities both of the humerus and ulna appeared quite healthy. The end of the humerus was removed, and the edges of the wound were brought lightly into contact.

REMARKS. This case is remarkable as showing a state not often found in the diseases of joints in children; viz., necrosis of a large part of the end of a bone without any implication of its articular surface. Such a condition is not, perhaps, so very rare as is sometimes imagined, as several instances have recently fallen under our observation at the Hospital for Children; but it is sufficiently uncommon to be worth remarking. The case is also interesting from the obscurity attending the real cause of the abscess in the joint. The dead bone was situated for the most part, outside the articulation. The cavity left by

its removal appeared to communicate with the joint at its anterior part, under the coronoid process. This had set up abscess in the joint and partial destruction of its ligaments, allowing the displacement of the olecranon, and thus causing a loss of motion which simulated partial ankylosis; and which was increased by the quantity of semi-solid deposit effused around the bones and into the cavity of the joint. Another point of interest was the existence of so large a sequestrum which was never struck by the probe, although the latter penetrated into the cavity in which it was contained. The reason of this was that the sequestrum was in great part covered by the olecranon, so as to be inaccessible from the sinus behind the joint, and that the probe passed in through a narrow sinus by the side of the latter process, so that it was not allowed to move freely. When the necrosed bone was removed, it was a question whether the articulating extremity of the humerus should not be allowed to remain; but the cavity left in the end of the bone would have been exceedingly large, and the loss of motion occasioned by the processes necessary to its repair probably as great as that caused by the removal of the end of the humerus, besides which, recovery would doubtless be rendered more expeditious by the latter treatment.

ST. MARY'S HOSPITAL.

I. VESICO-VAGINAL FISTULA.

Under the care of I. Baker Brown, Esq.

Mr. Brown operated on February 11th on a case of vesico-vaginal fistula which presented several points of interest. The patient, a middle aged married woman, had been previously under Mr. Brown's care two years ago, when the rent in the upper wall of the vagina was of sufficient size to admit the passage of two fingers into the bladder. There was considerable tension upon it. In order to diminish the latter, Mr. Brown dissected away the urethra and bladder from the symphysis pubis, and sewed up the cleft. This proceeding was followed by considerable benefit. The bladder remained in its altered situation, and the extent of displacement was still indicated by a large white cicatrix below the superior commissure of the labia. The rent contracted considerably, leaving a hole, through which a large pea would pass, close in front of the os uteri. The patient returned home and became again pregnant. Parturition was accompanied this time by partial laceration of the perinæum down to, but not through, the sphincter ani. This was rather a favourable circumstance for future operation, as it further diminished the tension on the parietes of the vagina.

The present operation consisted merely in passing three wire sutures through the opposite sides of the walls of the vagina, paring the edges of the cleft, and then securing them by means of the shield or button invented by Dr. Boseman of Alabama.

This is a silver shield of the necessary size to correspond with the extent of the wound, perforated by holes for the sutures. Through each of these holes the two ends of one suture are passed, clamped upon the hole by means of a split shot, and then cut off. Thus the pressure of the sutures is equalised over the whole extent of the wound; the edges of which are also brought evenly into contact through the whole of its extent. The plan has already been followed in other cases with success; and, although failure has also attended its employment, still, in the limited number of cases in which it has yet been tried, to attain any amount of perfect success is a very gratifying result. In numerous cases of this distressing malady which we have had an opportunity of seeing treated, the result has been tolerably uniform, viz., that the wound has been prevented from uniting by the infiltration of urine between its edges, which has not been entirely prevented even by the constant retention of a syphon-shaped catheter in the bladder. Still in every case some degree of contraction has resulted from the operation, so that usually the patient has been able to retain the urine for a longer period, and has been placed in a more favourable condition for a fresh operation. The plan which has seemed to be followed by the greatest amount of benefit in extensive fissures with cartilaginous margins, has been the application of the actual cautery to their edges, especially when the induration of the latter has been considerable. Cases are reported in which this method alone has sufficed to produce the closure of the cleft; but in those which we have seen, a small opening has always been left through which the urine flowed in the upright posture. The most eligible method for the application of the cautery is perhaps the electro-galvanic apparatus. Various methods have been proposed and practised for diminishing the tension on the walls of the vagina. Of these perhaps the most efficient is the detachment of the urethra from the symphysis, adopted by Mr. Brown in the above case. Others are the separation of the edge of the fissure into two laminæ, one comprising its vaginal, and the other its vesical portion; lateral incisions into the parietes of the vagina; the separation of the neck of the uterus from the neighbourhood of the cleft; and, finally, various mechanical contrivances (of which the best account may be found in Jobert's work), but which do not appear to have been followed by the desired results.

The fact of the recurrence of pregnancy during the existence of a vesicovaginal fistula is uncommon, but not unheard of. Jobert (*Chirurgie Plastique*, ii, 378) observes: "It would be an error to suppose that pregnancy is a proof of cure: I myself am acquainted with several cases of women, in whom the vesico-vaginal septum has been destroyed, and who have yet become pregnant."

II. EXCISION OF THE HEAD OF THE FEMUR.

Under the care of A. Ure, Esq.

The patient, a little boy, had suffered for a long time from disease of the hip, and the femur had become dislocated upon the dorsum ilii; numerous sinuses, situated further back than usual (near the great trochanter), led to the diseased bone. An incision about four inches in length, curving backwards, was made over the dislocated head of the femur, which was then easily removed by cutting through the neck with a pair of cutting forceps. The acetabulum seemed healthy, except that its surface was slightly softened by contact with the diseased parts. This was, therefore, scraped, and as much of the neck of the femur as could be found diseased was gouged away. The head of the bone was almost entirely denuded of its articular cartilage, and the articular lamella was also in great part removed. Its tissue appeared much softened and very vascular.

We shall hope to give the result of this operation in a future number.

KING'S COLLEGE HOSPITAL.

PLASTIC OPERATIONS.

By W. Fergusson, Esq.

Mr. Fergusson operated again on Saturday last on the patient mentioned in the Journal, p. 81, in whom the nose had been lost. When we last mentioned the case, the alæ had been successfully restored; the bridge which had united the new ala to the skin of the forehead had been divided, and turned back again on to the forehead. The present proceeding consisted in taking a piece from the lip to form a columna. The lip was divided in its whole thickness, so as to have a strip in the middle, and reunited by hare-lip sutures; the middle portion turned up and its position reversed, so that the mucous surface presented outwards. Its tip was then inserted into a notch cut in the middle of the flap which formed the alæ, and retained there by means of twisted sutures.

Amylene was given in this case, and appeared to keep the patient in a state of at any rate partial insensibility; but the constant interference with the anæsthetic in order to make room for the hands of the operator rendered it an unfavourable case for the use of this drug.

In the next case, an infant with hare-lip, ether was employed. Only partial narcotism was produced; nor was a more complete anæsthesia advisable, on account of the risk from blood trickling down the throat. In fact, as there was a projection of the intermaxillary bone which required removal, and as a vessel in the divided bone bled very freely, some danger was incurred from this cause, so that the breathing was for an instant suspended, and it was necessary to reverse the position of the little patient, and disengage the blood from its throat in order to restore it. This having been done, and the bleeding stopped by the application of a hot iron, the operation proceeded as usual. It may be mentioned that the case had been one of double hare-lip. The cleft on the right side had been previously operated on; that on the left was now united.

The other plastic operation reported at p. 81 has unfortunately failed; the transplanted flap which had been further displaced having sloughed away. The part, however, which had been transplanted into the place of the lower lip retains its vitality, and the patient is so far benefited. It remains to be seen whether anything can be done to remedy the deformity of the other part of the face.

WESTMINSTER HOSPITAL.

BELLADONNA IN INCONTINENCE OF URINE.

Under the care of Charles Brooke, Esq., F.R.S.

[*From notes supplied by* G. Nayler, Esq., *House-Surgeon.*]

Daniel H., aged 7, a pale, delicate looking boy, was admitted January 21st, on account of incontinence of urine, which had existed for several months. He had been carefully watched, and various plans of treatment adopted, among which corporal punishment appeared to have been not forgotten. The urine dribbled from him by day as well as night. He was ordered one-sixth of a grain of extract of belladonna, dissolved in a teaspoonful of water, three times a day; no fluid was allowed after 5 P.M.; and the nurse was ordered, as usual, to see that he passed urine at night. This plan was perfectly successful. After its adoption he only wetted his bed once at night; and left the hospital quite cured three weeks after admission, making water only two or three times a day.

We shall give some other cases of the treatment of this annoying and frequently obstinate affection by means of the same drug in an early number.

Original Communications.

PUNCTURE THROUGH THE ABDOMINAL PARIETES IN IMPASSABLE OBSTRUCTION OF THE BOWELS.

By Sir Henry Cooper, M.D.Lond., Physician to the Infirmary, Hull.

The following case of obstruction of the intestines occurred to Mr. J. H. Gibson, of this town, and myself, in the latter part of 1855. Mr. Gibson agrees with me, that the publication of it may be useful. I have, therefore, at his request, and aided by his notes, drawn up the following notice.

The interest of the case chiefly arises from the simple, easy, and effectual means used for its relief, and from the successful result of their employment. I do not find any records of this simple expedient having been tried; and it certainly is not a proceeding recognised by the authorities. Perhaps its very simplicity and want of pretension have caused it to be overlooked. At all events, I think the attention of the profession should be directed to it, as affording a chance of relief from a distressing and desperate condition but too often occurring.

Records of intestinal obstruction constantly appear in our periodicals; and monographs of value have, from time to time, been published, shewing at once the frequency of the affection, its importance, and the difficulties surrounding its treatment. My friend Mr. B. Phillips's paper, in the *Transactions of the Royal Medical and Chirurgical Society* (1848), has been the guide to most later writers. It contains valuable statistics; and sums up with still more valuable propositions, which the author considers to be proved by his observations. In 1853 (*Lancet*, Feb. 26th, 1853), Mr. Phillips reviews and modifies these conclusions by the results of his subsequent experience, and sums up the present state of our knowledge and practice. He recommends the avoidance of active purgatives, the administration of calomel and opium till the system is affected, and the application of emollient enemata. "I am now of opinion," he says, "that surgical operation is not justified, unless there be satisfactory evidence as to the point at which the obstruction is situated. If no such evidence is obtained, I am of opinion that an exploratory operation—a voyage of discovery, as it were—is not justifiable. The present state of our knowledge enables us," he says, "to conclude that the occurrence of complete cases of obstruction is by no means unfrequent; that the causes and seat are various, and, in most cases, cannot be discovered; but the presumption always favours the idea that it is beyond the cæcum; that in a considerable majority of cases the termination is fatal; that if symptoms are urgent and obstruction continue, and there is a distinctly marked tumour which is the probable cause, we are justified in cutting down upon it, releasing the bowel, or forming an artificial anus; or, if we have proof that the cæcum or descending colon are distended, we are justified in opening the left iliac region in the one case, or the right or left lumbar in the other, for the purpose of forming an artificial anus."

I purpose to dismiss the subject of medical treatment with the remark, that I believe all judicious and experienced practitioners now agree in Mr. Phillips's condemnation of the use of purgatives after the active symptoms of obstruction have once set in, and in his estimate of the value of opiates, though there may be a difference of opinion as to the extent to which mercurials should be carried. I shall take up the case at that point at which these means having been ineffectually used, the obstruction remaining, the fæcal vomiting exhausting, the tympanitic distension extreme, and the vital powers failing, relief by operation is faintly and doubtfully proposed by the medical attendant, and probably declined by the patient and his friends, as scarcely lessening the risks of the disease itself, and superadding dangers of an equally formidable character. The operations which have been for the last one hundred and fifty years recommended, are indeed of a severe character, and involve great shock to the system, and much subsequent risk. In the earlier operations, gastrotomy was performed by Littrè, and the colon reached through a large opening in the belly, and after much handling of vital organs. Callisen's and subsequently Amussat's operation were a scientific advance upon this, avoiding the peritoneum and much abridging the amount and gravity of injury inflicted. But the object of these operations was the formation of an artificial channel of relief, and not the reestablishment of the natural passage.

The desire to *cure* and not merely to *relieve*, led to the adoption of the exploratory operations, the purpose of which was to set the intestine at liberty, the cavity of the abdomen having been laid open for that purpose. But the uncertainty of attaining this object, and the certainty of greatly aggravating the patient's danger if the attempt failed, has led to the abandonment of these operations, except in cases where the indications of the seat of stricture are unequivocal, and such as to make it probable that the stricture, if traced, would be easily unravelled or removed. Mr. Phillips states, in the paper above alluded to, that there are not more than two well authenticated cases in which the integrity of the intestine has been respected, and the obstacle successfully removed; but there are many in which life has been saved by the establishment of an artificial anus: "and I apprehend," he adds, "it is to that point our attention must be earnestly directed."

It is to that point that my case tends.

Case. M. A. K., aged 34, a robust, healthy, unmarried female, sent for Mr. Gibson on December 10th, 1855, and stated she had had no relief from the bowels since a scanty and imperfect evacuation on the 2nd. She had for many months suffered from abdominal pains, constipation, difficulty in passing stool, and distension, and tenderness in the right iliac region. She had now the usual symptoms of obstruction, with eructation and nausea, but little or no actual vomiting. Calomel and rhubard, with saline purgatives, were given. O'Bierne's tube was then used, and passed fourteen inches, and large quantities of gruel, castor oil, and turpentine, were injected, but returned unchanged. This plan was followed till December 13th. She then took two grains of opium every three hours, up to six grains, with no other result than that of abating the pain, which had become intense, and procuring refreshing sleep. At this time I first saw her, and formed a very unfavourable opinion of the case. There was great prostration; a sunken, anxious suffering countenance; rapid weak pulse; very great abdominal distension; hiccup and occasional vomiting of offensive matter. Careful examination of the abdomen detected no tumour or induration, but a uniform tight distension, except a slightly prominent roundness about the right iliac fossa, where was some additional tenderness. Opiates and enemata, with fomentations, were used till the evening of the 15th, when the symptoms being all aggravated, and the powers of life flagging, it became necessary to determine whether any and what operation should be performed. In determining this question, the following points were important. The rectum and sigmoid flexure were not the seat of obstruction, as was clearly showed by the passage of the tube, and the large quantity of injection (three or four pints) retained. The situation of the prominent distended point indicated the cæcum as the seat of the stricture, the distension probably consisting of the caput coli or immediately contiguous portion of the tube. The tenderness at this point indicated that some peritoneal action had been set up here, and that *probably* the bowel and abdominal parietes might be adherent. The abdominal walls, as proved by percussion, were thin at this point, and no important part would be endangered by piercing them. These considerations, pressed on us by the extreme urgency of the symptoms, determined us to puncture

this prominent part of the gut with the largest sized trocar, and thus, at all events, to secure temporary relief. The operation was precisely that of paracentesis abdominis, except that it was not performed in the median line, and had therefore to pierce muscular fibre, an incident not without a favourable bearing on the after issue of the case as affecting the patency of the opening. The situation of the puncture was about three inches to the right and one inch below the umbilicus. The immediate result of the withdrawal of the trocar was the escape of an enormous quantity of flatus, followed by fluid fæces, producing instant tranquillity, and a decided general improvement in our patient's condition. It was an essential part of our plan that the canula should be retained in the bowels at least for three days, as by that means the parts were *pinned* together, and extravasation rendered mechanically impossible. This state of parts would also favour the surrounding and isolating of the puncture by lymph, and the limiting of peritoneal inflammation, should such be set up. The operation was unattended by any difficulty or after complication; the system was relieved from the moment of the puncture, not having to rally from the shock of a long and severe operation; nor did any symptoms whatever arise from the simple procedure adopted, except a slight local irritation, due rather to the dressings and apparatus than to the operation itself. For three days the canula was retained in the wound, and a moistened bladder was attached, into which flatus and fæcal matter were freely repelled, and removed from time to time. Afterwards a gutta percha tube was inserted into the opening, and closed by a plug. A saline aperient was administered to keep the fæcal matter in a semi-fluid state, and the bowels generally emptied themselves spontaneously when the plug was removed. Some difficulty was experienced in fitting the opening with a tube, which should be large enough to retain its position and to discharge the contents, and not too large to pass readily into the bowel. Sponge-tents were found of very great use in dilating the opening, which might have been increased in this manner to any desirable extent. Eventually the patient managed the opening herself with a tent or rolled linen plug well greased. The course of the recovery was two or three times retarded by coughs, febrile attacks, and nervous debility; but these conditions were successively overcome as the summer advanced. She acquired more skill and confidence in managing her tents and bandage, and regulating the condition of the bowels; she left town for the sea-side for a few weeks, and returned in good health. She now (thirteen months after operation) is able to walk several miles, and to attend to her household duties; her functions are naturally performed: she is as stout as usual, and is free from local or general uneasiness. She takes a small quantity of Epsom salts every morning, and has a free semi-fluid discharge with much flatus daily. There is a tendency in the opening to close; it is of about the size of the little finger, and might doubtless be much increased if the patient could be prevailed upon to use sponge-tents for a week, and then adopt a permanent tube instead of the linen plug, which she still uses on account of its easy manipulation. There is some permanent enlargement of the abdomen, probably from over-distended bowel, which has lost its tone. No fæcal matter has ever passed *per anum*, only a little flatus and inspissated mucus occasionally.

Remarks. In reviewing this case, and the ease and freedom from danger with which relief was afforded and life saved, one cannot help feeling that the simplicity of the procedure has been one cause why it has been hitherto overlooked, at least as a recognised operation. The disadvantages are: the wounding of both layers of peritoneum, and of the bowel itself. With the precautions described, however, the chances of peritoneal inflammation do not seem to be materially greater than in ordinary tapping; and a wound of the intestine is implied in every case where an artificial opening is formed. The uncertainty as to the part of the intestine perforated is a disadvantage shared in common with other operations. The part chosen is the most distended part, and therefore of necessity a point *above* the stricture, and certain to give relief: so that there need not be any hesitation or delay in searching for particular portions of the intestine. The opening is of necessity small; this is a serious objection, but it may be obviated by the size of the trocar and canula used, by the free use of sponge-tents, and by maintaining a mouldable state of the fæcal mass.

The advantages I have already partly pointed out in the course of my remarks; they are briefly, that the puncture is momentary, and unattended with pain or shock to the system at the time, or with any after constitutional effect; a most important consideration where the patient is already in the last stage of an exhausting malady; the certainty of immediate relief if the prominent part is selected; and hence the absence of any doubt or difficulty in determining the site of the obstruction; and if the puncture does not succeed, the patient's death is at least not accelerated. There are some advantages also as regards the management of the opening afterwards; it is altogether under the patient's control; it is not liable to the prolapse and tension of the mucous membrane or closure by septum which interfere with other artificial openings; and, lastly, it is not so deep seated as the lumbar anus, and therefore not so liable to obstructions and infiltration between the inner opening and the skin.

The operation is applicable to any form of intestinal obstruction where there is great distension (and this condition is rarely absent); and is particularly indicated in the later stages of schirro-contracted rectum, or other malignant disease, where the object is to prolong life for a few days or weeks, and mitigate suffering at little or no expense of vital power.

DEATH FOLLOWING THE INHALATION OF CHLOROFORM IN SURGICAL OPERATIONS.

By T. Holmes, Esq., F.R.C.S.

[*Concluded from page* 68.]

As a summary of the preceding tables, I would adduce the following facts.

They contain the records of 50 deaths under chloroform, occurring during the eight years 1848-1855 inclusive, in 39 of which *post mortem* examinations were made; in the great majority, the chloroform was given by qualified medical men.

1. *Sex.* This is noted in 44 cases: 21 were males, 23 females.

2. *Age.* All were persons in the middle period of life; no children, and only one man above the age of 60.

3. Most of the operations were of a comparatively trifling character.

4. The chloroform was given on a handkerchief, cloth, towel, or piece of lint, in 27 cases; on a sponge in 4; on an inhaler or other apparatus (not described) in 8; on Dr. Snow's inhaler in 3. In 8 cases the apparatus is not specified.

5. The quantity used was ʒj and under in 13 cases; ʒij and under in 12; ʒij-ʒss in 3; a larger quantity in 8; not specified, 14.

6. The time is noted in 32 cases: 2 minutes and under in 15 cases; 2-5 minutes in 6 cases; 5-10 minutes in 6 cases; above 10 minutes in 5 cases (in one of them, 40 minutes).

7. The symptoms are intelligibly described in 36 cases.

In 19 there was no previous struggle; in all of these, except one, the pulse ceased before or at the same time with the inspiration.

In 17 there was previous struggle; in 4 of these lividity and failure of respiration was next noticed; in 13, failure of the pulse, or of the bleeding from the wound, generally preceded by pallor.

8. Of 33 cases in which *post mortem* examinations were made:—

(*a*) Eight, viz., Nos. 15, 22, 31, 32, 34, 42, 46, 50, showed no appreciable morbid appearances, *i.e.*, referrible to chloroform: for one (No. 34) is said to have presented extravasation of blood in the spinal canal.

(*b*) The *heart* is reported *soft or flaccid* in 10 cases, Nos. 3, 9, 16, 19, 20, 23, 24, 27, 30, 46; *fatty* in 9, Nos. 26, 29, 33,* 35, 36, 37, 38,* 41, 45. The cases marked thus * were two of the oldest patients in the list, and the morbid appearance seems not to have exceeded the traces of fatty degeneration usually found at that period of life. The heart was *flaccid* and *empty* in 7 cases, Nos. 2, 5, 8, 9, 10, 14, 48; *full* in 1, No. 1.

The *blood* was usually fluid; air was found in it in 3 cases, Nos. 2, 5, 24.

(*c*) The *lungs* were congested in 14 cases, Nos. 1, 2, 5, 8, 9, 10, 16, 19, 20, 23, 28, 45, 46, 50.

(*d*) The *brain* was congested in 7 cases, Nos. 1, 14, 16, 20, 23, 28, 44.

(*e*) *Other viscera* were congested in 6 cases, Nos. 1, 10, 16 20, 24, 30.

(*f*) There was organic disease in 4 cases besides that of the heart, viz., aneurism, No. 39; phthisis, No. 3; atheromatous arteries, Nos. 33, 38. The latter had also granular degeneration of the kidneys. It will be observed that the latter two had also fatty degeneration of the heart; but to a slight extent.

In considering the results of the tables of which a summary is here given, there is one thing which must, I think, attract the attention of every reader: I mean the fact that no child or any old person died from the administration of chloroform. This is a forcible confirmation of the view which I was endeavouring to enforce in my previous communication; viz., that most of the fatal accidents from chloroform have arisen from some imperfection in the method of its administration, and are not to be regarded as unavoidable results of its continued use, when that method shall have become better understood and more carefully followed. Otherwise, what cause can be given for the exemption which children have enjoyed? Chloroform is given even more frequently to children than to adults, as the intractability of the former renders its use necessary or expedient in many minor operations (such as passing sounds, exploring diseased parts, etc.), where it is not employed in the latter. Children, again, are affected by a less quantity of chloroform than adults, and are generally more exposed to the influence of narcotics; so that, on all accounts, we should have expected a more than proportionate mortality among them; instead of which, no case is found reported in eight years. I can hardly imagine any cause for this, except that which is found in the fact that every one is aware of the facility with which children are narcotised, the danger of an overdose, and consequently the necessity of caution: and it is not an unfair inference, that, if this caution were more generally exercised, the number of deaths would be much reduced. The same observations apply to the other extreme of life. At any rate, we may say that our present experience negatives the doctrine which has been sometimes propounded, that the extremes of age are contraindications to the use of chloroform.

Among other contraindications which have been mentioned, the one most frequently admitted is disease of the heart, especially fatty degeneration. I think our tables will show that, at any rate, too much stress has been laid upon this point.* We may at once admit that extensive disease of the heart, or of any other important organ, contraindicates surgical operations, either with or without chloroform; in fact, contraindicates anything which by its reputed danger may alarm, or even by its novelty unduly excite, the patient. Unfortunately, however, operations are sometimes necessary on such subjects, and then only a choice of evils remains. The statistics, however, only show† nine cases, out of thirty-nine examined after death, in which a fatty condition of the heart is asserted to have been observed; and in two of these it seems quite evident that it was not more than the trace of degeneration almost always found at that age (an age, be it observed, in which chloroform is safely given every day); and in only one is it stated that the disease was extensive. The evidence, therefore, that the fatty degeneration which was found in this small minority stood in the relation of cause to the fatal result, is very deficient. The common sense view of the matter would appear to be, not to incur the risk of giving chloroform to a person evidently the subject of extensive disease (fatty or otherwise) of the heart, unless the severity of the operation or the fear entertained of it should threaten an even more dangerous shock to the system; and, in the latter case, to watch its administration carefully, stopping just beyond the point where reflex motions are abolished.

Again, disease of the lungs is mentioned as a contraindication; but there is little evidence on the point, and that little does not give much support to such an opinion. In a case of fracture of the spine in the cervical region (where all the muscles of respiration, except the diaphragm, would be paralysed, and where, as the fracture had existed for many days, the lungs would be much congested), Mr. Jones of Jersey submitted the patient to the full influence of chloroform during the space of half an hour or more, without any detriment (*V. Medical Times and Gazette*, 1856, vol. ii).

Still less reason have we for regarding disease of the brain as an absolute contraindication. In functional disease of this organ (delirium tremens, epilepsy, etc.), chloroform is known to exercise a highly beneficial influence; and I have seen it administered with safety in a case of extensive fracture of the skull and laceration of the brain during an operation which would otherwise have been difficult from the patient's restlessness. We should not forget, however, that, in most of the cases where *post mortem* examinations have been made, the prominent morbid appearance has been congestion; and that, therefore, all diseases or morbid states of the system which predispose to congestion are so far contraindications to the use of chloroform. The most usual, as well as the most dangerous of these conditions, is that which accompanies habitual intemperance. It will be seen that many of the patients whose deaths are recorded in the above table were known to have been persons of intemperate or otherwise dissolute habits; and I have no doubt that, if more accurate information were attainable, we should find this to have been the case in a much larger proportion.

Does chloroform exercise any secondary effect unfavourable to the healing of wounds? This is a question asked by no less an authority than the College of Surgeons in their last examination for the Fellowship, and it is a point which has been mooted elsewhere. It is a matter of considerable interest, and one which well deserves attention and dispassionate investigation. I must confess that I have watched many hundreds—I may say thousands—of cases of wounds made under the influence of chloroform, without seeing any proof of such effect; and, further, I have questioned many men of large experience in operative surgery, without meeting with any person who has observed this supposed secondary action. Nor does it seem, *à priori*, probable that a single dose, however strong, of so volatile a substance as chloroform, should permanently modify the healing process, while all other effects of its administration are allowed to be transitory. As to its other subsequent effects, every one knows that it frequently produces sickness. This effect, however, is much less common when it is given in the way above described, than when administered without precaution, and therefore irregularly and in unnecessarily large doses.* Sometimes, also, alarming fainting fits follow its administration. The cases of this nature which I have seen have occurred to weakly females; but I have heard of a similar instance in private practice, in the case of a well known member of Parliament—a man of considerable mental and physical vigour. I have never heard of a fatal termination to these fits, nor of any subsequent ill consequence.

It being admitted, then, that chloroform is in some degree dangerous to life; that it has an irritating effect on the stomach; that it sometimes causes severe nervous symptoms, especially in hysterical females; and that, in persons disposed to congestion of the brain, it increases that tendency to an extent which is often at least unpleasant, if not alarming,—we have next to inquire what is the value of the means which it has been proposed to substitute for it. The undoubted superiority of chloroform to sulphuric ether may be considered established by the fact of its having so rapidly and so entirely superseded that drug. The question of the value of amylene as an anæsthetic is one which can hardly be answered confidently without more information than our present experience supplies us with. As to the congestion induced by chloroform, which is, in my opinion, the principal drawback to its use, I cannot say that, in the cases which I have seen of the administration of amylene, I have observed much improvement in that respect. Many of the patients have shown even more lividity of the face and more struggling than is usual under chloroform. The number of those who suffer from sickness is indeed, as it appears, less when amylene is used. Out of sixty-two patients, only two had suffered from sickness, and that only of a trifling character. The recovery is undoubtedly more speedy; but it may well be questioned whether that is an unmixed advantage; and the action of the drug in producing anæsthesia cannot always be depended on. Among the small number of cases as yet submitted to its action, I have heard of several in whom no anæsthetic effect has been produced. This, however, might have been from the inefficiency of the apparatus; for I believe that, without a properly contrived inhaler, whereby a sufficiently powerful mixture of the vapour and the atmospheric air is induced, this failure will be constant. On the whole, I am inclined to suspect that chloroform will hold its ground against the newly introduced agent, the peculiar odour of which will alone prove a powerful obstacle to its introduction into private practice. The local application of freezing mixtures, as recommended by Dr. Arnott, is the only substitute that I know of for chloroform to which no sound objections have been hitherto made; but this is only applicable in superficial operations, and

* The observations here made with respect to fatty disease of the heart, apply also to valvular lesion and other morbid states of that organ. It will be noticed that no such cases are reported in this table.

† I have no doubt that, in some of the cases in which the heart is reported soft or flabby, microscopic examination would have shown traces of fatty degeneration.

* At St. George's Hospital, the average quantity for the ordinarily severe operations is ℥ij, and for others a less quantity. I have noted amputations of the thigh and arm in lads about the age of puberty, done (and without hurry) with the expenditure of only ℥i of chloroform. I speak, of course, of the quantity expended. Far less than this passes into the blood.

has certainly the drawback that, as it leaves the patient perfectly conscious of all the preparations for the procedure which he dreads, nervous people suffer under its use nearly all the terror which they would without an anæsthetic; and this terror is perhaps the most painful part of these trifling operations. I cannot help thinking that the limited extent to which a method so easy, so free from danger, and so confessedly effective in these minor operations, has been adopted, is a proof that the profession at large have come to a different conclusion as to the dangers of the plan it was intended to supersede, from that adopted by its ingenious author.

I must now bring these observations to a close. My object in them has been to show what the mortality after chloroform has really been, and to inquire whether the results of *post mortem* examination have given us any clue for assigning it to its efficient cause. In reference to these two points, I believe the facts before us show—

1. That the reported mortality in the British Islands has been less than six *per annum;* that a great number of these cases occurred in private practice; and that, as many of them were disclosed by means of coroners' inquests, it seems probable that we do really hear of most of the fatal cases which occur in the United Kingdom.

2. That the *post mortem* appearances have not been sufficient to indicate any uniform cause of death; that the importance ascribed usually to fatty degeneration of the heart is greater than experience would warrant; that, from the number of cases of persons previously in perfect health, and the rapidity with which death was produced, there is a strong presumption that the result was due to imperfect methods of administration, or carelessness on the part of the administrator. Further, from the experience of hospitals in which a rational method has been adopted and due caution exercised, we are justified in believing that chloroform is as safe in its action as any drug which produces narcotism by mixing with the circulating blood, can in the nature of things be expected to be.

4, Vigo Street, February 1857.

CLINICAL OBSERVATIONS ON THE TREATMENT OF FRACTURES BY THE IMMOVABLE APPARATUS.

By Joseph Sampson Gamgee, Staff-Surgeon of the first class, and Principal Medical Officer of the British Italian Legion during the last war; late Assistant-Surgeon to the Royal Free Hospital, etc.

"Perhaps there is no subject more interesting to the practical surgeon than this of fracture of the limbs. . . . This is one of those subjects which has fallen into almost inextricable confusion: none, I believe, requires more to be historically explained. . . . It is, I fear, but too certain, that, while more has been written on the subject of fractures than on hernia, lithotomy, amputation, or trepan, yet no two books correspond, no two authors agree, even on the general points of practice; and every surgeon, whether in the army or in the navy, in a village or in a city, sets a broken limb, as he writes his name, after a fashion of his own." (John Bell's *Principles of Surgery*, pp. 490-1. London, 1815.)

This is not the first time I quote* the above passage from the eloquent chirurgic treatise of John Bell;—a passage so pregnant with truth of the greatest practical moment, that instead of apologising for repeatedly referring to it, I would recommend its insertion in the commonplace-book of every diligent seeker after truth. Fractures are the surgery of every surgeon's every day. They often involve the life, always the comfort, of the large number of individuals who are afflicted with them; they are a department of practice in which the very greatest manual dexterity is often called for, without such opportunity for display as is afforded by cases in which cutting instruments are employed; and it is to be feared that not sufficient importance is attached to their study, in the period more especially allotted for acquiring a fundamental knowledge of practical surgery. The large amount of valuable experience which might be collected from the fractures in our out-patients' rooms, is but very inadequately availed of, while any one "walking the hospitals" must be struck by the fact that house surgeons and dressers, but more especially the former, monopolise the learning to be derived from fractures admitted into the wards. At the surgeon's visits, the limb is seen "done up," and in due course, the amount of information acquired by the majority of students is, that A. B. was admitted such a day with a fracture, oblique or otherwise, with shortening, reduction effected, apparatus applied, and patient discharged with the result witnessed, be it good or bad. Supposing the case to have been one of oblique fracture through the trochanters, above the femoral condyles, or through both bones in the small of the leg, how many times during the progress of the cases has there been cause for anxiety, and call for the nicest manual dexterity! How much has depended on the surgeon's head and hands, altogether apart from the merits inherent to the apparatus adopted!

My desire is to be brief; and yet I have been obliged to submit these introductory general reflections, from a conviction that the considerations of cases and principles into which we are about to enter would be comparatively valueless, unless it were borne in mind how essentially this subject is one of practical importance, admitting only of solution on the basis of experience, acquired, as experience to be valuable must be, by the exclusion of all prejudice, by a clear and accurate appreciation of facts, and by an appropriate use of the ambassadors and agents of the understanding—the hands.

I reflect with satisfaction that my first publication on this subject was concluded in the following terms:* "That the system I advocate does possess real advantages in a large number of cases, can no longer be matter of doubt. Whether or not all my anticipations respecting it admit of realisation, is a question well deserving future clinical observation for its solution." The subject was one which had been so complicated by vague assertion and practical inconsistencies, that I determined it should not, for my part, be further imperilled by partial observation or illogical argument. I had learned from the immortal genius in and for whose memory my little treatise had been prepared, that "years are not the measure of experience; that it does not follow, that the older the surgeon is, the more experienced and trustworthy he must be; that it is the greatest number of well assorted facts on a particular subject which constitutes experience, whether those facts have been culled in five years or in fifty."+ It will, I trust, appear from a perusal of the serial communications now prefaced, that faith has been kept with the great master's teaching; and I shall not hesitate even to seem tedious in minutely analysing every particular which can exercise even the most remote influence on the demonstrative truth of tenets which are to form a code of experience. The question is one of fact, and *by fact it must be solved.*

Necessitating, as do the facts which I have to contribute, some knowledge of the plan under discussion, I beg to refer the readers of this Journal to its volume for 1855, for a series of papers on the Treatment of Fractures by Mr. Benjamin Hunt of Birmingham. Those papers are in my opinion some of the most valuable contributions to periodical surgical literature; and since it is the fate of memoirs in journals to become buried with time, the present communication will at least have had the effect of again directing attention to a series of clinical facts, which have not been studied and put to the test of experience in proportion to their weight.

[*To be continued.*]

16, Upper Woburn Place, Russell Square, February 18th, 1857.

Sale of Poisons. Last week a servant-of-all-work, named Anne Boxall, resident in the house of Mrs. Adams at Petersfield, committed suicide by taking a dose of "mouse powder" (Battle's "vermin-killer"), which contains the deadly drug strychnine. It was purchased by a fellow-servant at a druggist's shop. The doctor found the wretched girl in a state of spasm. On endeavouring to raise her head (to which she strongly objected), in order to introduce the tube of the stomach-pump, he found it impossible to force open her mouth. She repeatedly expressed a wish to have her legs rubbed, and also her feet. He was about to use chloroform, when she expired in great pain. The stomach was found to be very much inflamed, and showed the results of an active poison. (*Sussex Express.*)

* Chapter on the Relative Merits of the different Methods of Treating Fractures of the Lower Limbs, at p. 134 *et seq.* of "Researches in Pathological Anatomy and Clinical Surgery," by Joseph Sampson Gamgee, with six plates. London, 1856.

* "On the Advantages of the Starched Apparatus in the Treatment of Fractures and Diseases of Joints," being the Liston Prize Essay for 1853, by Joseph Sampson Gamgee, p. 89.

+ "Elements of Surgery," by Robert Liston. Second edition. London, 1840. Preface, p. vi.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS PULMONALIS.

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture III *(continued)*.

REMOVAL OF THE EFFECTS OF THE DISEASE BY ABSORPTION AND EXPECTORATION. GENERAL SYMPTOMS: PULSATION, HÆMOPTYSIS, COUGH, DYSPNŒA, NIGHT-SWEATS, WASTING, AND DEBILITY. MODE OF ACTION OF COD-LIVER OIL.

II. *Removal of the Effects of the Disease.* This is an extensive part of the subject, and may be conveniently divided into the consideration of those conditions attaching to the lungs, and of those found in the general system. We will first consider the former.

When the only probable pathological change is the lessened action of the air-vesicles, and the retention to a greater or less extent of the epithelium, it is highly probable that the means which have been recommended for the arrest of the disease may suffice to remove these conditions; for I have in many instances observed a large increase of the respiratory murmur to follow the use of those means. It may be a question if the retained epithelium is thus got rid of; but since, in healthy parts, the normal quantity of epithelium undergoes solution and removal, and since even accumulations of matter which are more or less fluid are also capable of removal, analogy would seem to imply that such may be the case. It is, however, evident that the degree of calcareous and oily degeneration at which the tubercle has arrived must mainly solve this question; for, when hard tubercle is fully developed, it must be almost incapable of absorption, even should it be again disintegrated by the ordinary process of softening. The process of absorption will be probably slower in the lungs in every stage of phthisis than in other tissues, apart from this disease; for, with the lessened action of any mass of cells, there is there a lessened supply of blood; and it is capable of demonstration, that, with complete filling of the cells with solid material, there is a more or less complete closure of the pulmonary capillary vessels; and hence but a very small supply of blood is sent to the diseased effete part, and the power of absorption is very greatly lessened. Whatever, then, tends to recover the lost power of the vesicles, tends to restore the supply of blood to that part, and to promote the power of absorption. In all these occurrences, moreover, we must make a liberal allowance for the rate of progress both towards degeneration and recovery, which, depending as it does upon constitutional as well as on local conditions, varies much in different individuals.

Thus, before the deposit has assumed the earthy form of degeneration, we should not despair of its removal; but, after this, such a result cannot be expected by absorption. Now, as we cannot by any means at our disposal determine the extent to which this degeneration has proceeded, we cannot entertain a certain hope of this result, and the less so if the case should have been of some standing, and have passed through the very early condition before referred to.

It is in these early conditions that iodine appears to be a suitable adjunct to the treatment, from its well known power of increasing the action of the absorbents; and, so long as the deposit retains much of its earliest condition, it can hardly fail to be of service. The ordinary combinations of iron and iodine, or both with quinine, appear to me very suitable remedies. I cannot believe in its efficacy at a later period; but, on the contrary, since a main feature of the disease is the wasting from a want of due deposition of material, itself partly the result of the quickened circulation, I think it would be more likely to be injurious. It is quite true that, on the theory advocated in these lectures, as the disease increases in extent, there must be a continued new accumulation of effete epithelium in the effete cells, and a transformation of it into the earthy tubercle; and hence there is a continued occasion for the employment of the absorbents: yet, with the increasing deposition, the system commonly deteriorates and wastes, and the good which iodine might effect in one direction is counterbalanced by its harm in another. Moreover, as the absorption of the tubercle is only just possible, in consequence of the lessened circulation, and as the waste of the system is certain, the iodine will probably effect a certain injury, in order to do a merely possible good. This will of course be influenced by the stage of the disease, and the rapidity of the progress, as indicated by the rapidity of pulsation.

But, although absorption of calcareous tubercle may be fairly considered impossible, it may be got rid of by expectoration. My talented colleague, Dr. Theophilus Thompson, has recently published cases in which the hardened mass appeared to have been expectorated bodily, and the patients recovered; and it is not unlikely that equally observant physicians would have met with many similar cases. There is every reason to believe that tubercle in its softened state (that is, softened by secondary changes) is frequently spat up; and it is possible that circumscribed deposits may be removed in this way. I, however, know of no power which the physician possesses to bring about these results, or even to single out any cases in which they are likely to occur. It is the *vis medicatrix naturæ*, and not the physician, to which we must look.

Assuming, then, that by any means the deposit has been removed from the lung, is the lung-tissue capable of restoration to a healthy condition? When it has been destroyed, we must admit that no such restoration can be effected, and the only substitute is then to close up the vacant places. When, however, no actual loss of tissue has occurred, but the parts have lost more or less of their vitality and power of action, the capability of restoration must be proportionate to the amount of injury. It is quite within belief that the earliest diminution of vitality is not irremediable, and hence some degree of progress may be made by the disease before we should despair. When, however, the parts which are implicated are restricted to narrow bounds, as would be the case when restoration might be looked for, the recovery of the vital powers of those parts is of but little moment, seeing that Nature has made the lungs so much more capacious than our ordinary wants require. The same remark would apply to the instances in which tubercle remains inactive in small patches for many years; for so common is tubercle in small masses in the lungs, that but few bodies can be opened in which they are not found; and yet during those years no evil was done by them.

We will now turn to the general system, and to the general symptoms. These are, chiefly, excited pulsation, hæmoptysis, cough, dyspnœa, night-sweats, wasting, and debility.

Rapid pulsation is no more characteristic of phthisis than it is peculiar to it, but yet it commonly attends it. In the investigations already referred to, I found the pulse below 60 and above 160 in different cases, and in the former the disease had passed into the stage of softening. One-fifth of the cases exhibited an average pulsation in all postures, for a whole month, of under 90; one-fifth, above 100; and three-fifths, between 90 and 100: and, on dividing the cases into two classes, of advanced and less advanced disease, the former had the quicker pulsation. The rapidity varied very greatly in the course of the twenty-four hours. In the night, it was so low as from 20 to 40 pulsations per minute lower than during the day, and was then still lower both by night and day during sleep; whilst during the day it was increased by food, sunlight, excitement, and much exercise. The effect of food was to increase the pulse up to 20 pulsations per minute; but, on the total average, the increase was about 11 pulsations from breakfast, 10 from dinner, 7 from tea, and 3 from supper. This increase was obtained within from one to three hours after the meal, and it subsided before the next meal. Thus the effect of food on pulsation was temporary, and, in consequence, the pulse exhibited a series of elevations and depressions corresponding with the number of the meals. The effect of short fasts was to prevent this variation of pulsation; and such would be the case with very frequent meals, except that, in the latter, the elevation would be greater than in the former. *Posture of body* was exceedingly powerful in this influence, and it varied with the period of the day. At 8 A.M., the excess of pulsation in the standing over the lying posture was so much, on the total average of 1,500 observations, as 20 pulsations; and at 4 A.M., it was 14 pulsations per minute. It is probable that, at a later period of the day, the excess would have been yet more greatly reduced. *Sunlight* was also most important, since it sustained the pulse to the extent of about 10 pulsations per minute throughout the whole daylight day. *Temperature* also, when considered in the long interval of a week or a month, had considerable influence in quickening the pulse, as the temperature

rose. (See diagram at page 110.) Its effect was not, however, uniform; for when the temperature rose above the degree which was comfortable to the system, the pulse rose in vastly greater proportion; and when the temperature fell from such an elevation, the pulse fell also, but not to the extent which would be proportionate to the degrees of lessened temperature. The pulse, however, rose with heat, and fell with cold. In like manner, with dryness of the air, as it increased, the pulse rose; and as it fell, the pulse fell; but in both directions there were limits to this parallelism. Thus it is manifest that season, as well as daylight, must have much influence over the progress of this disease.

Such, then, being the conditions of the pulse, with some of the circumstances to which they are due, the following are indications for practice in the treatment of the disease.

In the cases in which it is desirable to increase the pulsation, this may be effected by abundance of food, by exercise, by the sitting and standing postures, and by sunlight. These cases do not perhaps form a very numerous class of persons; but there are many of lymphatic or lymphatico-bilious temperament, in which the pulse is both infrequent and feeble, and is indicative of little vital power and activity. The progress of the disease in such cases is slow, but they are not the less difficult to treat.

In all cases, it is desirable to maintain a pulse of tolerable frequency, and with as much uniformity as possible. This is difficult, since the tendency is both to rapid pulsation and to very great variations. The following will have a tendency to the desired result.

1. Food in somewhat small quantities, and very frequently, and especially of milk, as opposed to the use of tea and coffee, since both of the latter are amongst the most powerful stimulants taken as food, whilst milk has but little influence in increasing pulsation. An important period for the administration of food, with the object now in view, is in the evening, during the night, and in the early morning; for at all these periods the pulse is either low or falling; and I am convinced that nothing can be more acceptable to the system than a small meal of milk and bread and butter, or of some such food, at from 3 to 6 A.M. With the same view, also, a diminution of food during the day, whilst the sunlight is powerful, is valuable.

2. Free exposure to sunlight in winter, and a limited exposure in summer; and hence both much out of door exposure in summer, and dark rooms and houses at all seasons, cannot be beneficial for this purpose.

3. A due cultivation of the horizontal posture. The sitting posture is not enough, since it implies a pulsation of 10 beats per minute more than the former.

4. An assiduous cultivation of sleep during the daytime; for then the pulse cannot fall so low with sleep as during the night; and thus the height of the day pulsation and the depth of the night pulsation are both modified.

5. A freely ventilated dwelling, as preventing a high temperature and dry air; and, for the like reason, a residence in a moderately cool and moist locality. At the stage of the disease when the pulse is commonly excited, an inland and upland residence is undesirable, and more particularly if that be in a hot climate. It is probable that a voyage on the Nile, or a residence at Malta or other ports on the Mediterranean coast, or a sea voyage, are of use amongst other things, by thus supplying a moderately cool and moist air, and hence preventing excessive increase of pulsation. Moreover, it is not unlikely that the fatality of our summer months (without the existence of any complication) is in great measure due to the great temperature, sunlight, and dryness of the air at that season of the year, all of which directly tend to exhaust the system by maintaining an increased rapidity of the blood-current, and a lessened degree of respiration. There is also a lessened evolution of carbonic acid.

The above general remarks are intended to be limited to phthisis when free from inflammatory complications; and, as the latter is an accidental circumstance only, and one to which my investigations do not refer, I shall not further enter into it.

Hæmoptysis is a very common accident in chest-diseases, and indeed in cases in which no chest-disease exists, and therefore ought not to be regarded as a very marked indication of the existence of phthisis. On the other hand, whilst it is commonly met with in the latter disease, during some part of the long period during which the disease continues, cases in the last stage, and with large cavities, are not infrequent, in which it was never observed. I have made careful inquiry into the subject, and am satisfied, that whenever, and from whatever cause, there may have been violent attacks of cough, with or without any impediment to respiration, slight hæmoptysis probably occurred. It has appeared, on close inquiry, that the so called hæmoptysis consisted of minute streaks of blood mingled with the expectoration; and, for the most part, it occurred with violent cough, with tickling and relaxation of the throat, or on first rising in the morning, without the occurrence of much or indeed of any cough. All these conditions are commonly found in simple chronic bronchitis. When with the two former conditions, it is fair to attribute the cough to the local irritation, and the hæmoptysis to congestion of some part of the mucous membrane (probably that about the fauces), induced by the obstruction to the circulation in the capillaries from the mechanical effort of coughing. In the latter, it has appeared to me to be rather due to congestion in the capillaries of the lung from long existing, and not temporary causes. These remarks apply primarily to chronic bronchitis, but they are equally applicable to phthisis. In that disease, even in a very early stage, there is often an irritable cough, not due directly to the condition of the lung, but to local irritation, itself partially the result of a general exalted sensibility of system, and of a tendency to local relaxation about the fauces. The suitable treatment for this is clearly first to allay this irritability by direct means, as by local applications to the fauces, and by sedatives; and, second, to so improve the tone of the system that the general sensibility shall be less exalted. For the former purpose, I find the local application of chloroform with oil, or of a solution of nitrate of silver, and very minute doses of morphia, taken internally, the most beneficial; and when the latter are so small as the one-sixteenth to the one-twelfth of a grain, the cough and tickling are commonly removed without the sensorium being in any way affected. I attribute great importance both to the plan and to the remedy; for I think it cannot be doubted that the irritable cough is an evil, and leads to greater evils; and I am convinced that the remedy, if fairly tried, will suffice to keep it in check.

The hæmoptysis which results from congestion of some part of the lung is to my mind a more serious question, and the remedy for it is not so easily determined. It may be, and often is, associated with irritability in the trachea and fauces, which is capable of relief as just mentioned; but it may be apart from it; and if it be associated with it, it yet demands a very different treatment. The cause of this congestion does not need to be of an inflammatory nature; neither is it necessary that inflammation should attend or follow it; but the latter result is a circumstance always to be feared. It appears to me to be due to the interference with the circulation in that part of the lung by the mechanical pressure of the deposited tubercle, or even probably from the inaction of the vesicles before the tubercle is deposited. It is clear that, when the cells become useless, the circulation will be lessened; and this will occur to a much greater degree when there is a mechanical pressure exerted by the deposit. This will cause congestion not only in the limited locality in which these changes occur, but also in every other part of the lung, by throwing a larger amount of blood into other vessels than they were accustomed to transmit. This would be so much the greater as the changes referred to were sudden in their development, and as their seat was widely fixed. It is also clear that this secondary congestion would be greater in the lobe in which the changes are proceeding than in other parts of the lung, from the localised distribution of the primary and the ultimate subdivision of the pulmonary vessels. Thus, I think, we account for congestion from local causes in the very earliest period of phthisis, and also, and to a greater extent, in the period of deposition, and long before the occurrence of any destruction of tissue.

In this point of view, the hæmoptysis is rather a remedial than a morbid agency, by relieving the vessels, and preventing or modifying more serious complications; and hence it may be a very serious question as to how far, in any given case, it may be proper summarily to arrest it. In some instances, there may be a rupture of the coats of the capillaries; but in most we may infer that it is rather a transudation. Whichever it may be, it cannot really influence the treatment. When it is not due to succussion from cough, but to congestion of a part of the lung, the correct plan of treatment must be derivative through the liver, bowels, and extremities, and not repressant. I do not see the value of local bleeding, since its action is too remote, and its power too little; but that of the horizontal posture, darkness, lessened temperature in hot weather, or a milder one in cold weather, by acting through the skin, with diminished food and excitement, must be proper. Gallic and the mineral acids cannot, I think, be safely employed at this period; but, in

the subsequent period, when there is extensive destruction of tissue, these styptic properties may be of great value. As the cause of this hæmoptysis is thus local and permanent, and moreover is commonly increasing, it would clearly be more constant than it is if the slow progress of the case did not permit the system to accommodate itself to the altered circumstances by increasing the rapidity of the blood-current. Hence rapidity of pulse may arise from prophylactic causes, and yet become one of the greatest enemies of the system. To the same cause we may probably further attribute the comparative infrequency of any inflammatory attacks in those parts of the lungs which are thus diseased; for, as the blood is carried along at a quicker rate, the quantity impelled at each pulsation is lessened; and hence the pervious vessels are less liable to congestion, and the evils which would follow from the local resistance to the blood-current are diminished.

Cough is an act which, in my opinion, should be sedulously restrained within narrow limits. Its remedial action seems to me to be restricted, or nearly so, to the removal of detached phlegm; but, as the circulation is quickened by it, it might be open to inquiry if temporary congestion could seek for its relief in coughing, as imperfect evolution of carbonic acid from the lungs induces frequent yawning. I think there may be a question raised on this point; but, as the increase of the respiration, and to a less extent of the pulsation also, occurs directly *after* the act, and as, during the act, the respiration is rather suspended, the former may admit of explanation by the latter. It cannot be maintained that cough is needful for the elimination of tubercle beyond the degree which is needful to remove detached mucus; for a cough which could suffice to detach matter from the air-cells must surely be sufficiently potent to be able to induce much mischief by disturbing the circulation. Hence I think it of prime importance that the frequent irritable cough should be arrested. It must, however, be effected by such means as will not in any degree derange any other part of the system, as the action of the bowels and liver, and the integrity of the sensorium. This is the best effected, if there be no inflammatory complication, by minute doses of sedatives, given alone and apart from expectorants, and only in doses and at times sufficient for the purpose in view. The combination of sedatives and stimulants, as in the common form of poppies and squills, appears to me to be indefensible; for both cannot have their full effect at the same time; and, in employing them, we must at the moment decide which effect we would desire. The removal of phlegm is commonly followed by relief to the cough; but that is the result of secondary influence, viz., the exhaustion of the nervous irritability; and the more direct way is to arrest the latter at once by suitable sedatives. When inflammation or congestion exists, the treatment will of course require modification; but, under all circumstances, as the cause of the cough is ever existing or recurring, it must in some degree ever attend the disease.

The importance of the state of the throat, as causative of cough, is most important; and I have frequently found that a cough, which had been intractable under every form of general treatment, yielded to local applications to the fauces.

Dyspnœa, although so constant an attendant of the disease, can hardly be said to be a source of great suffering; and this is doubtless due to the gradual adaptation of the system to the altered circumstances. As the vital capacity of the lungs is lessened, and the space for the residual air is diminished, it is manifest that, in order to the aeration of the blood, the circulation of the blood and the rapidity of respiration must both be increased. A period soon occurs, however, when this increase in rapidity does not suffice for the purpose, and then the dyspnœa appears; and the more so under such circumstances as exertion, erect posture, and the exhibition of food, which ordinarily call for a full supply of air. Thus it is due to an ever acting and increasing mechanical cause; and, when no complication exists, it may fairly be a question if we can really do anything which shall relieve it. No doubt, under the influence of temporary causes, as cold, inflammation, and derangement of the liver and other parts of the body, it is capable of relief proportionate to the influence of these causes; but otherwise I fear we may, and perhaps do, torture our patients with blisters and other irritants to very little purpose. The only directions for hope are the increase of the capacity of the lung, and the accommodation of the general system to the lessened vital action of the organ. The former is to be sought in the improvement of the general health, and in the employment of deep inspiration, both of which tend to increase the respiratory act, and also to prevent the further diminution in the vital capacity. In the early stage, it is probable that these plans of treatment may be efficacious; but, in an advanced case, hope can scarcely be cherished. The latter alternative is unfortunately the one which Nature is alone able to supply, and one also in which the physician even is compelled to take refuge. As, however, its tendency must be to favour the progress of the diminution of the vital capacity, so that ultimately the admitted air shall be inadequate to maintain life, if we favour it by medical aid, we lessen the present distress of the patient at the risk of shortening his life. It may, however, doubtless be effected by the employment of such plans as call for but little aeration; viz., repose, horizontal posture, somewhat elevated temperature, and little food.

[*To be continued.*]

Reviews and Notices.

Hints on the Pathology, Diagnosis, Prevention, and Treatment of Thoracic Consumption. By J. C. Hall, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary; late Lecturer on the Practice of Medicine at the Sheffield Medical Institution; etc. London: Longmans. 1856.

This little work contains an excellent *resumé* of the present state of knowledge respecting pulmonary consumption. Dr. Hall has presented us, in a compendious form and readable style, precisely with that amount of practical information with which the medical student can most easily furnish, and the busy practitioner most readily refresh, his memory.

Commencing with the statistics of consumption, we find treated in succession the general and microscopical pathological anatomy of pulmonary tubercle, the diagnosis of the disease, its physical signs, its general treatment, and the special treatment of its more important incidental symptoms. Thus, no part of the subject is left unnoticed; whilst no part is dwelt upon with an amount of detail that is wearisome.

We will cull a few of the interesting points which have struck us in perusing the volume.

In England and Wales, of the whole population, one person out of every 310 dies annually from thoracic consumption.

"When the health of the parents undergoes a change during the increase of their family, it sometimes happens as a consequence that the elder children are healthy and the younger ones the victims of thoracic consumption."

In phthisis, the apex of the left lung is most frequently the part affected; in pneumonia, the base of the right lung. There is thus a double contrast in point of localisation between the two diseases.

"All writers agree in stating that one half of the deaths from thoracic consumption occur between the twentieth and fortieth years, and that its maximum is reached at thirty; from this age the rate of mortality sensibly diminishes."

Amongst several very interesting cases of *arrested* phthisis, one given at p. 46, presented hæmoptysis, a humid click at the left apex, and with troublesome cough: "the expectoration consisted of free fat and other granules, disintegrating nucleated cells imbedded in a matrix, together with elastic tissue of the lungs; one or two pus-globules were also present."

Speaking of the earliest signs of phthisis, the author remarks, that "a prolonged expiratory murmur, slight in degree, when heard only on the right side, must not be considered conclusive; but it is far more significant when confined to the ape of the left lung."

The paragraph headed "Microscopic examination of the sputa", contains so good an exposition of recently acquired information, that we are tempted to quote from it largely, both as presenting valuable matter, and as furnishing a fair example of our author's style.

"For our knowledge of the microscopic appearances of the sputa in phthisis, we are not a little indebted to the labours of Schröder van der Kolk, Dr. Black, and especially to the valuable papers of Dr. Andrew Clark, and my friend and namesake

Dr. C. Radclyffe Hall, of Torquay. I have personally examined the sputa in more than one hundred cases of phthisis, and in many labouring under the Sheffield grinders' disease, that have been under my own care, and shall simply content myself with describing what I have seen..... There is a variety of expectoration which, without any qualification of which I am aware, may be regarded as conclusive of the existence of thoracic consumption. When spat into a glass containing water, it appears in globular masses, like little balls of cotton. Some may be seen floating on the surface, sustained by the bubbles of air which are entangled in the surrounding mucus; others are suspended at different depths, and some have fallen to the bottom of the vessel. The patients from whom such expectoration is obtained, will be found in an advanced stage of the disease, and a clicking rhonchus or the cavernous gurgling will generally be heard under one or both clavicles.

"The first kind of expectoration observed in thoracic consumption is frothy, and is characteristic of irritation. So far as my own experience goes, it does not enable us to arrive at any correct conclusion as to the existence of tubercle when placed under the microscope; and many of the appearances may arise from other causes. After a longer or shorter period, as the disease may be impending or established, the expectoration becomes gelatinous, rather transparent, and resembles a solution of isinglass. This expectoration is generally brought up in a morning in the dressing-room, and scarcely noticed by the patient. It consists of a transparent and very tenacious semifibrillated matrix, in which we may see imbedded oily matter, molecules, granules, and corpuscles. This kind of expectoration may often be seen in various forms of pulmonary congestion. The investigations I have made in numerous cases of phthisis, enable me to conclude with certainty that we have, in looking at this kind of expectoration, a diagnostic guide of very great practical importance; for when there is no special tuberculous tendency, the corpuscles are of one uniform kind; but when the deposit of tubercle has taken place, or is impending, the corpuscles are of various forms and sizes. Some are ovoidal, some spherical, and resist the action of acetic acid; others are abruptly defined, obscurely granular or nebulous, requiring the application of reagents to render their nuclei apparent. Others again are compressed and elongated; another set may be seen of a spherical form, which are filled with granules of fat or pigment, and these are often in process of disintegration; and, lastly, corpuscles may be seen with depressions, from which nuclei have been extruded.

"The first kind of corpuscles, Dr. A. Clark considers to consist of very young epithelial cells and extruded nuclei; the other varieties are unquestionably diseased epithelial cells, in various stages of degeneration. The jagged outlines of the corpuscles is a point of great interest to the practitioner, and almost certainly diagnostic of phthisis. Dr. C. Radclyffe Hall has drawn attention to the appearance in the sputa of *enveloped blood-corpuscles* at the commencement of thoracic consumption. In a great majority of the cases in which I have examined the sputa, this microscopic hæmoptysis has been evident, even when to the naked eye there was no trace of blood; and the opinion of this physician, that this appearance is seldom absent in cases of the disease in which the more obvious expectoration of blood is wanting, is strictly in accordance with what I have observed.

"The next kind of expectoration is met with at a more advanced stage of thoracic consumption. A highly characteristic example is given (plate I, fig. 6) of this flocculent sputa, in which will be seen a large piece of the curled elastic tissue surrounding the pulmonary vesicles. The expectoration was obtained from Sarah Ann Chambers, aged 18, admitted during the month of October 1856, under my care, at the Sheffield Public Dispensary, with signs of softening at the apex of one lung. It is at the period of the formation of these excavations in the lung, that I most frequently observe the elastic tissue forming the areolæ of the air-vesicles, partially obscured by masses of molecular matter, in which tubercle corpuscles may be seen, and it then becomes an important aid to the formation of a correct diagnosis..... I have never yet met with a case in which I discovered with the microscope the elastic tissue of the lungs, in the absence of all other symptoms indicative of thoracic consumption. Such a case, however, has occurred, in which that accomplished physician, Dr. Bennett, after a careful examination with the stethoscope, could not detect any physical sign of consumption."

The microscopic appearances in the Sheffield knife-grinders' disease are duly described; but on these we do not touch, as Dr. Hall is about to favour the readers of this Journal with a series of papers on the subject.

In treatment, our author, like every other discreet physician of twenty years experience, is judiciously eclectic. His book is rich in useful formulæ for the alleviation of distressing symptoms, which cannot fail to prove convenient in a complaint whose varied features often tax the ingenuity of the medical attendant to devise fresh forms of palliative remedy.

The illustrations in clearness and definition are excellent.

We heartily recommend this work as a useful and honest compendium of the present state of practical knowledge respecting pulmonary consumption.

British Medical Journal.

SATURDAY, FEBRUARY 21st, 1857.

MR. GORHAM AND THE BOARD OF GUARDIANS OF THE TUNBRIDGE UNION.

Instances of the conduct pursued by Boards of Guardians towards Poor-Law Medical Officers are common enough: but the details are often wanting. The entire correspondence on a case, however, of apparently a most flagrant kind, has been forwarded to us; and of it we shall give an outline.

It will be remembered by many of our readers that, at p. 112 of the Association Medical Journal for February 9th, 1856, there was published a correspondence between Mr. John Gorham and the Board of Guardians of the Tunbridge Union, relative to the salary of that gentleman as a poor-law medical officer. The correspondence was concluded (in March 1855) by a letter from Mr. Gorham, stating that "he felt so satisfied that, after a due investigation of the facts on which he based his appeal, the Board of Guardians must and would in justice to themselves, to the parish, and to Mr. Gorham, make the remuneration of the medical officer for the district commensurate with his duties, that he was not disposed to make his acceptance of the appointment conditional on an increase of salary." Thus matters rested until January 1856; when Mr. Gorham applied to the Board for one of the letters which had been sent by him. Instead of the letter, he received a copy of the following resolution:—

"That the clerk inform Mr. Gorham that the Board of Guardians decline to return his letter of the 14th of March last; that on the 16th of March, the guardians replied to Mr. Gorham's letter, and inquired whether Mr. Gorham made the acceptance of his office conditional on an increase of salary; and that Mr. Gorham, on the 20th of March, wrote to the the guardians, stating that he did not make his acceptance of the appointment conditional on the increase of salary.

"That the guardians have examined Mr. Gorham's medical returns, and find them very irregular, and that he has altogether omitted to enter the days when the paupers were attended or when medicines were furnished, or whether the attendances were given by his substitute, or other person instead of Mr. Gorham.

"That the clerk return to Mr. Gorham the last seven returns, and request him to insert the days when the paupers were attended and the medicines furnished, and to distinguish in red ink, whether the attendances were given by Mr. Gorham himself, or his assistant or other person."

After some further correspondence, Mr. Gorham offered to nominate as his assistant, Mr. Joseph Percival, a duly qualified member of the profession; and at the same time apologised for not having done this before, the omission being an act of inadvertency on his part. Although, however, Mr. Gorham

applied for the proper forms for making the nomination, no notice was taken of his request. At the same time, he reiterated his assertions that the amount of duties thrown on him had been largely increased, and that this addition had not been recognised by the Board of Guardians in the shape of an increase of salary. No notice whatever appears to have been taken of these representations; but, on December 22nd, 1856, Mr. Gorham received a letter from Mr. Grenville Pigott, Poor-Law Inspector, stating that he was about to institute an inquiry into a charge made by the guardians against Mr. Gorham, "that the entries in his Medical Returns, as District Medical Officer of the Tunbridge Union, had not been correctly made; but that entries of visits by him had been reported to the guardians, which he had not personally made."

It is very evident that Mr. Gorham would never have been troubled about inaccurate returns, if he had not become troublesome in his importunities to the Board for increased remuneration. As he himself correctly points out, "it is not imputed to him that the poor in his district have been neglected"; and he broadly asserts that "the poor have, one and all, been properly attended by himself and by thoroughly qualified medical men acting as his substitutes, and the patients themselves have never to his knowledge complained of want of attendance; and in every case of difficulty, he has always been referred to, and has given it his best care and attention." The charge against him was, we imagine, nothing more than a pretext for his removal.

In reply to a request that he would attend the inquiry to be held by Mr. Pigott, Mr. Gorham declined to comply, "after the entire absence of due consideration towards him exhibited by the Board of Guardians." This determination, we think, was scarcely politic, however much he might have been annoyed by the insulting conduct of the Guardians. It would perhaps have been better if he had attended the investigation. At the same time, he is desirous of a public inquiry, not merely into the charge brought against him, but also into several other matters of moment, which are thus expressed by him:—

"Whether those patients have or have not for the last eleven years received from me proper attention in every respect?

"Whether the communications which I have, from time to time, made to the Board of Guardians, as to the extent of the additional work thrown upon me, are or are not correct?—*i. e.*, whether the number of out-patients has or has not increased to three times the amount or thereabouts of the original number when I first took the parish, and whether the remuneration has not actually diminished?

"Whether those communications have ever received that attention which they deserved at the hands of the Board of Guardians, or whether they have not been passed by entirely unattended to?

"Whether these facts have ever been brought to the notice of the Poor-Law Commissioners; and if not, Why not?

"Whether the complaints which have now been made by the Board of Guardians in reference to the returns have not arisen solely in consequence of my pressing, what I conceived to be, the fair and legitimate claim for professional remuneration, not only individually, but as a simple act of justice to the profession to which I belong?

"Whether the sum of one shilling and eightpence per head for the whole year, for attendance and medicines administered by a properly qualified person, is a fair and proper remuneration?"

The result of the inquiry has been, that Mr. Gorham has been requested to resign his appointment; the principal reason being apparently not so much the substantiation of the charge, as the fact that Mr. Gorham declined to attend before the Poor-Law Inspector during the investigation.

The whole correspondence has been published by Mr. Gorham, and circulated among the rate-payers and medical men of Tunbridge. He hopes that none of the latter will engage in the duties of the office resigned by him, without a fair remuneration. We only trust that the profession in Tunbridge will not be deaf to this appeal to their honour. It must be remembered, too, that he has been not only injured but insulted by the Board of Guardians. Common courtesy would have dictated some kind of acknowledgment of his letters; but the passing over his statements in silence was an act of gross indignity.

THE WEEK.

THE Inquest on Mrs. Bacon has terminated in a verdict of "Wilful Murder" against Thomas Fuller Bacon, arsenic having been detected by Dr. Taylor in various parts of the body. In the interesting account of the *post mortem* examination given at p. 162, it strikes us that there is a discrepancy on one point between the evidence of Mr. Jackson and Dr. Taylor. Mr. Jackson says, that the abdominal viscera "presented a peculiar appearance," "like that which Dr. Christison and other analytical chemists describe as being the result of arsenic." On the other hand, Dr. Taylor describes the parts as "presenting none of the appearances which are usually produced by this poison." If the case have been correctly reported, this discrepancy may unfortunately prove a ground on which an astute counsel for the defence may work with the view of mystifying the witness and the jury.

The letter of Mr. Edward Barber, published at p. 158, affords an extraordinary example of the manner in which the study of forensic medicine is sometimes encouraged. Three medical men in Stamford, being desirous of observing the appearances presented on opening of the body of the late Mrs. Bacon, applied for admission to the place where the *post mortem* examination was being made, but were refused, although they stated their object to be merely to gain instruction, and not in any way to interfere in the case. No explanation was given, except in the case of Mr. Barber, who was told that, as he had attended Mrs. Bacon in her last illness, he would have to appear as a witness, and had therefore better not be present; but the exclusion of the other two gentlemen seems to have rested on the dictum of the Coroner, and Dr. Taylor and Mr. Jackson, the medical examiners. Mere idle curiosity is at all times to be repressed; but when medical men endeavour to avail themselves of opportunities of scientific improvement which are not every day afforded to them, on subjects which, nevertheless, may at any time be brought under their immediate notice, it appears *primâ facie* a most unwarrantable proceeding to deliberately and causelessly thwart them in the attainment of their laudable desire.

The series of Resolutions forwarded by the Royal Society to Lord Palmerston, and of which an outline is given in our news columns, are a sign of great promise. They show distinctly that the members of the learned institution from which they have emanated are desirous of no longer moving on in the old well beaten path, but of making such advances as shall be in pace with the progress of the age. The recommendations have of course a reference to the promotion of science in general; but medicine also will profit thereby. The proposal to enlarge the annual Government grant of £1,000 is worthy of note. When the grant was first instituted, it is probable that the sum was sufficient; but now that the field of science and observation has been and is being so vastly extended, the restriction to such a sum becomes almost ridiculous. Our French

neighbours are before us by far in the pecuniary recognitions which they are able to make of scientific improvements. A fortnight ago, the Academy of Sciences in Paris distributed a sum equal to £940 in rewards for improvements in medicine and surgery. It is true that this sum is the bequest of a private individual, the late M. de Montyon, and that they have numerous other rewards at their disposal, bequeathed also by private individuals. But this is not the case in England; and therefore the *onus* (if it ought to be so called) of rewarding scientific merit falls on, and should be liberally borne by, the state, which would in the end be no loser by its outlay.

At the meeting of the Academy of Sciences in Paris, on February 2nd, two of our countrymen had the honour of receiving some of the rewards annually bestowed by that learned body. To Professor Owen was awarded the Cuvier prize, in recognition of his having during more than twenty years greatly extended the field of comparative anatomy and paleontology, by his continued and valuable labours. One of the principal Montyon prizes, of 2,000 francs, was awarded to Professor Simpson, of Edinburgh, for his introduction of the use of chloroform into surgical and obstetric practice. A few weeks ago, the knighthood of the order of St. Olaf was conferred on Dr. Simpson by His Majesty the King of Sweden.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Adjourned Meeting.]	37, Soho Square, London.	Tues., March 3, 4 P.M.

METROPOLITAN COUNTIES BRANCH: ORDINARY MEETING.

An ordinary general meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Tuesday, February 10th; George Webster, M.D., President, in the Chair.

NEW MEMBER.

Thomas Charles, Esq., of 2, Hertford Street, May Fair, was, on the motion of Dr. Ogier Ward, seconded by Dr. Henry, elected a member of the Branch.

NOTICE OF MOTION FOR CHANGE OF LAWS.

Dr. Henry gave notice that at the next general meeting he should propose alterations in the Laws of the Branch, to provide for the appointment of two Honorary Secretaries in place of one.

MEDICAL REFORM.

The subject of Medical Reform having been brought forward, it was resolved that the meeting be adjourned for the further consideration of the question, until Tuesday, March 3rd.

Dr. Lankester gave notice that he should move—

"That this meeting rejoices at the near prospect of the settlement of the question of Medical Reform, by the adoption, on the part of the British Corporations and Universities, of the principal details of the Medical Reform Bill proposed by the British Medical Association; and would heartily approve of the proposal of the Medical Reform Committee of the Association, that one-third at least of the medical council constituted under the proposed Bill, should be chosen by the Government from among those members of the profession not constituting the Governing Bodies of the Corporations and Universities; and that the Branch strongly urges upon the Association the necessity of seeing that this arrangement is fully carried out."

Notice was also given of the following motions:—

"That this Branch do strongly recommend the Government to grant a new Charter to the College of Surgeons, on a more liberal basis as regards the elective franchise, and the residence in London as a qualification for the fellowship.

"That this Branch do petition Parliament to pass a Bill for the regulation or prevention of the sale of poisons."

It was also resolved, on the motion of Dr. Thudichum—

"That the proposed resolutions be printed, and a copy thereof sent to every member of the Branch, with an invitation to attend the adjourned meeting, for the purpose of considering, and if found suitable, passing them."

Reports of Societies.

NORWICH PATHOLOGICAL SOCIETY.

Donald Dalrymple, Esq., President, in the Chair.

STRICTURE OF THE RECTUM. BY W. B. FRANCIS, ESQ.

Mr. Francis exhibited a specimen of stricture of the rectum taken from a lady aged 34. The disease had extended over a period of thirteen months from the discovery of the stricture, and was indicated by occasional slight bleeding after the action of the bowels; progressive constipation; pain, and, during the latter period of the disease, great abdominal distension. When the finger was introduced to the full extent a nipple-like projection was felt, in which was a small orifice of about the size of a goose quill. With some difficulty a No. 10 male catheter was passed through the stricture. The treatment consisted of mild aperients, tonics, enemata, and careful attempts to dilate the stricture. The spasmodic contraction of the sphincter ani opposed greatly the use of instruments and requisite manipulation; this was freely divided, and larger bougies were used with greater ease. Gradually, however, the symptoms became aggravated; strength failed; emaciation followed; the stricture narrowed till scarcely any relief of the bowels could be procured; the abdomen became greatly distended, and death soon ensued.

The rectum was found healthy for about two and a half inches above the anus. For three and a half inches above this point the bowel was indurated, thickened, and excessively constricted. Above this again the bowel was healthy for a short distance; but, instead of rising out of the pelvis in the ordinary manner, it curved downwards, became connected with the strictured portion, and so narrowed at a second point as barely to admit a No. 12 bougie. Under the microscope the disease was clearly ascertained to be malignant, although serious doubts were expressed on this point, both during the life of the patient and after death.

AMPUTATION OF TONGUE BY AN ACCIDENT. BY B. H. NORGATE, ESQ.

Mr. Norgate detailed the case of a young man, aged 20, whose face was crushed by a wagon wheel. He received a compound fracture of the lower jaw, and the tongue was nearly severed at its base by the sharp edge of bone. When he was brought to the Norfolk and Norwich Hospital, the tongue was found attached by merely a few shreds of membrane, and nothing was left but to remove it. There was free but not troublesome hæmorrhage; articulation was impossible for a time, and deglutition was difficult. He gradually recovered; and when he left the Hospital speech was so far restored, that he could be under- stood without trouble.

THREE INJECTED SPECIMENS FROM THE EYE. BY W. WOODHAM WEBB, M.D.

Dr. Webb exhibited the following specimens:

1. An injected specimen from human fœtus of five months, of a posterior view of the entire membrana pupillaris, *in situ*, with the lens removed.

2. A vertical section of the corresponding eye, showing the looped vessels of the membrana pupillaris passing to it over the anterior margin of iris.

3. Detached capsule of the lens, with vessels spreading from pole to pole of the lens, in connection with another preparation of the same eye, verifying the commonly received opinion of the existence of this membrane as a distinct structure closing the pupillary aperture.

These preparations were presented in consequence of Professor Quekett having unsettled the question as to the true character of this part, and to negative the assertion advanced in his *Histological Lectures* (vol. i, page 131), "that at one stage of development of the lens, the whole capsule is covered with vessels; and if it should so happen, in the course of the dissection, that the anterior layer be detached from the posterior, the anterior layer would be described as the membrana pupillaris; but if the lens come away entirely covered with vessels, no such membrane is found."

CALCULUS AND DISEASE OF KIDNEY. BY C. M. GIBSON, ESQ.

Mr. Gibson exhibited a specimen of hypertrophy of the left kidney. The organ weighed 2 lbs. 2 oz. The right kidney was not so large, but was affected with fatty degeneration. The bladder was not unhealthy, and contained two small calculi. The prostate gland was enlarged.

DISLOCATION OF WRIST-JOINT. BY WILLIAM CADGE, ESQ.

Mr. Cadge exhibited a cast of an unreduced dislocation of the wrist, of twenty years duration. The bones of the forearm rested on the back of the carpus; and every prominence and groove of the radius was so obvious as to leave no doubt of the nature of the injury.

Editor's Letter Box.

ON THE AMOUNT OF MORTALITY FROM CHLOROFORM.

LETTER FROM T. HOLMES, ESQ.

SIR,—I have already discussed sufficiently the statistical question to which Dr. Arnott alludes in your last. The question between us is not one which can be solved by statistics, however extensive (and Dr. Arnott must forgive me for saying that his are far too meagre for any useful purpose), but by the details of well observed cases, and by careful reasoning upon them. All that Dr. Arnott has as yet attempted is to show that, in a period of three years (1853, '4, and '5), more persons died after amputations in London hospitals than a certain average, which is assumed for the time antecedent to chloroform, from the results of a comparatively small number of cases. The reason of that mortality is known; viz., the prevalence of pyæmia. Accordingly, Dr. Arnott, in order to establish his theory, ventured the assertion that the administration of chloroform predisposes to pyæmia. It was with a view principally of testing the accuracy of that assertion that I published the statistics to which he refers (in the *Medical Times and Gazette*), in which it is shown, from the records of more than two hundred cases of pyæmia occurring in St. George's Hospital during the last thirteen years, that the prevalence of that disease was tolerably uniform before and since the introduction of chloroform, and among those who had not, as well as those who had, been submitted to the action of that drug. This part of my statistics Dr. Arnott does not notice, but endeavours to found an inference favourable to his views on the results of the small number of cases of amputation which I gave. That it was only intended as the commencement of one which I hope to see completed from the records of other institutions. Till then it is better not to argue about it. Allow me to express a hope that, in future communications, Dr. Arnott will rely less on statistics which are obviously incomplete, and will produce, for the consideration of the profession, the details of those cases which have led him to the belief that chloroform predisposes to various secondary affections. Accustomed as I have been to see patients of healthy constitutions submitted to operations under chloroform without any apparent bad symptoms, and those of unhealthy constitutions without any which might not fairly be referred to that cause, I confess that I receive statements like that of M. Guérin with much hesitation, when unaccompanied by such details. In fact, such loose unsupported assertions do far more harm than good, and tend to encourage that tendency to hasty generalisation and exaggerated views of which we see so many instances in the medical literature of the present day. Let us not forget what one of our most esteemed authors has said, "that it takes little trouble to introduce an error which it may take enormous labour to eradicate"; and let us insist, before we subscribe to any doctrine, on having detailed facts and logical reasoning to base it upon. I have before pointed out to Dr. Arnott that, in order to render his theory even probable, he has to show not only that the mortality is now habitually in advance of what it was before (and this his statistics are not sufficiently ample to do), but that this increase coincided with the introduction of chloroform, and that the known and observed action of chloroform has some intelligible tendency to produce such increase. Till he has done so, he is strangely deceived in supposing that his theory rests on even the same kind of evidence which supports our received medical doctrines.

One word as to the concealment of deaths from chloroform. I did not say, as Dr. Arnott will find, that I believed none had been concealed, but not a sufficient quantity to affect the argument. I adduced certain reasons for thinking so, to which let me add, that a powerful one is, that I do not find Dr. Arnott himself saying that such cases have come under his own notice; nor have any (except one in which the opinions of those in attendance, as to the cause of death, were divided) such come under mine, though I have lived in the daily habit of seeing chloroform administered, in public and private, almost ever since its introduction, of communicating familiarly with many men in large operative practice, and of hearing the medical "small talk" of a great city.

As to the relative accuracy of the list which you published in 1853, and that of Dr. Crisp, you will perhaps refer that question to the gentleman who compiled the former list. I can only say for my part of it, that I searched our London journals carefully, and received additional cases from foreign journals from a gentleman on whose accuracy I rely.

In conclusion, allow me to hope that this correspondence may drop. I can assure Dr. Arnott that no one will give a more attentive, and I hope dispassionate, consideration than I to any new argument that he may have to bring forward: merely to reiterate the old ones cannot be profitable.

I am, etc., T. HOLMES.

4, Vigo Street, Feb. 17th, 1857.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your inserting the accompanying letter from the Poor-Law Board, which, with the preceding one of January 31st, published in your JOURNAL of February 7th, are most important to the union medical officers. The correspondence clearly defines the duty of the medical officer, which is to attend the poor resident in his own district *only*, and that he is not legally called upon to render assistance to a pauper out of it, though living in the same union. It also informs us that the relieving officer's duty is "to procure attendance by giving an order on the district medical officer, *or such other means, as the urgency of the case may require.*"

Hitherto, it has been customary for the union medical officers to assist each other gratuitously; in future, I trust they will make the guardians pay for their services. In cases of difficulty, and where aid is imperatively necessary, let them in writing inform the relieving officer, or, in "cases of sudden and urgent necessity", the overseer, whose order is then of equal force with that of the relieving officer, and request an order for such assistance, and it will be at his peril to refuse it. The Poor-Law Board have decided in my own case that the guardians must remunerate me, and this decision will apply as a rule to all.

I am, etc.,
RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, February 14th, 1857.

"Poor-Law Board, Whitehall, S.W., 9th February, 1857.

"SIR,—I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 2nd instant; and in reply to your inquiry, Whether it is a part of your duty, as medical officer, to render gratuitous medical assistance to the poor who reside beyond your district? to state that the Board can only refer you to Article 206, No. 1, of the General Regulations of the 24th of July, 1847, which will inform you of the circumstances under which it is legally incumbent upon you to attend any poor person.

"With regard to your request, to be furnished with a copy of the letter which the guardians have addressed to the Board respecting your general conduct, I am directed to state that as the Board have not received any specific charge against you which they can entertain, they do not think themselves called upon to furnish you with a copy of the letter referred to. It will be competent to the guardians to supply you with a copy of the resolutions which they have forwarded to the Board, and the Board must accordingly refer you to them on the subject. They desire me to assure you that no charge against you will be entertained by them without being fully communicated to you, and an ample opportunity being afforded to you of entering into any explanations respecting it which you may wish to offer. "I am, sir, your obedient servant,

"R. W. GREY, *Secretary.*

"Richard Griffin, Esq."

Article 206, No. 1, referred to by the Poor-Law Board, is:—"To attend duly and punctually upon all poor persons requiring medical attendance within the district of the union assigned to him, and according to his agreement, to supply the requisite medicines to such persons, whenever he may be lawfully required to furnish such attendance or medicines by a written or printed order of the guardians, or of a relieving officer of the union, or of an overseer."

EXHUMATION OF THE BODY OF THE LATE MRS. BACON.

Letter from Edward Barber, Esq.

Sir,—The exhumation at Casterton yesterday (for judicial purposes) of the body of the late Mrs. Bacon, mother of Thomas F. Bacon, who is charged with the murder of his children at Walworth, presented an opportunity of observing the condition of a corpse after twenty-one months interment; and it may be interesting to some of your readers to know in what state it was found, and hereafter be useful in assisting them to answer a question sometimes put to medical men as to the extent to which decomposition may have proceeded at any given period. Ann Bacon died at Stamford, May 15, 1855, at the age of 63. The body was enclosed in a strong oak coffin, French polished, and was deposited in a brick grave in the churchyard of Great Casterton, which is sufficiently elevated above the country immediately contiguous to it to secure good drainage. The grave was damp, but there was not any stagnant fluid in it: it is probable that it would be gradually absorbed by the bricks and transmitted to the surrounding earth. The coffin was quite sound, and did not appear to have undergone the slightest change. The sawdust in it was damp, but not wet, so far as one could judge by the surface. When the coffin was first opened there was some effluvium, but it quickly disappeared, and in a very few minutes there was not the slightest odour; none arose from the corpse that was perceptible within a few inches of it. The face was quite black; the mouth slightly open; the subcutaneous tissues were reduced either by absorption or exudation, so that the cheeks were nearly dry, and the skin of the face appeared to be tightly stretched upon the bones; the scalp seemed little, if at all, altered, and the hair remained firm upon the head. The hands were reduced in a similar manner; the skin was quite black, and shrivelled upon the bones of the fingers. The arms were wet with a viscid exudation, with which the sleeves of her dress were saturated, but their form was no way altered. The inferior extremities were in a similar state; the stockings had given way at the ends of the toes, which were dry and shrivelled; the fore part of the feet were black and dry, the instep and lower part of the legs wet with an exuding viscid fluid, with which corresponding parts of the stockings were saturated. The trunk of the body appeared little altered; the abdominal cavity had been distended with gas, which had escaped and had allowed the integuments to fall flat; but the size of the abdomen indicated that the bowels still contained much air: it presented much the same figure as that of a person immediately after the operation of tapping for ascites. The front part of the calico night-gown was dry and clean, and little, if at all, altered in texture: so that the corpse presented less appearance of change than might have been expected, and, for the purposes of judicial investigation, did not seem very much the worse for the lapse of time. I wish I could conclude with some observations on the state of the viscera; but this I am unable to do. Upon the removal of the body to a small barn for examination, it was stated that the coroner, on the recommendation of the medical examiners (Dr. Taylor, who, by order of the Secretary of State, attended to examine the body, and Mr. Jackson, of Stamford, who, by direction of the coroner, assisted him), declined to allow any one else to be present at the opening of the body. An appeal was made to him by Dr. Pratt and Mr. Morgan (both of Stamford), and myself, for admission, on the ground that it was a subject of professional interest, and presented an opportunity not often had of acquiring a knowledge which might, at a future time, be of public service; we pledged ourselves not in any way to interfere in the examination, but to stand there simply as spectators with a view to observe the changes and appearances of a body which had been so long interred. He said that he had no objection himself, but felt bound to attend to the wishes of the examiners. On appealing to them, and asking the reason for our exclusion, we could get neither admission nor explanation. It was objected to me that as I had attended the deceased in her last illness, and was to appear as a witness, I had better not be present; but this did not apply to Dr. Pratt or Mr. Morgan, who were subsequently refused permission to see the body after the removal of the parts required for chemical examination. I think, sir, our exclusion without any assignable reason, and at the instance of our professional brethren, was a breach of that courtesy and kindly feeling which should characterise the intercourse of the members of our profession. I admit with regret the existence amongst us of much professional jealousy, generally the offspring of local or self interest, but in all questions affecting alike the interests of science and humanity, and the advancement of professional knowledge, no class of men, perhaps, as a class, are less exclusive than ourselves; and I am unable to conjecture any reason for the departure in this case from the general rule. I see no objects to be served by our expulsion: nor had we any to attain in seeking admission, save those in which the public and the profession are equally interested with ourselves; and I enter this protest against the course adopted, hoping that it may not serve as a precedent for the future guidance of medical examiners in like cases. I am, etc.,

Edward Barber.

Stamford, February 7th, 1857.

ENCOURAGEMENT OF HOMŒOPATHY BY LEGITIMATE PRACTITIONERS.

Letter from J. R. Humphreys, Esq.

Sir,—The letter of Mr. Long which you inserted in last week's Journal, demands a few remarks from me, lest it should be thought that I have accused Mr. Long wrongfully of a breach of medical etiquette.

I would first direct attention to the inconsistency of Mr. Long's principles with regard to the propriety of meeting, or not meeting, a homœopath. Mr. Long states "that the letter of Mr. A. G. Field in the British Medical Journal of January 3rd, in reference to the above subject, accords so much with my own ideas in most of the points, etc." That letter, be it remembered, was written in justification of Mr. Long's conduct. Mr. Long further on tells us when the letter of Mr. A. —that is, the surgeon who refused to do what Mr. Long did— was read to him stating the reasons why Mr. A. would not meet the homœopath, he (Mr. Long) said, "I gave my full approval to the sentiments expressed in that letter, and pointed out the impossibility of Mr. A., if he considered Dr. Wilkin to be a homœopathist, meeting him in consultation." Now, sir, it is evident one of the two must be wrong, either Mr. A. or Mr. Long; which it is, I must leave your readers to decide now the facts of the case are before them.

As to the assertion made that Dr. Wilkin is not a homœopath, that is a mere subterfuge, readily proved by Dr. Wilkin's own words; by Mr. Long's conduct on the occasion; and, lastly, by the letter which was published by W. in the *Shrewsbury Chronicle*, and copied into the Journal of the 10th Jan. If Dr. Wilkin was not a homœopath, why did Mr. Long remark on his way to Sundorne "that he regretted to find himself in such an unexpected position, especially as regarded a gentleman for whom he had regard and esteem; but it is too late to recede; I should now, independently of Dr. Wilkin, after seeing the case, do what I thought right, and give an unbiassed opinion upon it?" I ask Mr. Long, if he was satisfied that Dr. Wilkin was not a homœopath, what was there in his (Mr. Long's) unexpected position to cause him regret, and why did he thus ignore Dr. Wilkin's presence? Again, on adjourning to the drawing-room, why did Mr. Long explain to the family— "that whatever might be their feeling respecting medicines, or their notion about homœopathy, this was obviously no case for it," if he was not satisfied in his own mind that Dr. Wilkin was a homœopath?

Dr. Wilkin, when he wrote to Mr. Long, enclosing the paragraph above alluded to, said, "he trusted he (Mr. Long) would think little or nothing of having his name associated with homœopathy in his attempt to save life." He adds: "homœopathy I have nothing to do with: as a man, and responsible for my act and deeds, I do what I conceive right." Here evidently there is a distinct admission that he is a homœopath, and as distinct a denial of it. Of the value of this statement I must leave your readers to form their own opinion. Mr. Long denies that he met or consulted with a homœopath. Mr. Long informs us in his letter, "that he desired Mr. Fergusson to state to the family whatever he had to say upon the case without either *Dr. Wilkin or myself* being present." What does Mr. Long call this, but meeting a homœopath? With regard to the consultation he further states, "in fact, there was no consultation in any sense of the word; and I believe most conscientiously that whatever course Dr. Wilkin may pursue in other cases, that in this case he was not accessory, either directly or indirectly, to its fatal issue." Now I ask Mr. Long, if there had not been a consultation, how could he be justified in giving so positive an opinion on this point?

I think, sir, I need not offer any apology for troubling you

again on this subject, as I feel there is a principle at stake which concerns us all; and, personally I have to substantiate the statements made in my two former letters, which Mr. Long must allow me to say I do not think he has refuted.

I am, etc., J. R. Humphreys.

Shrewsbury, Feb. 17th, 1857.

THE TOBACCO-SMOKING CONTROVERSY.

Letter from James Paxton, M.D.

Sir,—At the present time, there is an interesting discussion on the exceedingly prevailing custom of smoking; and the diversity of opinions upon this subject may justify a searching inquiry whether the custom is good, bad, or indifferent. Having carefully watched the effects of tobacco on the human constitution, and as the question is constantly, in our ordinary practice, before us, we shall find no difficulty in pursuing the inquiry, and furnishing a reply.

It is true that the properties of tobacco are soothing to the nerves. While a person is under its influence, he feels forgetful of past sorrows, and a freedom from anxiety about the future, with a gentle lull to all the faculties of body and mind—simply from a temporary intoxication. Moreover, there is a desire created to indulge these sensations until the indulgence overpowers the reasoning faculties, and excess follows excess: a pleasing exhilaration alternates with a stupefaction. Such are the results in inveterate smokers. In a greater or less degree, it affects every one. No wonder, therefore, young and old, rich and poor, have fallen into this unnatural habit. These remarks might be extended for, were there nothing further consequent; but [illegible] besides myself have examined into the physical influence of this plant on the system in those who use it; and the mode of its operation cannot be concealed. Although the smoker soon gets over the disagreeable excitement and peculiar sense of giddiness and sickness occasioned by his first attempt at smoking, yet there follows, by insensible degrees, a weakness of the powers of the heart and circulation of the blood. Mr. Solly's letter in a cotemporary journal has arrested the attention of the public. His own opinion is stated, with that of some of the most eminent physiologists and practitioners; and they condemn its use. The yielding to the acquired taste of tobacco cannot be gratified for any length of time without manifestly affecting the health. There are, indeed, some whose organisations resist the injury: these are exceptions to the general laws of the vital economy. The sallow complexions, debilitated frames, and disordered digestion of young men of the present day, attest the noxious influence of tobacco. This plant possesses no salutary qualities; neither removes nor mitigates disease; and neither supports the body nor refines the mind. On the contrary, by its combustion, the essential oil is volatalised, and inhaled or absorbed by the mucous membranes—an oil most injurious, nay, when administered to animals by way of experiment, it proves a deadly poison.

Many smokers express doubts and misgivings, and say, "I think smoking does me no good." These suspicions are just. However tranquilising to the nerves, such sensations are too dearly purchased when a train of ill consequences follow. From attentive observation, I feel assured that the use of tobacco is more or less subversive of all the purely natural functions of life, always impairing the finer sensations of tasting, smelling, and correct feeling.

I am, etc., J. Paxton.

Rugby, Feb. 17th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, February 13th.

LUNATIC ASYLUMS (IRELAND).

Colonel Dunne moved for leave to bring in a Bill to amend the law relating to the appointment of the Officers of Lunatic Asylums in Ireland, and also to the management of those institutions.

Mr. Horsman did not object to the introduction of the Bill; but would not pledge the Government to its support on the second reading. He did not think the House would be in a position to legislate on this subject till after the commission appointed last year had made its report.

Leave was then given to bring in the Bill.

Monday, February 16th.

VACCINATION.

Mr. T. Duncombe rose to ask the Vice-President of the Board of Health when the Committee on Vaccination, agreed to by the Government during the last Session, was to be appointed.

Mr. Cowper said it was proposed that a Bill of somewhat similar character to that of last year, should be brought in and referred to a Select Committee, with the understanding that they should fully inquire into the working and the results of the present law, and the best means of amending it. He believed that the Bill would be brought in in the course of a few days.

PUBLIC HEALTH ACT.

Mr. Cowper obtained leave to bring in a Bill to confirm certain provisional orders of the General Board of Health, applying the Public Health Act, 1848, to the districts of Ipswich, Oldbury, Stroud, Llangollen, and Dukinfield, and for altering the constitution of the Local Board of Health for the main sewerage district of Wisbech and Walsoken.

Tuesday, February 17th.

MEDICAL LEGISLATION.

Mr. Headlam gave notice that he should, on Thursday, February 19th, move for leave to bring in a Bill to amend the laws relating to the Medical Profession.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Burns. On February 12th, at the New Convict Prison, Chatham, the wife of Dr. Burns, Surgeon R.N., of a daughter.

Culhane. On February 12th, at Dartford, the wife of Daniel Culhane, M.D., of a son.

Norton. On February 16th, at 19, Monmouth Road, Westbourne Grove, the wife of Robert Norton, M.D., of a daughter.

Stewart. On February 16th, at 8, Weymouth Street, Portland Place, the wife of William E. Stewart, Esq., Surgeon, of a son.

Taylor. On February 16th, at Bayswater, the wife of John Taylor, Esq., Surgeon, of a son.

MARRIAGES.

Bealey—Bridges. Bealey, Adam, M.A., M.D., of 27, Tavistock Square, to Mary, Isabella, eldest daughter of John William Bridges, Esq., of 39, Tavistock Square, and Birch, Essex, at St. Pancras Church, on February 10th.

Griffith—Willis. Griffith, John William, M.D., F.L.S., to Anne, only daughter of Joseph Willis, Esq., of Hinton Charterhouse, Somerset, on February 12th.

Hudson—Groves. Hudson, John, M.D., of Cork Street, Burlington Gardens, to Louisa, daughter of the late Captain Groves, F.R.S., at St. James's, Westbourne Terrace, on February 17th.

Llewellyn—Brown. Llewellyn, Evan, Esq., Surgeon, of Mount Place, London Hospital, to Maria, only child of Thomas Brown, Esq., of Camberwell Green, at St. Giles's, Camberwell, on February 5th.

Nicholson—Wise. Nicholson, Captain Albert L., 64th Bengal Native infantry, to Anna Margaret, eldest daughter of Thomas Wise, M.D., late of the Honourable East India Company's Service, at Edinburgh, on January 13th.

DEATHS.

Rutherford. On February 14th, at Devonshire Street, Portland Place, George Sydney, eldest son of George Shaw Rutherford, M.D.

*Simons, John, Esq., Surgeon, of Birmingham, lately.

Smith, Richard, Esq., Surgeon, late of Chertsey, where he practised for fifty years, at 12, Percy Street, Bedford Square, aged 78, on February 12th.

APPOINTMENTS.

Crane, J. Wyatt, M.D., Physician to the Leicester Infirmary and Fever House, has been appointed one of the Honorary Physicians to the Leicestershire and Rutland Lunatic Asylum, on the resignation of Dr. Noble.

Jones, Arthur Newel, Esq., Surgeon, has been appointed by the Lord Chancellor a Justice of the Peace for the Borough of Bideford.

*Pridham, Thomas Lawrence, Esq., Surgeon, Mayor of Bideford, has been appointed by the Lord Chancellor a Justice of the Peace for the Borough of Bideford.

*Thompson, John, Esq., Coroner for the Borough of Bideford, has been appointed by the Lord Chancellor a Justice of the Peace for the said Borough.

PASS LISTS.

Royal College of Surgeons. Licentiates in Midwifery admitted at the meeting of the Board on February 11th :—

Davies, Henry Naunton, Cymmer Works, Pont-y-pridd, Glamorganshire: diploma of membership dated March 10th, 1854

Davis, William Farquhar, Grosvenor Street: May 12, 1856

De Nicéville, Charles Francis Hippolyte, Clifton, Bristol: January 8th, 1855

Hamilton, John Eccles, Royal Navy: June 23rd, 1845

Hutcheson, Robert William, Bahamas, West Indies: February 6th, 1857

Luke, Joseph, Claremont Square: June 15th, 1849

Roberts, Thomas Lewis, Australia: March 14th, 1856

Russell, George, Merthyr Tydvil: October 29th, 1852

Smith, Henry Tyrwhit, Melton Mowbray: July 25th, 1853

Smith, Josiah Sidney, Tiverton, Devon: May 8th, 1846

Times, Henry Gorsuch, Thayer Street, Manchester Square: February 6th, 1857

Williams, Charles, Dolgelley: March 31st, 1856

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 14th, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London in the week that ended on Saturday were 1264, and exhibit a decrease on those of the preceding week, when they were 1368. In the ten years 1847-56 the average number of deaths in weeks corresponding with last week was 1135. But as the deaths in the present return occurred in an increased population, it is necessary for comparison that the average should be raised in proportion to the increase, in which case it will become 1249. The rate of mortality last week was therefore very near the average rate in the second week of February.

The decrease on the previous week, amounting to about 100 deaths, is referrible in a principal degree to a diminished mortality from pulmonary diseases. Bronchitis carried of 224 persons in the previous week; last week the number was 178; pneumonia (inflammation of the lungs) was reduced from 96 to 90; phthisis, or consumption, from 184 to 172. On the other hand, hooping-cough shows an increase, 61 children having died of it in the previous week, and 70 last week. Measles presents more decided evidence of having been influenced by cold weather, for the deaths from this complaint, which had risen to 38, again declined to 20. The deaths from small-pox last week were only 3. The mortality from zymotic diseases in the aggregate was not high, as compared with the corrected average of corresponding weeks; but it will be seen that hooping cough was much more fatal than any other disease in that class. Three children died of measles on the 2nd and 5th of February in the Workhouse, Norwood.

The deaths of six persons (all women, and four of them widows) occurred at ages ranging from 90 to 97 years. The three greatest ages recorded are 94, 96, and 97 years. Four of these old women died in workhouses.

Last week the births of 947 boys and 904 girls, in all 1851 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1550.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·837 in. The *highest* reading in the week was 30·25 in., and occurred on Thursday. The mean temperature of the week was 40·9°, which is about 9° or 10° higher than that of the two previous weeks, and 2·4° higher than the average of the same week in 43 years (as determined by Mr. Glaisher). The *highest* temperature obtained in the week was 52·2° on Wednesday. The *lowest* occurred on Friday, and was 31·0°. The range of the week was 21·2°. The mean dew-point temperature was 35·2°, and the difference between this and the mean temperature of the air was 5·7°. The wind blew on almost every day from the south-west. The rain measured by the gauge was only nine-hundredths of an inch. The horizontal movement of the air was 220 miles on Monday; only 15 on Saturday.

ACTION FOR TRESPASS AND ASSAULT.

GEORGE *v.* JONES.

Mr. Edwin James, Q.C., and Mr. Prentice, appeared for the plaintiff; and Mr. Serjeant Shee and Mr. Pearce for the defendant. The plaintiff sought to recover damages from the defendant for breaking into his apartments and assaulting him, and also for services rendered by the plaintiff and his wife. The defendant pleaded the general issue.

Mr. James, in opening the case, stated that the defendant, Dr. Griffith Jones, called himself a hydro-homœopathic doctor. He resided at 43, Woburn Place, and professed to be vendor of a wonderful patent medicine, which was able to cure all diseases. The medicine was called "axtra mancaz", the meaning of which, the learned counsel said, he had not been able to discover; but it was recommended by the doctor as a cure for constipation and everything else. The doctor, in his prospectus, said he recommended it to all his patients, and used it in his own household (though he did not say he had ever used it himself). He said it was useful in consumption, and was an agreeable substitute for cod-liver oil. From the white sulphur which it contained, it possessed a bland aperient quality; and from the caseine, in which it abounded, it made excellent food for infants. The defendant had engaged the plaintiff to superintend an establishment which he had opened for the sale of the axtra mancaz, at No. 496, New Oxford Street; and the present action was brought for violently expelling the plaintiff from his apartments in that house on the 7th of July last. The plaintiff on that day had written a letter to the defendant, requesting an acknowledgment of the policy on the plaintiff's life, upon which the defendant had borrowed £100; he, being irritated by that letter, the defendant sent a man, named Ray, and a body of nearly twenty men from St. Giles's, who broke into the plaintiff's rooms, assaulted him violently, and endeavoured to eject him from the house.

William George, the plaintiff, after stating the circumstances under which he had resided in Dr. Jones's establishment, gave the following evidence regarding the assault:—Mr. Ray called on me on July 7th. He was assistant to Dr. Jones. He came at 3 or 4 o'clock, or later. Ray came again in about an hour. He brought a number of men of the roughest description. There were about a dozen. The back parlour door was burst open, and they rushed upon me. I got into the front room, and they knocked me down. They dragged me along. I resisted, and was nearly strangled. They knelt on my breast. The police released me. A written authority was produced by Ray, in Dr. Jones's handwriting, as follows:—

"Hydro-Homœopathic Establishment, 43, Woburn Place, July 7, 1856.

"I authorise Mr. Ray to turn out all persons trespassing on my premises, 496, Oxford Street. "D. G. Jones."

Ray returned again the same day with a dozen or twenty men. They made several attacks on the doors, but I succeeded in keeping them out. The police came in after this, and as the police came, the men got away. My wife was very unwell at the time. They held up this chopper at a female in my house, and threatened to bury it in her skull if she gave any alarm. I was internally injured. Through the interference of the police, I was allowed to remain till the next day. I was not engaged for any particular time; but I was to have £1 a-week, and 5s. for each lecture which I was to deliver, and a commission on what I sold. I was not to pay any rent. On the 7th of July, I had taken apartments at 75, Red Lion Street, Holborn.

Cross-examined.—I never was a carpenter. I was in the early part of my life an upholsterer and cabinet-maker. I had a chemist's shop in Pentonville for two years. It was in Lower Queen's Row. I sold mineral compounds and vegetable poisons. I was for twelve months, eighteen months, or two years, a pupil of Dr. Beach's, in Kennington Lane. It was a private medical academy. I attended two courses.

Re-examined.—I am an Englishman.

By Lord Campbell.—I have never been in the States.

By Mr. James.—There is a Reformed Medical Society in the United States. [*Laughter.*] This is my diploma. Dr. Beach

was the founder of the Medical Reformed Colleges in America.

Mr. James handed up to the Court a diploma on parchment, which had been given to the plaintiff.

Lord Campbell, who seemed much amused with the document, said it only authorised the plaintiff to practise in America.

The witness said the defendant knew of this diploma.

Mrs. George.—I am the wife of the plaintiff. I remember the men coming on the 7th of July. We had been at work, arranging to move our things. I did work for twelve months in cleaning the dispensary.

Thomas Pratt, a policeman.—I saw the man Ray with about twelve men at the house in New Oxford Street. They looked like costermongers from St. Giles's. I heard screams of "murder!" and when I got to the house, the men referred me to Mr. Ray, their employer. Ray said he was trying to eject a party. He said he had a magistrate's authority. I asked him to produce it, and he refused. I went upstairs, and saw the panels of the door broken in, and observed to Ray the state in which Mrs. George was; and that if anything happened to her, he might be indicted for manslaughter.

Other witnesses corroborated the previous evidence. Among these were two of the men employed by Ray: they stated that they had been paid for their work.

Mr. Cuff, a surgeon, proved that he attended the plaintiff, and found bruises on various parts of his body. He suffered from fever in consequence of the injuries. He was in bed four days, and then he suffered from debility and pain from the injuries.

Lord Campbell, in summing up the evidence, said there would be a question as to whether the defendant was liable to pay for the plaintiff's wife's services; but as to the trespass and assault, his Lordship said the only question would be as to the amount of damages which the plaintiff ought to recover. The jury would give reasonable damages.

The jury found for the plaintiff—Damages, £35 for the assault; and £15 for the wife's services.

POOR-LAW MEDICAL REFORM.

MEETING OF STUDENTS OF THE LIVERPOOL INFIRMARY SCHOOL OF MEDICINE.

At a general meeting of the students of the Liverpool Royal Infirmary School of Medicine, held on Wednesday, Feb. 4th, for the purpose of supporting Mr. Griffin's movement—A. Brooke George, Esq., in the Chair—the following resolutions were proposed and carried unanimously:—

1. Proposed by Mr. Roskell, and seconded by Mr. Callen—

"That the thanks of this meeting are especially due to R. Griffin, Esq., for his unwearied exertions in the cause of Poor-Law Medical Reform."

2. Proposed by Mr. A. Long, and seconded by Mr. Williams—

"That this meeting, viewing with regret and indignation the injustice and oppression which union medical officers now suffer, deems it expedient that prompt and decisive support should be given to the movement already set on foot by R. Griffin, Esq., which movement this meeting considers will be the most effectual means of obtaining redress if supported by the profession at large."

3. Proposed by Mr. Campion, and seconded by Mr. J. H. T. King—

"That the present system of supervision of Poor-Law Medical Officers, by persons not conversant with either medicine or surgery, ought to be amended, by appointing a Medical Inspector on the Poor-Law Board, to whom would be referred all charges of a purely professional character."

4. Proposed by Mr. Thompson, and seconded by Mr. E. Stokes Roberts—

"That this meeting earnestly urge their brother students in the United Kingdom to join in pledging themselves that on the completion of their studies, they will not accept any appointments as union medical officers until a more equitable adjustment of salaries has taken place."

5. Proposed by Mr. Finegan, and seconded by Mr. Robinson—

"That in order to carry out the objects of the meeting, a committee be formed, consisting of the following gentlemen:—Mr. A. B. George, Chairman; Mr. Roskell; Mr. H. G. Rawdon; Mr. E. Stokes Roberts; Mr. A. Long; and Mr. J. H. T. King, Honorary Treasurer and Secretary."

The business of the meeting was concluded with a vote of thanks to Mr. A. B. George, for his able conduct in the Chair.

J. H. T. King, *Hon. Treas. and Sec.*

MEETING OF STUDENTS OF ST. BARTHOLOMEW'S HOSPITAL.

A meeting of the students of St. Bartholomew's Hospital was held on Tuesday, February 17th, for the purpose of supporting Mr. Griffin's movement, Mr. Chippendale in the chair. The following resolutions were then adopted.

1. Proposed by Mr. Barford, and seconded by Mr. C. Smith—

"That this meeting tenders its best thanks to Mr. Griffin for his able and unwearied exertions in the cause of poor-law medical reform."

2. Proposed by Mr. G. Reed, and seconded by Mr. Dixon Adams—

"That this meeting pledges itself to support the movement commenced by Mr. Griffin, and resolves upon its best endeavours to promote the reform of the present iniquitous system."

3. Proposed by Mr. R. Goodall, and seconded by Mr. Heelas—

"That this meeting desires to express its disapproval of the conduct of those members of the profession who, regardless of its dignity and interest, have hitherto treated this movement with apathy and indifference."

4. Proposed by Mr. Chalk, and seconded by Mr. Oldman—

"That the present system of vesting the power of appointing union medical officers and fixing the scale of their remuneration, in the hands of the boards of guardians, is viewed by this meeting with the greatest disapprobation."

5. Proposed by Mr. Russell, and seconded by Mr. Daniels—

"That this school is of opinion that an aggregate meeting of the students of the metropolis should be held; and it therefore appoints two delegates to confer with the representatives of the other hospitals."

6. Proposed by Mr. Muskett, and seconded by Mr. Linacre—

"That in order to carry out the objects of this association, a subscription should be at once commenced to defray the necessary expenses."

Mr. Barford and Mr. G. Reed were then chosen to represent the school.

Mr. Chippendale was elected Chairman; Mr. Daniels Treasurer; and Mr. Russell Honorary Secretary.

The proceedings terminated with a vote of thanks to the Chairman, for the able manner in which he had conducted the business of the meeting.

John Russell, *Hon. Sec.*

Garioch Medical Association. The Garioch Medical Association (Aberdeenshire), at their quarterly meeting held in Inverury on Friday, February 6th, had under consideration the measures of medical reform at present before the public. The Association expressed an unanimous opinion in favour of those points for which the British Medical Association have all along contended, viz., preliminary examination, uniformity of qualification, reciprocity of practice, registration, and the exercise of a general superintendence over medical education. These are all found provided for in Mr. Cowper's bill: together with a council, to be appointed by Government, which it was also deemed advisable to accept, rather than divide the profession on the question. A committee was appointed to watch the introduction of any measure. A hope was expressed that at some not very distant day the Garioch Association might become a branch of the British Medical Association.

Disease among Cattle. Advices from Konigsburg give unfavourable accounts regarding the cattle disease, which during the past two years has manifested itself in Poland and other parts of Russia, and which now threatens to spread to Germany. For a short time during last autumn there seemed to be some abatement in the distemper, but it has again become very virulent. It seizes the animals suddenly; and after severe trembling and purging they die within four-and-twenty hours. One proprietor lately lost 300 head in a single night. It attacks cattle exclusively, and does not communicate itself to sheep or any other kind of stock. Every effort is used to prevent infection, and detachments of the military are charged to destroy and bury all that become affected. On the Prussian frontier a strict quarantine is enforced; but it has already made its appearance in some villages, and the authorities have ordered that if even only one of a herd be attacked the whole are to be slaughtered. The recent progress of the disease northward towards St. Petersburg has been a chief cause lately in the advance of the tallow-market. (*Times.*)

Medical Society of London. On this (Saturday) evening, a paper will be read by P. C. Price, Esq., "On the Treatment of Certain Diseases of the Knee-Joint by the Operation of Resection."

INQUEST ON MRS. BACON.

The inquest on the body of the late Mrs. Bacon has terminated in the finding of arsenic in the body, and the returning of a verdict of Wilful Murder against her son. We subjoin the medical evidence with regard to the *post mortem* examination.

Mark Wilson Jackson, surgeon, Stamford, deposed,—I made a *post mortem* examination of the deceased. On opening the body the abdominal parietes were found to be unusually thick; they consisted of layers of fat and muscle (of a reddish colour), varying from half an inch to two inches in thickness. On raising the parietes the omentum, or caul, was exposed, on which a peculiar redness was apparent. The stomach and liver appeared in their proper positions. On removing the omentum the bowels were seen; they appeared dry, empty, somewhat inflated, corrugated like dry bladder, a patch of redness here and there. The mesentery was loaded with fat; the colon and stomach appeared thickened. The stomach was of a dark reddish colour, and much reduced in size. The liver was small in size; the gall bladder was full; the whole of the viscera of the abdomen were in a high state of preservation, and presented a peculiar appearance. Such a condition would not be produced by any disease; the appearance was like that which Dr. Christison and other analytical chemists describe as being from the effects of arsenic. If Dr. Taylor should find arsenic it certainly will be a strong proof of the highly preservative effects of arsenic, and also show that bodies consigned to the tomb poisoned by the action of this pernicious drug will for years retain the appearances peculiar to its specific action as a preservative.

Professor Taylor presented his report, which was as follows:

"Report of analysis in the case of Mrs. Ann Bacon.

"The box delivered to me by Chief Constable Mitchell contained—

"1. A bottle holding a quantity of bloody liquid taken from the chest of the deceased.

"2. A large jar containing the viscera.

"3. A brown paper parcel containing mould from the grave of the deceased.

"Articles 1 and 2 were in the state in which I had delivered them to Mr. Mitchell—namely, well secured and sealed with my seals, which were unbroken.

"1. Contents of the Bottle. The liquid was of a reddish brown colour, and measured seven fluid ounces. It was examined by the usual chemical processes for arsenic, but it contained no trace of that poison.

"2. Contents of the Jar. This jar contained—1, the stomach; 2, the spleen; 3, the kidneys; 4, the heart; 5, the liver and gall bladder; 6, the small and large intestines. These different organs were very much shrunk and diminished in size as the result of changes since death; but on the whole they were in a very good state of preservation, so that the parts could be separated and recognised.

"*The stomach* was reduced to about one half of its natural size. The coats were thin, but firm. When laid open the mucous membrane, or inner coat of the stomach was found covered with a thin, black, pasty-looking substance closely adhering to it, and giving a dark colour to all the coats. There was no redness of the mucous membrane. and no mineral matter could be perceived by a magnifying glass when the surface was examined. The coats with the black substance adhering to the inside of the stomach were examined for mineral poison, with the result that a small quantity of arsenic was separated from them. No other metal or metallic compound was detected. There was no trace of any kind of food.

"The *spleen* was small, much diminished in size; its substance was soft, and easily broken down. It yielded a slight indication of the presence of arsenic.

"The *kidneys* were shrunk to about one-third of the natural size; they were of a reddish brown colour, moderately firm when cut, and were imbedded in a large quantity of fat, part of which had been converted into adipocere. Arsenic was detected in them in larger proportion than in the spleen, but in smaller quantity than in the stomach.

"The *heart* was collapsed; its cavities were quite empty, and it was much reduced in size. The outside of the organ was loaded with fat. The valves in the ventricles were plainly recognisable: they were free from any ossific deposit. This organ did not contain any arsenic.

"The *liver* weighed about 2lbs. Its structure was firm and of a dark reddish brown colour; it was in a good state of preservation. Twelve ounces were taken for analysis, and arsenic was separated in about the same proportion as from the whole of the stomach. The gall-bladder was also well preserved; its coats were firm, and the inner coat was deeply stained and covered by a layer of thick bile. There were no gall-stones. The gall-bladder, with its contents, yielded arsenic in greater proportion than the stomach.

"*Small Intestines.* The coats were thin and collapsed, but firm and rather tough; in fact, they were well preserved. Excepting the duodenum, they were empty or contained only air. In some parts the mucous membrane was covered with a thin, black, pasty substance like that found in the stomach. This was especially observed in the duodenum. The duodenum contained arsenic in greater proportion than the stomach. About one-third of the small intestines, taken from different parts of their length, also yielded arsenic in greater proportion than the stomach.

"*Large Intestines.* The coats were firm, and equally well preserved. A black pasty-looking substance was found, but nothing of a mineral nature could be detected by the aid of a magnifying-glass. There was no redness of the coats of the large intestines. On analysing, the large intestines with their contents yielded arsenic in about the same proportion as the parts of the small intestines examined. There were, also, in the rectum traces of mercury and antimony.

"3. Mould from the Grave. Twenty-two ounces of this were examined for arsenic. It contained none, either in a soluble or insoluble form. It consisted of ordinary clay, sand, carbonate of lime, and oxide of iron, with vegetable roots and fibres.

"Conclusions. 1. The body of the deceased Ann Bacon contained arsenic, which must have been taken by or administered to her while living.

"2. The arsenic was found in the largest proportion—1, in the intestines; 2, in the liver and gall-bladder; and 3, in the stomach. The kidneys and spleen contained a small quantity; the heart and bloody liquid of the chest contained none.

"3. The total quantity extracted from the different parts was small—namely, about three-quarters of a grain.

"4. The parts containing the arsenic were well preserved, but presented none of the appearances which are usually produced by this poison.

"5. Whether the deceased died from the effects of the arsenic or natural disease, can only be determined by the symptoms from which she suffered in the illness preceding her death.

"Alfred Swaine Taylor, M.D., F.R.S."

Testimonial to Thomas Thomson, M.D. A testimonial has recently been presented to Dr. Thomas Thomson, formerly of Stratford-upon-Avon, and now of Leamington. For six-and-twenty years Dr. Thomson was Honorary Physician to the Stratford Infirmary; and on his retirement from that, a short time ago, to reside at Leamington, the Stratford public considered that some testimonial was due to him for his long, able, and gratuitous services to the institution. Accordingly, a subscription was set on foot, and a very handsome testimonial, of solid silver, and of £200 value, was designed and executed by Messrs. Garrard and Co., of London. The elegant offering was presented to the eminent physician at four o'clock in most appropriate terms. The subject of the superb work of art is taken from one of Shakespeare's plays. On a simple base, which contains a clock in the Cinque Cento style, is represented in full relief, with animated and forcible action, the noble story of the deliverance of Oliver by his brother Orlando, taken from the description in the fourth scene of the fourth act of "*As you like it.*" The testimonial was presented to Dr. Thomson at his residence, by a deputation consisting of Lord Villiers, Joseph Townsend, Esq., and several clergymen and gentlemen.

Royal Society. An important series of resolutions has been transmitted by the Royal Society to Lord Palmerston. The Royal Society begins by suggesting that the necessities of the times require that physical science should be made a branch of public education; and this suggestion, we venture to say, will be received with approbation by all but those who pertinaciously adhere to old-world notions about the educational theory. The Royal Society then goes on to recommend the encouragement of provincial museums, and of lectures upon scientific subjects, and, as ancillary to this, recommends that duplicate specimens from the British Museum and other institutions should be distributed. It further recommends that national publications bearing on science be more extensively circulated than they are at present, by additional donations to societies and individuals engaged in the cultivation of science.

Furthermore, that the sums placed by Parliament at the disposal of the Government and of the Royal Society should, in the former case, be augmented, and, in the latter, not necessarily limited to 1000*l.*, but increased wherever "special reasons may be assigned for an additional sum." That scientific officers shall be placed more nearly on a level, in respect to salary, with such other civil appointments as are objects of ambition to civilised men. Finally, the Royal Society expresses its satisfaction at the concentration of the principal scientific societies at Burlington House, and suggests the establishment of some Board "which might advise the Government on all matters connected with science." The society concludes by pointing out the fees taken upon the granting of patents as the proper fund from whence money might be taken, if necessary, for the purpose of carrying out their recommendations.

MEDICINE IN EGYPT. All who are interested in the progress of medicine will be gratified in learning that the school of medicine in Cairo has been reopened. The school, which was founded about thirty years ago by Dr. Clot-Bey, was suppressed by the late Viceroy Abbas Pasha, and its founder was compelled to retire from Egypt. On the 10th of September last the institution was reopened, under the presidency of Ethem Pasha, to whom the progress of public instruction in Egypt owes much. Dr. Clot-Bey delivered a discourse on the occasion, and proclaimed the opening of the school.

LUNACY. The receipts of the Lunacy Commissioners in the year ended the 31st of July, 1856, amounted to £14,491, and the payments to about £13,158.

TO CORRESPONDENTS.

LETTERS and other COMMUNICATIONS for the JOURNAL should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C.; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—MR. J. H. T. KING; MR. W. JAMESON; MR. G. BIRD (Tollerton); MR. J. S. GAMGEE; MR. CHARLES PEARSON; DR. J. SLOANE; MR. THOMAS PAGET; MR. T. L. PRIDHAM; DR. C. H. JONES; MR. BASSETT; MR. R. GRIFFIN; MR. J. SCHOLFIELD; DR. NELSON; MR. G. BODINGTON; MR. PROPERT; DR. THOS. WILLIAMS; MR. G. B. MASFEN; MR. JOSEPH HINTON; MR. W. DALTON; DR. GLÜCK; MR. T. HOLMES; DR. J. R. NICHOLSON; DR. EDWARD SMITH; MR. HERBERT MORRIS; MR. J. V. SOLOMON; MR. J. R. HUMPHREYS; DR. PAXTON; DR. F. J. BROWN; SIR H. COOPER; MR. MCDERMOT; MR. W. COLLYNS; DR. SIEVEKING; MR. JOHN RUSSELL; and DR. LAUDER LINDSAY.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Epidemic Cholera, Diarrhœa, and Dysentery. Pointing out an Effectual and Expeditious Method of Cure. By Henry Jeanneret, M.D. Pamphlet. London: 1857.
2. The Crystal Sphere: its Forces and its Beings: or Reflections on a Drop of Water. By J. Milton Sanders, M.D., LL.D. London: Baillière. 1857.
3. On the Pathology, Symptoms, and Treatment of Ulcer of the Stomach: with an Appendix of Cases. By *William Brinton, M.D. London: John Churchill. 1857.
4. Nature and Art in the Cure of Disease. By *Sir John Forbes, M.D., D.C.L., F.R.S. London: John Churchill. 1857.
5. The Constitution of the Animal Creation, as expressed in Structural Appendages. By G. Calvert Holland. London: John Churchill. 1857.
6. A Report on some of the more important Points in the Treatment of Syphilis. By Holmes Coote, F.R.C.S. London: Churchill. 1857.
7. Compressed Air as a Therapeutic Agent in the Treatment of Consumption and other Diseases. By Archibald Simpson, M.A., M.D. Edinburgh and London: 1857.
8. The Constitution of Women, as illustrated by Abdominal Cellulitis or Inflammation of the Cellular Membrane of the Abdomen and Pelvis. By Charles Bell, M.D. Edinburgh: Sutherland and Knox. London: Simpkin & Co. 1857.
9. What is to be done with our Criminals? A Letter to the Right Honourable the Lord Mayor. By Charles Pearson, Esq., City Solicitor. London: Hall and Virtue. 1857.

ADVERTISEMENTS.

Pepsine and its Preparations.—TITTERTON'S MEDICINAL RENNET, or Liquor Pepsiniæ Præparatus (as originally approved of, and so named, by Dr. DAVID NELSON, of Birmingham, in 1851.—See *The Lancet* of 1855-56.) Messrs. W. and C. R. TITTERTON are ready to supply this well tried and valuable remedy for Diabetes and the various forms of Dyspepsia, in pint and half-pint bottles.—Apply, 6, Snow Hill, Birmingham.

TESTIMONIAL.

"13, Colmore Row, Birmingham.

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Fig. 1.

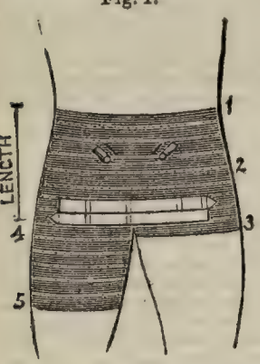


Fig. 2.

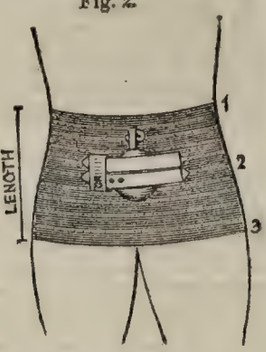


Fig. 1. THE BELT AND AIR-PAD FOR FEMORAL HERNIA.—Mr. BOURJEAURD begs to state that this has been extensively tried, and has met with great approbation, especially at Guy's and St. Bartholomew's Hospitals. (See *Lancet*, January 10, 1852, p. 43; and March 13, 1852, p. 267.)

Fig. 2. APPARATUS FOR UMBILICAL HERNIA.—Mr. BOURJEAURD has had several cases of radical cure with young subjects. (See *Lancet*, July 12th, 1851, page 33; and Feb. 12th, 1853, page 153.)

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Professor of Chemistry, etc., in the London Hospital.

January 21st, 1856.

Sir,—I hereby certify that I have this day terminated a careful examination of the loaves (one of which was Brown Bread) which you left with me for the purpose a few days ago; that they were all perfectly free from alum, and in every respect genuine, each according to its kind. I feel, therefore, much pleasure in giving you this certificate under the conditions which you have accepted, and which are recited in your letter to me—namely, that you have undertaken to forfeit £50 in behalf of a Provident or Charitable Institution should Bread or Flour in any way adulterated be subsequently found exposed for sale in your shop.—I remain, Sir, yours respectfully,

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. IX.] LONDON: SATURDAY, FEBRUARY 28, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

EXCISION OF THE KNEE-JOINT : SYMPTOMS OF PYÆMIA : AMPUTATION OF THE THIGH : RECOVERY.

Under the care of W. BOWMAN, Esq. and HENRY LEE, Esq.

[*From Notes by* MR. RENDLE.]

MARY ANN B., aged 19, was admitted November 19th, under the care of Mr. Bowman, on account of chronic abscess of the knee-joint. The disease, which was of three years duration, appeared to have commenced in an attack of synovitis, which passed on to abscess within the joint; and this latter had burst four months ago, on the outer side of the patella. On her admission, the leg was found bent at an acute angle on the thigh; there was a good deal of fluid in the joint. The patella was lying on the outer side of the outer condyle, and the tibia was also dislocated. There was not much pain in the joint. The general health was tolerably good.

The opening into the joint was dilated by an incision, with some temporary benefit; but as her health was beginning to suffer (furred tongue, hectic flush, etc.), it was thought best to excise the joint. This operation was performed by Mr. Bowman on December 6th. The ends of the tibia and femur were removed, as was the patella, which, as well as the other bones, was extensively eroded by the abscess.

She seemed to suffer severely from the shock of the operation, and on the second day is reported as "feverish" and thirsty, with brown tongue, and very small rapid pulse. On the fourth day an attack of erysipelas of the thigh supervened. The discharge from the wound was foul and grumous. It was necessary to give her very large quantities of wine and other stimulants, and with this she slowly gained strength; but, a fortnight after the operation, the end of the femur was found uncovered and apparently threatened with necrosis. An abscess now presented in the parotid region, and was soon afterwards opened. The end of the femur seemed infiltrated with pus; there was also a large abscess between the ends of the bones; and it was evident that if the case were left much longer, she would die of the secondary infection of the blood, which there was every reason to believe already established. Accordingly, on January 7th, Mr. Lee (who had now charge of the case) determined to give her the chance of amputation.

On account of her great weakness, it was thought better not to remove her into the operating theatre; and she was accordingly brought under the influence of amylene, and the limb removed (by the circular method) in the ward. On examination of the limb, matter was found between the cut ends of the bones of the leg; and their cancellous tissue was also infiltrated with pus. She remained for some days in a very weak condition, and an attack of erysipelas again came on, a few days after the amputation. This seemed to depend on the presence of retained matter, and was relieved by passing the finger into the stump. It is not necessary to go more minutely into the history of the case. Under the use of very large quantities of stimulants and quinine, she gradually recovered, and the stump was found healed on February 20th.

REMARKS. This case is of great interest from the circumstance of an operation having been undertaken while the patient was, as there was every reason to suppose, already labouring under secondary infection of the blood. The symptoms of pyæmia were sufficiently strongly marked; and the infiltration of pus in the cancelli of the bones, together with the occurrence of abscess in a remote part of the body, left little doubt of the correctness of the diagnosis. Under these circumstances, the removal of so great a cause of exhaustion as the large suppurating wound of the excision, could not but put the patient into a better condition for living through the disease, if only her strength should prove sufficient to survive the amputation; and, as the latter was fortunately accomplished without much hæmorrhage, the expedient succeeded. Cases of pyæmia, in which recovery has been obtained, have been now observed pretty frequently; and in all these, the treatment has consisted in large doses of stimulants and quinine. M. Vidal de Cassis has given a detailed account of such a one in the *Mémoires de la Société de Chirurgie*, tom. i, p. 533; another is alluded to in Mr. Prescott Hewett's Lectures on Injuries of the Head. (*Medical Times and Gazette*, 1855, vol. ii, p. 463.) In the present case, the patient was at one time taking as much as thirty-six ounces of wine and twelve of brandy in the course of the day.

It would, of course, be very rash to hazard a theory founded upon data so imperfect; still the history of such a case as this is sufficient to justify a conjecture that the old doctrine of purulent absorption (that is, of the direct conveyance of pus into the blood, which, being deposited in some remote organ, becomes the focus of an abscess therein) may be, in some cases at any rate, the true one; and that in such cases it may be sometimes possible, by removing the source of the purulent supply, to cut short the disease before it has invaded the whole mass of the blood.

In another point of view, the case is of some value as an instance of the feasibility of amputation after the failure of excision of the knee; and, so far, an additional encouragement for trying that operation.

ST. MARY'S HOSPITAL.

I. RUPTURE OF THE PERINÆUM.

Under the care of I. BAKER BROWN, Esq.

MR. BROWN operated, on February 18th, on his fiftieth case of ruptured perinæum. The case was one in which the sphincter had been torn completely through, and the anus and vulva thus laid into one cavity: in fact, the most formidable variety of this affection. The operation was done in the manner usual with Mr. Brown; *i. e.*, by paring a large triangular piece on either side, with its apex at the anus, making two incisions through the sphincter, leading obliquely backwards from the anus, and uniting the parts by means of two quilled sutures passed deeply through the parts, and interrupted sutures to the edge. The after treatment consists in bringing the patient rapidly under the influence of opium (a dose of two grains being given immediately after the operation, and one grain every six hours subsequently), and allowing generous and nutritious diet from the time of the operation. The urine is to be drawn off frequently, to avoid the risk of any running over the wound by accident, and getting between its edges.

II. OPERATION FOR VESICO-VAGINAL FISTULA.

In reference to the case of operation for vesico-vaginal fistula reported in our last, we have to correct a slight inaccuracy in the history of the case. The operation in which the urethra was detached from the symphysis pubis, and the bladder pushed back, was performed two years ago, and was followed by considerable contraction of the cleft. That for paring the edges of the latter, and uniting the wound, was first attempted five weeks since, on the same plan as the present, viz., that recommended by Dr. Boseman.

The present operation has not succeeded, although some contraction of the cleft may probably be looked for. As soon as the state of the parts admits of it, it is Mr. Brown's intention to make a fresh endeavour to relieve his patient.

ST. BARTHOLOMEW'S HOSPITAL.

DUMMREICHER'S (OR THE RAILWAY) SPLINT.

The new splint described by Dr. Carl Bader in a recent number of the *Medical Times and Gazette*, and invented by Professor Dummreicher, may be seen applied to a patient in St. Bartholomew's Hospital, under Mr. Stanley's care, with an oblique fracture of the tibia running into the knee-joint. The object of this apparatus, as our readers may be aware, is to produce gradual extension by means of the weight of the limb below the fracture, assisted, if necessary, by the application of a weight to the foot. It consists of an inclined plane below, fitted with a small tramway, on which the splints move by means of wheels. The upper splint is fixed by a screw passing through the plane: the lower, to which the foot and leg are firmly bandaged, tends by the weight of the parts to run down the incline; and thus gradual extension is produced, which is increased as the resistance of the muscles diminishes. The objection to its use which struck us, on seeing it in action, is, that the lower fragment is not quite sufficiently firm; so that slight movements, coughing, etc., cause motion in it, and so perhaps irritation and pain. As to this, however, experience will soon decide.

GUY'S HOSPITAL.

I. OBLIQUE FRACTURE OF THE LEG: SECTION OF THE TENDO ACHILLIS.

Under the care of J. Birkett, Esq.

Two cases at present in Guy's Hospital, under Mr. Birkett's care, illustrate the advantage derived in some cases from section of the tendo Achillis in oblique fracture of the leg. In each case there is a fracture of both bones of the right leg, that of the tibia running very obliquely downwards and inwards. The lower fragment, being tilted forward by the action of the gastrocnemius upon the heel, causes a projection on the skin at the upper end of the fracture, although the subcutaneous surface of the bone is quite regular. In one case (that of a boy) the fracture has been treated merely by position and extension. In the other, an old man, in whom the projecting lower fragment was very nearly through the skin, the tendon was divided: and the result now is that, notwithstanding his age, and the greater severity of the injury, the prominence, though perceptible, is not nearly so great. In both patients the foot is of rather a peculiar shape, and the heel very prominent.

II. SINGULAR WAY OF ATTEMPTING THE REDUCTION OF HERNIA.

An old remedy for the cure of obstruction of the bowels was the swallowing of a portion of mercury, which was to force its way through the affected parts, to dilate the stricture or uncoil the twisted intestine; and occasional instances of the success of this rough plan are found in writers on the subject. The same principle was illustrated in an extraordinary manner in the case of a patient examined after death at Guy's Hospital the other day. This was a woman who had been suffering from strangulated femoral hernia during five days before her admission. The hernia was, with some difficulty, reduced by the taxis. Shortly afterwards diarrhœa came on, under the exhausting effects of which she gradually sank. It was noticed that she passed a good quantity of small shot in her motions; and on interrogating her, it was found that she had been recommended by some friend to swallow a spoonful of shot in order to force open the passage of the bowel. After death, numerous grains of shot were found firmly impacted in the appendix cæci vermiformis.

WESTMINSTER HOSPITAL.

NÆVUS OF THE TONGUE.

Under the care of Barnard Holt, Esq.

Nævus of the skin of the face is exceedingly common—a similar affection inside the mouth very rare, if we may trust our own observation and the authority of Rokitansky (vol. iii, p. 64). An instance of this affection is, however, at present under observation at the Westminster Hospital in the person of a girl, aged 20, who applied for treatment on account of an external nævus, near the right angle of the mouth. It was discovered that she had two other congenital vascular swellings inside the mouth, one on the upper surface and side of the tongue, with a broad base, purple in colour, and covered by the papillæ of the mucous membrane, emptying completely on pressure; the other seated below the tongue, more prominent, and not yielding to pressure. Neither were growing, nor producing any symptoms, and were therefore not interfered with. The other nævus was tied.

Another instance of this rare affection was observed a short time ago, in St. George's Hospital, in a patient under the care of Mr. H. C. Johnson, a middle aged man, who was admitted on account of some other ailment, and who had also numerous other nævi. But neither they nor the nævus which existed on the dorsum of the tongue appeared at all to increase in size. The latter was a small blue patch, near the border, yielding to pressure, but not completely emptied thereby, which gave him no manner of pain or annoyance, and was only discovered on his putting his tongue out. It is possible that the slow growth, or the absence of growth, in such tumours may be a result of the anatomical structure of the part, the mucous surface being firmly united to the muscles by a fibrous stroma of great density, which would doubtless oppose the progress of such vascular expansions in the submucous tissue.

DORSET COUNTY HOSPITAL.

BELLADONNA IN INCONTINENCE OF URINE.

Under the care of Charles Cowdell, M.D.Lond., Physician to the Hospital.

In the September number of the *Journal de Médecine et de Chirurgie*, is an account of the treatment of nocturnal incontinence of urine by means of belladonna, by M. Trousseau. At page 397, he relates the case of a patient, aged 15, in whom the belladonna in fifteen days produced a remarkable amendment (*amélioration très-notable*). She had from the age of eight wetted her bed several times a-night. On the appearance of the catamenia, the use of the belladonna was suspended, and the incontinence returned (*on a suspendu la belladonne, et l'incontinence est revenue*).

This patient afterwards took an increased dose of the drug, and the incontinence again ceased.

In the December number of the same periodical, is a notice of a work by Dr. Cazin, on the belladonna, in which it is said "that great advantages are obtained from it in the nocturnal incontinence of urine of children. (*Que l'on en retire de grands avantages dans l'incontinence d'urine nocturne chez les enfants, etc.*")

Since the appearance of the first of these statements by French physicians, I have employed the extract of belladonna for the complaint indicated.

I have just had three patients under treatment—boys—aged respectively 12, 7, and 7.

I will dismiss the latter two first, as they were in private practice, and their cases were not closely watched; and, from the circumstance of the sight, in both, becoming early affected, the remedy caused some alarm, and was not perseveringly used. It must, however, be stated that, concurrently with the use of the belladonna, in one of these, a longer interval without incontinence passed than had ever been experienced before, since it had existed.

I will detail the first case only. R. Thomas, aged 12, presented himself as an out-patient at the Hospital, October 23rd, 1856. He had not, since he was four years old, passed more than two consecutive nights without wetting his bed.

I prescribed one-eighth of a grain of extract of belladonna in a mixture containing tincture of sesquichloride of iron and quassia. He began at once to improve; but, as I had advised that he should not drink after his dinner, and that he should be roused once or twice early in the night, I was not sure that the remedy had done anything. I increased the dose to one-fifth of a grain three times a day, and then he passed twenty-seven nights without once transgressing.

We have seen that, in the case narrated, by M. Trousseau, a great improvement took place in fifteen days; but that, on suspending the medicine, the malady returned. In the last number of the British Medical Journal, a correspondent furnishes a case discharged "quite cured three weeks after admission." (!) But for this report, I should have deemed my own premature; it is, however, now forwarded in the hope of preventing a remedy, which my own trials convince me is worthy of recommendation, from falling into disgrace from being *over*-recommended.

I proceed with my case. R. Thomas had for twenty-seven nights been perfectly continent; when, but for M. Trousseau's cautious account of his experience, I might have thought my patient cured. On the nights, however, of the 14th and 15th instant (nights 28 and 29), he wetted his bed as badly as ever, without any known departure from the other rules laid down. Here, then, we have a case in a boy twelve years old—old enough to see the importance of being rid of such an ailment, and hence likely to strive against so much of it as resulted from mere habit, relapsing, *while under treatment*, after twenty-seven days *cure* (?); and yet the correspondent of this Journal reports his case "*quite cured three weeks after admission*". Perhaps, on some of the earlier days following this period, the boy did wet his bed.

This method of reporting cases seems to me likely to injure the cause, which I am sure the reporter of that case of cure has as much at heart as I have; and nothing is further from my wish than, whilst protecting the cause of legitimate medicine from injury, to inflict a wound upon his feelings. I do believe that belladonna is useful in nocturnal incontinence of urine; but I question its curing that complaint, when inveterate, in three weeks.

Original Communications.

ON SOME OF THE VARIETIES AND COMPLICATIONS OF PNEUMONIA.

By Henry Duncalfe, M.R.C.S., West Bromwich.

[*Read before the Queen's College Medico-Chirurgical Society, Birmingham.*]

I do not know of any disease which requires greater vigilance to detect in its first onset, than pneumonia in some of its varied forms and complications. Experience teaches us that we have to contend with cases not marked with those prominent symptoms which are characteristic, and oftentimes scarcely with those minor ones, which, in the ordinary course of the disease, we pass over unnoticed and uncared for. How often, after some painful and trying fever, which has already nearly deprived a family of one of its members, and has so far yielded to treatment, that we have just congratulated the friends of our patient on his emergence from danger, does a single symptom, hot skin, a quick pulse, or a hurried respiration, tell us but too surely of the accession of a pneumonia, which will be yet more dangerous than the disease already run, and will probably destroy the patient's life at the time we felt most confident of success. Contingencies of this kind must have happened to all of us; and the subject bearing upon them will, I trust, be interesting and useful.

I have chosen cases to illustrate the difficulty of diagnosing pneumonia, when coexisting with diseases which obscure or modify its physical character; the difficulty of determining the period at which intercurrent pneumonia commences; the extent to which the lung-tissue may be involved; and the occasional fallibility of the ordinary evidences of pneumonic disease.

In childhood, pneumonia is one of the most destructive diseases, and is often obscured or exists to a greater extent than we are aware, from the impossibility of making a minute examination of the chest, owing to the restlessness of the patient, and to the fear a child evinces at the presence of a stranger. The peculiar character of the sputa is also lost to us, inasmuch as children always swallow whatever is brought into the pharynx; and in infantile life inflammatory fever, quick pulse, hurried breathing, and frequent cough, are indicative of other diseases.

A child, two years of age, was some time since brought under my notice, having the symptoms of remittent fever, with frequent purgings of slimy mucus, and apparent pain over the bowels, for the child lay on its mother's lap, with its knees drawn up, and before each purging stool became restless, moaned, and then cried, and a short time after the evacuation sank into the same quiet state. The previous history afforded no clue to disease of any other organ than the bowels; there was no cough, and the breathing was not more hurried than is frequently seen as the result of bowel irritation. When the child died, inflammation was found to have existed in both lungs; the liver was much congested, and the bowel affection was no doubt the sequel of the pneumonia, the symptoms of which, at its commencement, had been so slightly marked as to have escaped the observation of the mother.

A simple catarrh, gradually extending itself over the mucous surfaces, and through the ramifications of the bronchi, sometimes involves the lung-tissue; this extension of disease is more frequently seen in young children, and produces those isolated consolidations which we designate as lobular pneumonia. Occasionally this form of disease occurs as an epidemic, and often it is the immediate cause of death in measles, scarlatina, hooping-cough, small-pox, and such like diseases. Bronchitis, with the congestion and fever which in infancy always attend it, is with great difficulty distinguished from pneumonia; and though it is not of very much importance as far as it may influence our treatment, yet it is a mattter of very great moment in aiding us to form a prognosis; for, with pneumonia, from the frequently intractable nature of the disease, and from the collapse which so quickly follows, we should give a very guarded opinion.

The extension of inflammation from the bronchial mucous membrane to the lung is common in influenza, and is particularly fatal to old people, indeed, to the extremes of age; and when pneumonia supervenes on bronchitis of some standing, the diagnosis is not only rendered difficult, but next to impossible, every symptom characteristic of pneumonia being obscured or modified.

An old man, aged 65, who had for some years laboured under a chronic bronchitis, with habitually hurried breathing, and frequent violent attacks of coughing, during which loud gurglings of mucous were always audible, had, after exposure to cold, all his symptoms increased, and in that state came under my notice. The skin was hot, the pulse full, the expectorated mucus clear and glairy, of the same character as the sputa before the accession of the acute attack, but of greater quantity; mucous râles were heard over the whole chest; the sounds elicited by percussion were equal on both sides. The man's condition, unaltered by treatment, gradually got worse; and with increased urgency of all his symptoms, he at last became asphyxiated and died. The characteristic symptoms were here so far subdued by the old disease, that it was but reasonable to conclude that the case was one of acute bronchitis, and that the man died from an abundant secretion of mucus, which he was unable to expectorate. The dypsnœa might have resulted from obstruction of the bronchial tubes, and the expectoration was catarrhal throughout; yet the examination of the body after death showed extensive coexistence of pneumonia. There was hepatisation of the back part of the right, and the base of the left lung; the bronchial tubes were reddened, swollen, and filled with mucus. If in the commencement of the acute attack I had depleted and used counterirritation, with carefully watched doses of mercury, I think it not unlikely that his life perhaps might have been saved. Of what value, then, were the ordinary symptoms? The rusty coloured sputa, certainly one of the most characteristic, was absent; the minute crepitation, if ever it did exist, was drowned by the musical râles of all intensities and grades, and everywhere predominant; the dulness over the chest was uniform, and did not differ perceptibly over the corresponding portions of lung, which were not inflamed; the congested state of both lungs completely annihilated the value of the important evidences usually adduced by auscultation, but there was one symptom which prevailed thoughout, and which, as being subsidiary, I was not sufficiently alive to, viz., the peculiar hot, stinging state of skin. I have since met with this peculiar heat repeatedly; and I believe that when, from any disease coexisting, the pathognomonic signs of pneumonia are lost, this will be found generally an unerring guide. Certainly it exists to a greater extent in pneumonia than in any other disease I have ever witnessed; and though the "hot skin" is mentioned by writers as amongst the symptoms, I do not recollect any description which conveys to the mind the sensation produced. The expression "hot skin" does not adequately designate it. It imparts to the hand a pricking and painful impression; and though not easily to be described, it is so uncommon, that when once felt is again readily recognised.

A tax collector, who for many years has had a chronic cough, and frequently acute attacks of bronchitis, from the exposure necessitated by his employment, was under my care in the spring of 1855. At the time of my first visit he had been ill for three days with, as he termed it, a bad cold. His face was flushed, there was the stinging heat of skin, and a pulse full and quick. His breathing was accelerated and laborious, and violent paroxysms of coughing occurred every ten or twelve minutes, with expectorations of thick, glairy, and frothy

mucous. As this was my first attendance on him, I inquired the history of his past life, and of the present illness. His wife assured me that he frequently had similar attacks, and that after three or four days he would have a copious perspiration, and be able to resume his occupation in the course of a week; that his present illness came on suddenly in the evening, after having walked in the rain half the day from house to house, collecting. I was not, however, so well satisfied of this ready return to health, but thought it better to confine him to his bed, and use such means as would make the hoped for change less doubtful. From external examination I found nothing but what would bear out the wife's history; but the state of skin was to me indicative of pneumonia. I bled him, administered a sharp purgative, combined with antimony, and on the following day, finding his symptoms alleviated, and his bowels well acted upon, I gave him consecutive small doses of mercury and salines. For four or five days he continued in the same state, the sputa being abundant and catarrhal; after which he complained of soreness in the gums. His breathing then became less laborious, the skin moist, the cough of shorter duration, and the expectoration was bloody; and now for the first time I could hear, at the termination of the inspiration, the small crepitation of pneumonia.

This case was especially interesting to me, as the most prominent symptom was the peculiar state of skin. His condition did not excite any anxiety in his family, for they believed it to be nothing more than a repetition of an acute bronchitis, which they had been accustomed to witness. The sequel, however, proved the contrary; and it was only when the disease resolved that the more prominent physical signs were exhibited. Since his recovery he has again been under my notice from an attack of acute bronchitis; the burning state of skin did not then exist, but the other symptoms were as urgent as when he had pneumonia. Rest, confinement to a warm apartment, and the ordinary antiphlogistic treatment soon restored him.

The supervention of pneumonia on phthisis is of very common occurrence, and has received very contradictory opinions from different writers; some authors affirming that the disease is tractable; and that though it may happen from time to time during the progress of phthisis, it is not necessarily fatal, nor does it materially shorten the duration of life. Other writers, however, are of a different opinion; and there cannot be a doubt but that many cases of acute phthisis run their course very speedily, from the inflammation which, being necessarily of an asthenic character, favours the softening of tubercles already existing, and aids in the development of new ones.

Inflammation occurring at the commencement of phthisis is generally well marked by symptoms, and from its seat is an important help in the early diagnosis of that disease. "The existence of pneumonia", says Louis, "affecting the upper and anterior part of the lung, without a trace of disease posteriorly, is tuberculous;" but when pneumonia attends the close of life, and especially when the disease is limited, it is generally unattended with symptoms.

A young woman, who for some months had slowly wasted, and whose appearance was indicative of tuberculous disease, was visiting her sister for temporary change, and I was requested to see her, and examine her chest for the satisfaction of her friends. The history of her case was, that she had been apprenticed to a dress maker for three years. Eighteen months back she had taken cold at the time of menstruation, and soon afterwards had an attack of hæmoptysis; she had never since that time been free from slight cough, and had occasionally had spitting of blood. Her appetite had failed; she continned to waste, and was anæmic; the breathing was hurried after the slightest exertion, the night perspirations were copious, and in the morning she was faint, with a slow pulse and relaxed skin; but hectic came on in the evening. She expectorated a thick greenish sputa, of a saltish taste, together with a more copious and less viscid bronchial secretion. There was a slight depression under the left clavicle, with diminished vesicular breathing, and very slight gurgling audible at the termination of a forced inspiration, a little dulness on percussion, no loss of tactile vibration, and no pectoriloquy. Somewhat below the first rib, and towards the axilla, the inspirations were interrupted, and whiffing, and the expirations prolonged. The case was evidently one of tubercular deposit, with softening at the apex of the lung. As I was not called to attend the girl, I did not see her again till a fortnight afterwards, when I was summoned in consequence of an acute attack after exposure to cold. I found her in a high state of fever, with difficulty of breathing, and mucous râles over the chest. The expectoration was copious and frothy; there was dulness generally over the whole chest, but no difference on comparison of the two sides. Mucous râles increased, and loud gurglings accompanied each inspiration, as from day to day she lingered. Inability to expectorate succeeded to this distressing state, and she died on the ninth day from the accession of the attack. Two or three excavations existed in the apex of the left lung, and there was a general distribution of tubercles through the remaining healthy portion; there were likewise tubercles, less in number, in the right lung, which was itself inflamed through its whole extent. When it was cut and pressed, a dirty bloody serum oozed from every part, and its structure, though solid, had its tenacity destroyed; the fingers easily penetrated every part, leaving holes which were immediately filled up with the bloody serum, like circumscribed abscesses.

In this case the pneumonic symptoms were very obscure; and repeatedly cases occur to us where auscultation fails to bring out the characteristic symptoms. To all appearance, these are cases of acute bronchitis; the dulness, so uniform and general, shows a state of engorgement; but neither the sputa nor other symptoms justify more than the suspicion of pneumonia. How difficult does it become to ascertain in such cases when the invasion of pneumonia really takes place, how much of the fever attends the acute development of tubercles, and how much of pneumonia. Louis and Andral relate cases where almost the same symptoms, as remarkable for their severity as for the rapidity of the course they run, attend both the development of tubercles without pneumonia, and *vice versâ*.

In the case just related death occurred from the pneumonia, and not from phthisis; but this is not always the case. Pneumonia often hastens the death of consumptive people, by exciting the tuberculous affection, death ensuing while the pneumonia is progressing slowly, and before it has passed the stage of inflammatory engorgement.

Intercurrent pneumonia may occur from time to time in chronic phthisis; and as it is chiefly localised in the excavations, or in the structure immediately around patches of tubercles, or the termination of bronchial tubes, is unattended with the general symptoms. When the accessions are very frequent (and in some cases they do occur almost every week) there is a greater degree of hectic, and patients complain more of the uncomfortable heat than of painful suffering. The inspirations are interrupted from the local consolidations, and tubular whiffing inspirations are here and there audible, and sometimes, when the inflammation has produced a cartilaginous thickening, a bruit can be heard during deep inspiration, from the pressure of these hardened structures on the pulmonary artery.

I next come to notice pneumonia in connection with fevers. In typhus, especially, when the fever is declining, and in that critical period when, in the absence of all excitement, the debilitated frame seems almost exhausted, occasionally secondary fever arises, and announces the invasion of pneumonia; the stupor has not as yet entirely disappeared, the mental powers, alike weakened with the body, are yet clouded and slow to appreciate the commencement of a new disease; the patient expresses no feeling of pain, and his helpless condition prevents a careful examination of the chest; and if we are fortunate enough to be able to auscultate him, and find dulness over the back part of the chest, we immediately ask ourselves, Is not this, or may not this be, simple congestion from gravitation, owing to the laboured circulation from the depressing agency of fever? We look to the accompanying symptoms for corroboration, but find nothing. There is short cough, with rhonchi, but of what nature we are ignorant; the patient being unable to expectorate, and his brain so oppressed that it reveals nothing to render more intelligible our supposition of pneumonia. What is the cause which produces this condition of disease? Is it the sequel of a congestive state resulting from fever? Can the specific poison of fever give rise to local determination and inflammation? or is there any change in the constitution of the blood which will afford an explanation?

I need not quote cases of intercurrent pneumonia in fever, as examples are so common, that it would needlessly occupy time. I will, therefore, briefly draw attention to the immediate and exciting causes. Catarrh is a common accompaniment of typhus, sometimes ushering in the disease, and not unfrequently attending the early progress; it then generally requires little treatment, and if it does not spontaneously disappear, is easily subdued by appropriate remedies; but when the same affection appears as typhus *declines*, and in that exhausted condition to which I have alluded, the danger is great. When the secondary fever runs high, and the cerebral oppression is considerable, the pulmonary capillaries become

congested, and after death occasionally patches of hepatised lung are discovered, while the greater portion of lung tissue is destroyed by œdema. The name "congestive catarrh" has been given to this state. The pneumonia of the eruptive fevers, scarlatina, small-pox, etc., is of this kind, and appears generally to be an extension of disease from the mucous linings of the bronchial tubes: though isolated patches of hepatised lung are found, the general condition is that of congestion and œdema.

It has been a matter of greater dispute whether malaria or the poison of fever can produce pneumonia. From well directed observations, it appears to be satisfactorily settled. Dr. Morehead, in a report on pneumonia, as observed in the Hospital at Bombay, has noticed the occurrence of this disease, complicating intermittent and remittent fevers. He says, "From five to eight grains of quinine, with from one-tenth to one-fourth grain of tartar emetic, given at intervals of two or three hours for five or six doses, will in general suffice to check, and then stop, the febrile recurrences. When this effect on the febrile symptoms has been produced, it will generally be found that improvement in pneumonia will at once commence; and, in a large majority of cases, if the recurrence of the febrile state be prevented for some days, the inflammation will be speedily removed." He adds, "I am not acquainted with anything more striking and satisfactory, in the whole range of rational therapeutics, than the progressive but speedy restoration of an hepatised lung, coexisting with fever of remittent type, when the exacerbations have been controlled by the adequate use of quinine."

To an altered state of blood is to be attributed no small share in the development of pneumonia. That the blood undergoes some important change, both from the effects of the fever poison as well as from the course of the disease, is evident from the careful analyses of chemists—Andral, Simon, and others. We find certain elements gradually wasting, while others are in proportion increasing; and that, as certain products are abundant, so have we a tendency to inflammatory conditions. We know full well the disposition to the accession of pneumonia when fever is declining. Now is it not probable that, in our over zeal to save our patients from sinking, by affording them a highly nutritious and stimulating diet, while the excreting organs are scarcely able to perform their functions, we may increase too suddenly those products which, together with the tendency to congestion from debility, give rise to pneumonia? In almost every case, when this disease has arisen, we find the urine loaded with those deposits which prove to us that the blood is overcharged with nitrogenised matter. Of this I am sure, that since I have been very guarded in the administration of stimulants, and the richer kinds of animal food, I have seen much less of pneumonic complications in fever. Some very admirable remarks on the treatment of fever will be found in a report by Dr. Wilks, in *Guy's Hospital Reports*, vol. i, 1855, and in a review of that report published in Ranking's *Half-Yearly Abstract*, January to June, 1856.

I have hitherto spoken of the absence of symptoms which prevent our readily recognising pneumonia. I should not forget to mention the presence of other diseases, which are attended with symptoms characteristic of inflammation of the lungs; the chief of which are, congestions from old standing disease of the internal organs, heart, liver, kidneys, etc.

An old gentleman, seized with pain in his left side, fever, heat of skin, dyspnœa, and cough, came under my observation. His chest was carefully examined; there was small crepitation over the back part of both lungs, more especially the left, and dulness on percussion, both anteriorly and posteriorly. His cough was troublesome, and he expectorated a quantity of rusty coloured and bloody sputa; indeed, there were apparently very evident signs of pneumonia. Mercury was given in small doses; the gums became affected, counterirritants were applied over the chest and back, perfect rest was enjoined, and the patient was supposed to be progressing favourably. He died suddenly after some slight but unusual exertion, and during the progress of the disease. An examination of the chest was allowed, and to my astonishment, there was not and had not been pneumonia at all. The heart was flabby, and so soft that I could readily poke my fingers through any part of it. The lungs were congested and œdematous, the liver large and fatty, and the kidneys, like all the other organs, much congested. Death no doubt ensued from over exertion, the fatty degenerating heart being unable to cope with the accelerated circulation.

I have seen similar pneumonic symptoms exist when, I believe, the real seat of disease has been the capillary system generally. I have not had many opportunities of witnessing this condition; the prominent symptoms were such as would lead one to suspect heart disease; but the heart's sounds and actions were good; there existed congestions of the internal organs, and a blue congested state of skin. I could only account for the disease by supposing that the obstruction to the circulation, instead of being in the aorta, or about the valves, was eccentric and in the capillaries generally.

CLINICAL OBSERVATIONS ON THE SPECIAL APPLICATION OF LIQUOR PEPSINIÆ IN CERTAIN DISEASES.

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[*Concluded from page* 133.]

C. DYSPEPSIA, WITH ABDOMINAL TUMOURS, ETC.

Case I. Miss A. T., from the neighbourhood of Temple, aged about 32, complained of painful indigestion and vomiting, and of constipation alternating with irksome diarrhœa, the latter usually consisting of frequent, teazing, thin stools, in very small quantity, but sometimes relapsing into frequent attempts with only the passage of small scybala. She had taken stomachic mixtures, and aperient medicines; but the latter had usually caused great uneasiness, with very little result in the way of evacuation, and she had become pale, thin, and weak. The heart and lungs were in sound condition, and the menses were regular; but, on examination, a large mass was discovered in the right side of the abdomen. It extended from the right groin to near the edge of the ribs like a Bologna sausage, was doughy to the touch in greater part, but towards the top felt harder and more tender. She said that, for a long time, she had felt a fulness and stiffness there in stooping, and also whilst lying straight out in bed; and further added, on finding me make particular examination, that she had a sister (who has since seen me) whose disease commenced with a swelling in the right side, which gradually extended over the the abdomen, and finally maturated to an abscess, which is now discharging in vast quantities from the groin, and carrying her rapidly to the grave. My conclusion was, that there was some growth, or other cause of pressure in the neighbourhood of the liver; that this caused obstruction to the ascending colon, and that the mass of the present swelling consisted of long retained fæces, all the other symptoms being mere consequences of this state of things. She was ordered mild, softening, but not drastic, purgatives, and also injections, and took the liquor pepsiniæ in combination with soda and hydrocyanic acid. At the next visit she reported that the stomach felt easy, that she had not vomited since she saw me, and that there had been larger and more easy evacuations from the bowels. She could stoop and lie straight with more ease. Under a continuance of the same treatment the elongated mass disappeared, and then a roundish lump became distinctly perceptible under the edge of the liver, slightly tender to the touch. Not viewing it, from the appearance of the patient, as malignant, she continued the treatment, and applied tincture of iodine over the lump. It has now disappeared, so far as manipulation goes; but, though she feels very well, with no return of her old torments, still she is conscious that there is something in that quarter that burns and shoots with a curious pain after any hard exertion. The medicine under discussion could never have removed either the lump or even the fæces, *per se;* still it has proved a valuable subsidiary agent, if not essential.

Case II. Mrs. B., the wife of a respectable farmer in Worcestershire, aged about 35, first called at my house with a friend, in a nervous and excited state. She complained of indigestion, and what she said had been called chronic dysentery; for which she understood there was no cure. She said she could eat, but it did her more harm than good, giving her pain, constant eructation, and rattling of wind in the bowels, and often she vomited. Her bowels, she said, would be moved five or six times while dressing in the morning, and nothing would come but "slime and corruption," as she worded it. She had been in the habit of having chalk mixture, with laudanum, etc., which quieted the bowels for a time, but the symptoms always returned. The liveliness of her manner and eyes, her good complexion, and quiet pulse, made me doubt the existence of dysentery; but, under the impressions arising from the ac-

count, I first prescribed mercury and opium, and doses of castor oil, with little effect; and in one of her severe attacks I was summoned into the country. I then found the stools slimy, and complaints of severe abdominal pain; but she looked lively, spoke briskly, and moved about the bed in any direction with ease. This, to my mind, was quite inconsistent with that depression of dysentery, which will soon bend down the strongest men. On examination, the tongue was rather furred, the epigastrium and right side tender to touch, and there were discoverable about the navel several internal lumps, one solid, the rest yielding to pressure, and resulting, under such pressure, in the rushing backwards and forwards of flatus. She said, "That is how it serves me; when it fixes, the pain is dreadful; and when it shifts I get easy; but it only shifts for a time to fix again." It appeared obvious that this flatus was imprisoned within the folds of the transverse colon, that pressure could move it backwards and downwards in the ascending colon, but that there was some impediment, be it a tumour, or fibrinous band, or impacted fæces, that prevented its onward passage towards the rectum. There was no tenderness over the lower part of the abdomen, but a great deal of dulness and incompressibility in the course of the descending colon. Under this diagnosis, I stopped all medicine by the mouth, excepting a pepsine mixture, and ordered a succession of injections, consisting of nothing but warm water with a little olive oil. Of the benefit to be derived from this she was at first a little sceptical, as she felt so convinced of having been long purged, and that nothing could be in her. However, on the visit of the following day, I found arranged in another room a series of vessels to the number of six, some nearly half full, others with but little in them, graduated specimens of each successive discharge, and varying from the hardest and darkest scybala to black, pultaceous, clayey stool; and, lastly, what might be called thin dark bile. There was in this last a good deal of heavy earth-like settling, arising, apparently, from the quantities of chalk she had taken; and all was offensive in the extreme. She now felt convinced of plain facts, and expressed herself as being much better. Still there was the lumpiness about the navel, and the confinement of flatus, though it did not give the same pain. For some time she took alterative doses of hydrargyrum cum cretâ, and Dover's powder at night, and liquor pepsiniæ with her food, while she persevered with the simple clysters till the evacuations should become of natural appearance. By that time she felt well; and though the latent cause of obstruction may still exist, yet, by keeping an open channel by the above safe and simple means, she eats and drinks, and goes about her usual avocations with comfort.

D. DYSPEPSIA FROM ULCERATION OF THE STOMACH, ETC.

Case I. Mr. J. H., a schoolmaster, of Staffordshire, aged 38, had been afflicted with severe dyspepsia for several years; and, in spite of treatment by soda and bitters, etc., it had steadily gained upon him, till his whole constitution got greatly impaired under loss of nutrition. At the extremity of his illness, when I was consulted, he complained of agonising pain after almost every meal; his tongue was foul; the epigastrium very tender and retracted; the bowels costive; and if he did not vomit three times a day he never vomited less than once, the undigested matter coming back very sour, and sometimes consisting of pure coagulated blood, like coffee-grounds. The attacks of pain and vomiting invariably supervened after horse-riding, walking up hill, or even speaking for a little time. He was also much emaciated, his cheeks very hollow, and the skin of a pale lemon colour, so that he was called "the walking ghost" by his neighbours. Though no tumour or hardness could be detected, all these symptoms quite convinced me at the time of the existence of a malignant hardening and ulceration. He was advised to cease from the toil of school duties, as he was not quite dependent thereon; to keep easy, and live upon spoon meats. He was also given colocynth pills for the bowels; and for the hæmorrhagic ulceration quinine and nitrate of silver before food, while he took the alkalised liquor pepsiniæ, with morphia and hydrocyanic acid, after each meal. Under this treatment the symptoms were arrested, and he gradually improved in flesh, strength, and colour. The pains and vomitings subsided, he began to be able to bear stronger food and drinks, and he could walk and talk without the old discomfort. He has now regained his former bulk and florid complexion, and his appetite is sound. He is still aware that the stomach is his weak point; so that if he eats beef, pastry, or the like, they pain him, and swell him up. The liquor pepsiniæ removes such symptoms, and he therefore takes it occasionally. From the happy result, I am now disposed to withdraw my former fears of malignant action (though for such fears there were sufficient grounds), and to view the case as one of simple ulceration. Death alone can reveal the whole truth; but it seems very clear, from the whole history, that the peptic liquor was here the grand instrument of curation; for calumba, creasote, and all other ordinary settlers of the stomach were only wont to derange it the more. The patient himself has the most lively consciousness of the beneficial effects of the pepsine..

Case II. Miss S. J., a girl of 18 or 20, was brought by her mother to me from Cheltenham, labouring under pain and fulness of the epigastrium and right side, vomiting of blood, and sometimes of purulent matter. She was excessively anæmic, her skin being nearly white, and the legs œdematous. There had been no catamenia for a considerable time, and her father, as reported, had died of cancer of the stomach. She became worse after the journey. I saw her in bed, and detected a rounded swelling to the right of the epigastrium, which I inferred might be a hepatic abscess, complicated with stomach ulceration. At this time she lay faint and helpless, vomiting everything she ate, sometimes intermixed with blood, and occasionally being composed entirely of muco-purulent matter combined with bile. She was afraid to speak above a whisper, her tongue and mouth were parched, and her legs pitted deeply under pressure; the pulse was small, frequent, and thready, about 140 per minute. Soothing poultices were applied over the swelling, large masses of hard round fæcal matter were removed by injections, nitrate of silver was administered before food, and the alkalised liquor pepsiniæ, with hydrocyanic acid, was given after food, at intervals of one hour. At the same time the food was entirely pultaceous or liquid, and consisted of the smallest quantities at a time, seldom more than one teaspoonful. After several fluctuations, and occasional severe attacks of purulent vomiting, she gradually began to amend. So soon as the above symptoms abated, she went through a course of quinine and steel; and, after a tedious treatment of about ten months, she recovered plumpness, colour, and strength, contrary to the expectations of all her friends and acquaintances. The remedy could have little power over hepatic abscess; but I can scarcely see how, in her utterly reduced condition, she could have gone through the treatment without the support derived from the solvent action of the pepsine upon the food—oysters, arrowroot, and milk and wine, having all been previously rejected.

Case III. Mrs. M. C., a married person, aged 28, pale and delicate, had had tenderness of the epigastrium and right side for many years; but recently the evil had become greatly aggravated, and she also suffered under an extensive bronchitis, chiefly implicating the right lung, with painful dyspnœa, and universal sibilant respiration. The pulse was 140; and, from the alarming condition of the chest, phthisis had been diagnosticated, and country air and cod-liver oil suggested as a last resource. From the general appearance, I was not equally disposed to believe in the presence of tubercle, but rather directed attention to the stomach and liver. There was retraction of the abdominal muscles, and pain and tenderness all over the right side, from the shoulder to below the umbilicus; but in the epigastrium it was extreme, so that she shrank under the slightest pressure, and feared to take a common inspiration. Besides the vomiting, which was very acid, and the asthmatic bronchitis, there were immense discharges of lithates by the urine, with pain in the back, and a suffocating cough. She had to be propped up in bed, and supported under the least effort. Six leeches were applied over the stomach and along the right side at once; and these were followed up by a series of blisters, while she took antispasmodic diaphoretics, with small quantities of liquid food and pepsine largely imbued with soda, and had daily injections of decoction of poppy. Under this treatment, continued for some time, the asthmatic bronchitis gradually abated, the urine became clear, and the pain slowly departing from other parts, narrowed and narrowed to a lesser circle, until the seat thereof could be covered with a half-crown piece immediately under the point of the sternum; and she took quinine and nitrate of silver with marked benefit. She was now fast improving, so that I had ceased attendance, when an event occurred in the house which led to great bodily exertion and excitement on her part, and the eating of some beef and pickles to supper. Next morning I was requested to attend, and found all the stomach symptoms greatly aggravated. She suffered intense pain, and vomited everything she took. By and by she threw off muco-purulent matter in great quantity, intermixed, it seemed, with fæcal matter: meanwhile the bowels were confined and racked with spasm. As calomel and opium had always produced very bad effects before when-

ever administered, she now had only injections of decoction of poppy, by the machine with long tube, and draughts of soda, morphia, and hydrocyanic acid; while blistering was renewed over the epigastrium, and nothing was allowed but a teaspoonful of gruel or milk at a time. By this means the excessive irritability being overcome, she resorted afresh to the quinine and silver pills with constant and marked effect. These she took before food, and the liquor pepsiniæ, with morphia and hydrocyanic acid after, and so again gradually recovered. Nothing, however, but liquid food of the lightest nature was permitted; and she herself soon saw, that so soon as she partook of hard, solid, or otherwise indigestible food, so surely she had a relapse. This fact having made her cautious, she conformed strictly to rule, until she found she could eat almost anything with impunity. She has now gained her original flesh, colour, and strength; though quite aware of a something at the pit of her stomach, which does not admit of being trifled with. Both sides of the chest have a clear resonance, the respiration is soft, 16 to 18 in the minute, and the pulse ranges from 65 to 80—all clear proofs of the absence of pulmonary tubercle.

E. Dyspepsia with malignant disease of stomach, liver, etc.

Case I. Mrs. M. B., an elderly widow, and housekeeper, consulted me in regard to long standing indigestion, with lancinating and burning pains in her right side. She was attenuated to the last degree, of shriveled lemon coloured aspect, sunken and knotty in the abdomen, and felt great tenderness on pressure of the stomach and liver; while, along the edge of the latter organ, a series of hard lumps could be felt. The little she ate lay heavy, and the stools were pale. Frictions of mercury, and the exhibition of the ordinary stomachics had little availed; but on giving mercury and chalk with ox gall, and a liquor pepsiniæ mixture, the alteration was great. The stools improved, the pains were subdued, and she gained strength, and even a little more fulness and colour of the face. The organic disease remains, but its most troublesome symptoms are subdued.

Case II. Mrs. S. R., carrying on the business of a master carrier, had been the victim of what she called a "horrible bad digestion" for some years past. She feared to eat for the pain, had constant flatulence, vomited several times a day, and her bowels were always bound, and difficult to be moved. She had been stout, but had wasted to skin and bone, the skin being of a pale straw colour. As soon as she lay down the examination revealed the presence of a hard lumpy tumour between the navel and the breast bone, which I inferred to be cancerous. Injections were ordered, and pepsine was administered, with morphia and hydrocyanic acid, after liquid or pultaceous food, while a belladonna plaster was applied; and her report is, that this is the only medicine that has ever subdued her bad symptoms without inducing something else unpleasant. She can now attend to her business.

Case III. Mrs. E. C., a widow, aged 54, with symptoms so similar to the above that they need not be described, had also a hard tumour in the same place. She has found, in the course of journeying from place to place, that she cannot obtain ease under any other treatment than the above. She therefore carries her bottle always about with her, and has gained in flesh, strength, and colour, in spite of the continued presence of her evil tumour. She now enjoys life by keeping at ease.

Case IV. Mrs. F. M. was, in almost all respects, similar to the above two: faint, emaciated, straw coloured, with pain and vomiting after food, and a tumour in the epigastrium. The treatment was about the same, and she feels easy.

Case V. Mr. W. T., a broker, 48 years of age or so, had been long the victim of dyspepsia, and had undergone many a series of treatment with temporary ease, the disease still advancing. It did not appear that anything specific had been made out. He had the pains, and vomitings, and constipation, was thoroughly emaciated, and of a deep straw colour, intermixed with smokiness, as it were. He had the additional bad symptom of swelled legs; and, on examination, there was discovered a hard, stone-like mass to the right of the epigastrium. Purgatives were used, a belladonna plaster applied, and the alkalised liquor pepsiniæ, with morphia and hydrocyanic acid, given after liquid food; after a short period he also had quinine. So much easier did he feel from this, that he began to think himself cured, and acted as usual. In consequence I was again sent for, under feelings of much alarm. Having indulged his fresh gained appetite, and neglected his bowels, the pain, the sickness, and swelling of the legs had returned, and he also feared that the tumour had suddenly grown to an immense magnitude. It was obvious, however, that it all arose from the hepatic tumour pressing on the colon, and causing it to be gorged with retained fæces. Repeated injections removed all the mass, except the originally discovered solid growth; but he never again rallied from the debility, swelled legs, etc., and so died. I was not present at the *post mortem* examination; but the existence of a malignant tumour was reported to me.

F. Tuberculosis, and tabes mesenterica of infants.

The number of these cases that have presented themselves precludes my entering upon them individually. Let it suffice to picture them generally, and according to their broad features: to wit, the wrinkled, discontented, fretful faces of the young children, rather resembling those of old men and women in the most unhappy humour possible; the small shrunken chests; the large toad-like bellies; shriveled extremities; and bloodless wax-like fingers. Such patients often have voracious appetites, without any good results; the food passing off in diarrhœa, without having been digested. By means of hydrargyrum cum cretâ and Dover's powder, and the liquor pepsiniæ by itself after food, the changes in such children have been very extraordinary, especially when the diet has been consistent with the other treatment, and goats' or asses' milk used, along with raw egg. The same results will accompany its use amongst the pot-bellied young of the lower animals. My daughter has often been amused with its rapid effect upon a poor kitten in that condition, now grown to be a large, active, and healthy cat.

G. Dyspepsia with extreme albuminuria.

Case I. Miss E. P., the daughter of a publican, about 20 years of age, had begun to decline in health for some years before. Her flesh and colour began to decrease about two years before seeing me; and she became weak, bronchitic, and short of breath, while her legs swelled, and the menses had disappeared for eighteen months. She had been treated for this anæmia and amenorrhœa, and had hoped that the re-establishment of the menstrual flux would put her quite right; but it never did appear. On examination she was found emaciated, with much whiteness of the cheeks, canthi, lips, tongue, and gums. Her chest was oppressed, her skin dry, her cheeks under the eyelids swelled, and her legs and thighs immensely œdematous, going into folds and sulci, almost resembling elephantiasis, yet pitting freely under pressure. She had pain in her back, rose frequently in the night time to make water, and the urine passed was almost entirely coagulable albumen. The case appeared very desperate; but, by ordering the recumbent position, and employing tonics, diaphoretics, and diuretics, along with bandages to the legs, the dropsical swellings and the cough gradually disappeared after a certain time; and then, under a good diet, and a free allowance of eggs and porter, accompanied with quinine and iron, followed always by liquor pepsiniæ, she rallied so far as strength, flesh, colour, sound sleep, and less frequent micturition could indicate. She also menstruated two or three times in the course of the treatment, and has felt for some time past so well as to attend to her father's business with ease. On a recent examination of the urine, the albumen was somewhat diminished, but still in great amount, fully three-fifths of the urine. She continues the eggs, with quinine and steel, and takes the liquor pepsiniæ whenever her meals lie heavy.

Case II. J. B., an elderly man, with sallow puffy face, swelled legs, pain in back, and immense discharges of albumen and blood by the urine, had first the bleeding stopped by large doses of acetate of lead and opium, and afterwards the dropsy overcome by tonics and diuretics. Subsequently he used quinine and steel with his food, consisting much of eggs, and liquor pepsiniæ after it. The albumen remains much as before, but there is no blood. He feels easy, and does not go on from bad to worse as formerly. He sleeps well, eats well, and enjoys working in his garden.

H. Diabetes.

Case. W. W. Esq., a gentleman of our own profession, consulted me between six and seven months ago, labouring under diabetes of eighteen months or two years' standing. He felt enfeebled; the skin was dry; he slept badly; the urine was in great quantity, and highly charged with sugar. He had been obliged to relinquish practice. As he is a professional man, and a man of talent, I shall allow him to report for himself, by quoting from his letters. He began a course of liquor pepsiniæ, with quinine and steel in the beginning of July, and the fol-

lowing are extracts from communications of successive later dates.

"July 16th, 1856. I am pleased to inform you that I am progressing very well. The liquor pepsiniæ quite agrees with me; especially in the form of mixture which you recommended, as I have a *little* acidity and flatulence. I do not make much, if any, more water than the usual quantity; certainly not so much as I have taken of fluids. Specific gravity about 1030. No particular thirst; skin acts properly; appetite good; I sleep well."

"August 20th, 1856. I am pleased to inform you that I am much better, being considerably improved in strength. I have no symptom of indigestion, my stomach performing its functions well at all times, and my appetite being good, without being ravenous. The urine is 1028, and about 60 ounces in 24 hours, and containing less sugar. Pulse 80 to 85. Skin acts naturally, with the natural smell under armpits, etc. *Indeed I am much stronger.* I consider the mixed diet you allowed has, besides its greater agreeableness, done me good; and my stomach now can digest anything. My bowels are perfectly regular, and I sleep well. I have no pains in my head."

"Nov. 24th, 1856. I sleep well, and soundly, and walk from two to four or six miles every morning, according to weather; besides this, I am engaged in helping a professional friend." (Here he describes his habits of diet, a mixed one, with porter, brandy-and-water, and light pale sherry.) "I have taken the liquor pepsiniæ, with the iron and quinine, three times daily; and lately only twice. My appetite is remarkably good; my bowels are regular, not the least costive. Though I feel so much better, I wish to go on with the pepsine, etc. Two days I was without it, and did not feel so well. The increase of weight since taking your medicine was eleven pounds a fortnight ago, and I feel on the increase. I can eat anything; pork pie or any meat to breakfast. I do not make more water than an ordinary person, certainly not so much as I drink. Specific gravity 1030; and yet, with the liquor potassæ test, there does not seem to be any great amount of sugar. Though I do not wrap up at all, I do not feel the cold as I used to do. I feel deeply grateful to you. So well do I feel that I think of recommencing practice after Christmas. There is one symptom worthy of remark; and that is, that I *feel better* after a hearty meal, such as breakfast and dinner, both of which I eat heartily."

The foregoing are but a few specimens culled out of a great number. I make no further comments, as the facts speak for themselves to all rational physicians, and to my professional brethren in general; but I would merely add, as a standing caution, that the benefits of the remedy are not to be expected from its random or empirical use, but only when such use is grounded on a scientific review of all the important functions of the body in each individual case.

ACETATE OF POTASH IN RHEUMATIC FEVER.

By John R. Nicholson, M.D., Redditch.

Frequently the remedy most successful in the treatment of disease in hospital is not the best adapted for use in private practice. In the latter case, a new set of conditions arise. For the necessary discipline of a well-ordered hospital ensures due attention being paid to ventilation, temperature, diet, nursing, and frequent observation of the patient, all greatly modifying, directly or indirectly, therapeutic effects; but these conditions can only be partially, if at all, secured in the homes of the class which form the bulk of a general practice. Disappointment very often ensues, therefore, to the general practitioner in the use of remedies founded solely upon the *dicta* of heads of hospitals, and he becomes wary of risking his reputation on such.

Dr. Sandwith has given, in the Journal for February 7th, the results of fourteen cases of rheumatic fever treated in hospital with acetate of potash. Twelve cases of this disease have come under my professional care in the preceding two years; of these, nine were treated with acetate of potash, and in all of them the remedy was completely successful in speedily eradicating this painful affection.

The ages of the patients varied; one was aged 11; two were under 20; four were aged from 20 to 30; one was 36; one above 40. Their conditions varied in as great degree, from the well-to-do farmer to his labourer; from the manufacturer to the mechanic; the youngest patient was the daughter of a needle manufacturer in comfortable circumstances; and her parents informed me that she had twice previously suffered. This was the only case in which any symptoms of heart disease made their appearance; and in her they rapidly yielded to treatment by calomel and leeching, acetate of potash being given at the same time.

The period of treatment varied in the different cases from ten to twenty-eight days, the average being fourteen days; and, excepting in the girl above mentioned, no leeching or blistering was required.

On one point Dr. Sandwith does not, I think, sufficiently insist. It is my practice *always* to commence the treatment by giving a pill of calomel and rhubarb, followed by the common black draught. By this means the diuretic action of the acetate of potash is determined more speedily and effectually, a mild diaphoresis being established at the same time. The formula for administration, though slightly differing from that of Dr. Sandwith in detail, is essentially the same. I prescribe the acetate of potash in doses of ten to fifteen grains in a mixture containing bicarbonate of potash and orange syrup, to be taken with lemon juice in the effervescing state. This forms an agreeable medicine to the patient, who is apt to complain of the saline taste of the acetate of potash given alone. I am satisfied, from frequent and mortifying failures in its administration, that these beneficial effects are not to be attributed to the lemon juice solely; but, given with the acetate of potash as above, it undoubtedly promotes and assists the action of that remedy.

The advantage in chronic rheumatism was not so marked as Dr. Sandwith obtained; yet when combined with the nitrate of potash and spirit of nitrous ether, acetate of potash undoubtedly exercised some influence over that disease, but not to the extent expected.

PROLAPSE OF THE UTERUS.

By John Bassett, Esq., Birmingham.

[*Read before the Birmingham and Midland Counties Branch, February 12th*, 1857.]

I propose to relate to the Society to-night the particulars of four cases of prolapse of the womb, and subsequently to make some general remarks upon the causes and treatment of this displacement.

Case i. A. H., single, aged 28, a housemaid, consulted me in April 1854, for a bearing down, which she stated had been troubling her for some months, and was gradually getting worse. She attributed it to frequent running up and down stairs. On examination, I found the womb protruding through the os externum; it presented a bright pink appearance, and was about the size and shape of a pear. There was no heat, abrasion, or discharge. Her general health was not particularly disordered, but she did not consider herself strong. Rest and an astringent injection were ordered: and in a few days a pessary was applied. This not proving sufficiently large, another was substituted. Complete relief followed, so that she was enabled to resume her occupation. I saw her on several occasions subsequently, and once or twice removed the instrument to clean it. At the end of two years she was so far recovered as to be able to dispense with the use of the instrument.

Case ii. Mrs. G. consulted me in August 1853, for a bearing down. Her history was that she was twenty-eight years of age; that she had been married four years, and was the mother of two children, the youngest of whom was three months old. She had never been a particularly strong woman, but since her last confinement had been quite unable to walk about. She suffered from a bearing down after her first confinement, but not to a serious extent. When she consulted me, she complained of lumbar and hypogastric pains, with so much weight and bearing down, as entirely to prevent her from walking. She had a furred tongue, impaired appetite, increased heat of skin, an accelerated pulse, scanty, high-coloured urine, and a costive state of the bowels. On examination, I found the vagina hot and swollen, the uterus enlarged and low down, and the passage moistened with a copious mucous discharge: a large fissure existed in the perinæum, which resulted from laceration in her first confinement. The examination did not give much pain. I prescribed rest in the recumbent posture, a lead and poppy injection, a saline aperient mixture, and a fa-

rinaceous diet. In a week some improvement in the symptoms had taken place: the pain, heat, and discharge, had diminished. The medicines were ordered to be continued, the diet improved, and an alum injection substituted in lieu of the lead and poppy. At the end of the month, the uterus had decreased in size, and the vagina contracted, so that I was enabled to apply a pessary. The first I used was too small; the second produced irritation; so that I deemed it advisable to return to the former treatment. After a time, the symptoms of irritation again subsided, and a pessary was applied, which gave great relief.

This patient continued under observation until the middle of last summer, more than three years, and wore a pessary during the whole time; and although the uterus had regained its natural size, and the vagina become much contracted, I could not persuade her to leave it off. I removed the instrument every three months and substituted another, allowing an interval of a few days between the removal and substitution.

Case III. Mrs. W., whilst I was in attendance upon her daughter, consulted me for a bearing down from which she had suffered during the last ten years. There is nothing remarkable about her history; at present she is in good health. On examination, a simple prolapse was detected; a pessary was adjusted, and complete relief followed.

Case IV. Mrs. B., whom I attended in her second confinement in July 1855, consulted me in the October following for a bearing down, attended with profuse discharge. Her history was that she had not felt well since her confinement, which was in every respect a natural one. Recently she had had so much pain in the back and a feeling of bearing down, that she had been unable to walk about. The discharge had been considerable for the previous three weeks, she felt herself very weak, and had not much appetite. On examination, prolapse of the womb was detected. She was ordered to keep in the recumbent posture, to take a tonic mixture, and to use an alum injection. In a fortnight the discharge had so far ceased as to permit of a pessary being applied, which gave complete relief, and did not produce any irritation or inconvenience. At the end of three months I advised its removal. In proceeding to do this, I found the vagina so much contracted that it was not without some trouble that I effected the extraction of the instrument. She has not since suffered from any symptoms of prolapse.

Remarks. I have not related these cases because there is anything peculiar about them, but for the opposite reason, because I believe them to be well marked examples of a common infirmity; and did I not feel conscious that we sometimes, in our anxiety to improve the art we practise, underrate the importance of common diseases and easy remedies, I should not have appeared here a contributor to night. I do not intend, on the present occasion, to cite the opinions of a number of authors on the proximate and remote causes of prolapse of the womb, as viewed in their anatomical and physiological relations, but shall prefer, by a brief analysis of the cases, to trace out the causes. The first case selected was one of simple prolapse in a single woman, a housemaid, constantly running up and down stairs. The force from above the womb being greater than the resistance from below, it descended, or was dislocated, so to speak, from its axis. In the second case the uterus had lost its perineal support, in consequence of proper care not being exercised after her second confinement, it descended whilst still enlarged, became a source of irritation; it required four months of treatment to reduce its volume, and return it to its natural position. The third case is one of simple prolapse of long standing; it has been related to show the great relief afforded by an accurately adjusted pessary. The fourth case is one of considerable interest, and great practical importance. The facts are brief: prolapse soon after confinement from over exertion whilst the parts concerned in child bearing were in a relaxed and weakened condition; the means employed were so efficacious that the case was cured in three months.

It is a well conceived idea which teaches that the uterus is suspended or equipoised at the apices of two triangles, the bases of which are the diaphragm above and the perinæum below, and that it is retained in its position less by the power of its ligaments than by the general support it receives from above and below, from before and behind. The loss of this balance of support, whether from pressure above, or from injury and weakness below, is the proximate cause of the displacement under consideration. The history of the cases related affords unequivocal evidence of the value of the pessary as an instrument in the treatment of this affection; it is to this part of the subject that I would particularly invite the attention of the society to-night, by asking the associates present what is their experience of the value of the pessary? In what cases is its use indicated? When ought it not to be applied? What kind of instrument is the best? Have any unpleasant consequences followed its use? The instrument I used in the cases related was the circular ring pessary, composed of cotton or sponge, wrapped and coated with caoutchouc; it is durable and clean, and, when warm, yielding. The fact upon which its successful employment seems principally to depend is its being carefully adapted to the capacity of the vagina. In conclusion I have to remark that I might have related a greater number of cases, as well as have told of the instances in which the pessary fails to afford relief; this would have rendered analysis and criticism more difficult. I have preferred, on the present occasion, to deal with simple cases, as being those which are most benefited by treatment.

Reviews and Notices.

Torquay, in its Medical Aspect as a Resort for Pulmonary Invalids. By C. Radclyffe Hall, M.D., Fellow of the Royal College of Physicians of Edinburgh, and Physician to the Torquay Hospital for Consumption, etc. pp. 163. London: Churchill. 1857.

In most places which are celebrated for the salubrity of their climate, or other natural advantages, some resident physician has been found to publish an account of them. In some instances, it is possible that self interest may have a large share in influencing the minds of such writers, and their productions may only be on an equality with those unpretending but useful manuals which direct the excursionist in the pursuit of pleasure. The present work, however, is from the pen of a physician who has every claim to be regarded as a scientific inquirer. Dr. Radclyffe Hall is well known to our Association by the distinguished zeal and ability which he devotes to his profession. We are glad, therefore, to welcome his little work on the Medical Aspect of Torquay.

It is difficult, perhaps, to offer anything very new respecting a residence for invalids which is already so celebrated; but Dr. Hall's work will, at least, be found to contain a valuable and succinct statement of what is most important to be known. It is professedly written at the suggestion of Miss Gore, who, it appears, is the benevolent founder of the Torquay Hospital for Consumption. Dr. Hall is ready to confess that the climate of Torquay is not able to accomplish everything that may be expected, and that consumption itself is by no means unknown to the natives; yet this cannot be urged as any rational objection, for a complaint which originates in low and abortive forms of nutrition may exist in all climates. It is sufficient that Dr. Hall is convinced that the air of Torquay is particularly soothing to the respiratory passages. In matters of this kind, the experience of patients can form the best and only guide; and we make no doubt that we have in Dr. Hall's work a candid statement of what he has observed. At the end of the book will be found some useful meteorological tables. Those who look for an amelioration or cure of pulmonary disorder in a change of place, may consult with advantage a work which emanates from a resident physician who is so competent to advise.

More Suspected Poisoning. Some circumstances have come to the knowledge of the police at Stamford, which have induced the authorities there to order the exhumation of the body of Nathaniel Bacon, the father of Thomas Fuller Bacon. It is stated that Mr. Bacon, sen., was possessed of house property in Stamford to the extent of about £160 per annum, a portion of which would immediately revert to his son, Thomas Fuller Bacon, and the remainder to his wife for life. Nathaniel Bacon, the father, dined with his son on the 13th of October, 1854, was taken ill, seized with cramps, spasms, and vomiting, died on the 17th, and was interred in Great Casterton churchyard. The chemical analysis of the remains of the deceased will be commenced without delay.

British Medical Journal.

SATURDAY, FEBRUARY 28th, 1857.

THE TOBACCO CONTROVERSY.

The discussion relative to the effect of tobacco upon the human constitution seems to grow hotter and hotter in the pages of the *Lancet;* and those who advocate not only temperance, but total abstinence with respect to the weed, are anything but temperate in their language. Indeed, we fear that the question is far too much mixed up with our passions and appetites to be decided by the mere *impressions* of medical men, in the absence of positive information. Mr. Solly, who is the chief leader of the anti-tobacco party, has certainly this great advantage over Mr. Lizars—he argues temperately, and does not deal in those gross exaggerations which, as we pointed out a short time since, render the opinions of the Edinburgh surgeon worthless and mischievous. We must confess, however, that Mr. Solly has not put forth any facts which are indisputable with respect to the ill effects of the moderate use of tobacco. He tells us, indeed, that impotency(terrible word! which has, we believe, frightened all the old fogies of the clubs out of their wits) is the result of excessive smoking; but we answer, such is the effect of excess in the sexual act itself—are we, therefore, to find refuge for the evil in celibacy? We are quite willing to grant that the immoderate use of smoking is exceedingly prejudicial to the young, but what earthly good is not open to the same objection? Are we justified in preaching a crusade against religion, because in some minds it degenerates into fanaticism? Must we abjure wine because "Stiggins" sots and beats his wife? We ask these questions, because we believe that these solemn leagues and covenants against "creature comforts" of all kinds, are symptoms of a disorder which characterises the age. Surely the Almighty gave us reason in order that we may use it—that we may be able to rely upon our judgment and say, "Now I have had enough." If we are to taboo everything which may prove injurious if carried to excess, we shall end in isolating man from every good that God has given him; and let us add, that in attempting to do so much in the tabooing system, we are, in our opinion, emasculating the human mind: for what becomes of our self-reliance, if we lock up the will at every conceivable avenue, and stir no foot for fear of stumbling?

If tobacco is really prejudicial to the human constitution, taken, as most men take it, moderately, we shall be glad to see its use wholly abolished; but we fear no proof of the fact is forthcoming. Most certainly, as yet we have seen no tittle of evidence to that effect. We have read an infinity of letters upon the subject; but we must confess they contain nothing but the personal impressions of their writers, and that, if the weight of these airy nothings were pitted against each other, the moderate smokers have the advantage. Mr. Solly appears to see this difficulty; and, in his attempt to escape it, he appeals to wider fields of experience—he asserts that "high intellectual activity" is interfered with, by the habit of smoking; and he rather inaptly seeks to prove his position by stating that Lord Raglan and Sir Charles Napier gave up smoking as soon as they entered upon their respective commands in the late war! We fear the tobacco smokers will say "that was the reason they made such a mess of it—had they gone on smoking, they would have been more successful." Be that as it may, however, we think Mr. Solly's appeal to the manes of the illustrious dead is rather unfortunate; for, if our memory serves us, the great intellects of the past were notorious smokers—to wit, Raleigh, Newton, Hobbes, Locke, Milton, Byron, Coleridge, Charles Lamb (see his ode to Tobacco), Moore, Shelley, Scott, Robert Hall, Burns. These are only a few that come to mind at this moment, but they certainly contain the cream of the human intellect of the last three centuries in England. Among living great men who smoke habitually, are Tennyson, Guizot, and Louis Napoleon. If we look abroad, the smokers are equally in the ascendant; in large brained Germany all the philosophers, past and present, with Gœthe at their head, were and are smokers.

After this evidence, we think Mr. Solly must considerably modify his statement, that smoking is incompatible with a high state of intellectual activity. We do not think, however, that the defence of a moderate use of tobacco rests upon the support of even these gigantic exemplars of the human mind; it has a far surer foundation in the universality of its use. Surely a substance which is used almost as commonly as food itself—which finds equal favour in the hut of the savage and the homes of the first cities in the world—must be something more than a mere vulgar mistake, a noxious blunder, which has only to be exposed to be abolished. It must be *en rapport* with man's nature itself to have spread even farther than the use of wine. Let our controversialists consider this fact in its broad and ineffaceable meaning, and we do not fear that they will pooh-pooh it as unworthy of being considered as Mr. Solly does.

Mr. Solly asks if our psychologists or mental physicians cannot give us some account of the average number of lunatics who have been habitual smokers. Is this eminent surgeon, who has devoted himself to brain diseases all his life, unaware that tobacco is almost without exception used as a common article of consumption, and as a sedative, in our public and private lunatic asylums? We select, for instance, the following items from the reports of lunatic asylums on our own table. Colney Hatch: tobacco and snuff for the year, £271 2*s.*; North and East Riding Lunatic Asylum: tobacco, 210 lbs., £36 15*s.*; snuff, 8 lbs., £1 17*s.*; Wilts County Asylum: tobacco, 227¾ lbs., £37 10*s.* 11*d.*; snuff, 37½ lbs., £6 12*s.* 8*d.* We may go through the reports of every county asylum in England and find similar entries. This, if not an exact answer to Mr. Solly's question, at least shows what are the smoking habits of our lunatics. The medical superintendents of our asylums must be prepared to defend this practice against the wholesale denunciations of Messrs. Lizars and Solly; and we call upon them publicly to give "the reason that is in them" for what they do. As far as we have been able to observe, it would appear that excessive smoking is more particularly confined to very young men, a class of persons who are generally apt to run into excesses of all kinds. To such persons the habit is, we believe, injurious, as the nervous system in youth is particularly sensitive. In middle age, we question whether there is such a thing as immoderate smoking to any extent; certainly the habit is not so universal among men of the world as it was in the reign of the

first and second Georges, when the pipe and the pot, or the punch-bowl, were the sole solace of the age.

After a certain period of life the human frame seems capable of resisting the influence of any amount of tobacco-smoking. Those who have noticed the habits of very aged people know full well that many of them, especially in the lower ranks, consider the pipe to be the chief enjoyment of life. There is, at the present moment, an old woman at Swansea, 108 years old, whose cutty pipe is never out of her mouth; and we have remarked that of late most old women who have died at a very advanced age, beyond a hundred years, have retained the habit until the latest moment of their existence. We do not wish to put forward these old women as any argument in favour of immoderate smoking, as we know the worthlessness of arguing from the special to the general, but simply to show that the *poison* of tobacco, even taken largely, in a certain stage of life, and after the establishment of a habit, becomes quite inert.

We are certainly astonished at one statement which we have seen used by Mr. Solly, and repeated by Dr. Hassall, namely, that the tobacco-smoke *is taken into the lungs*. It is quite evident from this remark that philosophers are sometimes sadly unacquainted with "common things." If either of these gentlemen will take one whiff of a cigar wholly into their lungs, they will speedily perceive that they do it at their peril. If any of our associates will supply us with any *facts* with respect to the effects of tobacco-smoking we shall feel obliged to them, as we must confess that the manner in which the question has hitherto been discussed is not very creditable to the members of a learned profession. When one surgeon boldly asserts that tobacco causes *cancer*, and another that it is the parent of consumption, we think it right to appeal to the calm judgment of unbiassed men.

THE WEEK.

The publication of the Government return relative to the condition of the late Army in the East corroborates in a very significant manner the accounts published in the press generally, and especially in the *Times*, of the terrible condition to which it had been reduced by the incapacity of its commanders and the total disregard of all the conditions necessary to maintain the health of large masses of men in the field. From this Government return, it appears that the total of British troops who served in the war, from first to last, was 82,901; of this number, 18,927 actually died, and 11,374 were disabled, making a total loss to the army of 30,301 for a period of eighteen months, only twelve of which were passed in the presence of the enemy. This enormous loss far exceeds that which took place at Walcheren, and which we are taught by history to consider as the blackest page in our military annals.

The return is not as explicit as we should have wished it to have been with respect to the number of men who fell victims to disease brought on by exposure and malaria. Could these have been distinguished from those who fell from the ordinary and unpreventible hazards of war, no doubt we should have a further example of the truth that pestilence kills threefold more than the sword. Out of a total number of 6,820 cavalry, 1,587 died and were invalided—a much smaller number proportionately than the infantry regiments. In the artillery, the losses amounted to 2,256, out of a total number of 8,944. It is noteworthy to observe that, although a greater number of officers were killed in the field than privates, proportionately, yet that a considerably less number suffered from disease; thus proving what has already been abundantly proved—that our losses in the Crimea were not so much owing to the exigencies of the war and difficulties of the position, as to the neglect of those charged with the public health and feeding of the troops. We intend next week to draw attention to Mr. Ranald Martin's very important proposition to institute a health officer for the army—an officer of high rank, who shall be present with it in the field. Until preventive medicine has a powerful voice in the camp, we not only have no guarantee that the shortcomings and neglects at Sebastopol, which swept 30,000 troops from the field, will not be repeated in the very next war, but a very fair presumption that they will again recur with all their original horrors.

We had hoped to be able to give an outline of the new Medical Reform Bill this week; but, as it cannot yet be obtained in a form which permits its public use, and as it would be injudicious to make statements which might subsequently demand correction, any lengthened remarks must for the present be deferred. When the Bill has been printed by order of the House of Commons, we shall take the earliest opportunity of making its contents known to our associates. In the meantime, we may state that, like previous Bills, it provides for preliminary education, uniformity of qualification, reciprocity of practice, registration, the restraint of illegal practice, and other important matters. The principal difference from previous Bills is in the constitution of the Council; but this will be a subject for future discussion.

In our impression of last week appeared an advertisement addressed to Naval Medical Officers, respecting a testimonial to Dr. McWilliam, F.R.S. We need not remind our associates of the events attending the agitation for improving the treatment of the naval assistant-surgeons, for they must be impressed upon the memory of each individual member of the profession. We would only state, that for seven years Dr. McWilliam led the movement which was so vigorously carried on by the whole profession, and in which our associates took an honourable part. He brought to bear upon the cause of the assistant-surgeons the same zeal and ability that he displayed in his investigations into the epidemic of yellow fever at Boa Vista some years since. We make no doubt that the appeal of the Committee will be liberally responded to by every medical officer in Her Majesty's Navy.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Adjourned Meeting.]	37, Soho Square, London.	Tues., March 3, 4 P.M.

ADMISSION OF NEW MEMBERS.

The Laws of the British Medical Association, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. Williams, Worcester; or to any of the Secretaries of the Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A General Meeting of the above Branch was holden on Thursday, February 12th, 1857, at the Hen and Chickens Hotel, New Street, Birmingham: Edwin Bartleet, Esq., President elect, in the chair. There were also present: A. Allcock, Esq. (Smethwick); A. Baker, Esq. (Birmingham); J. Bassett, Esq. (Birmingham); G. Bodington, Esq. (Sutton Coldfield); S. Chavasse, Esq. (Birmingham); J. Davies, Esq. (Dudley Port); J. Downes, Esq. (Handsworth); Dr. Fraser (10th Hussars); J. Houghton, Esq. (Dudley); J. Johnston, M.B. (Birmingham); W. J. Kite, Esq. (West Bromwich); G. B. Knowles, Esq. (Birmingham); J. H. Keyworth, M.D. (Birmingham); G. H. Marshall, Esq. (Birmingham); J. R. Nicholson, M.D. (Redditch); Oliver Pemberton, Esq. (Birmingham); J. Vose Solomon, Esq. (Birmingham); W. F. Wade, M.D. (Birmingham); C. Wardell, M.D. (Birmingham); T. Watkin Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham). Henry Terry, Esq., of Northampton, attended as a visitor.

NEW MEMBERS OF THE BRANCH.

J. Downes, Esq., of Handsworth, E. Welchman, Esq., of Southam, and Wm. Smith, Esq., of Redditch, were unanimously elected members of the Branch.

Mr. Bartleet having been called away, the chair was taken by Mr. G. B. Knowles.

AMPUTATION AT THE ANKLE-JOINT. BY ALFRED BAKER, ESQ.

[This paper will be published in the Journal.]

Mr. Oliver Pemberton remarked, that he could confirm most fully the truthfulness of the facts laid before the society by Mr. Baker in reference to the great advantages afforded by this operation; and he considered that Mr. Syme had established a claim to the gratitude of the profession and the public for having introduced and established this procedure in Great Britain. Mr. Pemberton had himself performed it at the tenderest years, and safely also in cases of recent injury. (See Journal for 1856, pp. 311, 377.) The operation was not, however, unattended by those accidents which belong to all surgical undertakings. He had recently lost a case from pyæmia, which, at the onset, promised everything to be desired; and, in another case, he had been compelled to amputate higher up, in order to save life. This latter case had enabled him to carefully dissect the stump in Syme's amputation, with a view to determine the position of the divided tendons in regard to the cicatrix. The particulars of these cases, however, and of the dissection, he should bring before them on another occasion.

Mr. Solomon thought it would be very desirable if statistics of the results of amputation at the ankle-joint were to be thoroughly and fairly compared with those of amputation in the lower third of the leg.

Mr. Baker, in reply, said that he thought Syme's amputation would bear comparison in all respects with other amputations. There were no doubt accidental circumstances which might occur, as mentioned by Mr. Pemberton, and which might also lead to a fatal termination; it being well known, for instancce, what slight causes sometimes would apparently give rise to pyæmia. He firmly believed, however, that there were no special drawbacks to be feared in this operation, as likely to arise either from its situation or from its mode of performance.

TREATMENT OF PROLAPSUS UTERI. BY J. BASSETT, ESQ.

[This paper is published at p. 172.]

Mr. Knowles considered an important point in the paper just read was the *kind* of pessary. He used a sponge covered with oil-silk, which had the advantage of being easily cleansed and adapted to the size requisite in individual cases.

Mr. Yates had tried a variety of pessaries. An objection to several was, that, in consequence of accretion from the vaginal discharge, their extraction became difficult; indeed, in some cases he had heard of, the vagina had been lacerated. The instrument he preferred was one invented by Mr. Copeman of Bradford, which possessed the merit of being easy of introduction and extraction, of being readily cleansed, and of not interfering with micturition or defæcation. Mr. Yates exhibited one of Mr. Copeman's instruments, and explained the mode of fixing it by tapes.

Mr. Baker said, that serious inconveniences are connected with all instruments used for the support of a prolapsed uterus. Few persons require their aid who are not affected with leucorrhœa: hence tapes near to the vaginal outlet become saturated by the discharge, lose their pliability, and cause excoriations. From a pessary with a straight stem, the vagina, on the patient's sitting down, is liable to be seriously injured: the stem should be curved. Mr. Baker gave preference to the old pyriform pessary. The most ingenious instrument is an inflated India rubber bag, of French manufacture, which is unfortunately too expensive to be within reach of the poor.

Mr. Bassett, in the course of his reply, dwelt on the necessity of a pessary being removed every three months, for the purpose of being cleansed of accretions; and that, when leucorrhœa was present, it ought to receive medical attention, and, if possible, be cured.

CASE OF WOUND OF THE KIDNEY: RECOVERY. BY J. JOHNSTON, M.B.LOND.

[This case will be published in the Journal.]

PERCENTAGES ON INSANITY.

Mr. Bodington (Sutton Coldfield), proprietor of Driffield House Asylum, Warwickshre, asked permission of the chairman to mention a subject which he deemed of importance to the profession generally, and especially to those who were engaged in the treatment and superintendence of the insane. In the number of the British Medical Journal for January 17th, the editor had exposed, in a leading article, the disgraceful nature of an advertisement which proposed to give "20 per cent. annually on the receipts to any medical man recommending a quiet patient, of either sex, to a first class asylum, with the highest testimonials." He (Mr. Bodington), as the proprietor of an establishment for the treatment of the insane, could not but view with satisfaction the manner in which the editor had treated a matter so degrading to the best interests of the profession; and he could not but express a hope that, if the offensive advertisement were repeated, the name of the advertiser would be given to the public.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary Quarterly Meeting was held at the White Lion Hotel, Bristol, on February 19th, 1857, at 8 p.m.: Wm. Davies, M.D., President, in the chair. There were also present: Geo. Allen, Esq. (St. George's); John Barrett, Esq. (Bath): J. S. Bartrum, Esq. (Bath); F. Brittan, M.D. (Clifton); Wm. Budd, M.D. (Bristol); Geo. Burder, M.D. (Clifton); W. J. Church, Esq. (Bath); Wm. M. Clarke, Esq. (Bristol); Edmund Cockey, Esq. (Frome); R. W. Coe, Esq. (Bristol); Chas. Collins, Esq. (Chew Magna); G. C. Corbould, Esq. (Bristol): Nath. Crisp, Esq. (Bristol); Jas. Crang, Esq. (Timsbury); Edw. Crossman, Esq. (Hambrook); J. G. Davey. M.D. (Northwoods); F. Flower, Esq. (Chilcompton); Jas. Godfrey, Esq. (Bristol); R. C. B. Holland, Esq. (Bath); Wm. Hutchins, Esq. (Keynsham); John Humpage, Esq. (Bristol); Geo. King, Esq. (Bath); Joseph Lancaster, Esq. (Clifton); Crosby Leonard, Esq. (Bristol); Thos. Martin, Esq. (Bristol); Samuel Martyn, M.D. (Bristol); E. S. Mayor, Esq. (Bristol); J. S. Metford, Esq. (Clifton); W. F. Morgan, Esq. (Bristol); A. Prichard, Esq. (Clifton); W. Y. Sheppard, Esq. (Bristol); J. K. Spender, Esq. (Bath); T. G. Stockwell, Esq. (Bath); G. Terry, Esq. (Wells); and as visitors: G. D. Freeman, Esq. (Bath); Dr. Bowen (Coldstream Guards); and — Browbray, Esq. (of the Military Train.)

The minutes of the last meeting were read and confirmed.

CASE OF BRONZED SKIN, ASSOCIATED WITH DISEASE OF THE SUPRARENAL CAPSULES. BY J. K. SPENDER, ESQ.

[This case will be published in the Journal.]

Dr. Davies had met with two cases of extensive disease of the suprarenal capsules, unaccompanied by bronzed skin: one died of heart, and the other of kidney, disease.

Mr. Leonard exhibited a preparation of diseased suprarenal capsules, from a woman, aged 35. The skin had been bronzed for eighteen months before death.

ON THE ATROPHY OF UNITED GROUPS OF MUSCLES. BY F. BRITTAN, M.D.

[This paper will be published in the Journal.]

Mr. Bartrum mentioned the case of a young man, who suffered from loss of power in the shoulder and upper arm, accompanied with atrophy of certain muscles. A variety of treatment was employed, without benefit.

Dr. Davey said a somewhat similar case had come to his knowledge. A gentleman complained of "loss of motive power" referred to the deltoid muscle of the right arm. On examina-

tion, the part was found to be much wasted. The symptoms progressed, and the deltoid muscle of the left arm was seen atrophied and powerless. The extensors of the cervical spine became similarly affected, which caused the spinous processes to assume so prominent a position, that the bony parietes themselves were long thought to be diseased (hypertrophied). Sir B. Brodie was consulted, and advised setons locally, and Plummer's pill, tonics, etc. At length the muscles concerned in respiration were involved in the destructive process, and death soon followed. Although the amatory desire remained to him, yet the patient lost all sexual power. Dr. Davey reminded Dr. Brittan that the nutrition of the muscular organism was dependent not on the spinal cord, but on the ganglia of the sympathetic, the ganglionic system. He threw this out as a hint towards the elucidation of the proximate cause of muscular atrophy.

Dr. Budd agreed with Dr. Brittan's views; he had seen many cases, and had noticed as cardinal points in them: 1. The symmetrical character of the affection; 2. Its isolation in particular groups of muscles;—symptoms very analogous to those of lead poisoning. All the cases had occurred in men, and the patients exhibited an appearance of decay; the disease was progressive, commencing in the peripheral groups of muscles, generally attended with inability to lift the arm. No benefit was derived from treatment; in advanced cases, the nervous centres and system exhibit signs of failing, there was great debility, and sometimes the speech became affected, showing that the muscular system was not alone involved.

Mr. Collins asked if there was any syphilitic taint in the cases mentioned by Dr. Brittan; and referred to a somewhat similar case.

Mr. Barrett observed that rheumatism sometimes occasioned loss of power in certain muscles, with wasting, in consequence of want of action, from the pain produced by motion.

ON THE MEMBRANA PUPILLARIS: WITH MICROSCOPICAL PREPARATIONS. BY A. PRICHARD, ESQ.

[This paper will be published in the Journal.]

ON ANÆSTHETICS. BY W. M. CLARKE, ESQ.

[This paper will be published in the Journal.]

Mr. Coe thought that in cases where the patient was weak, and the operation likely to be protracted, amylene would be found preferable to chloroform, as it did not appear to be followed by sickness, and the patient speedily recovered from its effects, so as to be able to take stimulants and nourishment.

Dr. Davies had administered amylene, but did not find it as satisfactory in its results as chloroform; a lady to whom he administered it found the smell and taste so disagreeable and persistent, as to prevent her taking food for two days afterwards.

Mr. Clarke said he had found the sickness and exhaustion after chloroform by no means so frequent as seemed to have been the case in Mr. Coe's experience; and that he considered that, in the majority of cases, support might be administered equally well after chloroform as after amylene. He referred to the account of sickness after chloroform that he had given to prove this point.

Reports of Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 20th, 1857.

Thomas Watson, M.D., President, in the Chair.

A large number of members assembled to greet the new President, who, on taking the Chair, made some remarks on the present flourishing condition and prospects of the Society. He thanked the Society for the honour it had done him in selecting him to preside over them; he was afraid he had not devoted that time to the study of pathological pursuits which he ought to have done; but he hoped to derive much instruction while occupying the presidential chair. He then referred to the objects of the Society, and the good it was doing, and spoke with admiration of its *Transactions*.

SCIRRHUS OF THE GALL-BLADDER. BY W. O. MARKHAM, M.D.

The subject of this disease, a female, aged 28, had always enjoyed good health up to about four months before her death. She was then seized with vomiting and pain about a quarter of an hour after taking food, and occasionally she brought up small quantities of blood. She came into St. Mary's Hospital about six weeks before she died. At this time she was intensely jaundiced; the pain and vomiting continued, but with occasional remissions. A hard swelling was felt near the pyloric end of the stomach, which, with the symptoms, led to the idea of the disease being cancer of the pylorus. The stools never contained any bile. Under the above symptoms, the patient gradually sunk exhausted. After death, the stomach was found much distended with a darkish coffee-ground coloured fluid; the viscus reached quite down to the pubes. The gall-bladder was converted into a hard scirrhous mass, the disease having evidently commenced in the tissues of the bladder; it had at one or two points thrown out processes into the liver. The section of the gall-bladder disclosed a contracted cavity filled with gall-stones; the duct was quite impervious. The whole of the tumour was about the size and shape of a large pear. It pressed upon and adhered to the anterior walls of the first part of the duodenum, but the pylorus and inner coats of the duodenum were perfectly healthy. All the tissues of the body were deeply tinged with bile. No other organ was affected; but there was a considerable quantity of cancerous infiltration beneath different portions of the peritoneum, particularly in the omentum, and around the rectum and caput cæcum coli. There were also a few similar yellow cancerous masses beneath the diaphragmatic surface of the pleura, opposite the base of the liver.

Cancer of the gall-bladder as a primitive disease is rare. In this case, it gave rise to symptoms very similar to those of cancer of the pylorus. By pressing upon the duodenum, it obstructed the passage of the food from the stomach into the intestines; and by interfering with the return of blood from the stomach gave occasion to the gastric hæmorrhage.

A LARGE ANEURISM OF THE ASCENDING AORTA, WHICH PRESSED UPON THE RIGHT VENTRICLE AND AURICLE. BY T. B. PEACOCK, M.D.

This preparation was removed from the body of a Hastings boatman, aged 42, who had been a patient of Dr. Barnard and Dr. Steavenson. For the opportunity of examining and exhibiting the specimen, Dr. Peacock was indebted to Mr. Penhall. The patient was first seized after a hard day's work, about two years before his death, with pain in the left side of the chest, and difficulty of breathing; and, latterly, he had suffered from aggravated symptoms of cardiac asthma, with anasarca and hydrothorax. The aneurism originated by an oval aperture, about an inch in diameter, from the right side of the aorta, immediately above the aortic valves. From this point the sac spread out into a large cavity, and pressed inferiorly upon the base of the right ventricle, and posteriorly upon the right auricle. The sac was covered externally by the adherent pericardium; its walls contained several large plates of bone; and internally it was lined by a rough and irregular membrane, and contained in places partly decolorised coagula. The perinæum adhered to the heart everywhere, except towards the apex, and, where it was adherent, there was a thick and wide plate of bone, which entirely encircled the heart. The heart was generally, but not very considerably, hypertrophied.

MITRAL VALVULAR DISEASE. BY T. B. PEACOCK, M.D.

This specimen was removed from a boy, aged 19, who was admitted into the Victoria Park Hospital, with symptoms of bronchitis and mitral valvular disease, in November 1856. He died on the 11th of the present month. He had extreme difficulty of breathing, and a loud murmur was audible with the systole, most distinctly beneath the nipple; latterly, he was very anasarcous; the liver was greatly engaged; the urine contained albumen; and he expectorated blood. The mitral valve was thickened and indurated, and the aperture so greatly diminished as to be only capable of giving passage to a ball measuring twenty-four lines in circumference; the aperture was permanently patent; the heart was generally hypertrophied, and its cavities dilated. It weighed twenty ounces and a half.

CANCEROUS ULCERATION OF THE COLON. BY JAMES PART, ESQ.

Mr. Part presented a specimen of cancerous ulceration of the colon at its hepatic flexure, in which the intestine was narrowed so as scarcely to admit the end of the little finger. The ascending colon was much distended with flatus, and its coats enormously hypertrophied. The peritoneal covering of the intestine had given way in two spots on the anterior surface, where adhesions had been contracted with the omentum. The small intestines were also greatly enlarged, and the coats

hypertrophied and filled with feculent matter. The patient, a medical man, had been obliged to relinquish his duties from severe head affections, which had, however, left him. During the last year he had frequent attacks of colic, attended by a large resonant and very painful tumour on the right side of the abdomen, sometimes in the situation of the caput coli, and at other times higher up. The attack supervened upon a constipated condition of the bowels and upon eating any indigestible substance.

EXTENSIVE OSSEOUS DEPOSIT WITHIN THE MITRAL VALVE. BY JAMES PART, ESQ.

The specimen was taken from a patient, aged 42, who had died with hydrothorax on the left side, with old adhesions on the right. She had had acute rheumatism twenty-five years before her death; and four years previously to death had had pleurisy.

ULCERATION OF THE ŒSOPHAGUS COMMUNICATING WITH THE RIGHT BRONCHUS. BY JAMES PART, ESQ.

A gentleman, aged 62, had had severe hæmatemesis nine months before his death. About five months and a half after the attack, he had, while suffering from severe dyspeptic symptoms with dysphagia, a second very severe seizure; this was followed by others at shorter intervals. He gradually became unable to swallow, until even fluids were, after five or six seconds, returned. Six weeks before death he had bronchitis; after which, blood was sometimes coughed up; and what little food he took into his mouth was returned by coughing. He died on January 3rd. Examination after death showed the liver in a state of cirrhosis, the other abdominal viscera healthy. In the chest a large quantity of offensive ash-coloured pus was found in the right pleural cavity, at a point corresponding to the bifurcation of the trachea; the anterior wall of the œsophagus presented a rough jagged ulcer, about two inches in length, and embracing two-thirds of the circumference of the tube, from this there was a communication with the right bronchi, and an ulcer as large as a small walnut in the substance of the lung at its root. The coats of the aorta were untouched by the disease, which had spread to close proximity with the left bronchus.

LARGE ENCEPHALOID MASS SURROUNDING THE ROOT OF THE LEFT LUNG; EXTENSIVE PLEURAL EFFUSION. BY R. QUAIN, M.D.

The mass, which was of about the size and shape of a large cocoa-nut flattened, was situated between the root of the left lung and the heart. In its aspect, it greatly resembled brain tissue, but was more resistent to the touch and more gritty to the knife. It yielded a copious cream-like juice. The microscope showed its structure to be composed of well-formed, variously-shaped polynucleated cells, of granular matter, of many compound granular or "mulberry-like cells", of a delicate stroma, forming variously-shaped interspaces, and of numerous bloodvessels. The tumour compressed the bronchus and all the bloodvessels of the lung. It had passed into the lung tissue, forming there several masses, varying in size from a pea to a small egg, some of which projected above the level of the pleura. The left pleural cavity contained about three or four pints of blood-tinted serum. This was clearly the result of the pressure on the bloodvessels of the lung, for there was no evidence, save of slight pleurisy, and this on the surface of the diaphragm. The other organs of the body were healthy. There was some rough white deposit on the visceral pericardium, the result of a former pericarditis. There was no glandular enlargement anywhere. The specimen had been taken from a warehouseman, aged 27, who was admitted into the Brompton Hospital, under Dr. Quain's care (Dr. John Sibbald, the reporter of the case, being clinical assistant), on the 8th of last December. He dated his illness from a slight febrile attack, which occurred six months previously, and which left him in possession of a short dry cough. Three months ago he observed his breathing becoming shorter, his appetite, his strength, and flesh to fail. His cough increased, and he expectorated with difficulty a tenacious glairy mucus, but never blood. In this state he was admitted into the hospital. His sallow, cachectic, sorrowful expression, was remarked, and it was observed that he could lie in any position, but he coughed most when on his back. There were no other peculiarities worth noticing. An examination of the chest showed the right lung to be healthy. Over the whole of the left side there was marked dulness. The mobility was greatly diminished. The side was by half an inch fuller than its opposite. There was feeble bronchial breathing over the apex of this lung before and behind. There was also a feeble breath-sound audible at the base behind, but not in front. The heart was but little displaced. Over it there was a distinct but limited friction-sound, and in certain positions of the patient there was also a pleural friction-sound. After a short stay in the hospital, the signs of effusion increased; the heart was much displaced towards the right side; the respiratory and friction-sounds disappeared, and there was heard with the first sound of the heart an endocardial murmur. The patient's weight increased by two pounds. Blisters, mild mercurials, and iodide of potassium, were administered without material influence. The subject of tapping the chest was debated in consultation, but the conviction that solidification of the lungs as well as effusion existed forbade the idea. The symptoms got worse rapidly on the 17th of January, and he died on the 19th. The breathing over the apex of the lung was observed by Dr. Sibbald at this time to be of a more bronchial and metallic character than previously. This case was of especial interest in common with a specimen of like disease presented by Dr. Quain at a meeting during the present session. The tumour in that instance was a sixth part of the size of the present specimen; but, being situated a few inches nearer the median line, pressed on the œsophagus, the aorta and the bronchus giving, by obstructing the functions of these canals, most unmistakable signs of its presence, and finally producing death by starvation.

CROUPOUS EXUDATION LINING THE LARYNX, TRACHEA, AND BRONCHIAL TUBES. BY F. SIBSON, M.D.

There had been very few urgent symptoms during life. This membrane covered the tonsils, the back part of the pharynx, and extended downwards into the lungs, forming a number of inner tubes to the bronchial tubes.

PERFORATED STOMACH. BY F. SIBSON, M.D.

The specimen was taken from a maiden lady, aged 70, a sufferer from severe pain in this organ, and who had been a voracious eater. The aperture, of the size of a half-crown, was on the anterior curvature of the stomach, through which fluid had exuded. There was general peritonitis, but especially marked around the contiguous parts. The pancreas was partly involved, its structure consisting of a fibrous stroma with a few granules of fat.

Dr. Brinton thought that the preparation looked like an eroded ulcer of the stomach, and in a form in which ulceration usually takes place.

Mr. Hutchinson and Dr. Brinton were appointed to examine and report upon the specimen.

TUMOUR ON THE LEFT CRUS OF THE CEREBELLUM. BY F. SIBSON, M.D.

The tumour compressed and involved in destruction the seventh pair of nerves. The tumour was the size of a walnut, and contained egg-shaped and other cells; it was taken from a lady, aged 63. The case was very interesting during life. She had double vision; deafness for one year in the right ear; discharge, and peculiar taste in the mouth. She had salivation for some days before death, depending solely on increased secretion of saliva from the right side only. She had frequent sickness, depending not on the food eaten, but on the quantity of saliva swallowed. This case showed, Dr. Sibson thought, that the fifth pair of nerves regulated the secretion of saliva as well as the sense of taste.

Editor's Letter Box.

ENCOURAGEMENT OF HOMŒOPATHY BY LEGITIMATE PRACTITIONERS.

Letter from James Long, Esq.

Sir,—In writing on the 2nd instant the statement which appeared in your Journal of the 14th instant, it was my intention, by a simple narration of facts, to afford each member of the profession an opportunity of forming his own opinion on the subject. I did not expect that all would think alike; facts, like other things, will assume different aspects according to the medium through which they are viewed. In order to obtain a correct view of the subject in question, the facts must be taken in the order in which they occurred, and viewed without prejudice. I see no inconsistency in approving at the same time of most of the points advanced in the letter of Mr. A. Field, and of the sentiments expressed by Mr. A. So far from the one or the other of us being of necessity in the wrong, I

think both were right. Mr. A., residing upon the spot, had data to go upon which I had not; he acted, I have no doubt, in accordance with his convictions, and I gave him at the time, and still give him, credit for (what I feel disposed to claim for myself) honesty of purpose.

I think it is clear that I did find myself in an unexpected position, and that, to say the least of it, I was on debateable ground. Mr. A., I felt assured, would have sufficient reasons for the course he had taken, and this decided me to act as I did in reference both to Dr. Wilkin and the family, and to request Mr. Fergusson to express alone to the family whatever he might feel disposed to say on the subject. I trust I am competent to give a positive opinion upon this case (and many others), after having heard the particulars of it, without a consultation being required for the purpose.

I have no means of knowing whether Dr. Wilkin does or does not practise homœopathy. The directions I gave when I undertook the management of the case were given in the presence of him and the family: and I have every reason to believe they were acted upon. I acted in the treatment of the case as if no such word as homœopathy had been introduced into the English language.

I have no wish either to exalt myself by a victory, or to lower another by a defeat; but I must repeat that I neither "went to meet a homœopathist, nor approved of homœopathy, nor consulted with a homœopathist;" and had I foreseen the position in which I found myself placed, I should not have visited the case at all.

As to my subsequent visits, I feel that I should have been wanting in moral courage had I deserted the case when unfavourable symptoms showed themselves and a fatal issue was more than probable.

I have now written what some may consider more than is necessary upon this subject, and others less; but having lived long enough to know the futility of attempting to satisfy every one, I shall let the matter drop; and if Mr. Humphreys is desirous of having the last word, I shall leave him in undisputed possession of the field. I am, etc.,

James Long.

3, Hardman Street, Liverpool, Feb. 23rd.

THE TOBACCO-PHOBIA.

Letter from W. O. Markham, M.D.

Sir,—The soul of that excellent surgeon, Mr. Solly, is up in arms against tobacco. He has sounded the alarm, and numerous warriors have eagerly ranged themselves to do battle under his banner. The hideous dream of the phantom evil fills him with despair: "the more I think of the Tobacco Question", he writes, "the more it haunts me". His eye sees a misshapen demon scowling dimly out of each puff of the poor costermonger's pipe, or hanging in threatening aspect in the cloud that rises from the pure Havannah of the West-end exquisite. Then honestly and fiercely he shouts guerra al cuchillo against tobacco.

Broadly and boldly he stirs up the question: Is smoking injurious to the health? And by the *prestige* of his name has got it placed prominently on the orders of the day for discussion. Be it so. To this there can be not the smallest objection. Ill weeds grow apace, as we all know right well, and seem to have a remarkable facility in starving out the finer sort of the earth's productions. Weeds in the vegetable are like vices in the moral world, wherein virtue is ofttimes apt to come off second best in the struggle.

All this is true and trite enough. And good people, therefore, must willingly applaud the discussion, and thank Mr. Solly for exciting it. But let us be wise in the discussion, not enthusiastic; let us be careful not to root up both the good and the evil, the vice and the virtue with an indiscriminate zeal. Why should not the matter be argued calmly and deliberately, and philosophically, as a grave question should be argued, according to the laws and rules duly prescribed in matters of physical investigation? It is true that there have been doctors, and even surgeons, who were gifted in a small way with poetical parts; but, then, this use of the imaginative faculties they exercised as a *délassement*, in the intervals of repose from the sterner and soberer duties of existence. They did not allow creative fancy to interfere in the matter of fact of daily life. But have Mr. Solly and his ardent band been as careful in doing battle against tobacco? Can anyone read with an unbiassed, or at least a sober, eye the missiles hurled by them against the herb, and not perceive that half their weapons were forged in the realms of fancy? Why, one might believe that they who wrought them were actually working under the influence of the potent genius they assail.

They appear to have totally forgotten the self-evident proposition that abuse is not the right use of a thing. Drawing no distinction here, they have naturally involved themselves in the most absurd embroglios. The question, as they put it, is not stated justly, nor argued fairly, on its bare merits. Say the least of it, tobacco has a prestige both from its ancientness in time, and the universality of its existence on earth; and on these grounds alone surely it merits some honest consideration. Instead, however, of arguing what is the good, or is there any, and what the evil in tobacco and its uses, the hostile party have contented themselves with hurling the fiercest denunciations against it, making it out, according to their arithmetic, as the most fertile source of evils, physical and moral, that exists, or has ever existed, upon earth. Go on, ye sinning ones, they seem to say, go on in this career of madness, and the next generation will find the world peopled with idiots and imbeciles; the human race (or rather that part which has had smokers for its propagators) will be represented by a miserable crowd of wretched beings, wandering about, bankrupt in mind and bankrupt in body.

Surely one may be forgiven, if one suggests that all this partakes rather of that cry of unreasoning intolerance, which is supposed to resound remarkably loud within the walls of the Hall of Exeter, than of the dictates of sober judgment. Why! to ask "Is smoking injurious", and then to answer the question by adducing heaps of mischiefs that result from the gross abuse of tobacco, is just about as reasonable as objecting to the medical use of it, because a strong-minded surgeon despatched by its aid some four or five unfortunates, one after the other, to the dark realms of Pluto, as Mr. Solly relates. As reasonably might a cry be raised against victuals and drink, because of the inordinate transgressions against their gastronomic powers, which half the world commits on all available occasions. Talk of evils resulting from tobacco, of their blighting the father, and poisoning his degenerate progeny, even down to the third and fourth generations! Why! what are these compared to the thousand ills which are the manifest result of eating and drinking inordinately? Whence comes the gout? whence big and small livers? Whence large and little kidneys? Whence that big army of small evil species, crowding under the genus dyspepsia? Whence shaky arms and draggling legs, wandering wits and mad delirium? I suppose we all know pretty well whence these and a colony more of such like realities come, and yet no one puts down eating and drinking; it is only the abuse of the appetite that our monitors justly rail against. If half the old women in London poison their stomachs with tea, nobody cries out, What a blessing to humanity is this Chinese war, if it puts down the tea trade!

Of course I shall be told that eating and drinking were coeval with the creation of Adam and his wife, and that then and ever since the operations in question have been found necessary for the proper maintenance in union of that vital and physical compound, human-kind; and also that tobacco is only a late invention of the enemy, and its use merely a superfluity of naughtiness. I admit the force of the argumentative thrust, and will anticipate it, by observing, that as people lived before tobacco was invented, and as a good many now live who never use it, I have no difficulty in believing that *all* could get on very well without it.

I did not for a moment think of placing the use of a pipe of tobacco on a par with the beneficial results of a rump-steak properly digested (though, by the way, I have somewhere read that travellers have often made a satisfactory meal out of that pipe, *faute de mieux*, or when the buffalo-hump was not forthcoming). I only desired to bring back the discussion of the question to its true position. Instead of "Is smoking injurious?" then, the proper question is, What are the uses of tobacco, and what are the evils which result from its abuses?

Now, let us be just to tobacco; even if we all agree at least in condemning and excommunicating nicotiana tabacum, let us be honest enough to give its *pros* and *cons* a fair hearing. The herb is not a modern upstart weed, impudently thrusting itself upon the world's notice; it has the venerable dust of ages on its fragrant leaves. Many a generation has gone to rest since poor Sir Walter's pipe was violently extinguished. All nations of the earth have welcomed and embraced the charmer; and many of the wisest of Earth's later sons have been inspired by its gentle influence, and sought solace in its soothing perfumes. Rude savage kings have tried to trample down and blast its growth; emperors have issued decrees that it should die.

Russia did not spare the nose of him whose mouth was taken in the flagrant act of emitting the villanous vapour. Sultan Amurath decreed that he who lit a pipe should be himself extinguished. This master of a hundred wives seems somehow or other to have tumbled on the same theory of the herb's venom that, in one striking particular, our modern counterblasters hold; viz., that smoking and propagation are incompatible. To save the prophet's race, he therefore very consistently cut off the heads of his tobacco-given subjects. Even in the retired fastnesses of free Switzerland, tobacco could find no rest; every burgher who touched the forbidden fruit underwent citation and correction. But yet the weed does live, and verily flourishes most amazingly.

Now surely, on the first surmise of such a history, an unprejudiced surveyor of the case might be justified in thinking that there must be some virtue in a thing of such vitality that neither kings nor emperors can crush it, nor papal anathemata put it out—a thing that every nation on the earth has welcomed, and whose charms poets and philosophers have admitted and admired. Can it be that all the universe has thus, and for so many ages, gone mad in their idea? Is there indeed no virtue here, but unmixed evil only, as the modern enemies of tobacco would have us think? Is all the world mad, and they only wise who hate tobacco? Surely at least you must admit that tobacco has a prescriptive right of being put upon a fair trial—that there is here a strong *primâ facie* case to go to the jury.

Ages and universal custom are against you; and you must prove your case, not by isolated views, and wordy generalities, and ill defined hypotheses, and personal convictions, and stretches of the imagination, and such like loose kinds of logical artillery. To upset such a case as tobacco presents, we must have solid well established facts, such as Mr. Solly *promises us* at a future day. We must have these to prove his case, as he asserts it, even as regards the present race of human beings. As regards the third and fourth generations, who, he tells us, will smart sorely for the recklessness of the smoking sinners of this day, their case will bear adjournment, and may be fairly left for future consideration, until the former point is settled.

I have already made this letter too long; but I trust that I may have put the question of tobacco on better legs for discussion than its enemies will give it. Perhaps, after all, it may be found that there is some soul of good in this thing most evil, if men would knowingly distil it forth. If so, then let us abuse its abuses, and admire and use its uses. But if tobacco should turn out one huge unmixed evil, then let it be consigned to its proper destination—the abode of its wicked inventor; and let moralists write essays on the monstrous madness of universal human nature, which has for ages been quietly inhaling with delight a most villanous poison.

Perhaps you may find me a corner, on some future occasion, to signalise one or two little errors into which Mr. Solly has fallen respecting the material action of the inhalation of tobacco smoke, and respecting the materials inhaled. I will here only say, that tobacco smoke is *not* taken into the lungs; and that almost the whole of those virulent poisons, which exist so many frightful grains to the pound in the herb, are destroyed and burnt by the fire of the smoker's tobacco.

I am, etc., W. O. Markham.

London, February 25th, 1857.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Richard Griffin, Esq.

Sir,—Officers from the subjoined unions have joined the association since the last list was printed; and I trust before long every poor-law medical officer will see the necessity of enrolling his name with ours. I have this day received Knight's *Union Officers' Guide* for 1857, and find a considerable number of changes have taken place during the last year; and as many of the residences of the newly appointed poor-law medical officers are not in the Directory or List, perhaps all may not have received a copy of the statement addressed by me to Lord Palmerston; should any gentlemen have been omitted, I shall be glad to forward them a copy gratuitously—I say gratuitously, as the committee have permitted Mr. Archer to print a second edition for general sale. Advertisements for a public meeting will appear as soon as a day can be named by the Chairman. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, February 21st, 1857.

P.S.—Should you think the continuance of the correspondence between the Poor-Law Board, the Board of Guardians, and myself, of interest to your readers, pray append it.

List of Unions.—Stratford-on-Avon, Bodmin, Biggleswade, Bootle, Hambledon, Winchester, Driffield, Ashby-de-la-Zouch, Sunderland, Rochford, Clifton, Nantwich, Thorne, Mansfield, Woodstock, Goole, Westbury-on-Severn, Holbeach, Beaminster, Maidstone, Dolgelly, Lexden and Winstree, Watford, Solihull, Launceston, North Witchford, Totnes, Richmond, Romsey, Docking, Freebridge Lynn, Droitwich, Lincoln, East Ward, Bolton, Bridgend and Cowbridge, Upton-on-Severn, Oswestry, Kingsclere, Haslingden, Ross, and Cranbrook.

Mr. Griffin to the Poor-Law Board.

"12, Royal Terrace, Weymouth, February 19th, 1857.

"My Lords and Gentlemen,—I have the honour to acknowledge the receipt of your letter of the 9th instant, for which I am obliged. I herewith send you a copy of a letter addressed to the Clerk to the Weymouth Union, written in consequence of your referring me to the Board of Guardians. Your Honourable Board will perceive that although I applied for the 'exact charge', none has been sent me. I must confess it is difficult for me to solve this enigmatical resolution, coupled, as it is, with an admission made to me last Tuesday by the Chairman of the Board of Guardians, that they never had an officer who did his duty better than myself, nor with whom the poor were more satisfied. "I have the honour to be,

"My lords and gentlemen, your obedient servant,

"Richard Griffin.

"The Poor-Law Board."

"12, Royal Terrace, Weymouth, February 16th, 1857.

"Sir,—It has been rumoured that the Board of Guardians of the Weymouth Union, on or about December 23rd last, applied to the Poor-Law Board for leave to suspend me. At first, I could scarcely credit the report; but, from its reiteration, I was at length compelled to believe it, and wrote to the Poor-Law Board to request a copy of the letter. In their reply, dated February 9th, they say they have not received any specific charge against me, which they can entertain, etc., and that it will be competent for the guardians to supply me with it, and refer me to them on the subject; I shall therefore feel obliged by your furnishing me with a copy of the letter, and the *exact charge*, that I may have the chance, late though it be, of knowing the nature of the offence which could induce the Board of Guardians (whose Chairman is a magistrate and a marine officer, and consequently, one would imagine, conversant with the usages of public bodies) so far to depart from the custom of civilised society, as to condemn a man without first naming to him the charge preferred, and hearing his defence. I might be content with the reply of the Poor-Law Board, that no specific charge is alleged against me; but I am not desirous to shield myself under any technical objection, but am prepared to meet any charge that may be brought against me, which the Board of Guardians have a right to institute.

"I am, sir, etc., Richard Griffin.

"Philip Dodson, Esq., Clerk, Weymouth Board of Guardians."

Extract from the Minutes of the Board of Guardians of the Weymouth Union, December 23rd, 1856.

"Resolved—That the Clerk be directed to inform the Poor-Law Board, that in consequence of the antagonistic feeling of Mr. Griffin to the guardians, they find it impossible to work harmoniously with him, and which acts very prejudicial to the interests of the ratepayers and the poor; they therefore beg most respectfully to request that the Poor-Law Board will order an investigation into the conduct of Mr. Griffin, as the unanimous feeling of the guardians is to suspend him forthwith.

"Philip Dodson, *Clerk*."

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, February 19th.

MEDICAL PROFESSION.

Mr. Headlam obtained leave to bring in a Bill to alter and amend the laws relating to the medical profession.

SURREY COUNTY LUNATIC ASYLUM.

Mr. Otway said that it would be in the recollection of the House that a lunatic confined in the Surrey County Lunatic Asylum was recently subjected to certain treatment, and died in twenty

minutes afterwards. The medical officer, Mr. Snape, was committed for trial, but the Grand Jury ignored the Bill, and Mr. Snape had been reappointed to the medical charge of the asylum by the visiting committee of magistrates. He wished to ask the Home Secretary whether he had the power, upon the appointment or reappointment of such an officer, to remove him; and, secondly, whether he had signified his disapprobation of the reappointment of Mr. Snape. He also wished to know whether the Right Honourable Baronet would lay upon the table the correspondence between the Commissioners of Lunacy, the visiting magistrates, and the Home Office.

Sir G. GREY said, that after the occurrence adverted to, the medical officer was suspended during the inquiry and prosecution. He believed that he was not dismissed, and that there had strictly been no reappointment; but that after the inquiry, the committee of visiting justices recommended that the suspension should cease. The Secretary of State for the Home Department had no power as to the appointment or dismissal of the medical officer of a lunatic asylum—that power being entirely vested by the Act of Parliament in the visiting committee. He had received a statement from the Lunacy Commissioners on the subject, which he had transmitted to the visiting committee; and he had also received a communication from the visiting committee in reply, which he had transferred to the Lunacy Commissioners. There would be no objection to the production of this correspondence.

Mr. DRUMMOND hoped that the papers would include Mr. Snape's statement, and also copies of the medical evidence taken by the visiting magistrates.

Sir G. GREY said, if the honourable gentleman (Mr. Otway) would make a motion for the production of the papers, the honourable member for West Surrey could add the papers to which he had referred to that motion. If he could procure the papers, he would produce them.

Friday, February 20th.

PUBLIC HEALTH SUPPLEMENTAL BILL (1857).

This Bill passed through Committee.

Monday, February 23rd.

PUBLIC HEALTH SUPPLEMENTAL BILL (1857).

This Bill was read a third time and passed.

Tuesday, February 24th.

BOARD OF HEALTH.

Mr. PALK asked the President of the Board of Health when he would bring on a Health of Towns Bill; and whether the Bill would carry out the recommendations of the Committee on the Board of Health?

Mr. COWPER said he had already given notice of his intention to introduce a Bill to amend the Public Health Act. He thought he should bring it in on the 10th of March. The Bill would be the same as that agreed to by the Select Committee, with various alterations, which further consideration had suggested.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

NASH. On January 10th, at Madras, the wife of Dr. Pearson Nash, Madras Army, of a son.

THOMPSON. On February 20th, at 20, Sussex Gardens, Hyde Park, the wife of Charles T. Thompson, M.D., of a son.

MARRIAGES.

CONDIE—ALLARDICE. CONDIE, George, Esq., of Perth, to Alexandria Eliza Jane, only child of the late Alexander Allardice, Esq., Surgeon H.E.I.C.S., at Stokesley, Yorkshire, on February 18th.

GREENWAY—WIGHT. GREENWAY, Thomas, Esq., 55th Regiment Madras Native Infantry, to Eliza Susan Georgie, daughter of the late Robert Wight, M.D., Madras Army, at Secunderabad, Deccan, on January 1st.

RICHARDSON—SMITH. *RICHARDSON, Benjamin W., M.D., of 12, Hinde Street, Manchester Square, to Mary, youngest daughter of the late Edward Smith, Esq., of Mortlake, at All Souls, Langham Place, on February 21st.

TAIT—RENWICK. TAIT, George A. F., Esq., Surgeon to the Mexican and South American Company, to Margaret Anne, third daughter of Robert Renwick, Esq., of Hugh Street, Pimlico, at the British Consulate, Coquimbo, Chili, on December 27th, 1856.

DEATHS.

BAYLY. On February 20th, Frances, wife of A. H. Bayly, Esq., Surgeon, of Grove Terrace, St. John's Wood.

*MANIFOLD, William Wright, Esq., Surgeon, at Liverpool, aged 54, on February 19th.

STRAKER, Dr., C.B., H.E.I.C.S., at Bombay, on January 16th.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at the meeting of the Court of Examiners on Friday, February 20th, 1857:—

DENNE, Thomas, Tange, Sittingbourne, Kent
DYER, George Henry, Royal Navy
FORBES, William, Aberdeen
JONES, Charles Marchant, Beyrout, Syria
LAMB, Robert, Sutherland Square, Walworth
LAVER, Henry, Paglesham, Essex
TALLER, Ebenezer, H.E.I.C.S.
TUCKER, Owen, Army
WOOD, William, Middleton, Beverley, Yorkshire

At the same meeting of the Court—

ARCHER, Archibald Leslie, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons: his diploma bearing date July 4th, 1849.

APOTHECARIES' HALL. Members admitted on Thursday, February 19th, 1857:—

BLEASE, Thomas Torkington, Altrincham
COOPER, Astley, Plymouth, Devon
GREENWOOD, James, Queen's Road, Dalston
GULL, Frederick, Stanway, Essex
HUTCHISON, George Smith, Norwich
KENDRICK, Phineas John, Goldthorn Hill, Wolverhampton

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 21ST, 1857.

[From the Registrar-General's Report.]

THE total number of deaths registered in London in the week that ended on Saturday was 1243. In the first week of this month the deaths rose to 1368; with a warmer temperature during the succeeding two weeks, they have been on the decline. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1211; and in order that the deaths of last week, which occurred in an increased population, may be compared with the average, the latter should be raised by a tenth part, in which case it will become 1332. The result of the comparison is favourable as regards the present state of the public health.

In the three weeks of February the mean weekly temperature was consecutively 32·3°, 40·9°, and 42·5°. In the same periods the deaths caused by diseases of the respiratory organs (exclusive of phthisis) were 359, 307, and 288. The 288 deaths in the present return nearly agree with the corrected average, which is 294. But hooping-cough appears to be rather on the increase, the deaths from this complaint in each of the last four weeks having been 57, 61, 70, and 74. Scarlatina has not prevailed much for some time, and last week the deaths from it were reduced to 23. It was not fatal in a single case in the central districts. There were only 4 deaths from small-pox, and none of these in the Eastern or Southern divisions. Measles was fatal to 35 children; in the Marylebone Workhouse 5 deaths have occurred from this disease since the 8th instant. The registrar of St. Peter Walworth states that fever is common in the neighbourhood of the Westmoreland-road in his sub-district. Of 37 persons whose deaths are recorded in the week, and who were 80 years old or more, it appears that only one, a farmer's widow, had attained the age of 90 years. A labourer, aged 70 years, died on the 12th instant in Royal Mint Street, Whitechapel, from want. Two persons died from intemperance.

Last week the births of 975 boys and 904 girls, in all 1879 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1592.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·988 in. On the last three days the mean daily reading was above 30 in. The highest reading was 30·18 in., and occurred on Saturday. The mean temperature of the week was 42·5°, which is 4·1° above the average of the same week in 43 years. The mean temperature was on every day after Sunday above the average. The *highest* temperature occurred on Tuesday, and was 56°; the *lowest* was 28·2°, and occurred on Monday. The range of the week was 27·8°. The mean dew-point temperature was 39·3°, and the difference between this and the mean temperature of the air was 3·2°. The wind blew from the south and south-west, except on Sunday, when it was in the morning in the north-east. There was no rain, but occasionally fog or haze prevailed.

ROYAL COLLEGE OF SURGEONS: HUNTERIAN ORATION.

The oration in memory of John Hunter was delivered on Saturday, the 14th instant, before the President and Council of the College, and a large number of visitors, by Thomas Wormald, Esq., Assistant-Surgeon to St. Bartholomew's Hospital. The large and commodious theatre was unusually filled with the fellows and members of the College. In proceeding in his oration, Mr. Wormald more particularly addressed himself to the younger members of the profession, holding up Hunter as their model, who, with that modesty peculiar to him, said that he knew of no particular ability which he had beyond other men. But in him there was a rare combination of power; his understanding was clear, his will determinate, his memory strong, his imagination vivid, his judgment sound and comprehensive. He was little versed in the dogmas of former ages as in the philosophy of the schools: yet as if the very mantle of Bacon had fallen upon him, he carried into surgery that inductive process by which such gigantic strides had been made in every department of physical science. No power of authority, no mere assumption of knowledge could move him; to Nature alone he bowed, and from her he sought instruction. Mr. Wormald then alluded to Hunter's literary contributions, and to the important surgical operation for the cure of popliteal aneurism adopted by Hunter, but which had been strangely overlooked, or not directly assigned to the great anatomist, with whom the improved method of operating undoubtedly originated.

After some further notices of professional interest, Mr. Wormald alluded to the liberal sums expended by the Council of the College in the augmentation of the Hunterian museum, and paid well-deserved compliments to Professors Owen and Quekett, adducing the numerous descriptive catalogues of the collection as examples of their talent and industry.

The orator then, in eloquent terms, paid a just tribute to the late Mr. Guthrie, who, said he, with an iron constitution, persistent energy of mind and body, availed himself to the utmost of that extensive field for observation and practice which the Peninsular war placed at his disposal. The skill thus acquired he kept in continual exercise; while the facility with which, to the latest period of his life, he gained fresh information was truly marvellous. In him, said Mr. Wormald, was to be deplored the loss of the first military surgeon this country ever produced, and of a man whose time, influence, and talents were always given to promote, what he believed to be, our common interests. In connection with his name, the orator recalled the memories of those military surgeons who have fallen in the battle field. Military surgeons, he said, laid no claim to heroism; yet always were they seen at the post of honour, on the rampart, in the open trench, at the head of the division, or with the secret ambuscade, waiting for the moment when their assistance should be required. To others there was a time of rest; a period whan danger ceased; but theirs was a continual conflict. The battle called them to the front to bind up some shattered limb, or to stay the faint pulsation of the ebbing life. The morning of the victory found them still unwearied, labouring with firm and steady hand amidst the dead and dying. The close of warfare but sent them to the Hospital or tent, to the contagion of fever and disease. Such was their work: surely their deeds should not be forgotten. In conclusion, Mr. Wormald dwelt on the memories of those who had laboured in the profession, whose names should be held in remembrance. Those who had followed Hunter had pursued his questionings, and had disclosed those hidden things which nature revealed to her true votaries; and no longer could it be said, "Nulla ars inconstantior medicinâ, nec sæpius mutatur."

In the evening the President (Mr. Travers) entertained a large number of visitors at dinner. Amongst the gentlemen present were Lord Talbot de Malahide, the Lord Chief Baron, Mr. Justice Erle, Sir John Hall (covered with honourable decorations), the Director-General of the Army Medical Department, and several naval authorities, as well as the members of the several deputations from Dublin, Edinburgh, and Glasgow, who formed the conference on the proposed Medical Reform Bill.

COLLEGE OF DENTISTS.

On Saturday, February 14th, the inaugural meeting of the members of the College of Dentists was held in the concert-room, Hanover Square Rooms. The chair was taken at eight o'clock. The inaugural address was delivered by the President of the College, Mr. Robinson. After referring to the origin of the College, the speaker went on to detail the use of dental surgery. It is in the time of Hippocrates that we meet with any distinct notice of diseases of the teeth. This appears the more extraordinary, as among the ancient Egyptians one of their most severe and degrading punishments consisted in the abstraction of a front tooth. The loss of a front tooth, whether by disease or otherwise, would, during the existence of that Egyptian punishment, have given rise to unpleasant suspicions; and it may be presumed that every exertion would have been made to supply the deficiency. Belzoni and others discovered rudely manufactured teeth in the sarcophagi of the Egyptians. Sir Gardner Wilkinson observes that the Egyptians stopped teeth with gold. Proof of this has been obtained by the examination of mummies from Thebes. The general appearance of the teeth, and their diseases, attracted considerable attention amongst the Greeks and the Romans. The wearing of artificial teeth formed the subject of satire for some of the poets. Hippocrates and Galen mention sundry electuaries for beautifying the teeth, but describe nothing that may be called the proper art and science of dentistry. Albucases wrote on diseases of the teeth, and gave drawings of a number of instruments then in use for extracting, scraping, and other dental operations. He, moreover, gives instructions as to how teeth should be extracted, and directs that, if hollow, they be stopped with cotton—refers to filing teeth, and to fastening loose ones with *gold thread*. Ætius details a variety of applications for removing teeth without an operation; and it is worthy of observation that one of those applications contains red arsenic. Hippocrates describes the teeth as glutinous extracts, from which the fatty matter has been burnt up by heat, and affirms that they are harder than the other bones, because they have no heat in them. Aristotle declares them to be the only bones which grow through the whole of life, observing that if they did not they would soon be worn away by attrition. He adds that the growth is manifest in those teeth that have lost their corresponding opposites in the other jaw. At the end of the sixteenth century the dental art began to receive peculiar attention. About that time there were thirty-eight treatises published on the subject. The first attempt to classify diseases of the teeth was, in the eighteenth century, made by M. Fouchard, who not only directed attention to the construction and separate treatment of the teeth, but also pointed out the indications which, in common with the adjacent parts, they furnish of the general state of health. By the end of the eighteenth century, no less than 158 works had been published on the subject. The first work that appeared in England, in a popular form, was by Berdmore, and was published in 1770. In 1772, the great John Hunter gave the profession the result of his dental investigations, in his work on the *Natural History of the Teeth*. This was followed by the *Inaugural Dissertation on the Structure of the Teeth of Men and Animals*, by Robert Blake, in 1798. Time would not permit, on this occasion, the enumeration of the various valuable contributions to dental science that have since been published; but, without lessening the merits of others, the names of Fox, Bell, Goodsir, Nasmyth, Retzius, Purkinje, Tomes, and Professor Owen, might be mentioned. Some of our transatlantic brethren have likewise done much in dental physiology and pathology, and dental mechanism. The dentists of the United States have, for some years, held, as a body, a very different *status* to that occupied by the dentists of this country; but those who first attempted to found a College of Dentists in America had to

encounter precisely the same amount of difficulty as that which presented itself to the English dentists. The American dental colleges have an independent curriculum of study, and, connected with them, are dental hospitals and dispensaries. The pupils are taught every branch of the dental art, by a course of study that embraces dental anatomy, physiology, special pathology and therapeutics, chemistry and metallurgy, the principles and practice of dental surgery, operative dentistry, and dental mechanism. Having gone through the prescribed course of study, the pupils are examined by the professors in each department; and if the examinations be passed in a satisfactory manner, a diploma is granted, which authorises the holder to assume the title of "Doctor of Dental Surgery." Much has been said about their wishing to adopt the *modus operandi* of the dentists of the United States; but their only objects were to raise their *status*, to give professional skill its rightful pre-eminence, and to crush that charlatanism which has, in too many instances, succeeded in preying upon the public health and purse. Mr. Robinson concluded by drawing attention to the preliminary course of lectures which had been arranged; which, if diligently attended to from the commencement, would be found to form a very solid foundation for following studies.

ENCOURAGEMENT OF HOMŒOPATHY.

A meeting of the honorary medical officers of the Liverpool Royal Infirmary was holden on Wednesday, the 18th instant, to take into consideration Mr. Long's reply to certain letters which had appeared in the Association Medical Journal in December and January last, Henry Stubbs, Esq., in the chair. Mr. Long's letter to the Editor of the British Medical Journal (inserted on the 14th instant) was read, and not considered by the meeting to be sufficiently explicit.

Mr. Long then made a further statement, *i.e.*, "that if he had known he should have been placed in such a position as to have met a gentleman who had the reputation of practising homœopathy, he would not have gone to the case."

It was thereupon resolved, "That in the opinion of this meeting, it is not in accordance with professional etiquette to be associated in the treatment of disease with anyone who practises homœopathy."

Henry Stubbs, F.R.C.S., *Chairmam.*

R. Bickersteth, F.R.C.S. — R. Fomby, M.D.
John P. Halton, F.R.C.S. — James Vose, M.D.
E. R. Bickersteth, F.R.C.S. — James Turnbull, M.D.

Suicide by Strychnine. A painful sensation was created in Newport (Isle of Wight) lately, by the report of the death of Mr. William Gummow, from strychnine, administered by his own hands. On proceeding to view the body, the coroner's jury found deceased in the same position in bed, in which he died. His eyeballs seemed ready to burst from their sockets; his teeth were tightly closed; the features drawn and contracted, and the whole countenance frightfully distorted; his fists were firmly clinched; his feet forced out beyond the foot of the bed; and his limbs in a state of fixed rigidity. The poison was bought by the servant of the suicide. The druggist recollected the latter coming to his shop and asking for arsenic to kill rats. He gave him three grains of strychnine. "I have sold the same," said the druggist, "for killing rats for four or five years to many persons. I write the word 'Poison' on my packages, and have not a printed label." The coroner and jury observed it would be much better to have a printed label. The deceased took the whole three grains. The doctor who attended him first tried strong emetics, which produced no effect. He then applied the stomach-pump, but the patient's mouth was so firmly fixed, and the spasms and violent paroxysms were so powerful, that he could not in any way apply it. His body was bent in a curved form. They were only such symptoms as would be produced by strychnine or hydrophobia. The spasms contracted and bent the feet, and the hands were clinched too; and he died in one of those convulsions, quite black in the face. The right side of the heart was found full of blood, and the left empty. The lungs were blacker than usual, but the other organs were healthy. (*Hants Advertiser.*)

Medical Society of London. On this (Saturday) evening, a paper will be read by Jabez Hogg, Esq., "On the Ophthalmoscope; its value as a Diagnostic Aid in some Diseases of the Eye."

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Dr. Little's communication shall appear next week.

Communications have been received from:—Mr. E. R. Bickersteth; Mr. Thomas Charles; Dr. R. U. West (Alford); Mr. James Long; Dr. F. Brittan; Dr. Frederick J. Brown; Dr. James Ogden; Mr. R. Griffin; Dr. W. O. Markham; Dr. James Johnston; Mr. Oliver Pemberton; Dr. G. B. Halford; Dr. Hayes Jackson; Dr. Charles Cowdell; Mr. F. Spurrell; Mr. W. J. Slinn; Mr. Thomas Martin; Mr. Crosby Leonard; Mr. J. S. Gamgee; Dr. J. C. Reid; Dr. Edward Smith; Dr. J. C. Hall; Mr. R. W. Watkins; Dr. J. G. Swayne; Mr. E. McDermot; Dr. Arnott; Mr. T. Holmes; Dr. J. R. Nicholson; Dr. Nelson; Mr. J. Bassett; Mr. Stone; A Student; Mr. Augustin Prichard; Dr. G. Buchanan; Dr. Little; and Dr. Merriman.

ADVERTISEMENTS.

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To the Medical Profession.

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Treasurer—JOHN PROPERT, ESQ.

The COUNCIL of the ROYAL MEDICAL BENEVOLENT COLLEGE have the pleasure to inform the Governors and other friends of the Institution, that the FIFTH ANNUAL FESTIVAL will take place at the Freemasons' Tavern, on Wednesday, the 6th of MAY next, when the Right Honourable the EARL GRANVILLE has kindly consented to take the Chair. Gentlemen who are willing to act as Stewards on the occasion are requested to send their names to the Secretary, at the Office in Soho Square.

The following Noblemen and Gentlemen have already undertaken to officiate as Stewards. A further list will be published shortly.

The Right Hon. the Earl Manvers
The Right Hon. Viscount Palmerston, M.P.
The Right Hon. Viscount Boyne
The Right Hon. Lord Dynevor
Benjamin Bond Cabbell, Esq., M.P., F.R.S.
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. X.] LONDON: SATURDAY, MARCH 7, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

INJURIES OF THE CHEST.

Under the care of T. TATUM, Esq.

CASE I. *Extensive Fracture of the Ribs, with Paralysis of one Arm, and other severe Injuries.* Mary Ann S., aged thirty years, a married woman, the subject of ovarian disease, and extremely nervous and hysterical, was admitted on January 13th, on account of an accident, in which she had been much injured. She was riding in a Hansom cab, when the horse started up a bank. She jumped out of the front of the cab, and the horse fell back upon her. When admitted, she was in such a state of collapse, that it was feared she was dying.

On examination, a line of fracture was discovered running all down the left side of the chest anteriorly, near the costal ends of the ribs, and a corresponding line posteriorly at the other extremity of the diameter of the chest, passing through the ribs on the right side near their angles. Thus all the true ribs in the body, and perhaps some of the false, were fractured, and several were comminuted. There was a comminuted fracture of the left clavicle, the fractured ends nearly penetrating the skin. She was labouring under concussion of the brain, and was restless, moving the injured arm about violently. From the presence of a considerable amount of blood in the ocular conjunctiva of both eyes, fracture of the anterior fossa of the base of the skull was suspected. This blood, however, was slowly reabsorbed, and she gradually recovered perfect consciousness, without any more decided bad symptoms showing themselves. When she had somewhat recovered, it was found that she was quite unable to move the right arm; and she has remained so ever since. Sensation appears to be unimpaired, or, if anything, is morbidly acute; but all the muscles of the extremity are paralysed. On examination in the neighbourhood of the origin of the nerves the only thing that could be discovered was a little bruising at the root of the neck. She suffered much from cough and bronchial expectoration (not tinged with blood) for several weeks; and the treatment, after she had been rallied from the extreme prostration, which at first necessitated the use of stimulants, consisted in soothing the cough by small doses of antimony wine and morphia, and stronger doses of the narcotic at night; the chest being carefully supported by means of a bandage. She remained for some days in a semi-delirious condition, the result partly of the injury to the head and partly of nervous agitation, but has since continued to improve steadily, and is now so far recovered as to be reported convalescent, though she is still kept in the house on account of her extreme debility. The fractured ribs have united, though with considerable deformity in some parts where the fracture was much comminuted; but she has not in any measure regained power in the arm.

REMARKS. This case is interesting from the great amount of mischief to the bony walls of the chest, and the comparatively slight effects which followed. All who have been accustomed to pay attention to the *post mortem* examination of surgical cases know the grave consequences which usually follow extensive fractures of the ribs, and in how many instances death results from them. It appeared, therefore, worth while to put on record a case in which all the true ribs were fractured, and many of them comminuted, and the fragments much displaced, without the evidence of any lesion of the lungs, and without the injury being followed by any considerable amount of inflammation, either pulmonary or pleuritic. As a contrast to the above, we will cite a case from the practice of the same surgeon, in which the lung was extensively lacerated, and death ensued without any fracture corresponding to the laceration. This is a subject to which little attention is usually given, and the injury is doubtless a rare one; still it is worth while to remember that it may exist, with a view to establish the diagnosis in any doubtful case. The symptoms have been described with great accuracy by M. Gosselin in the *Mémoires de la Société de Chirurgie*, i, 201, where he relates the history of two cases which occurred in his own practice and recovered, and refers to four others of which he had found details, three of which were fatal. In M. Gosselin's cases, however, the patients being of reasonable age, he had the opportunity of auscultating and percussing the chest at his leisure, of discovering beyond doubt the existence, and then of following the closing up of a large cavity, filled partly with fluid and partly with air, which could only have been produced by the accident, the patients having been previously in perfect health. In the case here cited this was impossible. Although the remembrance of M. Gosselin's paper and suspicion of the real nature of the injury rendered those in attendance on the case particularly anxious to obtain an accurate stethoscopic examination of the chest, the child's restlessness and extreme terror when her chest was touched rendered it both useless and cruel to proceed. Thus the history is left imperfect; but on the other hand, as the chest was carefully inspected after death, the fact of the entire absence of injury to the walls of the chest in the part where the lung gave way is put beyond doubt. That there was extensive fracture of the ribs, without laceration of the pleura, is not an element of any importance in the case, as such a fracture (the edges of which were so perfectly in apposition, that it was not detected even after the thorax was opened) could have had no part in the production of the lesion of the lung. The mechanism of the latter injury would seem to be that the force happens to act at a time when, in the agitation of the accident, the glottis is spasmodically closed, and thus the tissue of the lung is caught between two forces—the shock of the injury from without, and the resistance of the column of air confined within.

The fact that so extensive a fracture may exist and escape detection after repeated and careful examinations, and even on examination of the thorax after the removal of its viscera, is not without its own interest, especially in a medico-legal point of view.

CASE II. *Laceration of the Lung, without a corresponding Fracture of the Ribs.* Louisa C., aged two and a half years, was admitted on May 29th, 1856, under the care of Mr. Tatum, in consequence of an accident in which the wheel of a carriage had passed over her chest. On examination, it was not possible to detect any fracture of the ribs. Her great restlessness, and the noise which she made when any attempt was made to auscultate the chest, prevented any satisfactory examination in that way; but the hand applied over the right side of the chest felt the thrill of some large wave of fluid. She had a hacking cough, but little expectoration. The breathing was much oppressed, and extremely quick. She could not bear the chest touched in any part without crying out. The usual remedies to mitigate the pulmonary symptoms were made use of, but in vain. The dyspnœa increased, and she died on the fourth night after the injury.

On *post mortem* examination, there was found a slight bruise of the integuments of the right side of the chest. A large quantity of blood, part fluid and part coagulated, was found in the right pleural cavity. The pleura covering the right lung was coated with a layer of recently effused lymph, and was adherent through a great part of its extent to the costal pleura. There was an extensive laceration of the back part of the upper lobe of the right lung. There was slight inflammation of the

left pleural cavity. On removing the contents of the thorax, the right costal pleura was found perfectly smooth in every part; and there was no appearance of a fracture implicating the walls of the chest. But, on removing the coverings of the chest on the right side, it was found that the first rib was separated from its costal cartilage; and all the ribs were found fractured opposite their angles, except the tenth and eleventh. There was no displacement of the fractured ends. All the other viscera were healthy.

ST. BARTHOLOMEW'S HOSPITAL.

I. AMPUTATION OF THE THIGH ON ACCOUNT OF EXTENSIVE DESTRUCTION OF THE SKIN AND CELLULAR TISSUE.

Under the care of E. Stanley, Esq.

The improvement which modern surgery has introduced in the treatment of diffuse cellular inflammation renders opportunities of observing the natural termination of that affection in gangrene of the skin and cellular tissue, fortunately, rare. Such a case, however, was operated upon at the above hospital on Saturday last. The patient, a middle aged man, was admitted with extensive destruction of the skin and cellular tissue of the leg and thigh. The history was very obscure, or rather there was no intelligible history; but Mr. Stanley observed, that he knew of no disease except phlegmonous erysipelas to which the appearances could be referred. The destruction of parts was most extensive; all the tendons of the inner hamstring muscles were exposed; the muscles themselves partly involved in the disease; and a wide and deep cavity left in the popliteal space. The soft parts in front of the thigh were destroyed to so great an extent that there was not sufficient sound tissue left to form a flap from the anterior part; and large sores existed in several other parts of the limb. Under these circumstances, it seemed that the only chance left for the unfortunate patient, who would soon sink under the exhausting discharge, and whose limb was rendered permanently useless, was to amputate the thigh very high up. Mr. Stanley accordingly performed a kind of oval amputation. The femoral artery being commanded by pressure in the groin, the soft parts were divided almost perpendicularly down to the bone, a few inches below the fold of the groin; and the femoral and other large vessels were tied, before proceeding further. A large flap was then cut obliquely from the back of the thigh, and brought forward to cover the bone, which was sawed through not far below the trochanters. Considering the formidable nature of the operation, no great amount of blood was lost.

II. THE ÉCRASEUR.

Under the care of Holmes Coote, Esq.

The *écraseur* does not appear to have secured any large amount of patronage from London surgeons hitherto, if we may judge from the rarity of operations with it in hospital theatres, and the reports of the instrument-makers as to the number which have been ordered from them; yet, in the case of non-malignant tumours of vascular parts, some advantages seem certainly secured by its use, the principal of which are, of course, the absence of troublesome bleeding, and the smaller size of the wound left than after the employment of the knife. When the tumour is of a malignant character, the operator has more security for getting beyond the diseased portion with the knife, as the laceration of parts by the *écraseur* would render it difficult to determine whether any of the tumour remained in the wound.

Mr. Coote operated on a case, on Saturday last, in which a slight accident occurred, which demonstrated strongly the efficiency of the instrument in arresting hæmorrhage. The patient was a young woman labouring under enlargement of the clitoris and nymphæ, forming a tumour about the size of a small apple, and very vascular. A stout ligature was tied around the base of this swelling, to form a groove in which the chain of the *écraseur* should act. The instrument was then applied, and gradually tightened, fifteen seconds being allowed to each turn of the screw. A little bleeding occurred at first, apparently from laceration of the surface by the ligature. This soon ceased; and the extreme congestion of the hypertrophied portion, after two or three turns of the screw, testified to the great amount of blood which it contained. After the neck had been almost severed, the chain broke, and the remainder (a very small portion) was cut through by a stroke of the scalpel. This gave rise to considerable bleeding from a small artery. All the vessels in the remaining portion of the neck were sufficiently contused to command hæmorrhage, which would otherwise have been rather troublesome. Of course this little operation could have been performed easily enough with the knife; and, as the patient was sufficiently robust, the bleeding might have been of no great consequence: but cases very frequently occur in which such conditions do not obtain; and it would be well if sufficient evidence could be collected to settle the question as to the efficacy of the invention.

III. WUETZER'S OPERATION FOR THE RADICAL CURE OF INGUINAL HERNIA.

Under the care of Holmes Coote, Esq.

Mr. Holmes Coote operated on a patient with inguinal hernia by the above method on Saturday last. The plan consists in invaginating a portion of the scrotum in the inguinal canal, and procuring its adhesion to or near the internal ring by setting up inflammation at that spot. To effect this, an instrument has been contrived which consists of a wooden stem, terminating in a bulbous extremity, through which a long curved needle is passed, screwed into a handle. The stem is passed up the inguinal canal till the bulb comes to the situation of the internal ring, and thus a piece of the scrotum is pushed up the canal; the needle is then thrust forcibly through the stem. Its shape causes it to point directly forwards, and it is thus brought out vertically through the parietes of the abdomen. The handle of the needle is then unscrewed; and a shield placed upon the stem and neck keeps the apparatus in its place. The patient is confined to bed, and the apparatus retained in place for six days, by which time the resulting inflammation has united the inner surface of the invaginated portion to the internal inguinal ring, thus forming a permanent obstacle to the future descent of the gut.

Mr. Coote mentioned that five successful cases had occurred in his own experience, and that he believed the proportion of success had been very great. The success of the operation will depend, however, in great measure, on the proper selection of the point for perforating the abdominal wall; as, if this is taken too far from the internal ring, there will be room for the gut to slip down by the side of the invaginated piece of the scrotum. It should not be forgotten that, among the cases hitherto recorded (which exceed 100), in four instances death has resulted from the operation.

WESTMINSTER HOSPITAL.

BELLADONNA IN INCONTINENCE OF URINE.

With reference to a case reported from the above Hospital in the Journal for Feb. 21st, we are desirous of saying a few words to correct a misapprehension of our esteemed correspondent, Dr. Cowdell. This gentleman, in forwarding the particulars of a similar case under his own care, has taken occasion to animadvert on the report above alluded to, assuming that its object was the recommendation of this particular plan of treatment. Such, however, is not the case. We report, in this part of the paper, any cases which may appear of special interest, and which have been observed with sufficient care, without any reference to our own opinions as to their treatment; and in the present instance, the case was only one of several which we hope to record, some more, some less favourable to the treatment by belladonna. As to the accuracy of the report, we took all reasonable care, having derived it directly from the gentlemen who had charge of the case; and have ascertained, by renewed inquiry, that they confirm our view of it. The boy while under treatment had been carefully observed; he was sent back to an establishment where he would be strictly attended to; and, had he experienced any return of the symptoms, he would doubtless have been heard of again. Such at present has not been the case. We submit therefore that there was no inaccuracy in reporting him "cured"—though we are far from denying that the same causes (whatever they are) which originated, may reproduce the disease; and are ready to admit that it might have been better to have qualified our statement so far as to have reported him "apparently cured," or "cured for the present."

In conclusion, we beg to assure Dr. Cowdell that his courteous animadversion is taken entirely in the spirit in which it was obviously offered; and that far from feeling annoyed at his suggestions, we are always glad to see that our reports are being put to the use for which they are intended.

GUY'S HOSPITAL.

TREATMENT OF OPEN CANCER BY THE APPLICATION OF CHLORIDE OF ZINC.

Under the care of J. Birkett, Esq.

[*From Notes by* T. Bryant, Esq., *Surgical Registrar.*]

We have been favoured with notes of two cases in which the above escharotic was used in ulcerating cancer of the breast—the only two which have been so treated in Guy's Hospital, at least for a considerable time. We record these cases as bearing on the question which has of late acquired such interest, relative to the value of different local applications, and as a continuation of those which we have already published of a series which will embrace all the cases which we can discover to have occurred in the London hospitals. Such a series will furnish some (though we fear, from its limited extent, not very perfect) data for comparison with the results of the treatment of Dr. Fell and other plans for the cure of cancer, which will shortly be published. The fault of such cases is that they comprise only the least important of the points of treatment, viz., the local action of the application. The far more important question of the progress of the constitutional disease, and the respite obtained for the patient, is not settled by them, nor under the present hospital system do we see how (unless by accident) particulars bearing thereon can be obtained. Our readers must be content to accept from us all that our opportunities enable us to offer.

These cases, being necessarily somewhat protracted, cannot be reported quickly. We hope, however, to continue the series regularly, and to sum up its results at some future period. All that can be said of the two patients referred to below is, that the treatment appears to have temporarily succeeded in the first case, and to have been less successful in the second. It should be added, that the chloride was applied in powder mixed up with starch.

Case I. E. Bland, a female, aged 55, was admitted with a small carcinomatous tubercle (of the size of a walnut) of the skin over the left breast, of nine months growth, which had been discharging two weeks. On March 6th, 1855, the chloride of zinc was applied, and repeated on April 5th. On the 24th the whole tumour appeared to have sloughed away, and on May 6th she left with the skin cicatrising.

Case II. M. A. Morris, aged 52, was admitted into Guy's Hospital, under Mr. Birkett, on Oct. 29th, 1856, with open carcinomatous ulcerating tubercles over left breast, of five years and a half duration. On November 3rd, the chloride of zinc was applied; the application was followed by acute pain. On the 16th, the slough came away; and on the 17th, the chloride was again applied, from which a large portion of the tumour was discharged. On November 23rd, she left relieved.

ST. MARY'S HOSPITAL.

CASE OF DISEASE OF THE AORTA: ANEURISMS AT THE AORTIC SINUSES: CLOTS IN THE ARTERIA INNOMINATA AND LEFT MIDDLE CEREBRAL ARTERY.

By W. O. Markham, M.D., F.R.C.P., Assistant-Physician to the Hospital.

A female, aged 50, the subject of the following history, came into St. Mary's Hospital on the 4th instant. She walked into the Hospital, and gave the following account of her previous condition; thereby showing, that at this time there existed no paralysis either of sensation or of motion. She stated, that when very young she had suffered from some severe affection of the chest, and had ever since from time to time been in an ailing condition. The chief symptoms which troubled her were palpitations, cough, and a feeling of constriction of the chest. From the circumstance that old organised adhesions of the pericardial surfaces were found after death, and from the nature of the symptoms here mentioned, we may presume that this attack was one of pericarditis. Latterly these symptoms had increased in severity, and had incapacitated her for performing any hard work; in addition, she had also frequently had attacks of faintness and giddiness, and particularly in cold weather and on exertion. Occasionally, indeed, when out walking in the street she had been forced to cling to the walls or railings for support; and on account of her staggering gait she had been several times unjustly accused of being drunk. These symptoms increasing in severity, and her breathing in particular being very difficult, she sought relief in the Hospital.

On her admission, her lips were blue, her breathing very hurried, and the veins of her neck were much swollen. It was also remarked that the pulse at the right wrist was imperceptible. At this time she was perfectly sensible, and had perfect command over her muscles. She took her dinner, and went to bed; and in about an hour afterwards was found lying low in the bed on her back and insensible. Her right arm and leg were completely paralysed, presenting not the smallest rigidity when raised or moved. The pupils of both eyes were firmly contracted and immovable. The pulse at the right wrist was not perceptible, neither was any pulse to be felt in the arteries on the right side of the head and neck; I fancied, however, that I felt a very slight pulsation in the upper part of the right brachial artery. Occasionally, during her heavy breathing, the right cheek was puffed out.

Loud râles were heard over the front of the thorax; the breathing was very noisy, so that it was not easy to make a very careful stethoscopic examination of the heart's sounds. I satisfied myself, however, of the existence of a diastolic aortic murmur—a bruit, coincident with the diastole of the heart, being audible from the middle of the sternum down to its lower edge.*

The arrest of the circulation through the vessels supplied by the arteria innominata, the diseased condition of the aortic valves indicated by the bruit, and the suddenness of the paralysis caused me at this time to hazard the conjecture that a clot of fibrin had suddenly arrested the circulation through some one of the cerebral arteries—a conjecture which was fully justified subsequently.

The difficulty of breathing gradually increased, the paralysis and other symptoms remaining the same, so that the patient died about sixty hours after the first occurrence of the paralysis.

Post mortem examination. When the body was examined, the limbs of both sides were found of equal rigidity; there was no œdema, and but little fat on the surface; the superficial tissues were remarkably dry and bloodless. In both pleuræ there was a considerable quantity of serous effusion; the lower lobe of the left lung was thereby compressed and rendered nearly solid; the right lung was adherent at its apex, which contained a few old, small, tubercular nodules. The lungs were highly congested with bloody serum. The surfaces of the pericardium were everywhere firmly adherent by old and organised attachments. The roots of the aorta and pulmonary artery were matted together; and so likewise were the auricles. The heart was slightly dilated and hypertrophied; its aortic valves were thickened and slightly shrunken, and thereby rendered incompetent; water, when poured into the aorta, escaped freely through them into the left ventricle. The other valves were quite healthy. The arch of the aorta was dilated, and its internal surface much diseased, exhibiting everywhere signs of fibroid and atheromatous degenerations. In the aortic sinuses were found the openings of three small aneurisms. One, situated above the left coronary valve, admitted the little finger, and led into a pouch which passed behind the pulmonary artery towards the appendix of the left auricle. The openings of the two other aneurisms were at the right of the aorta, and situated above the right coronary valve; one was of the size of a filbert; the other was much larger, and pressed considerably upon the descending cava and the right auricle; the descending cava would not admit the entrance of the little finger.

The arteria innominata was found completely blocked up, for the last inch of its course, by a firm, whitish-red, hardish coagulum, strongly adherent to the walls of the artery, and extending up the whole length of the common right carotid. The opening of the left carotid artery at the aortic arch was not more than one-fourth of its natural calibre; being contracted by hard fibroid exudation into its coats. The left subclavian artery was healthy.

When the dura mater was opened, blood flowed rather freely from the venous sinuses; many red points appeared on the cut surfaces of the brain. A considerable quantity of clear serous fluid was present in the lateral sinuses of the brain. The left carotid artery, where it emerges from the sella Turcica and passes to the brain, was found completely blocked up by a firm reddish coagulum, which extended for an inch along the middle cerebral artery. The portion of the brain to which the middle

* I mention *the direction* of the murmur, because the fact (a fact, at least, as far as my observation goes) seems not sufficiently recognised—viz., that diastolic aortic murmurs are heard much more frequently and distinctly in a direction down along the sternum, than towards the heart's apex. The reason of this is not very clear; and the fact is evidently opposed to what might be conjectured *à priori*.

cerebral artery—the chief branch of the internal carotid—is directed was much softened, readily breaking down into a pulp, and particularly so was the left corpus striatum. The other parts of the brain, and likewise the vessels at its base, were found quite healthy in appearance.

There was nothing worthy of note to be mentioned concerning the other organs of the body.

Remarks. This case presents some points of interest both in a physiological and in a pathological sense. It appears clear that the arteria innominata was blocked up at the time of the admission of the patient into the Hospital, and for the reasons that the pulse was then imperceptible at the wrist, and that the clot itself was evidently not of recent formation. Consequently the functions of the brain were duly carried on, notwithstanding that its supply of blood through this artery was cut off, and that not more than one-fourth of the due amount of blood could have passed through the opening of the left common carotid. Also it is evident, that for the last sixty hours of life the only supply of blood which the brain received was that which passed through the left vertebral artery. The cause of the formation of the clots in the arteria innominata, and in the left cerebral artery, must be, to a certain extent, matter of conjecture. There were no local alterations perceptible in the vessels themselves which could give any account of clots. Both vessels, to all appearance, seemed perfectly healthy; the arterial branches at the base of the skull and around the obstructed artery were quite natural to the eye. Perhaps the existence of the aneurisms may give us a clue to the obstruction of the arteries. It is not unfair to presume that it was very possible for some broken down portions of fibrin to have been washed out of one or other of the aneurisms at the root of the aorta, and to have been carried along in the current of blood until arrested in their progress, acting then as a ligature of the artery, and causing behind it the formation of a firm fibrinous coagulum. This supposition is strengthened by the fact that the mouths of the aneurisms were large. There were no fibrinous beads around any of the heart's valves, so that the carrying away and arrest of one of these in the circulation could not have caused the clots, after the manner described by Dr. Kirkes. The softening of the brain was clearly secondary to the arrest of the circulation. In this case the supply of blood to the left middle lobe of the brain must have been wholly cut off; there could have been no compensatory supply to it through the right carotid artery.

To the practitioner, also, this case of paralysis, like so many others of its kind, offers a word of fruitful warning. What would a vigorous treatment have done here? What could any interfering treatment do?

Original Communications.

THE ATROPHY OF LIMITED GROUPS OF MUSCLES.

By F. Brittan, M.D., Physician to the Bristol Royal Infirmary, and Lecturer on the Practice of Medicine in the Bristol Medical School.

[*Read before the Bath and Bristol Branch, February 19th*, 1857.]

In the *Dublin Quarterly Journal of Medical Science*, for November, 1856, Dr. Reade, of Belfast, published a paper, entitled, "Contributions to the Pathology of the Spinal Marrow." In it he relates three cases to illustrate "a diversity of morbid action arising out of disease or injury of the same portion of the spinal marrow." The three cases are: 1. "Symmetrical muscular atrophy." 2. "Paralysis of the body beneath the phrenic nerves, from concussion." 3. "Paralysis of the body beneath the phrenic nerves during dentition." The first of these cases is adduced in illustration of the views of M. Cruveilhier on muscular atrophy, announced to the Institute of France, December 1855, and published in the *Archives Générales*, January 1856. The conclusions at which M. Cruveilhier has arrived may be thus summed up:

That there is a species of muscular paralysis, sometimes partial, sometimes general, which gradually and successively invades, fasciculus by fasciculus, and fibre by fibre, the voluntary muscles, leaving all the functions of nutrition intact, excepting that of muscular nutrition.

That this gradual muscular paralysis is the consequence of progressive atrophy of the anterior roots of the spinal nerves, and equally progressive atrophy of the corresponding muscles.

That this "*paralysie musculaire atrophique*" is analogous to that which results from section of muscular nerves.

That the facts appertaining to this form of paralysis confirm the theory of Sir Charles Bell.

And that these observations demonstrate a previously unknown influence of the anterior roots of the spinal nerves on muscular nutrition. These conclusions, M. Cruveilhier states, are founded on a great number of clinical facts; and they are preceded by a declaration so essentially French, that I cannot refrain from quoting it in the original. "Le hasard a voulu que j'aie été le premier à qui il ait été donné de faire l'anatomie pathologique de cette maladie; c'est là tout le secret de la part que j'ai prise à sa détermination, dont je ne crains pas de le dire hautement, parceque c'est la vérité; la priorité ne saurait m'être contestée."

I have lately had two cases analogous to the first in Dr. Reade's paper, under my care at the Infirmary; but as they offer certain important differences as to the history of the patients and early conditions of the disease, I think it may be worth while to publish them, with a few remarks; more especially as Dr. Reade seems to think them rare, or at all events to have been able to find but one recorded.

Dr. Reade's case is that of a young man, aged 19, nearly six feet high in his clothes, apparently a specimen of robust health and excellent constitution. Eighteen months previous to examination he had been distinguished amongst his companions in all athletic exercises, and well proportioned in his muscular development. "The first sign of the approaching disease was a degree of stiffness or difficulty of executing the motion of putting on and removing his hat" (in other words, of raising his hand to his head); never suffered pain, and has enjoyed uninterrupted health in all other respects. "When he stripped his body to the waist, he exhibited neck, chest, and arms to the elbow-joints reduced to the most abject degree of emaciation; this was symmetrical; the greater and lesser pectorals were little more dense than the strongest brown wrapping paper." The muscles of the neck, scapulæ and humeri, were reduced to the mere elementary outline of muscles; whilst from the elbows, the forearms and hands displayed the full development of a robust and vigorous man, with all the concomitant power, sensibility, and aptitude for use. He was under treatment for two years. A seton in the neck, the use of dumb-bells, and electro-magnetism were tried, but without material improvement. Six years later he was again inspected, and was found decidedly improved; the muscles more developed. The muscles of the neck have been fully restored, and the others considerably augmented and perfectly obedient to the will. The forearm and hand have lost much of their former bulk; but his occupation for the six years has been sedentary. His health has been uninterruptedly good.

The analogous case is quoted from Rokitansky. A labourer, aged 45, much exposed to wet and in the habit of allowing his clothes to dry on him, was attacked with pain in the left shoulder, which was most severe about fourteen days after it commenced. There was no swelling, redness, numbness, nor tension; but great pain when the arm was raised with the other hand: he could not lift it without. After the first week the shoulder was found wasted; as the pain subsided the wasting advanced, till the deltoid, supraspinatus, infraspinatus, and teres muscles seemed completely absorbed. The shoulder-joint was healthy, and there was no emaciation of the forearm or hand.

Dr. Reade regards this case as one of muscular atrophy from abeyance or destitution of the function of nutrition; and he states "these three cases illustrate a diversity of morbid action, arising out of disease or injury of the same portion of the spinal cord."

He also alludes to two other cases within his own cognisance; one of atrophy proceeding from the shoulders to the feet, accompanied by paralysis, and a second confirming Cruveilhier's statement of the pathology of this paralysis; the same morbid changes having been found in the roots of the anterior spinal nerves. We thus have muscular atrophy, partial or general, according to Cruveilhier, depending on atrophy of the anterior roots of the spinal nerves. Muscular atrophy partial, according to Dr. Reade, depending on imperfect nutrition, the result of disease of the spinal cord.

My two cases more accord with that quoted from Rokitansky, and show, I think, that muscular atrophy, with of course necessarily a quarter or less degree of loss of power, proportionate to the amount of atrophy, may sometimes depend on

another cause, or at least appear to spring from a different origin, and be connected in some way with rheumatism and the rheumatic diathesis. They are as follows:—

Case I. William Spencer, cotton-spinner, aged 24, was admitted under my care at the Bristol Royal Infirmary in November last. His history was as follows. Four years ago he was discharged from the 2nd regiment of foot, on account of an attack of rheumatism, for which he was in Hospital seven months. His joints were then much swollen. Three years since he felt aching pains in the left shoulder, with stiffness and inability to move it freely; these symptoms gradually increased, and, *pari passu*, the shoulder became more emaciated; he has, however, continued to work at the cotton factory until very lately.

He is now excessively emaciated all over the body as regards the muscular structures, the joints being very prominent, and the muscles feeling like mere cords. His ordinary position is with the elbows flexed to a right angle, the forearms supinated. He states that he can move his arms better at night, especially after exertion during the day; the attempt to straighten the arm gives pain. He can raise the arms without pain, but has not power to lift anything. His general health is good. The first sound of the heart is rather harsh and rough. He perspires excessively in his limbs, particularly on the thumbs, and most remarkably after the galvanism, which was tried without benefit. He left scarcely, if at all, improved.

Case II. Charles Webber, aged 23, short, but healthy looking, and apparently well made, became an out-patient, October 1856. By trade he is a shoemaker, and always enjoyed good health. He was lately a corporal in the 17th foot, from which he was discharged on account of his present disablement. Six months since, whilst on duty at Limerick, he was exposed to very heavy rains, and continually wet; on rising one morning after exposure could not walk, on account of pain in his right hip, knee, and ankle joints, which then began to swell. He was confined to bed for fifteen days. After the first seven days the pain passed to his shoulder and side of the head, leaving his hips and legs. Soon after the pain reached his arm he found the flesh between his shoulder and elbow diminishing, on the right side first, then on the left. In two months the arms were no larger than his wrists, and he could not lift them to his head. This continued for six weeks, when they began slightly to increase again, and he felt more power in them.

Present condition. His arms, from the neck to the elbow, are less than half of the natural size, all the shoulder and humeral muscles being much diminished; the biceps only seeming of anything like the natural size. There is very little deltoid, and the triceps feels like a mere band. His appearance exactly coincided with that of Dr. Reade's patient, as shown in the drawing that accompanies his paper. He cannot raise the arm well, but can flex the forearm on the arm firmly. He had no particular treatment in his regiment; nothing but liquor potassæ. He had syphilis three years ago, and a few spots came out as the rheumatism appeared. He was under treatment for a month, principally with iodide of potassium, and much improved.

I should feel great diffidence in suggesting doubts as to the correctness of M. Cruveilhier's assertions, supported as they appear to be by the observation of the morbid changes, described in the *post mortem* examination of the corresponding case, alluded to by Dr. Reade, did I not conceive that the cases now reported bore me out in the supposition that the cause alleged by Cruveilhier is at least not the only cause of this curious disease; but there are many other objections to this theory to which these cases direct our attention.

It will be observed that in Dr. Reade's case, and in my own, especially the second, there are several common peculiarities.

1. The symmetry of the morbid action.

2. The localisation of it to particular groups of muscles; for example, those of the shoulder and humerus, and, to some extent, the biceps; whilst the muscles of the forearm remained unaffected.

3. The uniform commencement of the atrophy in the upper parts, and progress downwards.

4. The absence, in each case, of more paralysis than must necessarily be the result of such a degree of atrophy; in fact, it is not paralysis, but loss of power from want of muscle.

Each of these, independent of all other considerations, appears to me to afford strong objection to either of these alleged causes of the morbid actions. For,

1st. They require that we assume the anterior spinal roots to be exactly symmetrically affected on either side.

2nd. With a knowledge of the extraordinary complexity of the arrangement of the filaments forming the anterior roots of the cervical nerves, more especially the different distributions and variety of muscles supplied by branches from the fifth, sixth, seventh, and eighth roots, it is almost impossible to conceive atrophy of these anterior roots, affecting only limited groups of the muscles, to all of which these branches proceed; for instance, how can the scapular muscles be affected with paralysis and atrophy, caused by atrophy of the spinal roots, through which their nervous filaments pass, without involving also the phrenic nerve; or of the deltoid and humeral muscles without corresponding affection of those of the forearm and hand, whilst the subscapular, musculo-spiral, and circumflex nerves may be traced through the plexus to the 5th, 6th, 7th, and 8th roots, and the ulnar and median to the same.

3rd. If we allow Dr. Reade's view, that these cases depend on imperfect nutrition, the result of disease of the spinal cord, which involves the influence of the anterior roots—in other words, M. Cruveilhier's theory—we must suppose, to explain these cases, that this function of the cord is so located and circumscribed that disease of its structural instruments may produce its effect without inducing paralysis; or assume (as Dr. Reade states his case proves) that, as the result of organic lesion of the spinal marrow, "muscular atrophy may exist without paralysis, as paralysis of motion may exist without disease of sensation or the converse."

4th. The absence of complete paralysis in each case, and the proportion between the wasting and loss of power, seem to evidence that the loss of power is more fairly to be ascribed to want of nutrition and loss of substance, than to loss of nervous energy.

In fine, I cannot help thinking that the phenomena of these cases give no support to the views of M. Cruveilhier or Dr. Reade; and without considering the evidence of the two I have related, and that of Rokitansky, as sufficient to prove any connection between this curious condition and rheumatism, they do, I think, afford reason to induce us to lean to the side of analogy, and look for some more general or diathetic reason to account for such peculiarities of mal-nutrition. I should add that there was no evidence to lead to the notion of lead affection, nor, as far as I could learn, had mercury ever been largely administered in either of the cases I have reported, though "spots," probably syphilitic, appeared with the rheumatism in the case of Webber.

THE "HYDATID FREMITUS" OF PIORRY.

By W. J. Little, M.D., Senior Physician to the London Hospital.

I respond, with much pleasure, to Dr. Markham's invitation to contribute my quotum of experience as to the value of the "son hydatique", or the "hydatid fremitus", of Piorry. After perusal of Piorry's treatise, entitled "*Exploration par la Percussion médiate*", I, like Dr. Markham, was inclined to consider that author's account of his *son hydatique* as a pedantic refinement of symptomatology. About 1840, however, I visited, late one evening, in consultation with Dr. Langmore, of Finsbury Square, a gentleman, aged 36, who presented, with other signs of hepatic derangement, an enormous abdominal tumour which had commenced in the right hypochondrium. A recent and sudden aggravation of symptoms occasioned the consultation. I discovered the presence of the "*son hydatique*" of Piorry, and realised the truth of Piorry's description, as quoted by Dr. Markham, "La sensation que le doigt éprouve et que accompagne le bruit (humorique) peut être entièrement comparée à celle que donne une montre frappée sur la surface opposée au verre." Upon the strength of this sign, I suggested that the tumour was probably due to hydatids. I was subsequently informed by Dr. Langmore that the same night the patient discharged by vomiting a *pailful* of them. Some months later I saw the individual, without signs of tumour, in tolerable health, although very spare in habit. I believe that he sank two years afterwards from the same disease.

With my present experience of hepatic tumours, I should, in such a case as that above related, rely much upon the great size of the more or less obscurely fluctuating mass in diagnosing its hydatid origin. I have never witnessed a perfectly similar case.

I once had under my observation an unmarried woman, aged 33, affected with a single hydatid or serous cyst of liver, causing abdominal enlargement equal in size to fully advanced

pregnancy. She was tapped as for ovarian dropsy; unhappily it was an hepatic cyst, not united to the abdominal parietes, some of the fluid escaped into peritoneum, succeeded by death in eighteen hours. Insufficient stress had been laid upon the sufferer's statement that the swelling commenced at epigastrium.

It is probable that if the nature of the tumour had appeared doubtful, and the opening into cyst had been cautiously effected through the intervention of potassa fusa, the patient's life would have been spared. This unfortunate instance may be serviceable as a warning and as a hint in Dr. Markham's interesting case.

CLINICAL OBSERVATIONS ON THE TREATMENT OF FRACTURES BY THE IMMOVABLE APPARATUS.

By Joseph Sampson Gamgee, Staff-Surgeon of the First Class, and Principal Medical Officer of the British Italian Legion during the last war; late Assistant-Surgeon to the Royal Free Hospital, House Surgeon to University College Hospital, etc.

[*Continued from page* 156.]

It was remarked in my last communication on the treatment of fractures, that the question is one of fact, and that *by fact it must be solved:* a process much more intricate and fraught with sources of fallacy, than its professed or apparent simplicity would lead one to suppose. Let any one examine the long catalogue of disputed questions in matter of fact in medicine and surgery, and he will arrive at the conclusion that their solution has been prevented, not so much by illogical reasoning, as by error in the observation of fact, and misstatement of the question at issue. To use the words of Sir Charles Bell,* "what are professionally called facts are for the most part only those notions which a man insensibly adopts in the course of his practice, and which take a colour from his education and previous studies. It is this which makes the facts of one age differ from the facts of another age; and the opinions of men differently educated to vary in what they are inconsistent enough to call matters of fact." The medical fact—I use the expression in its largest sense—is not, like the physical, a matter of simple and direct observation: it is, in the majority of instances, only arrived at by observation of several subordinate facts, by an exercise of extreme philosophic caution in excluding fallacy from inquiry into cause, and by logical severity in enunciating a statement of this mental process and its results. The laws of causation—always most intricate in the organic world—are so to a peculiar extent in all that affects deviation from the healthy standard of structure and function, wherein the relation of sequence is of itself no evidence whatever of causal affinity. The number of circumstances to be considered before a pathological or therapeutical fact can logically, and therefore with any sound hope of practical advantage, be referred to one or more causes, is so great, and requires so keen an analytical spirit, as to inspire doubt, whether many of those who specially devote themselves to medical inquiry have anything like a correct appreciation of its legitimate views, requirements, and processes. The following case of difficulty in diagnosing fracture is full of instruction in point in proportion to its simplicity.

An old man had fallen on the pavement, striking the left hip. Unable to rise, he was carried to bed; and a surgeon diagnosed fracture through the femoral neck, from the three following facts: very great difficulty and pain in raising the limb; ecchymosis and crepitation over the trochanter; shortening to half an inch. On being consulted as to the treatment to be adopted, I thus weighed the diagnostic signs. The difficulty of movement and ecchymosis, which were undoubted facts, were perfectly consistent with simple bruise. The crepitus and shortening, however, appeared an unmistakable sign of fracture; but, on examination, I found they were not facts. The crepitus was a slight superficial crackling, not a dull deep seated grating. On placing my hand over the sound trochanter, and moving it, I felt precisely the same crackling, which I consequently regarded as due on both sides to friction between the surfaces, most probably thickened and lengthened, of the old man's bursæ, the subcutaneous one on the trochanter, and the deeper one between that bony process and the insertion of the gluteus. At first the shortening seemed real; but, on placing the hips perfectly bent, and tracing down the bones, I discovered a curious congenital deformity of the internal malleolus on the sound side; it was almost twice its natural size, both in breadth and length. This fact, conjoined with the observation that the length of the two femora, as measured to the patellæ, was perfectly equal, demonstrated the fallacy of the previous measurement, as due, not to shortening of the injured member, but to congenital inordinate length of a bony process of the sound one. The grating and shortening excluded, I suspected the case might be one of simple bruise; such it proved to be, after the old man had been in bed three days, with the benefit of cold lotions.

I have related this simple case to illustrate the complexity of simple medical facts, and the care necessary to their appreciation, even in what is considered one of the most simple departments of surgery—the diagnosis of a fracture. How much more difficult is all that relates to the very beautiful but really intricate subject of therapeutics! a branch of which is the theme of my present series of communications.

To avoid what has been above referred to as the second great obstacle to the attainment of truth in medical and surgical controversy—*a wrong statement of the question*—I purpose clearly to establish the object I have in view in the publication of these clinical reflections on the treatment of fractures of the limbs by the immovable apparatus—a plan of treatment much more comprehensive than might be supposed by its designation according to the instrument employed for carrying it into effect. Its most essential features refer—1. To the principle of immediate reduction, whatever be the direction or character of the fracture; 2. To the immobilisation of the severed fragments, so as to allow movement of the body, whether for mere comfort or more cogent reason, as in the case of fractures in military practice; 3. The employment of gentle and uniform compression as the preventive and curative of the swelling which so frequently complicates fracture; 4. The plan of treatment under consideration aims at discarding the multifarious contrivances at present generally employed in the treatment of fractures, and establishing on a scientific basis general rules of treatment, so far as is warranted by known facts, and by the peculiar difficulties attending generalisation in medicine.

[*To be continued.*]

16, Upper Woburn Place, Russell Square, February 25th, 1857.

* Observations on Injuries of the Spine and of the Thigh-Bone. London: 1824. p. 78.

LARYNGISMUS STRIDULUS: ITS PATHOLOGY AND TREATMENT.

By Thomas Paget, Esq., F.R.C.S., Senior Surgeon to the Leicester Infirmary, etc.

I have been led to select the present subject of to-night's consideration by but slight, if any, merit of originality in the view I am about to bring forward of a very serious infantile disorder. I have not, however, under the head of asthma infantum or cynanche stridula of Parr and Miller, or laryngismus of Good and others, found the disease so systematically and clearly considered as its dangerous import to life and its complications seem to demand; nor any principle indicated in the various treatments named, which by an intelligible philosophy and a simplicity of aim would commend itself to confidence. I cannot hope that my paper will evince any other merit than that of an attempt to supply this deficiency. Others have most probably adopted the views and treatment. I shall have pronounced them.

The phenomena of laryngismus stridulus I need not describe to professional brethren in technical phraseology, much less define with didactic precision. Who has not been sitting by the infant whose mother was recounting the suffocating spasms which had torn her child for the last few days (or rather nights, for the days have been less distressed), while she had gone on hoping from day to day without sending for medical aid? Which of us, while so occupied, has not seen suddenly come a frightened, staring expression in the child?—seen its pallor of cheeks with lividity of lips and orbitar areolæ?—then noticed two or three coughs, expiratory jerks, or shrill cries short as explosions, it is difficult to say which to call them?—and witnessed the tussle that follows, when, the breath being thus jerked out, a closing of the glottis by spasm renders fresh inspiration impossible? How the poor thing writhes, struggles and stretches into opisthotonos, until want of air increases the pallor and lividity, which were at first only those of terror, to those of asphyxia, and the insensibility and relaxa-

tion of this state weaken the spasm. After this come the sounds which warrant the epithet "stridulus," the horrid, creaking, shrill whoops with which the air is drawn in through the half opened rima; and which so often delude parents into the fatal error of supposing that their child is only the subject of hooping-cough, which they conclude must have its course; so that nothing is done to stave off the convulsions which are so apt to finish the patient's suffering in death.

Besides, however, the essential symptoms, there are some very common though not constant adjuncts of the disease, which we will not lose sight of; namely, spastic contractions of hands and feet, involution of the thumbs into the palms, snatchings of the whole body while dozing, and even general convulsions, as above named; occasionally, too, much disorder of the chylopoietic organs, shown by sour smelling, curdy motions, green in colour and tormenting in their effect upon the intestines; but what severe infantile ailment is not accompanied by this plague as its effect?

In the diagnosis of this affection, the only mistake at all probable is the one before-named as common among parents, namely, confounding it with hooping-cough. Occasionally the sound of the first inspirations on relaxation of the spasm very much resembles the whoop; but the occurrence of the spasm after but a very few short coughs, or rather jerks, distinguishes one disease very decidedly from the other, in which the sound only occurs when protracted and violent coughing has considerably exhausted the aerial contents of the thorax. The name of spasmodic croup can but be thought unfortunate for this complaint. Neither eye nor ear that has once witnessed croup could possibly be led to think them alike; and the treatment requisite for either would damage the other by every agent used except emetics, which have been advised for both. In the sudden attack of dypsnœa with croupy sound which occurs in the night from indigestion, and is the only affection deserving the name of spasmodic croup, an emetic is, according to my experience, *the* remedy. In true laryngo-tracheitis, it seems little likely to help, and defers mischievously more valuable means.

The treatment of every malady is, of course, deduced from an insight into its nature and origin; or, to speak more in accordance with the vernacular of our science, its proximate, predisposing, and exciting causes.

As to the first or proximate cause, there is no doubt, I imagine, that it consists of a spasm of the laryngeal muscles closing the rima glottidis, and occasionally extending itself to the whole muscular system in the shape of general epileptic convulsion.

The second (predisposing) is found in the high sensitiveness and irritability which exist in infancy, and which are shown so signally in the snatches that are seen as the infant lies upon the knee of its nurse during the many feverish affections of childhood; in the rapidity of pulse obtained from slight causes; in the tendency to convulsions after surgical operations, etc.

The third, or exciting cause, I believe, can logically and philosophically be cited as one only, namely, the process of teething. How this third cause acts upon the second, so as to produce the first—the proximate or essential one of the disease—is the point to be explained. Whether the communications between the fifth, the portio dura, the eighth, ninth, and sympathetic nerves, will help to explain; whether or not in fact anatomy will of itself satisfactorily account for this, or indeed any other disease, certain it is that the communications and interlacings are sufficiently numerous and intricate to support the physician when offering solution of the causation in this affection to the most straight-haired metaphysician, physiologist, or casuist.

But if anatomy does not summarily settle the point, there is an approximate certainty that the spasm of laryngismus is due to dentition alone as its exciting cause, if we find that under no other circumstances, except those of teething, does the disease exist; that is, the distinctive feature of this disease—the stridor laryngis. Of course these circumstances of dentition set in at the earliest period of the child's existence, three or four months from birth, or earlier, and terminate only with the completion of the first set. That the same affection does not occur with the change from the first to second set, we cannot take as any obstacle to the conclusion we are arriving at, so different is the constitutional state, the nervous susceptibility of youth from that of childhood. From the assertion of Good that these "stridulous spasms of the larynx are sometimes found in adults", I am compelled entirely to dissent. It must be granted him that negative experience will not rebut the positive assertion of a fact observed; I question, however, if the passage above quoted deserves the title of a positive assertion, for it is only made by him in context with other random matter. In naming the means of distinguishing the disease from croup, he says, "Croup is, moreover, *an exclusive disease* of children; stridulous spasm of the larynx is *sometimes found in adults*". He neither says he has seen it himself, nor refers to any authority for the statement. Surely the whole passage is precipitate and unsound; for who has been five years in the profession without seeing laryngitis and tracheitis with the phenomena of croup in the adult? I have never seen the disease he has so aptly christened laryngismus stridulus after the period of cutting the first set of teeth. I do not think it has commenced under my eye later than the cutting of the first eight; and observation leads me to believe not only that authors are perfectly warranted in naming teething as one among other exciting causes, but that they would perhaps be more correct, more logical, if they insisted upon it as the only one of this peculiar affection. Dr. Ley has published an idea that these cases have their origin in another mechanical cause, namely, pressure of swollen cervical glands upon the recurrent laryngeal nerve. I have not been able to read his work yet; but if his idea be correctly reported by others, the objection to its value lies of course in the non-occurrence of the disease at any other time than the first two years of life; while, to sanction such a version, it should be a daily occurrence in practice at all ages. How far the derangement of the chylopoietic organs may be secondary to and only consequent upon the disease, it is difficult perhaps to say, so early does it begin in some cases. It must be confessed, however, it must always act as an excitor of the whole system by means of the *malaise* it inflicts upon the delicate fibrils of the splanchnic nerves, and thus be an auxiliary cause. That it is most probably only secondary, not *the*, or even *an*, original cause, I conclude, because I have seen cases without it; and the disease would be common at a later period of childhood if it were thus produced.

In the treatment of this serious plague of infancy, it follows that there are three objects to be fulfilled. 1st. The removal of the local irritation, or exciting cause. 2nd. The subjection of the predisposing cause or excitation of the nervous system before such means as lessen its sensitiveness. 3rd. The correction of chylopoietic mischief in order to remove an ancillary predisponent.

Of the first and third of these objects, little is required to be said. The free and repeated lancing of the gums over as many of the teeth as show swelling, redness, and heat, together with sedatives rubbed on the gums and cheeks, are all the means in our power for the first. Varied, but well recognised are those for the third object; but varied also is the need of them, many of the cases going on with little or even no chylopoietic derangement at all, some with a good deal. In all, however, as we before concluded, this mis-function (if we may coin a word) is probably secondary; and, if so, will be most effectually corrected by removing the approximate cause—the primary disorder. No one, however, would be likely to neglect the removal or the correction of acrid matter which, if in origin only an effect of the disease, must, by reflected agency upon the spinal system, help its continuance and increase its violence.

With regard to the second object, subjection of the predisposing cause, irritability of nerve, I have to say that I can nowhere find it at all clearly insisted upon; and I am quite convinced, both by the theory of the affection just given, and by practical experience, that this second is of paramount importance; that it is, in fact, *the* object in the treatment. Of course the agents to carry out this object are naturally expected to be found among narcotics; but the only recommendation I can find of this class is that of opiate and tobacco clysters; and apparently these are suggested only as a means to be used during the paroxysm: in short, as a palliative of its violence. Now surely no occlusion of the larynx, such as obtains in a spasm of this kind, could continue long enough to test the value of the remedy. Dr. Ley says it could not last three minutes without destroying life; indeed, the attack scarcely continues long enough to test the value of cold water sprinkled on the face, so rapidly does its violence and distress end in exhaustion and the consequent relaxation of the spasm. For the same reason the value of an emetic is really to be set down as *nil*. "An active and speedy plan of treatment," says Good, "is imperiously demanded, yet an antimonial emetic generally effects a cure as soon as it begins to operate." He surely must only mean the cure of one paroxysm, and the emetic could not be swallowed during it; or if by inspired knowledge it could be timed exactly before an attack, the spasm, dangerous to life by

its violence, would exhaust itself before any prudent emetic could operate. It would be easy but tedious to go through writers on the diseases of children, and to show how much at a loss they leave us for a principle on which to treat this "formidable and terrifying disease", as one of them aptly calls it. Miller, Parr, Good, Marsh, Clark, Ley, Evanson and Maunsell, Watson, West, Williams (the latter of whom is the most particular in his directions), insist upon various means—gum lancing, garlic, assafœtida, emetics, purgatives, fresh air, opiate and tobacco enemata, but they name no principle to be aimed at in the administration of them; the two latter seem only given as occasional remedies for violence or frequency of paroxysm.

If we have been correct in fixing upon teething as the one exciting cause of laryngismus stridulus; correct also in concluding that it becomes operative only through the excitability which is natural to infancy, but obtains in an exaggerated degree in certain individuals, it results that after the removal of the exciting cause, and taking care that no irritability of the visceral nerves shall add fuel to the fire; in fact, after lancing the gums, effecting a clearance of the bowels, and contriving a prescription, dietetic and medicinal, for the correction and prevention of acrimony in the bowels, we are left to what I believe to be our most important object, namely, the subjection of nerve excitement by means of narcotics: we are left, in short, to deal with the mainspring of the disease, its predisposing cause. Upon the narcotic to be used, upon the mode of giving it, or the dose required, I need lay but little stress, especially since it is well known how varied is the susceptibility of individuals in reference to this class of medicines. Suffice it to say, that the drug I have most used is opium; that, beginning with small doses, and cautiously regulating them according to their effect, I do not stop short of producing a constant drowsiness and some slight pallor; that when this state is obtained, the paroxysms decrease in force and frequency, the infant is calmly sleeping its day away, no longer devil-torn, nor are its friends racked with anxiety; and that when the paroxysms have failed to occur for some forty-eight hours, which will usually happen in from three to six days, the drug is gradually withdrawn, the quantity taken off each dose being immediately restored if the attacks show the slightest disposition to encroach again. I may say, also, that to attain to the required effect I have usually been obliged to give to children four or five months old (the age at which the disease most commonly, perhaps, invades) from one to five minims of tincture of opium in a dose with four or six of sal volatile two or three times a day; or if in enemata, five to seven minims.

The principle, then, I would enunciate as the object of treatment after the more obvious ones, the removal of all causes of irritation, is the quieting of nerve excitability—the drowning of hyperæsthesis in a guarded, gentle, yet decided narcotism. I think it probable I may find that there is nothing new in the treatment itself; that, in fact, others have for years pursued the same. It seems to myself so obvious a course that I should be almost surprised to find that it had struck me alone as the proper one. It is, however, the first time, as far as I know, that this principle has appeared in public.

I have depended upon it for the period of twenty years and more; I cannot add, without losing a case; but I can say that it has saved many, or seemed to do so; and with the strictest investigation memory is capable of affording, I see no reason to doubt its safety, its efficiency, or the prudence of continuing it. I therefore adopt it in every instance that presents itself. It is now some years since I named it at the meeting of the Provincial Medical Association held in Worcester.

ON SOME OF THE MODES OF ACTION OF IODIDE OF POTASSIUM.

By E. H. Sieveking, M.D., F.R.C.P., Lecturer on Materia Medica; Assistant-Physician to St. Mary's Hospital, etc.

[*Read before the Harveian Society, February 5th*, 1857.]

Of the remedies which we owe to the advancement of modern chemistry, there certainly is none which has obtained a higher place in the estimation of medical men than the iodide of potassium. There may be some difference of opinion as to its efficacy in this or that individual case or in certain classes of disease, but its general utility as a member of the Pharmacopœia is undenied and, I would add, undeniable. Rarely inducing any unpleasant effects and, unless administered with culpable carelessness, never giving rise to disturbances in the system of a dangerous and permanently injurious character, it may be classed among the safest and at the same time most beneficial remedies we possess. At times it induces, in ordinary doses, frontal headache and coryza, an eczematoid eruption, or brief salivation; but by diminishing the dose or persevering steadily in the remedy prescribed, we generally soon succeed in removing these symptoms, and the toleration being established, it appears to work for the good of the patient.

Having been called upon unexpectedly and at a very brief notice to furnish a paper for the Harveian Society, it will be impossible for me to enter fully into the various questions connected with the physiological and therapeutic action of this drug. At any time, such a subject could not be exhausted in the course of a single evening. It is my wish to present it to you under some of those aspects, under which I have very frequently witnessed its effects; the more so, as by so doing, I feel satisfied that I shall succeed in eliciting valuable information from the experienced members of the Society present.

The action of iodide of potassium may be defined, according to the more old-fashioned terminology of therapeutics, as alterative; and alterative most undoubtedly it is, for it appears to search out the malady which it is intended to attack, and effectually to alter the condition of the solids and the fluids which induces the morbid symptoms. The terminology of therapy now more in vogue would class it among eliminants; and "eliminant" it indeed deserves to be called, for it stimulates powerfully at least one, not the least important secretion of the body, and by promoting the action of the kidneys, causes an elimination of organic and inorganic poisons through their agency. According to another view, the iodide of potassium might be ranked as a tonic, and if to rouse the lymphatic and glandular system from a state of torpor, to promote the removal of sluggish enlargements, to brace the pulpy, flabby tissues of the scrophulous, be a characteristic of a tonic medicine, we may fairly class it under that head. Our object, however, is not to determine what exact place it may occupy in the materia medica, where so much is yet wanting to establish anything approaching to a scientific system; we would rather examine into its action in certain classes of morbid affections, by which we may illustrate the therapeutic effects of the agent. While we admit that this *à posteriori* mode of viewing the subject is not the best possible, we think that in the present state of medical science it is perfectly justifiable. Though it is necessary to remember that the method of arguing from effects, involves those errors to which the manifold interpretation to which morbid conditions are liable, must always tend to expose the deductions of the physician.

Of the various organs of the body, the kidneys most uniformly, as far as we know, demonstrate the action of the salt in question. We trace it by the well known tests in the urine, after the first dose; I have found it in the urine, after a course of iodides, forty hours after the exhibition of the last dose. It rarely fails to increase the quantity of the urine discharged, while it manifestly augments the amount of the solid constituents contained in the secretion. The urates, and the uric acid more especially, are evolved in larger quantities, and taking the urine as our test, we clearly recognise a material augmentation in the tissue changes excited in the organism. These tissue changes are rarely otherwise than for the benefit of the patient; they, with rare exceptions, stop short of such destructive processes as are set up by some other minerals; yet it is to be borne in mind that even the iodide of potassium may by too long continued exhibition prove a poison, and by inducing excessive metamorphosis of the tissues, set up a wasting azoturia. Those who have had to deal with such cases know how depressing they are to the patient, how tedious to the physician; but fortunately they are comparatively rare, and with ordinary care these, and even the temporary ill effects of iodide of potassium before alluded to, may be avoided.

I would propose to offer for your consideration the iodide of potassium under three different points of view, as applied to the treatment of disease. It is, however, to be observed that this by no means embraces all its therapeutic aspects.

The modes in which I will regard it, are:

I. As an evacuant of excessive morbid secretions in the cavities of the body.

II. As an antidote to organic poisons.

III. As an antidote to and eliminant of inorganic poisons.

I. *Iodide of Potassium an Evacuant of excessive Morbid Secretions in the Cavities of the Body.* While I would, in refer-

ence to the first class of cases, regard iodide of potassium mainly as an evacuant, I would guard myself against the supposition of ever viewing it exclusively in that light. It would appear under all circumstances to act differently from remedies which, like elaterium for instance, eliminate simply by exciting very copious discharges from the system. Even where its evacuant influence is the most palpable, the eliminating action does not always appear to be in the exact proportion of the amount of disease to be removed, but by its stimulant or tonic properties it corrects that morbid condition of the blood and the bloodvessels which led to the morbid product. The following case may serve as an illustration to these remarks, while it affords an instance of the class of cases in which the eliminant influence of the iodide is most strongly marked. It is a case of hydrothorax, of a subacute character.

Case. J. M., the son of a carpenter, aged 7 years, was brought to me, with pain in the right hypochondria, attributed to a fall from a cart, which had happened eight or nine days previously. There was some cough. The right side of the thorax was enlarged, though the intercostal spaces did not project. Scarcely any movement was perceptible during respiration, in this side; it was absolutely dull throughout, anteriorly and posteriorly, except at the suprascapular space; this was the only point at which a vocal fremitus could be perceived, and that disappeared on lying down. Tubular breathing was found at the apex of the right lung, and diminished gradually downwards. The child suffered from dypsnœa, and had a distressed and anxious appearance. His pulse was 84. On the 11th Sept. 1855, I prescribed as follows:

℞ Potassii iodidi ʒss; spiritûs etheris nitrici ʒii; mist. camph. ʒviii. M. Fiat mistura cujus sumat ʒii tertiis horis.

Applicetur emplastrum vesicatorium magnitudinis 3 X 3, lateri thoracis dextro.

Sept. 14th. He was very much better, the appetite and breathing better, though the blister had not drawn. The bowels were open; discharge of urine free.

Sept. 18th. The patient was so much improved as to walk to see me; his cough was rather more frequent, but there was no expectoration; he was passing much urine; the bowels were open; the general appearance better and fuller; the dullness was diminishing from the apex downwards, and the dullness of the anterior thorax generally was diminished in the recumbent position. The tongue was furred at the root. The patient had slept better for three nights past. He continued taking the same medicine, improving in appearance and gaining flesh.

Oct. 2nd. The thorax is described as resonant, and presenting a fair respiratory murmur as far as the nipple on the right side. On deep inspiration, the respiratory murmur could be traced further still; below the nipple, it was tubular. A friction sound was heard about the middle of the outer side of the thorax. It was noted that the lungs were descending, and the fluid being absorbed.

Oct. 30th. There was still some dullness found over the lower third of the right lung, the breathing was normal below the scapula; anteriorly under the right nipple it was slightly bronchial, and the heart sounds were increased at the same point. The boy looks robust, has a good complexion and excellent appetite; the tongue is whitish; the pulse, 108. The medicine was now changed to the syrup of iodide of iron half a drachm in water three times a day, which he took until the 4th December. He then received cod-liver oil, which he took to the 18th December, when the lad was discharged cured.

It will be observed that no other remedy was administered throughout the period during which the effusion into the pleural cavity formed the *corpus delicti*, and it may therefore be fairly assumed that the removal of the fluid was due to the iodide of potassium; hydrothorax not being one of the diseases which have a tendency to spontaneous cure. But I could bring forward other proofs of a similar stringency, though in the majority of cases we are not satisfied with trusting to one remedy only, but consider a multiplication of our agents necessary to reduce the fortress of the enemy. To continue the simile, we may urge that in our warfare, we too often do not rest satisfied with destroying or rendering innocuous the hostile battalions, but must needs batter down the strongholds as well, and throw our hot shells into his magazine so as to cause a grand explosion, and a blaze of light, followed by a no less deplorable darkness and desolation. In effusions into serous membranes dependent upon organic disease of an important viscus, the efficacy of iodide of potassium varies, and as a rule we should be less disposed to rely upon it, than upon other remedies. I have no experience of it in renal disease, where it would seem to be generally contraindicated, the more so as we rarely have to deal with morbid local conditions of the kidneys, until the disorganisation has proceeded too far to be benefited by this agent. Moreover, the undoubtedly stimulant influence it exerts upon the kidneys would contraindicate its employment wherever an increased afflux of blood to the organs would be prejudicial.

We would say one word upon the influence of iodide of potassium upon cerebral hæmorrhage. Its action in these cases appears to be analogous to the action manifested in the instance of hydrothorax above detailed, though it may be here suggested that the natural tendency of the disease is to spontaneous cure after the first shock has passed off. Still we have seen so many cases, in which a more rapid absorption of the effused blood might fairly be inferred after the administration of iodide of potassium, than seemed to be taking place before it was given, that we cannot but regard it as one of the most valuable aids we possess in promoting the absorption of the extravasated blood, and the consequent removal of the pressure which induced the symptoms of hemiplegia. We have in these cases to deal with an effusion of a different character, and of a much smaller extent than we meet with in serous accumulations; but equally as in the latter, we wish in no way to interfere with, but rather to promote, the plasticity of the blood; hence we cannot but regard a systematic exhibition of mercurials in these cases as most reprehensible; while the iodide of potassium, if it may not prevent the renewed effusion into the cerebrum, will not at all events impoverish the blood and thus facilitate a return of the hæmorrhage.

II. *Iodide of Potassium as an Antidote to Organic Poisons.* We here trench more upon hypothesis than either in the point of view under which we have just examined the salt, or under that to which I shall direct your attention in the third instance. Yet in some cases the presence of an agent that contaminates the entire fountain of life is so palpably manifest, that we appear justified, by analogical reasoning, to infer the presence of a similar agent in other cases, which do not admit of being traced back with equal certainty to an organic poison. The syphilitic poison is undeniable, whether it manifest itself in the primary chancre, the contagious bubo, the ulcerated sore throat, the cupreous eruption, or the flat condyloma; in one sense we can scarcely refuse to admit that the proximate cause of rheumatism is a poison; in many skin diseases of an obstinate and a recurrent character, the evidence at our disposal tends to prove that a poison circulates in the system, which may periodically fall into a state of abeyance, but which, unless searched out, and neutralised by a more powerful agent, breaks out every now and then, to the annoyance of the patient and the disappointment of the medical attendant. Lepra and psoriasis appear to bear this type in many cases. The skin diseases that present the same outward characters often differ materially in their proximate cause and in their relation to the constitution of the individual; hence it is as erroneous to apply a uniform remedy to all scaly, all herpetic, or all impetiginous eruptions, as it would be to treat all cases in which we hear a crepitant noise in the thorax with the same tartrate of antimony mixture or Plummer's pills. It is impossible to give ocular demonstration of the organic poisons, but of the existence of some peculiar compound which is amenable to treatment by iodide of potassium in many of the cases alluded to, we entertain no doubt. In the instance of rheumatism, the existence of an organic acid in the blood appears to constitute the materies morbi which may either be decomposed or be ejected from the system, but in both cases rendered innocuous under certain circumstances by iodide of potassium. Where much depends upon analogical reasoning, the diagnosis of a chronic affection is necessarily rendered a matter of difficulty, and it is a severe test of medical ability. In many cases, we may be compelled to reserve our diagnosis until we have brought the guns of the Pharmacopœia to bear; there is this advantage in employing iodide of potassium as a test, that it will not be used at any serious risk to the patient, but will very probably prove beneficial.

There is some difficulty in selecting cases in illustration of the view we are now taking, since it rarely happens that in the very chronic cases to which we allude, it is wise to adhere to the use of one remedy throughout. Consequently, a person disposed to refuse credit to the remedy in question, may attribute the curative influence to another agent. The conviction which a multitude of individual experiences and experiments forces upon the practitioner, cannot easily be conveyed by the quotation of a single case.

III. *Iodide of Potassium as an Antidote to and Eliminant of Inorganic Poisons.* The cases of metallic poisoning which most

frequently come before us, are those of artificers who are employed with lead in some form or other, most commonly as the acetate or white-lead, and thus receive the poison in small quantities, gradually absorbed, into the system. Painters necessarily are most liable to suffer in this way; the facility and rapidity with which the system becomes affected depends upon a variety of circumstances; the vigour of the patient's constitution, his habits of cleanliness, the purity of the atmosphere in which he habitually works. The most rapid case of saturnine intoxication that has occurred in our own experience, was in a man not generally employed in this way, who for three days was engaged in applying a new process to the fastening of a roof, in which red lead was employed; during the whole time he was in a confined locality and forced to respire the fumes of the lead, and at the end of the three days gave unequivocal signs of lead-poisoning. The blue line which was shown by Dr. Burton to fringe the gums of persons poisoned by lead, and possibly dependent upon the formation in the system of a sulphuret, is an almost invariable characteristic of the affection, yet cases do occur where after exposure to the poisonous influence, symptoms are manifested which resemble lead-poisoning, and yield to the iodide, though the blue line is absent. Of the rapid action of iodide of potassium in saturnine neuralgia, the following are instances.

Case. George C., aged 27, a painter, had colic two months previous to coming under my care. He then had been affected with it for six days, and was slightly jaundiced. His belly was hard, but towards night it became as "hard as a stone." There was no tenderness. A slight blue line was seen to edge the gums.

Sept. 15th. The following medicine was ordered:

℞ Potass. iodidi gr. v; liquoris opii ♏x; misturæ camph. ʒi.

The pain ceased two days after commencing the medicine. The liquor opii was then omitted. On Sept. 26th, it is stated that the colic is much better; that there is still occasional pain in the upper left abdomen; that the blue line continues. I then gave him ten grains of iodide of potassium, and three weeks later there had been no return of pain.

The following is a similar instance.

Case. Thomas L., aged 28, painter, had never had colic or dropped hands, till a fortnight before coming under treatment he was attacked with severe and constant pain about the navel; the parts were tender; sense of nausea; urine high-coloured; bowels costive. A trace of blue line round several teeth. Pulse 72, normal. Good appetite.

Dec. 12th. The following pills were ordered to be taken every night at bed time.

℞ Pilulæ colocynthidis comp. gr. x; olei crotonis gtt. i.

Three days later, the pain is stated to be less; the bowels had been moved twice each day. The iodide of potassium was now administered in five-grain doses, and three days after the pain had left him, and though under treatment for other affections, for above two months, the pain did not return. The iodide was continued for some time, and when discharged cured, the gums were restored to their normal condition.

Many interesting questions are connected with the action of iodide of potassium in cases of metallic poisoning; not the least important being the mode in which the metal is eliminated. That it passes off by the urine has been demonstrated; but it is manifestly eliminated by other channels, because, at times, during its administration in undoubted cases of lead-poisoning, while the patient is rapidly recovering, the lead cannot be detected in the urine. We must then assume that it passes off by the bowels, after being set free by the antidote. Nor is the detection of the lead itself in the urine so easy a process; it does not occur in the form of an ordinary salt, but appears to enter into a very intimate combination with the organic matter of the urine, which must be destroyed before the common tests serve to demonstrate it.

In an ætiological point of view, the study of lead-poisoning is extremely interesting, as it gives rise to the most varied forms of nervous disease, in all of which an accurate diagnosis is the more important, as the proper remedy will rarely fail to establish a cure, that remedy being iodide of potassium. Thus epilepsy, almost always a disease with a doubtful prognosis, appears to lose this character when we trace it to lead-poisoning; for the cause may be removed, and with it the demoniac seizures likewise disappear. Steel and quinine, our ordinary anchors in neuralgic affections, fail us in lead-poisoning; but we are sure of allaying the pain as soon as we know that it is a case for iodide of potassium.

There is another metal which, to the disgrace of our profession, has long been employed to poison our fellow-men, under the protection of the ægis of science, but which now appears to be placed under such restrictions as to render it truly a remedial agent: we allude to mercury. This drug also, in its poisonous effects, finds a powerful and certain antidote in iodide of potassium. The latter searches it out in its various combinations with the organic constituents of the body, and, after more or less resistance, effectually expels it. Some pain most generally results from the mercury being first set free; and even salivation, which had subsided, may thus be again excited; but, in salivation itself, we know of no more effectual remedy, besides the exhibition of local astringents (upon which, however, we would not lay much stress), than the iodide.

We will close this paper by quoting a case in illustration of its efficacy under these circumstances.

James C., a painter, who had generally enjoyed good health, had been taking flowers of sulphur during the preceding summer, to counteract the effects of the lead paint with which he worked, but had never had the colic or dropped hands. Two weeks previously, his face began to swell. At first there was sore throat; then the gums swelled; and the teeth, which previously had been sound, became quite pulpy. The gums, at the time of consultation, were invisible, from the tumefaction of the adjoining parts. There was a decided mercurial fœtor, and the man bore the stamp of a man who was salivated; still he denied having taken any mercurial, and ascribed his affection to using a vinegar and rye gargle, and to working in a damp place. However, I prescribed—

℞ Potassii iodidi gr. iv; infusi cascarillæ ʒj. M. Fiat haustus ter die sumendus.

Sumat olei ricini ʒss omni mane.

Habeat decocti quercûs Oj pro gargarismate.

At the next visit, he, on repeated questioning, admitted having been in the habit of occasionally taking some pills prescribed for him by a physician a long time ago, and which contained some hydrargyrum cum cretâ. The treatment was steadily persevered in, and the improvement was satisfactory. In the third week, the report is, "Doing well; teeth recovering their normal appearance, but still loose, though less than they were; there was a blue ring round the gums." He now returned to work; the mercurial fœtor soon entirely disappeared; and in another month he was able to masticate.

In conclusion, allow me once more to revert to a remark made at the earlier part of my paper, that my intention has not been to exhaust the subject, as I know full well that much more might be said upon the action of iodide of potassium in other maladies than those named. My desire has been to submit for your consideration some of the opinions which practical experience has induced me to form relative to the drug we have considered, and to elicit from the stores of your own observation further illustrations in regard to its use and effects.

Lectures

ON CERTAIN VIEWS ON THE NATURE AND TREATMENT OF PHTHISIS PULMONALIS:

DELIVERED AT THE

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, IN THE SUMMER OF 1856.

By Edward Smith, M.D., LL.B., B.A., Licentiate of the Royal College of Physicians; Assistant-Physician to the Hospital, etc.

Lecture III (*concluded*).

REMOVAL OF THE EFFECTS OF THE DISEASE BY ABSORPTION AND EXPECTORATION. GENERAL SYMPTOMS: PULSATION, HÆMOPTYSIS, COUGH, DYSPNŒA, NIGHT-SWEATS, WASTING, AND DEBILITY. MODE OF ACTION OF COD-LIVER OIL.

Debility and wasting are invariable concomitants of the disease in some of its stages; and it is highly probable that the former may in many instances be both a cause and an effect. Neither, however, necessarily precede phthisis, nor indeed necessarily attend the early stage of the disease. As a cause, debility acts, as has already been pointed out, by lessening the intensity of respiration; or, in other words, both the debility and the lessened respiration are due to or connected with lessened nervous influence. Thus it is that systems of defective organisation, as those of the scrofulous diathesis (if we would refer to a large and heterogeneous class in illustration), are so

prone to the attacks of this disease, and connect so frequently debility of body with liability to phthisis. It is also worthy of note, that such persons commonly have narrow and flat chests; that is, have a lessened thoracic cavity, and consequently a capacity for respiratory influences unduly small in proportion to the size of the body, and at the same time a lessened muscular power in effecting the act of inspiration. All these circumstances act together, and tend to one common end. As respects wasting, I do not think that there is any evidence which could prove that to be a necessary cause of the disease; and, although it is so frequently observed as an early concomitant of phthisis, it is in fact due to the conditions which have led to phthisis; and, on the generic view which I have taken of the nature of this disease, it is at some period due to the phthisis itself. There cannot be a doubt that it is frequently found before tubercle can be detected, and therefore may not be due to the tubercle; but it is the result of that condition which ultimately leads to tubercle, and which ought properly to be called the first stage of phthisis.

Regarding, then, both the wasting and the debility as effects of phthisis, in what mode are they induced in the early stages? They are not necessarily induced from want of food, or of the due alimentary digestion of the food; for, whilst the appetite may be capricious, there is commonly abundance of food taken to sustain the system. Neither are they due to waste of the food; for vomiting and purging do not usually exist at all at that period. They are not, I believe, due to excessive excretion of material from the system; for there is not generally any change in the function of the liver, except it be, that it is lessened; nor in that of the skin. As respects the state of the urine, I do not think that there is any change in the early stages that could be seized upon; and although, in the later stages, there is often a large deposition of lithates and oxalates, and sugar in a small quantity, these changes are neither sufficiently intense nor sufficiently constant to warrant us in believing that any great waste of tissue proceeds in that direction. In the inquiry which I prosecuted here last year, I carefully examined, microscopically and chemically, the day and the night urine of fifteen patients, daily for one month; and have obtained a large amount of material for analysis; but the limits of this course of lectures prevent my now referring to them, further than to state that the solids in the urine in phthisis are less in quantity than in health. Hence, as the wasting is not due to want of food, nor to waste of the food, we are compelled to fall back upon the deficient respiratory function; and there we find two causes for both the wasting and the debility. They are the deficient elaboration of the food, whereby the blood is imperfectly fitted to sustain the tissues of the body; and the permanently increased rapidity of the blood-current, by which the due deposition of material is prevented, and the removal of old material increased. It is quite evident that both of these must tend to the impoverishment and waste of the system. The intensity of their action will vary with the degree of the deficiency of respiration, the temperament of the patient, the season of the year, and the favourable or unfavourable hygienic conditions in which the patient is placed; and hence, although they must occur in every case of phthisis, may occur more or less early, and with more or less of intensity. My colleague, Dr. Thompson, has ascertained that the figure of the red corpuscles is somewhat changed, as well as that the quantity of those oxygen-bearing bodies is lessened in advanced phthisis. The quantity of fibrine is also lessened in the stage of sweating, and probably its quality is injured; and, with a thinner condition of the blood, there is a less quantity of material for nutrition and enervation, less power of coagulation, and a greater tendency to extravasation of that fluid. The muscular structure becomes flabby; the skin soft and relaxed; the teeth and other dense organs lose much of their colour; and the condition known as fatty or oily degeneration is met with in perhaps every tissue of the body. The former facts indicate a want of due tonicity, and of both nervous and vascular energy; and the last not a retrograde metamorphosis necessarily, but defective elaboration of material at the time of its deposition. By way of parenthesis, I may state, that the term fatty degeneration is liable to mislead, since it does not always imply a degeneration of the material already deposited, neither is fat in fat-cells necessarily a degeneration at all. In phthisis, the fat is removed from the cells; and the fatty degeneration, as it is called, consists of globules of oil occupying the sarcolemma of muscles or the cancelli of bones; that is to say, in many parts in which normal fat is not deposited, as well as in the areolar tissue, which normally contains fat.

The point to which I would at this moment call particular attention is, that the various morbid conditions to which I have now referred are due to the results of lessened aeration attending phthisis, and are not causative of phthisis; and that with them the deposition of tubercle in the air-cells of the lung is an accident—is not the cause of these conditions, and is not caused by these conditions. It is the practice to refer to this malnutrition of the body and deficient elaboration of material, with its morbid products, as evidence that tubercle itself is a morbid product allied to them; and hence, that it results from the tubercular blood-disease before discussed. The two circumstances are co-ordinate, and it may be that the morbid condition of the system shall have set in before the stage of the deposition of tubercle; but it does not thence follow that the tubercle is morbid material, although induced by the malassimilation of the material. Let us keep distinct in our minds the conditions which are the effects of the lessened respiration, and those which caused the lessened respiration; and let us remember that, whilst both the tubercular deposition and the morbid material in the system may be due to the one common cause of deficient respiration, they are not necessarily due each the one to the other. There can be no doubt that, as the system becomes impoverished, it will become enfeebled, and the respiratory process be less and less perfectly accomplished, and, as a consequence, the deposition of tubercle be hastened or increased in extent; but the tubercle would still not be a deposit from the morbid processes.

Such, then, being the explanation which I would give of the cause of the debility and wasting (assuming that no renal or other secondary complication exists), the plan of treatment is obviously to improve the elaboration of the blood by an increase of the respiratory process, if the quantity of food which can be supplied and taken, and the digestion, are normal. In the early stage, this is possible, for the obvious reason, that the air-cells are not so numerously implicated, and, if implicated, are not so entirely useless as at a later stage of the complaint. The aim, then, is to prevent further extension of deficient action to cells which may be more normal than others, and to restore as far as possible to increased activity those cells which are becoming useless. This must be effected directly by increasing the power of the nervous system, and indirectly by the mechanical distension of the cells as before advised. The former is attempted when we direct change of air and scene, amusement for the mind, more activity of both body and mind (if it should have been deficient), less anxiety, vigorous calisthenic exercises, sea air and bathing, sea voyaging, and such nervous tonics as iron, quinine, and nux vomica. To let the correction of the secretions (which may be more or less at fault), or the relief of some pectoral irritability or uneasiness, be our chief, much more our only aim, would be to treat effects, and leave the cause untouched. If the nervous power cannot be increased, and the respiratory process invigorated, it is evident that we can have no hope of arresting the disease, much less of restoring to the body its healthy processes.

The mechanical distension of the lung by deep forced inspirations is, as I consider, chiefly indirect in its action for the purpose in hand. Hence, both directly and indirectly, we may seek to restore the normal amount of respiration, which itself would imply the increase of nervous power as its cause, as also as its effect. Then, with increase of respiration, we may look for better assimilation of food, and lessened rapidity of circulation; and, as a further result, a better quality of nutritive material, a more quiet and effective deposition of it, and a lessened rapidity in its removal. Waste and debility would thus be lessened.

Cod-Liver Oil. The discussion of the merits and mode of action of cod-liver and other oils in phthisis is one which presents peculiar difficulties to my mind; for, on the one hand, I cannot but think that we are liable to be unduly influenced in its favour by the existing tone of popular feeling; and, on the other, we really have too little information to enable us to explain its action on good physiological principles.

There is a general belief in the minds of patients, and also of medical practitioners, that the oil is beneficial in phthisis; and, on inquiry, I find that the patients refer the beneficial effects to improvement in weight and strength, and oftentimes to ease in the acts of coughing and of expectoration. We will, for the moment omit reference to the latter; and state that, in other states of system apart from phthisis, oils are also beneficial. These states are wasting and debility, where they do not depend upon defective primary assimilation of food; that is, in the very states in which oils are useful in phthisis. So far, then, there is nothing peculiar to this disease in the

action of the oils. But there is this broad line of distinction between the two cases: in states apart from phthisis, the debility and wasting have been due to, or at least connected with, a less supply of food to the system; as, for example, after fevers or some chronic disease, or long continued anxiety, grief, or over exertion; and hence we may readily infer that, with a deficient supply of food in general, there would have been a less supply of fatty or other carbonaceous matter in particular, and thence would result the wasting. There would not be coincident with the debility increased respiration and pulsation, with the corresponding requirements of a larger supply of carbonaceous material. In phthisis, however, the wasting and debility are accompanied by a sufficient supply of food; and, at the same time, the rate of respiration and pulsation may be, and at some period always is, increased. A question might be raised here as to the amount of carbon contained in the food of phthisical patients; for I have ascertained that, in a large proportion of such cases, there is, and always was, a dislike to fat food, more particularly after the disease had fairly set in; but opposed to this is the fact, that at the same time they will take plenty of butter, sugar, beer, and wine, and a fair supply of vegetable matters—substances which should surely do much to supply the requisite amount of carbon. There is, however, no proof that the desire for the latter articles containing carbon has increased with the decreased desire for fat meat; and hence the total quantity of introduced carbon may be lessened. But, on the other hand, many persons in health never take fat meat; and there is not any evidence to prove that such are particularly liable to phthisis, or any other disease of wasting and debility. Upon the whole, I doubt if any defect in the quantity of carbon in the aliment is the source of improvement in health, from the introduction of oils in medicines. Whether, however, the more general use of oils in the form of inunction, and also in such food as salads, after the fashion of all ages in hotter climates, would be conducive to health, and thence tend to ward off the attacks of phthisis in these colder regions, may be open to inquiry; but since, in the earliest condition leading to phthisis, it is customary to find feeble and inefficient respiration, whilst the quantity and quality of food remain much the same as before, we should rather, *à priori*, be disposed to infer that at that period, and, *à fortiori*, at later periods, the blood is surcharged with carbon; and hence, that the introduction of an unusual quantity of oils would lead rather to disease than to health. Vierordt ascertained that 260 cubic inches of carbonic acid gas exist in the pulmonary capillaries in one minute in a healthy person, whilst at the same time the quantity evolved would be only 13½ cubic inches with 12 respirations per minute, and 24·2 cubic inches with 24 respirations per minute. In phthisis, it is true that the amount of capillary ramification is greatly lessened; but I presume, as the quantity of blood in the body cannot be much influenced by that fact, the quantity of carbonic acid in that fluid would not necessarily be less than in health; and hence, as the respirations are at first both feeble and not increased in rate, and afterwards feeble and increased in frequency, the quantity of the gas evolved must surely be less than in health, and more would therefore be retained in the blood.

In order to obtain further information on this subject, I have entered upon the following mode of investigation. If cod-liver oil have any effect over the respiration (other than chemical), it would be shown by taking it fasting in the morning; that is, when the system is fresh, the stomach free of the remains of food, and the functions of the body rather increasing than decreasing in activity. I therefore, at 8 A.M., eleven hours after taking food, and before making any exertion, took five drachms of cod-liver oil alone; and immediately, in consecutive inquiries of five minutes duration, ascertained that the frequency of respiration, the quantity of air inspired at each inspiration, and the total quantity per minute, were all reduced, and the latter so much as one-eighth of the total volume. The pulsations, but especially the temperature of the breath, were both increased for a period. Thus the diminution in the inspired air, with at the same time increase of animal temperature, implies rather an influence upon the nervous system, whereby the intensity of the vital chemical action was increased, than any excessive requirement of oxygen in the processes of respiration, to meet the increased quantity of carbon which has thus been introduced into the system.

These results are of peculiar interest, as they are so opposed to the effects of food; for food of almost every kind at once increases the frequency of all the functions, and the quantity of air inspired. Thus so far it would seem that the action on respiration of cod-liver oil is opposed to that of tea in particular, and of food in general, except that of wine, with which it closely corresponds.

Such, then, being the facts of the case, unless there be some error, how can we attribute the good effects of the oil to the carbonaceous element? I do not see how it is possible; but I would rather direct inquiry in another direction. I believe it to be true that, in many instances, the weight and strength of the patients are materially increased on taking the oil; but it has yet to be proved in what per centage of the whole cases of phthisis, in all stages, this improvement is found. I feel assured that they do not by any means comprehend the whole number of such cases, or even a majority of them (for the instances of success, and especially if the improvement be marked, are apt to engross the attention unduly); and hence it would become a question whether, in the particular instances of improvement, there was any defect in the supply of carbon in the aliments, or any particular excitement of the respiration which would have called for a larger supply of that element than the food was able to furnish. There is clearly less difficulty in discussing the question, if the good effect be restricted to only a section of the phthisical cases, although we may be quite unable even then to ascertain its true mode of action. The true course appears to me to take each case by itself, and apply to it the ordinary chemical and physiological knowledge which science has afforded to us, in order to determine the question; since I much doubt if, in the direction now under discussion, any general law can be discovered which shall apply to phthisis and phthisical patients universally.

Then, again, it is open to inquiry whether the good effected is permanent, or only temporary; for, if it be only temporary, it is clear that no law relating to phthisis universally would be discoverable. Now, I fear that we must all admit both that in many instances no good whatever has followed the employment of the oil, and that in almost all cases the effect is temporary, although for a time it may be renewable. If it were permanent, we should have the pleasure of permanently arresting the disease constantly, and of preventing the fearful mortality which still occurs. But we know that, notwithstanding all our remedies, the patients die. The good effect is, I believe, most frequently observed in the early stage, in which the system is but little influenced radically, and in which the amount of residual air and pulmonary capillary circulation is fully sufficient for the maintenance of the system. Then also the mind is more influenced by hope; and we cannot doubt that the reputation which, rightly or wrongly, attaches to the remedy in the minds of patients, and especially of the poor, is great, and likely in itself to bring about a temporary good. At a later period, the respiratory process is materially impaired, an excess of carbon must remain in the blood, and oils and every other remedy can be of but little avail. At such a period, the improvement is both slight and evanescent as a rule.

Increase of weight is, however, a very palpable sign, and one which really does associate itself with a feeling of improvement. We have had remarkable instances of this nature in the hospital; but amongst the out-patients I have a young man in whom the total increase was 29 lbs., at the following periods: July 28th, 7 lbs.; Sept. 8th, 16 lbs.; Oct. 13th, 21 lbs.; Dec. 19th, 29 lbs. In his case, however, the disease progressed all the time; for, with the increase of weight, deposit, softening, and a cavity, followed each other in the lung; and, although the patient really looks almost well, both of his lungs are now extensively diseased. It is a disputed point, if arrest of the disease do really attend upon the apparent improvement in the general symptoms from the use of oils; and no doubt the cases must differ much amongst themselves, whether as to the stage, the constitution, or the circumstances of the individual.

I cannot form any opinion as to the value of Dr. Bennett's theory of the action of the oil; viz., the deficiency of fat in the chyle, or as to the efficiency of cod-liver oil; because, in some cases of phthisis, the acid secretions of the alimentary canal interfere with the digestion and absorption of fat. I do not believe that we can attach any real value to the iodine or to the phosphorus; and hence, if there be a value to the general system in the use of the oil, it must, so far as we know, be attributable to the carbon and hydrogen, or to the mechanical action of the particles of oil in the processes of alimentation. On the latter grounds, it is probable that all oils would have the like action, which in phthisis is not the case; and on the former, they should be on an equality, except so far as dose may be concerned. The statement that cod-liver oil is more readily assimilated than any other kind of fat, is an assertion for

which there is not sufficient proof; for, on the one hand, I found that patients who have discontinued the use of fat food have been able to resume it by varying its form, quality, and cooking; and, on the other, that a very large proportion of those to whom cod-liver oil is prescribed are unable to take it either temporarily or permanently.

On the whole, if the benefit be not restricted to a small section of the cases, and if it do not chiefly depend upon mental influences, it is probable that we must either know more of phthisis, or of the composition and action of oils, before we can offer a rational explanation. There is, however, one physiological fact to which I would ask attention; viz., that, during sleep, the rate of respiration in phthisis is greatly increased, sometimes to so much as the double of the ordinary rate—a circumstance quite opposed to health: and hence, as, during a large part of the twenty-four hours, the consumption of carbon and oxygen must be greatly increased, an unusual supply of the former may be imperatively called for. This appears to me to be a fair explanation, so far as it goes; and hence, at and in the night, the oil may be of value. If this were at all universally admitted, we might probably find that a limitation of the time of exhibition to those periods would include all that could be of service. Acting on this opinion, I have commonly directed a dose to be taken the last thing at night, and have presumed that the more frequent respiration in sleep and the exhibition of the oil both tended to sustain the animal heat under circumstances unfavourable for its production.

I know that an increase in the quantity of blood-corpuscles has been attributed to the use of the oil, and such may be the case; but it is improbable that this should be its usual or chief mode of action, since the improvement from the oil is commonly found in the early condition of the disease, when there is no fixed alteration in the composition of the blood; and in the latter stages of colliquatine sweats, when the blood has become really poor, the oil can effect but little good. When, however, the increase in the quantity of the red corpuscles does occur, it must be a secondary effect, and result from the improvement of the assimilative functions.

So far I have considered the influence of cod-liver oil as acting through the system; but I believe there to be a local action which is oftentimes of value. A large proportion of patients who conceive themselves to have been benefited by it, mention a soothing influence which they have experienced about the sternum, and a "softening" of the cough. This statement is so frequently made, that I cannot but consider that there is some truth in it. It may be explained by a local influence, as the oil passes over the irritable or perhaps desquamated mucous membrane of the pharynx, soothing that membrane, and for the time lessening the irritating influence of air. It may thus be readily understood how it will relieve the cough and irritation in the throat; but it is probable that, so far, any oil or fat, of the same degree of fluidity, would have a similar effect. I have also felt a general soothing influence, as of a mild narcotic, after having taken cod-liver oil experimentally, so much so as to induce me to consider that further inquiries in that direction were needed.

The practical conclusion which I wish to draw is this, that no theory has been propounded which can apply universally to all the heterogeneous classes of cases which are said to have been benefited by the oil; and, as there are many patients who cannot take it, and many others to whom it is not beneficial, it would be more philosophical to restrict its use to such cases as are amenable to any theory which, in the present unsettled state of the question, any one may prefer. To have no theory, or to administer the oil to cases to which our theory does not apply, must surely be empirical and indefensible. A universal remedy must surely involve a fallacy.

I am equally at a loss to determine the dose which is really the best for our purpose, and yet without inducing a waste of the oil. It is well known that the system can digest but a limited quantity of fat in health, and superfluous fat is thrown off by the bowel; hence fat is found in the fæces of all healthy men, in variable quantity. But it is curious to note that, in all wasting diseases, fat in a disproportionate amount is found in the fæces; and yet, in such instances in general, no increased quantity of fat could have been taken in the food. Hence, in phthisis, there must be an unusual disposition to the waste of this substance—a circumstance unfavourable to the exhibition of large doses of the oil. We need a series of investigations which should show the largest dose which could be taken without a waste of the remedy.

In conclusion, I would remark, that the night sweats, which are so often associated with debility and wasting in phthisis, are due to the low state of pulsation, and of all vital actions, which have been proved to occur in the night in phthisis. Hence any remedy which will raise the pulsation at night will arrest or prevent the sweats. Food is thus the most natural remedy; and a large cup of cold tea, with bread and butter, has in my experience been almost invariably efficacious. Milk is no doubt very proper; but it is far less powerful than tea, since, under any circumstances, its influence over both pulsation and respiration is far less than that of tea. Of course it is needful to take away the usual causes of perspiration, viz., feather beds, too much covering, bed curtains, and perhaps bed-fellows; and to have a free admission of cool fresh air into the room. The plan will be far more efficacious with dry than with very moist air, for obvious reasons.

63, Grosvenor Street, February 1857.

Reviews and Notices.

On the Diseases of the Bladder and Prostate Gland. By William Coulson, Surgeon to, and Lecturer on Surgery at, St. Mary's Hospital. Fifth edition. pp. 640. London: Churchill. 1857.

The publication of separate treatises on the disease of an important organ or system has become sanctioned by use; and, in many respects, it is attended by advantages. Amongst works of this kind, the treatise of Mr. Coulson has been long favourably known to the profession. It is written in an unpretending style, and contains the experience of a surgeon who has worked assiduously at his subject for more than a quarter of a century.

Mr. Coulson has adopted the anatomical arrangement as the basis of his work; in other words, he investigates the different kinds of organic lesions which are found in the different tissues of the bladder, describes the symptoms to which these lesions give rise, and explains the various modes of treatment by which their effects may be alleviated or removed. This plan, based on pathological anatomy, is the one adopted by all scientific writers of the present day; but we doubt whether it can be applied with the same effect to the diseases of the bladder, as to those of most of the other important viscera; while there is, to a certain extent, a parallelism between the bladder and the stomach. The bladder is destined to retain the urine for a time, and to expel that fluid at intervals. The contractile action of the bladder is, therefore, intermittent; but it may be increased or diminished by many circumstances not immediately affecting the organ. When the contractile power of the bladder is inordinately increased, the organ is no longer able to retain the urine, and incontinence ensues; when this power is disordered, the bladder is unable to expel the urine in a proper manner, and retention is the result. Experience teaches that incontinence and retention of urine arise more frequently from lesions and disorders not immediately involving the bladder than from organic disease or nervous disorder of the reservoir itself; and hence a very limited view of vesical affections is obtained, if we merely regard the organ apparently suffering and its pathological changes. Numerous illustrations of this principle might be furnished. The author's plan has been executed in as complete a manner as it admitted, and many valuable additions have been made to the last edition. The supplementary matter is mainly of a practical character, the author having preferred to avoid all speculative considerations, and to confine himself strictly to symptoms and treatment.

Tumours of the bladder are distinguished into malignant and non-malignant. Under the former head, Mr. Coulson describes scirrhus and medullary cancer, which latter is subdivided into villous cancer and encephaloid.

Scirrhus of the bladder, as our readers are aware, is a very rare disease. The author has never met with a case of it. On

the other hand, he relates from his own practice several cases of villous cancer of the bladder, the symptoms and diagnosis of which are carefully discussed. "The symptoms of malignant disease of the bladder," according to Mr. Coulson, "may set in suddenly, or may be developed in a gradual manner." In about one-quarter of the cases, the disease will be found to manifest itself suddenly—that is to say, without any premonitory symptoms.

"In some cases, the first symptom is a sudden and perhaps copious discharge of blood from the urethra; this is soon followed by pain in the bladder and difficulty of making water. In other cases, the disease commences with a sudden attack of severe pain either in the region of the bladder or in the back and loins; here, also, the first symptom is soon followed by hæmaturia and painful micturition."

In the second and most frequent class of cases—

"The disease begins with dull pain about the region of the bladder, or in the loins and hip. It may thus continue for several months, with alternations of severity and relief. The character of the pain presents nothing of a special kind. In the early stages of the complaint, the patients usually refer merely to varieties in its intensity, and rarely, if ever, speak of it as being of the lancinating darting kind."

The seat of the pain is seldom well defined at first; and in no case has the peculiar pain of the glans penis, so characteristic of stone, been observed. This remark, of course, applies to cases which are not complicated by the presence of stone in the bladder; for, as Mr. Coulson justly observes, the symptoms under such circumstances become extremely equivocal, and it is impossible to refer them to one source rather than to another.

Next to the pain, the chief symptoms of malignant disease of the bladder are, irritability of the organ, impediment to the excretion of urine, and hæmorrhage. The irritable condition of the organ usually sets in at an early stage of the disease, and continues to increase until its termination. Hæmorrhage from the bladder is also a constant symptom—at least, in cases of villous cancer; and this can be readily understood when we consider the vascular structure of the villous tufts, and the pressure to which they are subject under violent contraction of the bladder. Hence, as Mr. Coulson informs us, "the discharge of blood generally takes place at the same time as the evacuation of the urine"; though in other cases the blood comes away after the bladder has been naturally or artificially evacuated; and our author regards this latter circumstance as peculiarly worthy of attention. If it can be determined that the blood does not come from the kidneys, if there be no calculus, and the bladder be free from ulceration, the repeated hæmorrhage is almost diagnostic of malignant disease. A remarkable circumstance pointed out by the author, is the fact that, even in protracted cases, the patient seldom exhibits the peculiar countenance which is said to characterise a malignant diathesis. But the rational symptoms are insufficient for establishing a diagnosis. They afford strong presumption, not certainty; inasmuch as they may attend other lesions of the bladder. A careful examination of the organ must be made, a few ounces of tepid water having been previously injected. This examination will enable the surgeon to determine, in the first place, the absence of certain lesions which give rise to symptoms analogous to those of vesical tumour; it will reveal the presence of a soft tumour in the bladder; and, this being determined, the malignant or non-malignant nature of the tumour must be diagnosed from the presence or absence of cancer-cells in the urine. Although the presence of these cells indicates the existence of malignant disease, their absence does not necessarily imply the contrary. We believe, however, with the author, that if the urine passed during a severe paroxysm, in cases of villous tumour, be examined under the microscope, it will generally be found to contain cancer-cells.

We have noticed this subject at some length, because it is an interesting one, and very fully handled in the present edition of Mr. Coulson's work.

Another subject, examined with much care and copiously illustrated, is that of lithotrity, to which Chapter xx is devoted. Mr. Coulson has long been known as a successful lithotomist; yet, in the present edition of his work, he gives the precedence to lithotrity—and perhaps not without reason. This practice has for some time been gaining ground, and evidently admits of further improvement. The prejudices against which it had to struggle in this country are now well nigh abandoned. Our elder practitioners cease to denounce it; while the younger members of the profession are cultivating its practice with daily increasing success. For much of this, we are indebted to Sir Benjamin Brodie. His recent paper on this subject is a valuable contribution, and enables us to contrast lithotrity and lithotomy in a manner the fairness of which few will question.

The late Mr. Liston was the best of lithotomists of modern times: perhaps the most successful operator for stone since the days of Cheselden and Martineau. He tells us himself that he operated in one hundred and fifteen cases of stone in the bladder, and lost sixteen patients. Sir Benjamin Brodie operated by crushing in one hundred and fifteen cases of stone, and he lost only nine patients. Hence, for every patient lost by lithotrity, even Liston lost two by lithotomy. The conclusion appears irresistible.

The question whether chloroform should be employed during the operation of lithotrity, has been much discussed; and different opinions are entertained respecting it. Sir Benjamin Brodie and M. Civiale are unfavourable to the use of chloroform; and much may be said in support of their views. Mr. Coulson also was at one time disinclined to render the patient insensible; but he now informs us "that a more enlarged experience has induced him to modify this opinion considerably; though he still holds to it as a general rule." Thus children are so unmanageable, that it will generally be necessary to place them under the influence of chloroform when submitted to lithotrity. In other cases, it may be expedient to have recourse to this agent on account of the nervous temperament of the patient and his incapability of bearing the least pain. During the examination of the bladder, for the purpose of ascertaining whether any fragments remain, the use of chloroform is also attended with manifest advantage. To this we would add, that an irritable condition of the bladder, not depending on any serious organic change, may require to be appeased by the aid of chloroform; but, as a general rule, the surgeon had better avoid anæsthetics, unless he has full confidence in his own tact and capability for performing the operation. When the surgeon is compelled to feel his way hesitatingly, the patient should preserve the power of feeling.

The directions given by the author for seeking and seizing the stone, appear to be the same as those of M. Civiale; but they differ in several points from the rules laid down by Sir Benjamin Brodie and many operators in this country. Indeed, we can perceive that Mr. Coulson is *nullius verbis addictus*, but freely expresses independent opinions whenever they are supported by his own experience. Thus, most operators are afraid to attack hard calculi, especially if they be of any size; but the author thinks that with improved instruments any calculus may be broken up, provided it can be properly seized. There can be no doubt, as we have already said, but that lithotrity is progressing on this, as on many other points. For example, we perceive that M. Guillon has recently crushed, in five sittings, a hard calculus, which weighed five ounces and a quarter, and was from six to seven inches in circumference. The cure being complete. Not many years ago, such a case as this would have been at once rejected by the lithotritist, and in all probability would have proved fatal under the hands of the lithotomist.

The Chapter on Lithotomy and Lithotrity in the Female is complete and interesting. Some valuable data will also be found in the Chapter on Statistics.

The Section on Disease of the Prostate Gland is less complete than the portion devoted to the bladder. Several points require more development.

The chapters, however, contain a fair summary of the present state of our knowledge on this subject.

On the whole, we can strongly recommend the present edition of the treatise on the bladder to the favourable consideration of our readers. It is an excellent practical work, with fewer deficiencies, and a greater fund of really useful research, than works of the kind ordinarily contain.

British Medical Journal.

SATURDAY, MARCH 7th, 1857.

AN OFFICER OF HEALTH FOR THE ARMY.

Before the rude lesson taught us by the Crimean campaign fades from the minds of the authorities, it will be as well, perhaps, if we remind them that no step has yet been taken which will prevent, as far as human foresight and care are concerned, the repetition of the errors of omission as well as of commission then perpetrated. Before our army had seen the enemy, thousands had lost their lives in the pestilential neighbourhood of Varna; and those who survived to make the ensuing campaign, did so with the poison of malaria in their veins. The whole army of splendid Englishmen who left these shores, we deliberately assert, was poisoned by the ignorance of its commanding officers before it touched the ground of the enemy at Old Fort, and the wonder still is to any medical man who made the campaign, how they managed to fight so well at the Alma as they did. Upon the remaining career of that gallant band, we do not wish to dwell: suffice it to say that 30,300 of them either perished or were disabled—the greater proportion of the slaughter being attributable, not to the keen swords or swift Minié bullets of the Russians, but to the want of proper sanitary precautions in the chiefs. Thus it has ever been with the British army. The medical arrangements preparatory to the Walcheren campaign were directed by a successful Weymouth apothecary, Sir Lucas Pepys, who was not ashamed to declare that "he knew nothing of the diseases of soldiers, except what he had read in Pringle's book!" In the last Burmese war, we lost 73 per cent. of our force principally through scorbutic diseases, brought on by salt beef and pork, and decayed biscuit! The commonest precautions would have prevented such serious blunders as these, paid for principally in the blood of the Crimean soldier; but those who could and did suggest these precautions had no rank and authority to make themselves listened to, and, as a consequence, the hygienic condition of the army has always been looked upon as a thing beneath the notice of generals. Before public attention was called to the condition of our troops, it was possible to pursue an old system which so ruthlessly sacrificed their lives; but since it has been found necessary to treat them liberally, and to have them trained at great expense, the mere money value of their existence is a consideration which the War Office can no longer look over. We cannot train private Jones to the use of the Minié rifle without rendering him a skilled workman, and with skilled workmen the War Office can no more dare to play at ducks and drakes than they could afford to play at football with chronometers. We must reform the medical department of the army in order to keep pace with the condition of the army itself.

We owe to Mr. Martin the very valuable suggestion of the necessity of appointing a Medical Officer of Health for the army whilst in active service—a field inspector, in fact, whose duty it shall be to adapt his intelligence to the ever shifting necessities of war, and whose resources shall enable him to decide upon all questions relative to the health of the force to which he is attached. Such an officer, attached to the quartermaster-general in the field, and always in advance with him, should, according to Mr. Martin (and common-sense endorses the opinion), be only second in military rank to the head of his department; at the same time, his authority as field inspector should be supreme.

We shall be told, we know, that there is always a medical officer on the staff, and that there is no necessity for the creation of the new appointment; but the answer is simple. The staff medical officer has neither the status nor the training necessary to give authority to his opinions. If such a person were to dare to remonstrate with the general for placing the troops in some deadly hollow, quite irrespective of all strategical reasons, he would in all probability be answered, as a medical officer was once answered before, who had ventured to give good advice—namely, "Medical opinions are all very well when they are asked for"! Such an answer never could be returned to a field inspector, speaking with weight and authority. His advice would necessarily be given in writing, and the general would have to record his reason for neglecting it. With such a safeguard against the exercise of arbitrary power, we may be pretty sure that a general would not venture to resort to the snubbing process, now so ordinarily employed to get rid of those who tell unpalatable truths.

It is clear, however, that the whole value of the officer of health would depend upon his personal knowledge and character. He should be versed in the sciences of physical geography, topography, geology, and meteorology; he should have a general knowledge of the country in which the force is operating—its general features, its degree of cultivation, the arrangement of its cities, towns, and villages, the quality of water in its wells and running streams; he should be, as far as possible, the epitome of a well ordered medical council at home, from which he should receive all his orders, excepting those arising immediately out of the daily emergencies of the campaign. Together with this knowledge, he should possess a determined will. We shall be asked, Where shall we find this model man? and our answer is, that perhaps he does not at present exist; but there is stuff enough in Englishmen to make many such, if properly selected and trained to perform these special duties. In time of peace, the army officer of health would perform duties at home somewhat analogous to those of that functionary in the civil service. He would refer to and consult with the military authorities in every matter relating to the position, construction, and arrangement of barracks and hospitals; his office would contain, as Mr. Martin has suggested, patterns or models of these structures, so that when new ones require to be erected, the latest and best information with respect to them should be forthcoming. We have, it is true, inspectors and

deputy-inspectors of hospitals; but their duties, as at present performed, are chiefly retrospective. Now, what the army requires is a man who will think *forward*, who will make the prevention of disease in the army the aim of his life, and not content himself with routine measures for remedying the evil when it is done. We trust that the profession and the public will force this valuable suggestion of Mr. Martin's upon the attention of the War-office, and we also think that the valuable experience of our respected Associate, gained by hard service in actual warfare, will not be overlooked when Governments have been persuaded to turn their attention to the subject. There still remains another branch of the great subject of preventive medicine as applicable to the two services; this subject is, however, so important, that we shall refer to it in a special article.

POOR-LAW MEDICAL REFORM: AGGREGATE MEETING OF MEDICAL STUDENTS.

With much satisfaction we call attention to the fact that the medical students of England will hold an aggregate meeting, in support of Poor-law Medical Reform, at St. Martin's Hall, on Thursday next, March 12th, at half-past seven p.m. A. H. Layard, Esq., M.P., will take the chair. It is proposed to petition Parliament for an improvement in the system of poor-law medical relief, and to adopt a series of resolutions bearing on the subject. The resolutions, of which, as well as of the petition, a printed copy has been forwarded to us, are at once comprehensive, firm, and moderate in language; and we most sincerely trust that they will be unanimously passed. When the meeting has been held, we shall take an early opportunity of noticing the proceedings. In the mean time, the students have our best wishes. The expression of an intention on the part of students to hold an aggregate meeting might, perchance, tempt one to give some good advice to them; to men, however, who have shewn so much both of energy and of moderation as our young friends are now exhibiting in regard to the present matter, any assumption of superior judgment on our part would almost be an insult. All that we will say to them at present is, in the words of the old Roman,—

"Macte novâ virtute, puer; sic itur ad astra."

THE WEEK.

As far as we are aware, snowball affrays in Edinburgh have not occurred for some years; and the great battle of 1838 still maintains its historic preeminence. Last week, however, an opportunity was offered of showing that the ancient spirit is not yet extinct, by the wisely stimulating conduct of some of the advocates of the total suppression of traffic in alcoholic liquors—*i. e.*, of the Maine Liquor Law. The *Times* of Monday last contains a long account of the proceedings. Professor Laycock, having been requested by the Edinburgh Total Abstinence Society to deliver two lectures on the Physiology of Drunkenness, took the opportunity of expressing himself in favour of moderation and moral suasion, and in opposition to suppression and legal coercion. The second of these lectures, although the chairman had stated that Dr. Laycock had been invited to express his own unfettered opinions, seems to have been rather ungraciously received by some of the audience; and a lecture in reply was subsequently announced by means of placards headed "Dr. Laycock dissected". The students, not willing to allow the insult to their professor to pass unnoticed, crowded the lecture-room, and entirely prevented the delivery of the lecture. Afterwards, articles denunciatory of their conduct having appeared in some of the Edinburgh papers, the students showed their displeasure by publicly burning copies of the obnoxious periodicals. Some disturbance between the students, police, and mob, followed, and appeared likely to continue. On the following day, however, through the persuasion of Dr. Laycock, the students were induced to refrain from any further demonstrations, beyond that of demanding from the chairman of the last meeting an apology for the insult to the professor, and of complaining to the Lord Provost of the manner in which they had been used by the police. The mob, however, continued to produce much disturbance, breaking lamps and windows, etc.; several persons were apprehended, and the disturbance was quelled by the police.

The *Times* speaks of the "evil example" set by the students. Now, however much occurrences of the kind are to be regretted, it is pleasing to see that the Edinburgh students regard the honour of their professors as identical with their own. Their indignation at what they regarded as an insult to Dr. Laycock has shown them to possess "pluck": whether the means they adopted for showing their indignation were the most judicious, is another question. That they cannot have acted from the mere love of mischief, is apparent from the readiness with which they deferred to the recommendations of Dr. Laycock and the Lord Provost to desist from further agitation.

One of our associates has forwarded to us an extract from the *Banbury Guardian* of February 26th, consisting of a letter from Mr. Richard Grimbly, late medical officer to the Banbury District. The purport of the communication is, that Mr. Grimbly applied, on January 14th, to the Board of Guardians for an increase of salary; that, instead of making a direct reply, the guardians brought against him, by dint of stretching a form of words to its utmost extent, a frivolous charge of neglecting a certain patient; and that Mr. Grimbly, unable to obtain a hearing for himself, and knowing the impossibility of carrying out the requirements of the Board, at once tendered his resignation. His medical brethren in Banbury have forwarded to him the following gratifying testimonial:

"We, the undersigned medical practitioners of Banbury, having heard the statement of Mr. Richard Grimbly, medical officer of the union, in reference to a frivolous charge of neglect made at the Board of Guardians this day, beg to offer to him our sympathy on the harsh and severe treatment he has received from them, and to express our favourable opinion of the uniform attention he has paid to his duties for many years.

"Banbury, February 19th, 1857.

"Signed:—Shearman Chesterman, Wm. T. Douglas, Arthur B. Rye, R. S. Wise, John Griffin, John F. Smiles, Edward Morris."

With much satisfaction we learn from our correspondent that all the medical men in Banbury have pledged themselves neither to accept the vacant appointment, nor to hold profes-

sional communication with any stranger who might be induced to take it.

Mr. George Greaves, medical officer of the Chorlton Union, seems also to be in some danger from his Board of Guardians, on account of certain representations made by him with regard to the quality of the food of the inmates of the workhouse, which have not been altogether consonant with the opinions of the guardians. As Mr. Greaves has determined to appeal to the Poor-Law Board, the subject will probably again come under notice.

The recently published Report of the Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity shows the institution to be in a flourishing condition. During the past year, the funds of the Society have been increased by a legacy of £5,000 from Mr. Thomas Copeland, and by one of £100 from Sir B. F. Outram. The total amount expended by the Society in grants, during sixty-five years, has been £51,087 : 19. The object of the Society is to afford pecuniary relief to the widows and orphans of medical men in London and the neighbourhood, who shall have been members of the Society for two years at the time of their decease. The members pay one guinea as an entrance fee, and a guinea twice a year for twenty-five years; or they may compound for a life-subscription.

The trial of Dr. James Michell Winn, the well-known and respected physician of Finsbury Square, has resulted, as we fully expected it would, in a verdict of acquittal. It will be remembered, that he and his servant were given in charge by a person of the name of Benham, for having attacked and beaten him. It appeared from the evidence, however, that Benham, who rented the upper part of the house, wished to obtain possession of the lease, and in order to do so annoyed Dr. Winn in every conceivable way,—he even went so far as to call him a swindler. Indignant beyond endurance at being thus insulted, he struck this person, who was a much heavier man, it appears, than himself, and the doctor was getting the worst of it, when his servant came to his rescue. A vast number of highly respectable witnesses testified to the mild and gentlemanly habits of Dr. Winn, and the jury by their verdict sufficiently vindicated their opinion that the thrashing he gave the prosecutor was heartily deserved.

The death of Dr. Hume has caused a vacancy in the list of Medical Commissioners in Lunacy, which, we have good reason to believe, will be filled by the appointment of Dr. Nairne, of St. George's Hospital.

The defeat of the Ministry on the China question on Tuesday night, will have the inevitable effect of delaying the progress of the Medical Bill. Much business of a pressing public nature will, we fear, prevent its introduction before the dissolution of Parliament, and the new House will not, in all probability, meet before the end of May. It remains to be seen whether that period will not be too late for its introduction, with any chance of carrying it through Parliament this year. We trust, however, that Mr. Headlam, if he be re-elected, will bring it under discussion as soon as possible, in the hope that some measure calculated to satisfy the great body of the profession will be finally sanctioned, before our senators are off to the moors.

Association Intelligence.

METROPOLITAN COUNTIES BRANCH: ADJOURNED GENERAL MEETING.

An adjourned General Meeting of the Metropolitan Counties Branch was holden at 37, Soho Square, on Tuesday, March 3rd, at 4 P.M.: George Webster, M.D., President, in the chair.

EXPLANATION OF RESOLUTION.

Dr. O. Ward (Honorary Secretary) read a letter from Dr. S. Griffith, expressing his disapproval of the (supposed) intended advocacy by the Branch of compulsory residence in London, in the case of candidates for the fellowship of the College of Surgeons. Dr. Ward explained that the intention of the resolution was precisely opposite to that in which it had been interpreted by Dr. Griffith—that the Branch were desirous that the obligation (at present existing) on all candidates for the fellowship to study during three years in London, should be removed.

MEDICAL REFORM.

A letter was read from Dr. Lankester, regretting his inability to be present on account of illness. In his absence,

Mr. Propert moved—

"That this Meeting rejoices at the near prospect of the settlement of the question of Medical Reform, by the adoption, on the part of the British Medical Corporations, of the principal details of the Medical Reform Bill proposed by the British Medical Association; and would heartily approve of the proposal of the Medical Reform Committee of the Association, that one-third at least of the medical council constituted under the proposed Bill, should be chosen by the Government from among those members of the profession not constituting the Governing Bodies of the Corporations and Universities; and that the Branch strongly urges upon the Association the necessity of seeing that this arrangement is fully carried out."

Mr. Lord seconded the resolution.

Dr. Murphy proposed as an amendment—

"That the discussion of Dr. Lankester's motion be adjourned until Mr. Headlam's Bill be published."

Dr. James Bird seconded the amendment.

After some discussion, in which Dr. Burnett, Mr. Charles, Dr. Edward Smith, Dr. Beck, Dr. Stewart, and the President, took part, the amendment was carried.

It was then agreed also to adjourn the discussion on the second resolution, viz.

"That this Branch do strongly recommend the Government to grant a new Charter to the College of Surgeons, on a more liberal basis as regards the elective franchise, and the residence in London as a qualification for the fellowship."

SALE OF POISONS.

Mr. Lord proposed—

"That this Branch do petition Parliament to pass a Bill for the regulation or prevention of the sale of poisons."

Dr. Murphy seconded the motion, which was carried.

ADMISSION OF NEW MEMBERS.

The Laws of the British Medical Association, with regard to the admission of new members, are the following:—

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year.

The names of new members should be forwarded to the Secretary, Dr. P. H. Williams, Worcester; or to any of the Secretaries of the Branches.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Saturday, January 31st, 1857.

W. D. Chowne, M.D., President, in the Chair.

CASE OF IMPERFORATE ANUS. BY W. H. WILLSHIRE, M.D.

The case was that of a new-born child, in which the descending colon and sigmoid flexure ended in the form of a blind sac, attached by cellular tissue to the sacrum. The rectum was pervious from the anus for the distance of an inch and a half. The child lived six days. The tubuli uriniferi of the kidney were loaded with urates.

REMOVAL OF NEEDLES FROM THE BODY. HOW ARE THEY INTRODUCED? BY VICTOR DE MÉRIC, ESQ.

Mr. de Méric, after some remarks on the curious assertions sometimes made in regard to the introduction of large numbers of needles into the body, related the following case. A child, aged 2 years, was brought into the German Hospital, who, two or three days previously had been playing on the hearth-rug, and since that time had been unable to walk on the left foot. It cried much when the heel was taken hold of. No redness nor any sign of injury could be detected; but, as a matter of safety, the leg was put up in a splint. After some days, on looking at the foot, Mr. de Méric perceived on the plantar aspect of the heel a black spot; this was ascertained to be the head of a needle, which had most probably entered the leg by accident.

Mr. Jabez Hogg and Mr. Stedman alluded to the case of the late Dr. Rowland, in whom a needle entered into his leg while he was putting on a boot, and was some time afterwards detected and withdrawn at the plantar aspect of the heel by means of a powerful magnet.

ON STERILITY: ITS CAUSES AND TREATMENT. BY I. B. BROWN, ESQ.

Mr. Brown, after some prefatory remarks, enumerated the following causes of sterility:—

1. Absence of uterus and ovaries.
2. Presence of uterus, but disease of ovaries.
3. Atrophy of uterus and ovaries.
4. Disease of uterus and of Fallopian tubes—viz.: *a.* Hypertrophy; *b.* Inflammation; *c.* Fibrous tumour; *d.* Cancer; *e.* Polypus; *f.* Neuralgia; *g.* Ulceration.
5. Diseases of vagina—viz.: *a.* Cancer; *b.* Inflammation; *c.* Leucorrhœa: *α.* with acid secretion, *β.* with alkaline secretion.
6. Imperforate hymen.
7. Contracted os vagina.
8. Contracted os or cervix uteri—from: *a.* Contortion; *b.* Inflammation of mucous membrane; *c.* Caustic applications.
9. Dysmenorrhœa—*a.* Spasmodic; *b.* Mechanical.
10. Amenorrhœa.
11. Menorrhagia—from: *a.* Anæmia; *b.* Plethora.
12. Diseases of rectum—viz.: *a.* Hæmorrhoids (bleeding); *b.* Fistula; *c.* Fissure; *d.* Prolapsus ani; *e.* Scirrhus; *f.* Ascarides.
13. Vascular tumour of meatus urinarius.
14. Excessive sexual intercourse.
15. Want of mutual affection.
16. Loathing on the part of woman.
17. Secondary syphilis.

In the sections now enumerated were comprised most, if not all, the causes of sterility in the female which occur in practice. Mr. Brown briefly reviewed them with reference to their nature and curability.

The following causes may fairly be considered incurable—viz.: Absence of uterus and ovaries; Disease of ovaries; Atrophy of uterus and ovaries; Cancer of uterus, with or without that of the Fallopian tubes; and cancer of the vagina.

The remaining sections may be thrown into three classes, according as the causes are mechanical and local, or constitutional and general, or sympathetic or reflex. The mechanical causes are comprehended in sections 6, 7, 8, and in 9 in part; and to these may be added an occasional cause, closure of the Fallopian tubes. The constitutional causes operate at large through the general health, and are included under sections 10, 11, 14, 15, 17, and 9 in part. The next class of cases, termed by Mr. Brown sympathetic or reflex, were comprised in sections 12 and 13, and in 4 and 5 in part. As it would be impossible to discuss the mode of action of the numerous causes, and to examine their relative extent and force of operation, Mr. Brown restricted his observations to those comprised in sections 9 and 12, viz., dysmenorrhœa and diseases of the rectum. He believed that diseases of the rectum, as productive of sterility, had not previously been put forward; however, experience and observations had proved to him that he was right in advancing them under this aspect.

Dysmenorrhœa might be either mechanical or spasmodic; and numerous expedients had been resorted to for its cure, such are catheterism, caustics, sponge-tents, and similar mechanical contrivances, the object being to overcome stricture of the os and cervix uteri. Mr. Brown could adduce several instances where the protracted use of the metallic bougies, or of ordinary elastic bougies, had been successful. He called attention to a set of instruments which he had contrived to dilate the os and cervix uteri where this operation was called for. He had made use of the suggestions of Mr. Thomas Wakley for the treatment of stricture of the urethra. Mr. Brown introduced a long stilette into the os uteri through the speculum, and over that he passed the smallest sized elastic tube and allowed it to remain for a longer or shorter period according to the pain produced. Cases which presented almost insuperable difficulties to dilatation readily yield under this simple contrivance without bleeding or laceration. The most advantageous period for the introduction of the instrument was immediately after the secession of the catamenia, before the canal had returned to its usual size. Mr. Brown had never seen the necessity for the introduction of caustics into the cervix for the purpose of dilatation. Many cases had come under his notice, where partial occlusion of the os and cervix had been the result of their use.

Mr. Brown then proceeded to speak of diseases of the rectum as causes of sterility. He referred to the general law of the animal economy, that any irregularity or interference with the functional action of any one part of the body affects more or less the whole body. If this law pertain to the body generally, much more must it pertain to the female organs of generation, where the slightest deviation from normal functional action must materially interfere with the delicate physiological process of impregnation and the contiguous organs. Both the rectum and uterus are supplied with blood from the internal iliac artery and with nervous influence from the sacral plexus; and therefore functional derangement in the one part or organ must interfere with the other. For instance, a female is suffering from bleeding hæmorrhoids. At the menstrual epoch there is an increased supply to the hæmorrhoidal vessels and consequently a diminished supply to the uterus, because only a sufficient supply for the uterine function is sent down. In prolapsus ani, also, there is always some loss of blood at each defecation, and a greater loss at the period of the menstrual epoch. In a patient suffering from fistula or fissure, there is constantly more or less pain in the uterus; and consequently it is always under a state of irritation which renders it unfit for the performance of its duties. He had seen many cases of patients who had been treated for months and years for uterine inflammation with leeches, caustics, etc., where he had discovered a long standing fissure of the bowel, which had been the sole exciting cause of the uterine affection.

Saturday, February 7th, 1857.

W. D. Chowne, M.D., President, in the Chair.

THE NECROSIS OF CANCER. BY J. M. MOULLIN, ESQ.

Mr. Moullin brought before the Society two cancerous tumours of the breast, which had been enucleated by the application of chloride of zinc. One was of eight years, the other of twenty years standing. Both these cases were patients at the Westbourne Dispensary under Mr. Moullin. The chloride of zinc was applied in the following manner:—The integuments covering the entire tumour having been previously destroyed by the application of nitric acid, chloride of zinc in the form of thin paste, spread upon linen, was applied over the whole destroyed surface, and covered with cotton, which was allowed to remain till next day. The dressing being removed, incisions were now made to the depth of the destroyed parts, about one-eighth of an inch, and one-third of an inch apart from each other, causing no pain. The chloride of zinc paste, now spread upon strips of linen, was inserted in each incision, and covered over with cotton. One hour after the dressing the patient began to feel a sensation of heat in the part, which lasted for three or four hours, not at any time amounting to

pain. She slept well, and next day the process was repeated, and continued for fifteen successive mornings, when the whole tumour was destroyed. Separation now commenced, and on the thirty-third day from the first application the tumour fell out, leaving a perfectly healthy surface, which has gradually gone on healing, and is now quite well. The history of each case is much the same, except that, in the second, there was a large fungous growth on the upper part of the breast. This case was also completely destroyed after fourteen dressings, and enucleated in forty days, having the same healthy appearance as the former, and progressing equally well. Two other cases are now under treatment, the result of which, with several others, will form the subject of a paper, to be brought before the Society at a future period. The first case mentioned was dressed daily by Mr. Haviland, who assisted Mr. Moullin.

ANOMALOUS DISEASE OF THE CERVIX UTERI. BY J. M. WINN, M.D.

The patient was a young married lady, who suffered after her last confinement from what appears to have been congestion and morbid sensibility of the uterus. For this complaint, it seems, she had been subjected to repeated cauterisations of the cervix uteri. The result of this treatment has been a dilated and inflamed condition of the cervix. The remarkable feature of the case was, that the patient passed daily, and only once daily, accompanied by considerable pain, a small muco-albuminous clot. There was no leucorrhœa, but the general health had materially suffered. Under the use of tonics and the local application of powdered alum the case had improved. Dr. Winn, however, feared that an obstinate disease had been produced, which would take a long period for its removal.

CONCENTRATED LIQUOR CALCIS. BY W. CAMPS, M.D.

The fluid was prepared by Mr. Bastick, and possessed the following advantages:—It permits the internal administration and external use of lime in solution, without the necessity of employing an inconveniently large quantity of fluid. It is more portable, and more free from decomposition when kept, than the ordinary liquor calcis. Being sixteen times as strong as the liquor calcis of the Pharmacopœia, it may be diluted to any required strength.

CANCER OF THE FOREARM. BY T. W. COOKE, ESQ.

Mr. Weedon Cooke exhibited the arm of a woman, aged sixty-five, which he had amputated a week previously for cancer, involving the muscles and bones. The patient was doing well. He advocated the plan of proceeding in some cases, and mentioned one instance in which he had, five years since, removed an extremity of a woman affected with cancer, of the age of seventy-five. She was still alive and well.

THE SECONDARY ERUPTION FOLLOWING VACCINATION. BY GEORGE ROSS, ESQ.

Mr. Ross commenced by making some remarks on the obscurity of the subject of his paper, and on the contrariety of the opinions held regarding it. He alluded especially to the statement made by Dr. Seaton in his paper published in the *Journal of Public Health*, and of which an abstract was given in the British Medical Journal for January 31st. He then proceeded to lay down the following propositions:

1st. That there are various forms of eruptive disease consecutive to and caused by vaccination.

2nd. That these eruptions appear at definite periods, and are subordinate to the specific laws of the vaccinious disease.

3rd. That these eruptions are not prejudicial to the person vaccinated, but are rather evidences of the complete impregnation of the system, and of the protective efficacy of the act of vaccination.

Notwithstanding the assertion that vaccination does not cause consecutive disease, the occurrence of such disease has been frequently noticed by medical practitioners. Most works on Diseases of the Skin have some reference to such affections; but there is not, however, any methodical analysis on record of such maladies, and they have been regarded rather as unimportant casualties than as legitimate sequences of vaccination.

A few years ago, in conducting some inquiries into the frequency with which eruptive disease consecutive to vaccination occurred, Mr. Ross observed that such cases as at first fell under his eye manifested secondary cutaneous symptoms on a particular day. Continued observation detected considerable deviations; but in time he found that the deviations, though wide as regarded periods, were so few in number, that they admitted of a ready generalisation. The secondary eruptions differed more in their character than in the periods of their appearance; nevertheless there was sufficient collateral evidence to prove that they were all due to the same cause. The whole number of secondary eruptions noticed by him during the period whilst he was conducting his inquiries was nineteen, and of these the specific character was recorded in eleven; the others were adverted to in general terms as "secondary eruption;" but Mr. Ross believed that the greater number, or the whole of them, were of the vesicular type. Of the eleven one was a transient exanthem, three were papular, and seven vesicular. The vesicular eruptions varied much in character, sometimes being as small as millet-seeds, and few in number; at other times as large as a crown-piece, and looking as if one vesicle was comprised within the circle of another. The size of the eruption was frequently that of the cow-pock at the eighth day, which indeed it very much resembled, being a vesicle with a small central depression and circumferential redness. These eruptions were always preceded by fever, which was proportioned in degree to the number of vesicles thrown out. This fact proved the constitutional character of the affection. Mr. Ross had several times seen patients suffering from pyrexia and general *malaise* on the day when in other cases an eruption has usually appeared. The pyrexia convinced him that the activity of the virus does not always cease with the drying-up of the pock. Even after the local action has disappeared, there are periodical changes going on in the constitution, of greater or less energy, and manifested by fever and secondary eruptions. In some of the cases the eruption appeared on the tenth day from the day of vaccination; in others on the fifteenth day; whilst in one case the eruption was thrown out on the tenth day: it continued for a few days, then disappeared, and was observed again on the fifteenth day. In other instances the eruption appeared both on the fifteenth and twentieth days, or thereabouts. These cases further show the periodicity of the affection. Much accuracy of observation is required to fix the facts. The surgeon should himself see the eruption, and he will be able to determine, after a very short experience, whether the eruption be one or two days old at the time it comes under his observation. The day on which the accompanying *malaise* occurred must be also taken into consideration. A source of error will be the development of the original pock; for when vaccination is done with dry lymph, the development of the local and constitutional effects will vary from the genuine type, being often two days later than is proper. So frequently does this occur that often surgeons prefer to take matter from a tenth-day pock, it being larger and fuller than the eight-day pock. This is true only when dry lymph has been used, and not always true even in this case. The proper period from which to date the phenomena of vaccination is the formation of the vesicle, the symptoms anterior to this being variable. From the moment, however, that a vesicle is formed, with its attendant constitutional pyrexia, which occurs ordinarily on the fifth day, the phenomena, if the pock be genuine, proceed in regular succession, and may be safely calculated. Hence it would seem that vaccinia, as a disease, is subject to a periodical evolution in the system, which is manifested by a critical eruption on the fifth, tenth, and fifteenth days. Mr. Ross believes that the constitutional effects are not produced so much by the small quantity of lymph inserted under the skin, as by absorption from the pocks; these being not merely final results of certain constitutional actions, as generally supposed, but means of thoroughly impregnating the system with the virus. They are laboratories of lymph rather than mere eliminants of a poison. Hence it is that the security of the system, according to Mr. Marson's observations, is in a direct ratio to the number of pocks induced. If we open a pock with a lancet we can exhaust it of all its lymph; if we wait a little we shall be supplied with a fresh secretion; and so on for an indefinite period so long as the pock maintains its activity. If the pock be not opened we have a right to conclude that the same process of secretion is continually going on, and the excess of lymph instead of being evacuated, as in the former instance, is absorbed into the system. There is no reason to think that absorption does not proceed from the surface of the skin under these circumstances, whilst it is the rule on all other surfaces of the body, whether mucous or serous. In fact the functions of every organ are sustained by a due balance between the processes of secretion and absorption in unintermitting activity. Hence the constitutional pyrexia in vaccination commences with the formation of the vesicle; and hence, too, the number of vesicles is a measure of the immunity conferred.

The frequency of the secondary disease depends upon the

time of year when vaccination is performed. During the summer, when the circulation is hastened, and the functions of the skin are actively performed, the consecutive eruption appears more frequently than in winter, when it is very rare. In consequence of the greater prevalence of the secondary eruption in summer, and the suspicion with which it is viewed by parents, Mr. Ross thinks it best to postpone vaccination as much as possible during June, July, and August.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 20th, 1857.

Thomas Watson, M.D., President, in the Chair.

A PORTION OF SMALL INTESTINE PASSED PER ANUM, AFTER SYMPTOMS OF OBSTRUCTION. BY JOHN WOOD, ESQ.

This specimen was sent to Mr. Way, house-surgeon to King's College Hospital, by Mr. Ward, of Bodmin, in whose practice the case occurred. The patient was a married female, aged 23, who, six months before, had become subject to severe pains in the loins and abdomen. The case had been mistaken, and treated for disease of the womb. When Mr. Ward saw her, she was much emaciated, with a quick, feeble, and occasionally intermittent pulse, dry, furred tongue, and bowels apt to be, but not completely, constipated, with natural fæces, when acted upon. Micturition was frequent and painful; the urine was slightly albuminous, and contained lithates. She vomited frequently matters not distinctly fæcal, but consisting apparently of partially digested food; the vomiting generally coming on about an hour after eating. She had much griping pain in the bowels, with some pain on pressure over the region of the right kidney. There was no uterine disease, beyond a little thickening of the os. In November last the patient passed the produced portion of small intestine. It was about six or seven inches long, and an inch and a half in diameter, with no valvulæ conniventes, or any evident Peyer's patches, and was probably from the upper part of the ileum. The mesentery was separated close to the gut, and one end of the latter was considerably frayed off. The patient at first went on well, but since then has had a return of the symptoms of intestinal strangulation, with constant vomiting and scanty fluid dejections, arising possibly from contractions of the resulting cicatrix.

SACCULATED ANEURISM OF THE ASCENDING AORTA, FATAL BY RUPTURE INTO THE PERICARDIUM. BY JOHN COCKLE, M.D.

The subject was a robust man, about forty years of age. He had been ill about two years. His early symptoms were cardiac pain, extending up the aorta, and darting through the breast and down the arms; palpitation, with occasional cough and difficulty of lying upon the left side; gradual loss of weight and sallowness of complexion supervened. The only physical sign detected at this period was marked intensification of the second sound of the heart to the right of the sternum. Some months subsequently, in addition to these phenomena, pulsating tumour, with systolic and diastolic impulse, was detected between the second and third right costal cartilages. Compared with the cardiac impulse, sensible retardation of the radial pulse was manifest. No fremitus was felt over the sac, but percussion yielded a dull note. The systolic sound of the heart, heard over the apex, was dull, as also over the sac; the second sound in this latter situation still retaining its unnatural accent. The cardiac impulse was slightly heaving. A few days before the sac gave way, the first sound over the sac changed from a dull sound into one accurately imitated by the crumpling of parchment. Death was instantaneous, in the midst of active duties. A sacculating aneurism of the aorta was found, commencing about one inch and a half above the arterial valves. The sac was bilocular; the common aperture large. One loculus ascended upwards and forwards, its outer surface becoming fused with the sternal periosteum, and partially eroding the bone at its right inner edge. The other loculus extended downwards and backwards, moulding itself upon the cava, and thus preventing serious pressure upon the vessel. From this lower loculus transverse rupture of three-quarters of an inch had suddenly occurred midway between the right auricular appendix and the reflexion of the pericardium, permitting the escape of about twenty-eight ounces of blood into the sac, and thus probably at once arresting the heart's action. The aorta was greatly dilated at its origin, and had undergone extensive degeneration of its inner and middle tissues. The chambers of the heart were in a state of fatty degeneration. Those of the left side were hypertrophied. The right lung was partially adherent to the sac. Traces of old pericarditis existed. The apex of the right lung presented tubercle in a state of obsolescence. The case is also interesting from the rarity of an aneurism with external pulsating tumour bursting into the pericardium. From Dr. Sibson's tables, it has only occurred once in thirty-three cases.

Editor's Letter Box.

THE TOBACCO-PHOBIA.

Letter from T. W. Nunn, Esq.

Sir,—Will you think it impertinent in a humble reader to say that your leading article on the tobacco question does your editorship great credit? It was the "Hold hard! gentlemen, hold hard!" of the judicious master of the hounds, who sees the "field" impelled by the enthusiasm of the moment, or carried by the impetuosity of their steeds, getting a little too close up to be sportsmanlike. I was also delighted with the able letter on the same subject by the translator of Skoda, who threatens John Chinaman with an elbowing in his (tea) chest. *En passant*, Dr. Markham must be a bold man, and confident in his own powers of self-defence, to venture on *stirring up the animosity of a certain tea-drinking class.* He has, nevertheless, a good cause.

Now, sir, it does not appear, from the various letter writers on smoking, that any distinction has been made between pipe smoking and cigar, or cigarette, smoking; but there must be a very great difference, for many who can smoke and enjoy a cigar cannot smoke a pipe without suffering from the specific effect of tobacco. The following solution of this problem is offered.

In the lighted cigar, in consequence of the non-conducting properties of the material, the action of the heat is limited to the incandescent portion, and the fire catches as it were the greater part of the volatile poisonous products before they have time to escape from so warm a neighbourhood, decomposing them into, though more fragrant, equally subtle but less active vapours. Shade of King Jamie! did ever thy phantom nose detect aught acrid in rival presence of a departed cabana? On the other hand, in a lighted pipe, to say nothing of the finely-chopped conditions in which the tobacco matter is used, the clay bowl at some point at a certain distance from the incandescent layer, by its conducting power, affords just that degree of heat which is requisite to distil over the proper essential oil of the plant. Notwithstanding the condensation which takes place in the lower part of the bowl and in the stem of the pipe, a good deal must pass over with the smoke, which is thereby rendered more emetic than that of a cigar. There are numerous contrivances, as you are doubtless aware, for entangling and filtering off the oily, acrid, and too energetic elements of pipe smoke, more or less successful. The above remarks only pretend to compare the cigar with the ordinary clay pipe.

The psychological meaning of the inclination for smoking must be determined before the question dealt with in your leading article can be set at rest in a philosophic manner. Why do people smoke? This query should be answered, and then we might ask,—Does smoking hurt them? I hope, sir, you will continue to keep a logical eye on the progress of this agitation; and that you will rescue it from the miasmatic fog of spurious physiology, morals, manners, and prejudices, in which it is at present involved.

I am, etc., T. W. Nunn.

London, February 28th, 1857.

THE CAUSES OF THE SOUNDS OF THE HEART.

Letter from G. B. Halford, M.D.

Sir,—May I request you to give insertion to the following observations on the remarks of Dr. W. O. Markham, concerning some experiments I had lately the honour of performing at several of the London hospital schools.

The cause of the first sound of the heart has long been a *quæstio vexata* with the profession. I have endeavoured to demonstrate that it depends upon the tension of the auriculo-ventricular valves. My experiment I find quoted, and favourably referred to, in the last number (February 14th) of your Journal, by Mr. Waters, of Liverpool.

Great patience is required in all experimental investigations. It is not always we can succeed in shewing what we desire, as

happened to me at St. Mary's Hospital. I was enabled clearly to demonstrate the movements of the separate parts of the heart and their relations to the pericardium; but, from want of bull-dog forceps to secure the venæ cavæ, and from accidents during the operations, failed in repeating what I have so often done before at St. George's, the Westminster, Liverpool, St. Bartholomew's, and lastly, at the Middlesex Hospitals.

So far then from Dr. Markham being justified in differing "from many others", and thus addressing the profession on a subject of scientific importance, I maintain that being informed as he was of the impossibility of my properly accomplishing what I wished, and being also invited to witness the experiments repeated two days afterwards at the Middlesex Hospital, it would have more become a man of science to have attended a second time, or repeated them himself, before he sat down satisfied with "the positive evidence of his own senses" against "the negative evidence of numbers."

I must ask, therefore, Dr. Markham to repeat the experiment himself, and communicate the result to the profession. I can promise he will be repaid for the trouble. Further, I have performed this experiment many times by night, when all was still, on purpose that I might detect sound, if any were emitted by the contracting ventricle, when the venæ cavæ et pulmonales were compressed, but none was ever heard.

Dr. Markham objects to my experiments, on the score of the animal being subjected "to sudden and violent shocks of the nervous, arterial, and respiratory systems." This objection is of no value, because from the time of Hope to the present day, the sounds have never been affected by opening the thorax; they are heard as clearly as, if not more so than, before the operation; consequently, their causes remain intact. Again, Dr. Markham ought to know that chloroform prevents shock to the nervous system. What he means by "shocks to the arterial and respiratory systems", I do not comprehend. His other objections he will find most ably met in Mr. Waters's Lecture on the Sounds of the Heart, published in the same number of your Journal as his own remarks.

I can well understand Dr. Markham's "continually meeting with facts which seem repugnant to his received theories"; it is because those theories are false. All the difficulty vanishes if we adopt the valvular theory for the production of the heart's sounds. The miserable nonsense there is in some books about less muscle producing greater sound than more, has done much to mislead the profession; something like the celebrated live and dead fish of the Royal Society. Nobody has seemed to ask the simple question—Does it?

Let us endeavour, on the valvular theory, to explain Dr. Markham's first case. "A loud bruit is heard accompanying the first sound at the apex, but no second sound or bruit is audible there. How comes this, when at the same time the second sound is heard loud and clear over the situation of the aortic valves, and loudly intensified, it may be, over the base of the pulmonary artery?"

I can well understand the first sound, depending, as it does, on the tension of the mitral and tricuspid valves, being prolonged into a bruit, and this bruit, the result of disease of these valves, being continued *into the time* of the second sound. Is it surprising then that, the stethoscope being applied at the apex of the heart, the ear should not detect the short and comparatively distant second sound through the prolonged mitral or tricuspid bruit, which is comparatively near, being conducted to the apex of the heart by the chordæ tendineæ, the vibrations of which, equally with the flaps of the valves, assist in the formation of this first sound or unnatural bruit? Reverse the stethoscope to the seat of origin of the second sound, viz., to the base of the heart, and the second sound will, of course, be better heard.

It is useless writing further about morbid sounds, as they never can be described. I am, etc.,

George Britton Halford.

17, Victoria Square, Grosvenor Place, Feb. 1857.

NEW VECTIS: CLAIM OF PRIORITY.

Letter from James Ogden, M.D.

Sir,—In a recent publication by Dr. Copeman of Norwich, there appears a description of a vectis which he strongly recommends as superior to the forceps, giving cases of its successful application. On reading a review of the article, in *Ranking's Retrospect* for this year, I was struck with the measurements of the instrument being in every direction the same as those of a vectis recommended twenty years ago by me, and which I named the "Tractor Vectis"; this striking similarity varying only in one direction to the extent of one-eighth of an inch, led me to conclude in the first instance that the one described was my instrument, as the following measurement will show.

Dr. Copeman's.	Inches.	*Dr. Ogden's.*	Inches.
Handle	4⅛	Handle	4⅜
Blade when straight .	8½	Blade when straight .	8
Blade from handle when curved	7½	Blade from handle when curved	7⅛
Across the fenestra . .	1¼	Across the fenestra . .	1⅛
Widest part across the blade	2⅛	Widest part across the blade . .	2 except ⅛
Inner border of the fenestra . . .	3-10ths	Inner border of the fenestra . . .	3-16ths

Dr. Copeman, however, assures me that he has not seen or even heard of my tractor vectis, and points out a difference in shape in the two instruments, which, on comparing them, I find to exist; the one used by him, according to his letter to me (but not invented by Dr. Copeman), being the old vectis with an increased curve given to it just before the commencement of the fenestra, whilst the instrument invented by me, which I have used more than thirty years, and described seventeen years ago, differs *in toto* from the old vectis in having much more the hook-like shape, and being so completely adapted for traction, that once fixed on the chin or occiput, it is a rare circumstance for it to slip; indeed, I may say, that it is in this particular part in which the difference exists between the two instruments: mine being adapted and formed to fit the chin accurately; and it is chiefly in the shape and peculiar curve, and form, of the fenestra that my claim to originality rests; and no instrument without this peculiar curve can possibly possess tractile power, in cases of impaction, without acting upon the lever principle. I am induced to request a space, in your valuable Journal, for the few remarks which I have to make, principally with a view of calling the attention of my professional brethren to the great value of the vectis as a safe and powerful midwifery instrument, and of eliciting their attention to the tractor vectis as superior, not only to the ordinary vectis, which has no tractile power, but also to its greater power and safety over the one mentioned by Dr. Copeman, who seems to have searched but imperfectly for authors on this subject, or he would have been able to quote some recommendation anterior to his own, for this valuable instrument, a pamphlet having been published by me, with plates, in the year 1840, and circulated extensively, and also more fully elucidated in Dr. Clay's *British Record of Obstetric Medicine and Surgery* in the year 1849. I am, etc.,

Jas. Ogden, M.D.

Ardwick Villa, Manchester, Feb. 20th, 1857.

NEWBIGGIN BAY AS A HARBOUR OF REFUGE ON THE NORTH-EASTERN COAST OF ENGLAND.

Letter from John C. Reid, M.D.

Sir,—I beg to call the attention of my fellow associates, as well as of those members of the legislature who read our influential Journal, to Newbiggin Bay, as a harbour of refuge, however *outre* the subject may appear in a medical publication. I leave the natural construction of the bay as indicative of such an object; the very great depth of water at low tides; the ease of ingress and egress with every wind that blows; the abundance of material wherewith to construct the piers; the rocky foundations; the central position, betwixt the only two places for which vessels in distress can run, viz., the Frith of Forth and the Humber; the immense loss of property during the late heavy gale; not to mention the still greater loss of more valuable lives;—and casting these weighty considerations overboard, I would seek to direct attention to the very important fact of the *salubrity of Newbiggin*, which, in these days of sanitary improvement, stands conspicuous. It is true (and I call upon the registrar-general to contradict me, if he can) that, notwithstanding the almost daily intercourse with the infected districts, neither on the first nor on the subsequent appearance of cholera in this country did a single case occur here: and the same holds true of, I may say, all contagious diseases or epidemics (with the single exception of measles, which has appeared once only during the last seven years). However singular this may appear, it is a fact ("and facts are stubborn chiels that winna ding"), that epidemics have come within only two miles in some instances, and from some cause not hitherto ascertained, have been arrested in their progress.

Therefore, on the sanitary condition of Newbiggin, independently of all its other claims on the consideration of the Government, I would beg leave to suggest the priority of its claims as a fit and proper place for a harbour of refuge on this iron bound coast, extending over two hundred and sixty miles, from Leith to Yarmouth Roads. Even within a radius of fifty miles of this, on the 4th of January, ninety-four ships are known to have gone on shore or foundered, by which, in a few hours, one hundred and sixty-seven valuable lives were sacrificed on the altar of national neglect, or penuriousness—which? Will the present Government wipe this stain from the most philanthropic and liberal-minded nation on the earth?

Medical men have devoted their lives to the preservation of human life; and surely it cannot be out of place to direct their attention to this wilful waste of the defenders of the wooden walls of Britannia, who rules the waves.

I am, etc., J. C. Reid.

Newbiggin-by-Sea, 24th February, 1857.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, February 27th.

THE CATTLE DISEASE.

In reply to Lord Polwarth—

Lord Stanley of Alderley said, the Government had received no additional information of the existence of this disease; but the Custom-House officers had power by law to destroy foreign cattle supposed to be affected with any contagious disease. The Government would direct communications to be made to our consuls at foreign ports requesting them to send any information they could obtain: and the Custom-House officers, having their attention called to the existence of the disease, would watch narrowly all cattle imported from abroad.

HOUSE OF COMMONS.—Thursday, February 26th.

DISEASE AMONG CATTLE.

Mr. Stafford asked whether the attention of the Government had been called to the epidemic disease among cattle in Central Europe; and whether the Board of Control had taken any measures to prevent the landing of diseased cattle in this country?

Mr. Lowe replied, that the attention of the Board of Trade had been called to the subject, which had put itself in communication with the Foreign Office, requesting that department to obtain from consuls abroad all the information possible on the subject. The Board of Trade had likewise put itself in communication with the Customs, which department possessed an Act of Parliament, under which it had powers sufficient to prevent the importation of infected animals. As an instance that the officers of that department were not wanting in diligence, he could inform the House, that on a calf on board the *Concordia*, from Rotterdam, exhibiting symptoms of murain, they had the animal killed. Investigation then confirmed the suspicion that the animal was infected, and the body was accordingly destroyed. The remainder of the cargo was examined, and found free from disease.

Mr. Stafford gave notice that to-morrow, on the motion that the House, at its rising, do adjourn till Monday, he should call the serious attention of the House to this question of disease among foreign cattle.

Friday, February 27th.

THE MURRAIN IN CATTLE.

Mr. Stafford said that the answer given to him by the right hon. gentleman the Vice-President of the Board of Trade last evening had filled him and other hon. members with dismay. The right hon. gentleman had said that the Board of Customs had displayed extraordinary sagacity by the destruction of one calf; but it was a subject for alarm that the remainder of the cargo, of which this calf was one, had been allowed to be landed; and it was probable that they might have been infected by it. Would the right hon. gentleman state whether the Board of Customs, or any other department of the Government, had made arrangements for preventing the entrance into this country of one of the most tremendous scourges which could affect a thickly populated land like ours?

Mr. Lowe, in the absence of notice of the hon. gentleman's intention to put this question, could only say that the Board of Trade had put themselves in communication with the Foreign Office, in order to obtain from our consuls all possible information on this subject, and had also communicated with the Board of Customs, from which they had received assurances that they were perfectly awake to the danger which threatened the cattle of this country. As a proof of that, they had stopped one animal and had it killed on suspicion of its being affected with this disease.

Lord Naas thought that the answer of the right hon. gentleman was most unsatisfactory. In 1745 this murrain was introduced into England by two calves from Holland, and the consequence was the destruction of 40,000 head of cattle in Nottinghamshire and Leicestershire, and almost as many in Cheshire. The disease raged with scarcely any intermission for eight years, and visited nearly every part of the grazing districts of England. The disease was of a most contagious character. It had been known to be carried in the clothes of persons who attended upon the cattle, and there had never been a case in which contact had occurred without the disease being communicated. The permitting a cargo of cattle to land one of which was affected with this disorder, must have resulted from the grossest ignorance, or from want of instructions on the part of the officials. The practice of every State in Europe was at once to prohibit the importation of cattle from countries where disease had broken out, and all who had studied the subject were of opinion that it was the duty of our Government to adopt the same system. He sincerely hoped, therefore, that measures would be taken without delay to prevent the extension of this dreadful scourge.

Mr. Packe said this was a subject which concerned every consumer of meat in this country, as well as the graziers and breeders of cattle, and the answers given on that evening and the evening before by the Vice-President of the Board of Trade were most unsatisfactory. Since live cattle had been admitted duty free under Sir R. Peel's measures, there had been a very considerable increase in the fatal diseases to which cattle were liable, and the agricultural interest had been extremely patient under the losses to which it was thereby exposed. They knew that a shipload of diseased cattle had been dispersed over the country, causing great danger of contagion. Cattle bought at fairs sometimes did not show symptoms of the complaint till two or three weeks after they had caught the infection; and the most ruinous losses must ensue to the graziers if a check were not put immediately upon importation. He therefore entreated the noble lord at the head of the Government to take this urgent matter into serious consideration.

Sir J. Tyrrell said that attention had been called to this subject for many years by the Royal Agricultural Society; but in their report on the lungs complaint, that body had come to the conclusion that, unfortunately, nobody knew anything about it. A few years ago, small-pox spread extensively among sheep in this country, the disease having, no doubt, been the result of foreign importation; but it afterwards suddenly disappeared in apparently the most miraculous manner. The right hon. gentleman (Mr. Lowe) said he had destroyed one calf affected with the disease, so that his experience in the matter was plainly very limited.

Lord Palmerston promised that inquiry should be made by the Government, with a view to the adoption of whatever precautions were practicable to prevent the spread of disease among cattle.

Attempt to Poison the Foreign Residents in Hongkong. The correspondent of the *Times* of March 2nd, in a letter from Hongkong dated January 15th, states that an attempt had been made that morning to poison a considerable portion of the foreign community. The author of this diabolical act was a Chinese baker named Esing, who (being doubtless induced by the promises of reward held out by the mandarins) mixed with his bread a large quantity of arsenic, and, after sending it round to his customers, left for Macao in a steamer at 8 A.M. All who partook of this bread were shortly afterwards seized with violent retchings and other symptoms; but, prompt remedies being applied, no deaths had ensued at the date of the letter, although great numbers had been ill, and some were still in a dangerous state. The quantity of arsenic was too large to answer the intended purpose, its presence being immediately betrayed, and antidotes forthwith administered. A steamer had been despatched to Macao, in hopes of intercepting Esing; but it was feared he would have gained the mainland ere she arrived.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Jones. On March 1st, at Sydenham, Kent, the wife of Edward Jones, M.D., of a son.

Keyser. On February 28th, at 21, Norfolk Crescent, Hyde Park, the wife of Alfred Keyser, Esq., Surgeon, of a son.

Westmacott. On February 27th, at 10, St. Mary's Terrace, Maida Hill, the wife of John Guise Westmacott, M.D., of a son.

Wilkins. On October 21st, 1856, at sea, on board the ship *Agincourt*, from London to Madras, the wife of Jacob Wilkins, M.D., H.E.I.C.S., prematurely, of a daughter, who survived only a few hours.

*Wilkinson. On February 28th, at Greenheys, Manchester, the wife of M. A. Eason Wilkinson, M.D., of a son.

DEATHS.

Coope. On February 23rd, at Surbiton, Surrey, George Frederick, infant son of A. F. Coope, M.D.

Davies, William, Esq., Surgeon, of South Hackney, at Horncastle, suddenly, aged 57, on February 23rd.

Evans, Thomas, M.D., of Stockwell Park House, Surrey, and Kidwelly, Carmarthenshire, of heart-disease and bronchopneumonia, aged 57, on March 1st.

Gaye. On February 28th, at 14, Oxford Terrace, Chelsea, Emma Anne, fourth daughter of W. J. Gaye, Esq., Surgeon, aged 11.

Gibbs. On February 21st, at Exeter, aged 40, of chronic bronchitis, Sophia Maria Ann, daughter of Harry Leeke Gibbs, M.D.

Hume, John Robert, M.D., C.B., one of Her Majesty's Commissioners in Lunacy, at 9, Curzon Street, May Fair, aged 75, on March 1st.

McManus. On February 24th, in West Square, Georgiana Benigna, widow of the late David McManus, M.D., of Baker Street, Portman Square.

O'Connor, James, M.D., at Bath, aged 87, on February 13th.

O'Dwyer, John, Esq., late of the Bengal Medical Service, at 20, Edward Street, Portman Square, on February 26th.

*Ryland, Frederick, Esq., Surgeon, of Edgbaston, Birmingham, lately.

Squire. On February 21st and 22nd, at Brightlingsea, Essex, the infant twin sons of Samuel Nathaniel Squire, Esq., Surgeon.

Swayne. On February 21st, at Rochester, aged 73, Bessy, widow of the late Stephen Jennings Swayne, M.D., Deputy Inspector of Hospitals.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, February 27th, 1857:—

Brookhouse, Joseph Orpe, Brighton
Cope, Ricardo, Spark Hill, Birmingham
Hutchinson, William Johnson Dawson, Barnard Castle, Durham
Le Sage, William Louis, Ramsbury, Wiltshire
MacCormac, William, Belfast
MacGregor, John James, Melbourne, Australia
Miller, Charles James, Brighton
Paterson, Charles, Tarland, Aberdeenshire
Pemberton, Clarence Linden Henderson, Landport Terrace, Southsea, Hants
Rengifo, Pio, New Granada
Rogers, Braithwaite, Whitehaven, Cumberland
Smith, Frederick Henry, Greenwich
Smith, Samuel, Hudson's Bay Company
Stuart, Kenneth Bruce, Calcutta
Williams, Joseph, Westerleigh, near Bristol

At the same meeting of the Court—

Hudson, John, of H.M.S. *Rhadamanthus*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date April 25th, 1853.

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 28th, 1857.

[From the Registrar-General's Report.]

The deaths in London have exhibited a slow but constant decrease during the four weeks of February. In the week that ended last Saturday, the total number registered was 1216. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1148. But the deaths now returned occurred in an increased population; and for comparison with the average, the latter should be raised proportionally to the increase, in which case it will become 1263. The result of the comparison is a difference of 47, showing that the rate of mortality last week was rather below the average.

The zymotic class of diseases was fatal last week in 197 cases: the corrected average is 243. These figures indicate a very favourable condition of health, especially amongst young persons, who are chiefly liable to many of the diseases included under this head. Hooping-cough is still the most fatal of the zymotic complaints, but it shows a decrease on previous returns, the weekly deaths from it in February having been 61, 70, 74, and 53. Of 45 deaths from typhus and common fever, only six occurred in the southern districts, although in the five divisions of the metropolis the south contains the largest population. The central districts also appear to have been comparatively free from fever, one death in that division having been from scarlatina, and four from typhus. A woman died in Long's Court, in the Charing Cross sub-district, from cholera, after forty-eight hours illness. Mr. Leonard, who attended her during the latter stage of the disease, states that it bore a close resemblance to the Asiatic type.

The deaths from pulmonary diseases were last week 304, whilst the corrected average of corresponding weeks is 276. The excess is not very considerable, and arises from bronchitis, which was fatal in 166 cases (the average being 134), a number greater by 75 than that referred to pneumonia. Phthisis, which stands in the tubercular class, carried off 142 persons. Two persons died of carbuncle; three of intemperance; a boy, nine years of age, died under chloroform administered with the view to an operation. Only two nonagenarians, both widows, and the oldest 91 years of age, are recorded in the returns.

Last week the births of 925 boys and 896 girls, in all 1821 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1631.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·214 in. The mean reading was above 30 in. on every day from Wednesday, the 18th ultimo, to the end of the month. The barometer rose so high as 30·40 in. on Saturday. The mean temperature of the week was 41·2°, and was 1·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The highest temperature occurred on Saturday, and was 56·9°; the lowest occurred on Wednesday, and was 24·9°. The range of the week was 32°. The mean dew-point temperature was 36·9°, and the difference between this and the mean temperature of the air was 4·3°. The air was frequently calm; the wind was very variable; at the beginning and end of the week it was in the south-west. There was no rain, except a little, not measurable by the gauge, on Wednesday.

Geological Discovery. There has lately been discovered in the blue lias quarries belonging to Mr. John Crees, of Street, Somerset, a very perfect specimen of the plesiosaurus. It measures seven feet nine inches in length from the tip of the snout to the end of the tail. It was lying on its right side at about eighteen feet below the surface, deeply imbedded in one of the lowest of the blue lias rocks, with its beautiful swan-like neck turned very gracefully backwards, and its long tail bent upwards in a curve. Mr. J. E. Crees has spent a great deal of time and labour in cleaning it, and it is now exposed to public view. It is considered by some connoisseurs who have seen it, to be the most perfect specimen that has yet been discovered, there being not the smallest part missing. It is a very remarkable fact, that about eight months ago there was discovered in the same quarry, at about fifteen feet nearer the surface, and, as near as can be ascertained, in a direct line above, a very perfect specimen of the ichthyosaurus, in a bed of marl. The specimen was purchased for His Grace the Duke of Marlborough for nearly £100, and is now included in the collection of the noble duke at Blenheim, Oxfordshire.

POOR-LAW MEDICAL REFORM.

MEETINGS OF THE STUDENTS OF THE MANCHESTER SCHOOL OF MEDICINE.

A preliminary meeting of the students of the Manchester School of Medicine, in support of Mr. Griffin's movement, was held on Thursday, February 19th, W. Ramsden, Esq., in the chair, when a committee, consisting of a chairman, secretary, treasurer, and seven members, was appointed.

A general meeting of the students was held on Tuesday, March 3rd, when the following resolutions were unanimously adopted: Edward H. Petman, Esq., in the chair.

1. Proposed by Mr. Ramsden, and seconded by Mr. Barrett—

"That the Manchester medical students are desirous of expressing their cordial approval of the measures undertaken by Mr. Griffin for the regulation of the salaries of the Union medical officers; and are willing to act in cooperation with other medical students in support of those measures."

2. Proposed by Mr. W. H. Broadbent, seconded by Mr. Payne—

"That this meeting considers that the power of fixing the salaries of Union medical officers, as at present vested, has been the source of great injustice and oppression, and ought to be transferred to a more disinterested and impartial tribunal."

3. Proposed by Mr. Brooke, and seconded by Mr. T. P. Smith—

"That this meeting, considering unity of purpose and good faith among members of the profession of vital importance to the cause of medical reform, desires to express its unqualified disapproval of the conduct of those who not only treat this movement with neglect and apathy, but even act contrary to its principles."

4. Proposed by Mr. Barrett, and seconded by Mr. Gould—

"That this School is in favour of a general meeting of students, representing the different medical schools, to express publicly their approval of, and their determination to assist to the best of their power, any measures taken to secure the more equitable and adequate remuneration of their medical brethren holding public appointments."

5. Proposed by Mr. Sephton, and seconded by Mr. Ramsden—

"That a member of the committee be appointed by ballot to represent this School at the aggregate meeting of students in London."

6. Proposed by Mr. Smith, and seconded by Mr. Brooke—

"That a subscription be entered into towards a fund for defraying the expenses incurred by these meetings and the sending up a delegate, and that the surplus be handed over to Williams' bank to the account of the Poor-Law Medical Reform Association."

7. Proposed by Mr. Payne, and seconded by Mr. Sephton—

"That a report of the proceedings of this meeting be forwarded to the medical and local journals."

Mr. W. Ramsden having taken the chair:

8. Mr. T. P. Smith proposed, and Mr. Broadbent seconded—

"That a vote of thanks be awarded to Edward H. Pitman, Esq., for the able manner in which he has acted as chairman throughout the whole of these proceedings."

9. Proposed by Mr. Gould, and seconded by Mr. Pitman—

"That a vote of thanks be awarded to John D. Bird, Esq., for the able way in which he has discharged his duties as honorary secretary."

Thos. P. Smith was then chosen to represent the School at the general meeting in London.

John Durham Bird, *Hon. Sec.*

MEETING OF STUDENTS OF THE YORK SCHOOL OF MEDICINE.

A meeting of the students of the York School of Medicine was holden on March 3rd, for the purpose of considering the present position of the poor-law medical officers. Resolutions, similar to those passed at the meeting of the London students, were unanimously agreed upon; and subscriptions were entered into by the students and others.

Royal College of Surgeons. The course of lectures in the theatre of the College for the present year will be commenced on Tuesday, the 10th instant, by Professor Busk, who will deliver twelve lectures on the Anatomy, Physiology, and Classification of the Invertebrate Animals. Professor Quekett will, on Tuesday, the 7th of April, commence a course of twelve lectures on the Structure of the Skeleton of Plants and Invertebrate Animals. The course will be concluded by Professor Hewett's six lectures on the Injuries and Diseases of the Head, commencing on the 5th of May.

ACTION FOR RECOVERY OF FEES.

ROBERTS *v.* KERFOOT.

Mr. Hawkins appeared for the plaintiff; and Mr. Turner for the defendant.

The plaintiff, Thomas Roberts, was a surgeon and apothecary in Bridge-street, Southwark, and he sued the defendant, Thomas Kerfoot, a publican at Stockwell, to recover the sum of £46 6*s.* 7*d.*, being the amount of the plaintiff's bill for his attendance as a surgeon and medicines supplied to the defendant's wife. From the plaintiff's evidence it appeared that in the month of June, 1850, he was called in to attend the defendant's wife, and continued to do so daily, and often twice a-day, down to the beginning of October. The defendant at that time was living in the New North Road, Hoxton, and was keeping a public-house there. The plaintiff paid in all about seventy visits, having to treat his patient for prolapsus uteri and femoral hernia. With the assistance of the surgeon from Guy's Hospital the hernia was reduced, and the patient recovered of her other complaints, though she died afterwards of consumption. The plaintiff charged 5*s.* for each visit, and when the defendant removed to Warwick Place, Pimlico, he charged 7*s.* 6*d.*, and generally at Hoxton charged for two visits each day. The rest of the bill was made up of charges for medicines. The plaintiff was cross-examined to show that the case was a medical, and not a surgical case, and that he had undertaken to attend as a friend, upon the understanding that he should have refreshments, dinners, wines, and spirits, etc., in lieu of payment. The plaintiff denied this suggestion, though he admitted that he often had taken refreshment at the defendant's house, and had had wine (two dozen) sent to him by the defendant.

Mr. Turner submitted that the plaintiff had no case. The bill was an apothecary's bill, and the Apothecaries' Act required that before an apothecary could recover on such a bill he should prove that at the time he was a licentiate of the company. The learned counsel cited the "Apothecaries' Company *v.* Lotinga" (2 M. and R., 495).

Lord Campbell said there was evidence to go to the jury.

Mr. Turner examined the defendant, who stated that in June, 1850, he called in the plaintiff to attend his wife for consumption, and that he attended as a friend, upon the understanding that he should have refreshments, dinners, etc., free of charge. He said he had sent the plaintiff wine, whisky, and rum. He also produced an account of refreshments which he said the plaintiff had had at his house. This amounted to about £22.

The plaintiff had accounted for the delay in enforcing his demand by saying that when he asked the defendant for payment of his bill the defendant pleaded his inability to pay. The defendant, however, stated that for some years the plaintiff had made no demand at all, and he relied upon the length of time which had elapsed since October, 1850, as confirmation of his statement as to the terms on which the plaintiff had attended.

Lord Campbell, in summing up the evidence, said the first question for the jury was whether the plaintiff had attended on the terms suggested by the defendant; for, if so, he could not recover. If the jury thought there was no such agreement, they must then see how much of the plaintiff's bill was for attendance and medicines supplied as a surgeon. For so much the plaintiff could recover. But, as to the services and medicines supplied by the plaintiff as an apothecary, the plaintiff could not recover, for in the year 1850 he was not a licentiate of the Apothecaries' Company, though he was so now.

The jury found for the plaintiff—Damages, £20.

Medical Society of London. The Fothergillian gold medal has been awarded to Mr. Edward Canton, for an essay on "Diseases of the Spine". A silver medal has been awarded to Dr. Edward Smith, for special services rendered to the Society during the four years in which that gentleman has held the office of Honorary Secretary. The silver medal which the Society offers to an Honorary or Corresponding Fellow, or to a non-Fellow, for a paper read before the Society, and which was last year awarded to one of our associates, has not been this year awarded.

Medical Society of London. On this (Saturday) evening, a paper will be read by Graily Hewitt, M.D., "On the Diagnosis of Apneumatosis (Pulmonary Collapse)."

The general meeting for election of Officers and Council will take place the same evening at 7 o'clock.

Dr. Kane, the Arctic Voyager. Our American advices state that a despatch had been received in New York by Mr. H. Grinnell, conveying sad intelligence of the intrepid Dr. Kane. The despatch comes *viâ* Mobile, and is as follows:—

"Havannah, February 13th, 1857.

"Dr. Kane is still alive, but he can't last through the day. His mind keeps right. He has just left his friends, and bidden his countrymen farewell. "W. Morton."

Mr. Morton has been Dr. Kane's faithful servant and steward for the last seven years, and accompanied him twice to the Arctic regions. Dr. Kane is thirty-four years of age. His disease is of a scrofulous nature, arising from scurvy and exposure during his northern explorations. His life has four times been almost despaired of—once in Egypt, from an attack of plague; once in Africa, prostrated by the African fever; once in the Mediterranean, with lock-jaw; and he was dangerously wounded in the Mexican war, while carrying despatches for General Scott between Vera Cruz and Mexico. (*Times.*)

Dispensing of Medicines by Homœopathic Practitioners. The Imperial Court of Bordeaux, in November last, decided, in respect to a case brought before it, that the infinite small doses of homœopathic medicines had no active power which could bring them under the control of the law regulating the sale of drugs in France. An appeal against this decision having been brought before the Court of Cassation at Angoulême, it was there ruled that homœopaths have no right to dispense their own medicines, but that they must confine themselves to prescribing, and have their medicines furnished by druggists keeping open shops.

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

A Student is recommended to make the best use of the opportunities afforded him of acquiring such a knowledge of his profession as shall obviate embarrassment in emergencies. A clear knowledge of principles, and sound common sense, are the best guides of every medical man. But, if our correspondent wishes to have a portable book which he may use to refresh his memory in difficult cases, we would recommend to him "Shaw's Medical Remembrancer", published by Churchill.

A Village Doctor, whose letter on Professional Charges appeared in the British Medical Journal of February 7, will much oblige by forwarding his name and address to the Editor. A letter for the "Village Doctor" has been forwarded to the Office of the Journal, but his address, formerly given, has unfortunately been mislaid.

Homœopathic Medical Practice. The subjoined Circular has been forwarded to us. Dr. Eadon's condescension in consenting to extend the benefits of Homœopathy to the working classes, at low charges, will no doubt be duly appreciated.

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"229, Lincoln Terrace, Stretford Road, Manchester, Nov. 12, 1856."

The Tobacco Question. An Associate, who does not wish his name to appear, is "surprised" at our defence of the moderate use of Tobacco, and among others, asks us the following questions. "If the smoke does not enter the lungs, how is it that I have seen it come from an opening in the trachea as long as the pipe was kept in the mouth; and where does the black sputum come from in miners and others who are exposed to dust and smoke". In answer to the first part of this question, we must confess that we have never had the opportunity of seeing the smoke coming from an opening in the trachea; and with respect to the second, it answers itself; it is the coal dust of the *atmosphere* which enters the lungs and blackens the sputum, the tobacco smoke having nothing to do with it. The sputa of colliers, who never smoke, is just as black as that of those who do. Our correspondent again asks, "What does your statement of its consumption in the Asylums prove, except that it is has become necessary from abuse, and the habit cannot be abandoned all at once; does it not lead to the presumption that a many of the patients have smoked away their senses, and thus been sent to the Asylums to be cured?" The answer to this question is simple. Women preponderate in Lunatic Asylums, and women, as a rule, do not smoke.

W.B. Our series of Articles on the "Diseases of Special Occupations" will commence next week, with a Paper on the "Grinders' Disease", by our able Associate, Dr. J. C. Hall, of Sheffield. It will be continued weekly.

Communications have been received from:—Dr. J. C. Hall; Dr. J. Ballard Pitt; Mr. Augustin Prichard; Mr. John Burrows; Dr. G. Goddard Rogers; Mr. J. S. Gamgee; Mr. H. W. Rumsey; Dr. David Nelson; Mr. George Greaves; Dr. Edward Smith; Mr. William Mitchell Clarke; Dr. W. O. Markham; Mr. T. Holmes; Mr. Thomas Paget; Dr. Little; Dr. F. Brittan; Dr. Ogden; Dr. H. Reid; Dr. Halford; Dr. Sieveking; Dr. McWilliam; Mr. Arthur B. Rye; Dr. Radclyffe Hall; Mr. E. McDermot; Mr. W. H. Winchester; Dr. Sloane; and Mr. Lupton.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Cases and Observations illustrative of the Beneficial Results which may be obtained by close attention and perseverance in some of the most unpromising instances of Spinal Deformity, without the use of Steel Stays or other similar contrivances: with Engravings illustrative of the Cases. By *Samuel Hare, F.R.C.S. Second Edition. London: John Churchill. 1857.
2. Clinical Lectures on Certain Diseases of the Urinary Organs: and on Dropsies. By Robert Bentley Todd, M.D., F.R.S. London: Churchill. 1857.
3. On Diseases of the Skin. By *Erasmus Wilson, F.R.S. Fourth Edition. London: Churchill. 1857.
4. The Anatomical Remembrancer or Complete Pocket Anatomist. Fifth Edition. London: Churchill. 1857.
5. Cranial Presentations and Cranial Positions suggestions Practical and Critical. By *R. U. West, M.D. pp. 60. W. Mackenzie, Paternoster Row, London.
6. Address to the Medico-Chirurgical Society of Edinburgh. delivered on the taking the Chair of the Society, December 17th, 1856. By *James Miller, F.R.S.E., Professor of Surgery in the University of Edinburgh. pp. 16. Edinburgh: Murray & Gibb.
7. The Monogenesis of Physical Forces: a Lecture delivered at the London Institution on February 18, 1857. By Alfred Smee, F.R.S. London: Longmans. 1857.
8. Statistical Society of London. First Report of the Committee on Beneficent Institutions. 1. The Medical Charities of the Metropolis. London: John William Parker & Son. 1857.

ADVERTISEMENTS.

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POOR-LAW MEDICAL REFORM.

The Aggregate Meeting of the Students of Medicine throughout the Kingdom will be held at ST. MARTIN'S HALL, on Thursday next, March 12th. Doors open at Seven o'clock. Chair to be taken at half-past Seven precisely, by

A. H. LAYARD, ESQ., M.P.

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The present Examiners are eligible, and intend to offer themselves, for re-election.

Candidates must announce their names to the Registrar on or before the 25th of March.

Burlington House.
March 4th, 1857.

By order of the Senate,
WM. B. CARPENTER, Registrar.

TO ADVERTISERS.

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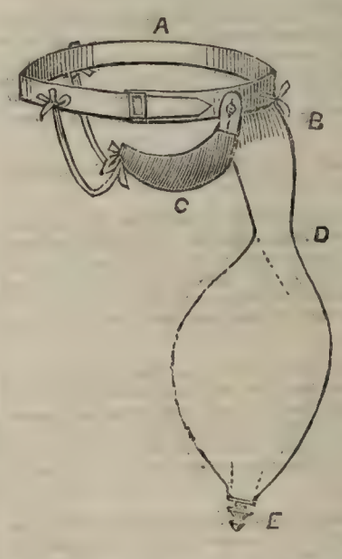
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XI.] LONDON: SATURDAY, MARCH 14, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

TWO CASES OF LITHOTRITY, FOLLOWED BY PYÆMIA.

CASE I. William H., aged 70, was admitted, under the care of Mr. Hawkins, on August 6th, on account of stone in the bladder, of large size. His general health was good, and the symptoms not very severe. The urine contained a good deal of blood, but was otherwise healthy. The urethra was of the full size, and the prostate offered no obstacle to the passage of an instrument. It was determined to perform the operation of crushing the stone, and this was accordingly done on Aug. 18th. A large and hard lithic acid calculus was found, and broken to pieces, one of which was reduced to powder. No severe symptoms followed; and the operation was repeated in a week, and then at short intervals during the next month. After the first few sittings, the urine was always clear and acid, showing no traces of inflammation of the bladder, though the patient complained of some pain in making water; but, after the sixth sitting, the urine contained ropy mucus, and was alkaline for two or three days afterwards. After the eighth sitting, the pieces were collected, and weighed 110 grains: they consisted of a mixture of lithic acid with a small quantity of fusible phosphates. After this, three more operations were performed; the last (eleventh) on the 1st of December. He was by this time considerably out of health, and was losing flesh and spirits. On December 4th, rigors came on, attended with bilious vomiting and diarrhœa. He was very thirsty, with dry brown tongue, and pain in the back and abdomen. The principal symptoms, from this time to that of his death, were diarrhœa, great prostration, drowsiness, and pain in the region of the right kidney, aggravated on pressure. Towards the end of his life, he was in a state of wandering delirium, moaning constantly. He died on December 13th. The whole of the stone passed up to the time of his death weighed 210 grains.

Chloroform was not administered in any of the operations.

POST MORTEM EXAMINATION. The body was universally of a deep yellow tinge. There was recent pleurisy on the right side of the chest, the pleura being covered with a very thick layer of lymph; and there was much yellow opaque fluid, mixed with flakes of lymph, in the pleural cavity. There were several circumscribed deposits of pus in the substance of the right lung: similar and more numerous deposits were found in the left lung, especially its lower lobe. The spleen was large, and soft in texture. A large abscess, containing very foul matter, was found between the surface of the right kidney and its capsule; it was connected with a sloughing abscess of the kidney itself, which extended some little way into its substance. There was also a second abscess, of smaller size, deeper in the same organ. The left kidney was of normal size; its surface was smooth, and presented a few cysts, with limpid transparent contents. There were two or three dark patches on this surface. Both ureters were slightly dilated and thickened, and their lining membrane was vascular. The bladder was of normal size and thickness; its mucous lining only a little more vascular than natural. It contained several large fragments of calculi, apparently originally two in number, which had been recently crushed. The middle lobe of the prostate was much enlarged, and projected considerably into the bladder, immediately behind the orifice of the urethra. The pieces of stone found in the bladder weighed, after drying, 390 grains.

CASE II. Richard D., aged 64, a farmer, apparently in good health, was admitted on January 23rd, 1857, under Mr. Hewett's care. He had had the usual symptoms of stone for many years, and had latterly experienced more pain than usual. The water contained blood and pus, and he had suffered on more than one occasion from retention of urine. The calculus was very easily felt; and, as the surface of stone swept over by the sound appeared to be very large, Mr. Hewett was anxious to perform the operation of lithotomy. To this, however, the man would by no means consent, as he dreaded "cutting"; but was prepared to submit to any other treatment. Accordingly, on January 29th, amylene was administered, and the operation of lithotrity performed. The calculus which was seized was of considerable size, and yielded very easily to the instrument; so that the pressure of the hand was sufficient to crush fragments of moderate size. The patient passed a bad night, and complained next morning of considerable pain in the bladder and urethra, and passed urine (with some fragments of calculus) involuntarily. The urine became very turbid, loaded with thick stringy mucus. He was ordered opiates, but without much relief to the pain; and, on February 2nd, rigors supervened. On the 4th, a yellow tinge of the skin, which gradually deepened up to the time of his death, indicated the presence of pyæmia. He became insensible in the evening, and died next day, exactly one week after the operation.

On *post mortem* examination, the skin was found intensely yellow, and even the lining membrane of the heart had acquired a deep yellow colour. The peritoneum was healthy; the spleen engorged and rotten. The kidneys were large, their cortical parts being yellow and light coloured. The mucous membrane of the pelves was thickened, soft, and pulpy, and covered in one or two places with blood. The ureters were vascular. The bladder was somewhat thickened and fasciculated, with one or two patches of ulceration at its posterior and lower part. It contained three large pyramidal masses of calculus, all of nearly the same size, about an inch in height; and the fragments of a fourth calculus, which had evidently been of the same shape and size as the others. These weighed, when fresh, altogether 2 oz. 40 grs. The prostate gland was large, and the urethra very vascular.

REMARKS. These cases of lithotrity present several points of interest. In the first place, they suggest considerable doubts as to the advisability of the operation in cases where the stone is large, even although all other symptoms may be favourable. In the first case, the patient, although old, was in perfectly good health, and the kidneys must have been as healthy as they are ever found after some years continuance of stone in the bladder. The various operations never gave any unusual pain; and the bladder, as proved on *post mortem* inspection, was entirely uninjured by the lithotrite. The continuous irritation, however, gave rise to inflammation, extending up to the kidney, and followed by abscess in that organ; and this again became the exciting cause of secondary infection in the blood, an event which was favoured by the extreme depression which followed on the protracted treatment necessary in crushing a large and hard stone. Another point of interest is the quantity of stone which was removed by the operation, compared to that left in the bladder. It will be seen that the quantity remaining in the bladder was not far short of twice as much as that collected after eleven sittings; so that, allowing for waste in collecting the latter, and for the progressive increase in the quantity passed after each operation as the fragments became reduced in size (which is shown by comparing the quantity passed after eight sittings, 110 grains, with that passed after the next three, 100 grains), it is impossible to suppose that the whole stone could have been removed in less than double the number of sittings. This is a very serious element in the calculation, when it is considered that the operations already performed had extended over more than three months, though repeated as frequently as prudence allowed. It is not,

therefore, without reason that many surgeons doubt the expediency of submitting cases of large and hard stone to a treatment which is so protracted and subject to so many risks. It must be allowed, indeed, that the choice is not easy, as in these cases the operation of lithotomy is very frequently followed by death; still, if the patient be in good health, and the urine exhibit no evidence of organic disease of the kidneys, the cutting operation has a fair chance of success, is followed in most instances by less irritation than crushing, and, if successful, restores the patient to health in a far shorter time. We shall give the particulars of an operation performed at St. George's Hospital by Mr. Tatum, on March 5th, in a case of this kind, as soon as it is completed.

The second case is peculiar from the great rapidity of the fatal termination after an operation which seemed in no degree dangerous. The case was not indeed, and was known not to be, a favourable one for lithotrity, on account of the very large mass of stone contained in the bladder, and would have been the more favourable for cutting, as this mass was divided into pieces which could have been easily extracted. As, however, the treatment was dictated by the patient, there was no choice in the matter. The operation was accomplished without any force; the piece of stone seized had been caught in the most favourable position, and yielded easily to the instrument.

There was no evidence at the *post mortem* examination of any violence having been done to the bladder, as the patches of ulceration found seemed to be of old standing. That pyæmia should have supervened so speedily on the inflammation set up by the operation is, of course, an accidental circumstance, which might just as easily have followed the wound of lithotomy; it shows, however, that lithotrity is not quite so free from risk as is sometimes supposed. That the death was correctly attributed to pyæmia, although it occurred too soon to allow of the decisive evidence of secondary deposits, is sufficiently proved by the course of the symptoms, the deep yellow stain of the skin and other membranes, and the absence of any other cause of death.

WESTMINSTER HOSPITAL.

LOCAL TREATMENT OF CANCER.

Under the care of Barnard Holt, Esq.

[*From notes by* G. Nayler, Esq., *House-Surgeon.*]

E. B., a female, aged 28, married, was admitted Oct. 25th, 1856, on account of scirrhus of the breast, which had been noticed only two months. When she first perceived it, it was of the size of a walnut. She knew of no cause for it, and there was no hereditary history. Her health had, however, been delicate, and she was subject to enlarged glands. On admission, the tumour was fungating out of a small opening which had been made in the skin on account of superficial suppuration a few days before. The growth had been increasing rapidly, with much lancinating pain and loss of sleep. Her pulse was rapid and weak, general health feeble. A collection of pus deeper in the tumour was evacuated a few days after admission; and after her health had been somewhat restored it was determined to give her the chance of an operation. This was done on December 19th. In a month afterwards (January 21st) the tumour was found to be recurring in the form of a fungous mass springing from the centre of the incision, and two or three small nodules along its upper margin.

On the 28th the caustic recommended by Professor Simpson (sulphate of zinc made into a paste) was applied to the diseased parts, the cuticle having been previously removed, where necessary, by a blister, and morphia sprinkled on the ulcerated surface. This application caused acute pain for three hours, and less severe suffering for two hours afterwards. The slough separated in six days, and the surface exposed looked healthy. The mass, however, continued to grow.

On February 5th the sulphate of zinc was again applied (in powder), but it caused such intense pain, and was so powerless to check the rapid growth of the diseased mass, that it was evidently useless to repeat it; and the case was abandoned to a palliative treatment.

Remarks. The cases hitherto reported of the local treatment of cancer by escharotics in this Journal have, with one exception, been followed by at any rate temporary benefit. The exception was one under Mr. Curling's care at the London Hospital, where, however, the case was so evidently hopeless, that the treatment was never much insisted on. The present was an unfavourable case, in consequence of the great rapidity with which the tumour was growing, and its speedy return after operation. The caustic treatment here appears to have been quite powerless in checking the disease, and to have produced great increase of the patient's sufferings.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF INJURY OF THE EYEBALL.

Under the care of W. Lawrence, Esq.

[*From notes by* G. W. Callender, Esq.]

Case I. *Temporary Loss of Vision following the blow of a Whip.* Edwin N., aged 25, was admitted Oct. 22nd, on account of a blow across both eyes from the lash of a whip received six days before his admission. The blow had caused very severe pain: he fell to the ground, and was picked up unable to see at all. In a few hours, however, he recovered sufficient vision in the left eye to follow his occupation (that of a drover) for a few days. The right eye, however, continued blind, and he suffered much from pain across the brow on that side. On admission, the only morbid appearance noticed was that the right pupil was dilated and fixed, and the cornea surrounded by a faint vascular zone.

The treatment consisted in taking blood by cupping on the temple, and the administration of mercury to salivation. As the mercurial agency became established, improvement in vision commenced and progressed steadily, and he left the hospital, with very fair vision, on the twenty-third day.

Remarks. In this case the loss of vision was probably due to the cause vaguely spoken of as "concussion of the retina," a morbid condition, the precise anatomical nature of which is ill understood, and no doubt varies much in different cases. From the rapid and decisive improvement which followed the exhibition of mercury, it may be conjectured that in this instance there was some inflammatory exudation following a disturbance in the circulation of the retina, analogous to that which has been observed in the cerebral circulation in cases of concussion of the brain, and which produces those minute extravasations described by several English and French writers. As a contrast to the above, we shall briefly cite another case, in which the lesion to the deeper parts was of a more permanent character, and the loss of vision irremediable by medical treatment. In this no antiphlogistic means were indicated, and nothing remained but to watch the progress of the case, in the hope (which, however, was not realised) that the absorption of the effused blood might be followed by partial recovery.

Case II. *Wound of the Sclerotic: the Iris protruding through the Wound: the Conjunctiva remaining uninjured.* John W., aged 43, was admitted Oct. 18th. He had received a blow across the right eye from the bough of a tree, three days before admission. On examination, a small black prominence was seen under the conjunctiva on the inner side and above the cornea, which caused considerable irritation and pain by rubbing against the upper lid. There was a slit in the iris in a line with this prominence, and a small part of this muscle was seen on each side of the slit, the remainder being concealed by extravasated blood, which nearly filled the anterior chamber. This extravasation increased, till on the fourth day it nearly filled the chamber and concealed the iris. Under simple tonic treatment, however, it was gradually absorbed, and on the 17th of November the patient was discharged.

At that time, there was total loss of vision, the conjunctiva was rather thickened over the discoloured spot, and a few vessels converged towards its margin. The prominence was less considerable, and no longer produced irritation. The slit in the iris remained; otherwise that muscle presented its natural appearance. The eye was examined with the ophthalmoscope, but no morbid appearance was detected.

ST. GEORGE'S HOSPITAL.

CASES OF EMPYEMA, PNEUMOTHORAX, AND PLEURITIC EFFUSION.

Communicated by G. Goddard Rogers, M.D., Medical Registrar to the Hospital.

Case I. Under the care of H. Bence Jones, M.D., F.R.S. G. D., aged 40, a hatter, was admitted on 8th June 1854, in a state of great excitement and tremor, the result of three weeks constant devotion to the bottle. He had suffered three times during as many years from delirium tremens; and this attack commenced on the 5th of June. His general health had been excellent, and he never had any cough until the last named

date. The tongue was dry and tremulous; the pulse 112, and feeble, easily compressed; the skin covered with perspiration. The lower part of the left lung was quite dull on percussion, and ægophony could be clearly heard. Above, loud bronchial breathing existed. The sputa were mixed with blood. His manner was irritable and peevish; he called himself quite well, and refused to be treated medically. It was not until the 11th that sleep could be procured. A blister was put upon the left side; and two grains of calomel and a grain of opium were given every four hours, in conjunction with a febrifuge draught containing ten minims of laudanum; strong beef-tea was also taken at intervals.

June 9th. His cough distressed him very much. The expectoration was copious, and tinged with blood. He perspired profusely, and was still very tremulous, but quite rational. The urine was high coloured, and free from sediment or albumen. Towards evening he was more excited, and would not take the medicine. About midnight he became very violent, tearing his blankets to pieces, and using the most abusive language. He was placed in a padded room, and allowed porter, with drachm doses of laudanum every few hours; but he obtained no sleep.

June 10th and 11th. He continued in the same frantic state. On the second night, he slept for several hours, was quite rational when he awoke, and was at once taken back to the ward. His tongue was much furred; pulse 112, and very feeble; the perspiration was excessive; and the cough no better. There was want of breathing over the whole of the left lung. Calomel was given every four hours, the blister repeated, and two quarts of porter were allowed.

June 13th. He passed a tolerable night, and required much less opium. Pulse 108; tongue much cleaner; expectoration thinner, and rust coloured. The auscultatory signs were just the same. At night he took two drachms of tincture of opium, and slept well.

June 14th. The gums were swollen and tender. Bronchial breathing and ægophony were heard at about the middle of the left lung posteriorly. He was ordered to have wine and fish.

June 15th. Pulse less frequent; tongue not so clean. He slept well, and did not complain of his cough. The heart was observed beating to the right of the sternum. In the afternoon there was much dyspnœa, which continued all night, and up to the time of visiting him on the 16th. A pustular eruption appeared on various parts of the trunks and extremities, dependent, no doubt, upon the impoverished state of the blood; for he had taken scarcely any nourishment since the 13th. The intercostal spaces were obliterated on the left side, and the heart was still more displaced. A grooved needle was passed into the chest: on withdrawing it, the groove was filled with serum.

Up to the 19th, no alteration for the better occurred. He perspired constantly, and each night was restless and delirious. On the 19th and 20th, his appetite improved, and he was put upon a generous diet.

June 23rd. He laboured under a smart attack of bronchitis, which soon left him; but the left side was becoming more distended with fluid, and greatly interfered with his respiration.

June 27th. He was in such distress about noon, that a trocar was introduced, and thirty-two ounces of thin pus were drawn off, to his immediate and sensible relief.

June 29th. Breathing could be heard over a small space at the upper part of the left lung.

July 2nd. The left side was quite dull; the heart was pushed completely over to the right. The night-sweats were more profuse than ever, and the cough harassed him incessantly. His appetite, notwithstanding, continued improving.

July 3rd. He was again tapped, and thirty-five ounces of fluid, similar to the last, were withdrawn. A week of comparative comfort followed.

July 13th. The left side was totally dull, and bulged out in a remarkable manner. An incision was made, and eighty-two ounces of thin puriform fluid were evacuated. A profuse discharge of most offensive pus drained from the wound during the remaining five weeks of his life.

July 25th. A loud pericardial friction-sound was heard. He had vomiting, loss of appetite, and restlessness; but no pain in the præcordial region. Suffice it to say, that under suitable treatment, he recovered from a severe attack of pericarditis, and went on well until August 4th. Cholera was then prevalent, and every medical ward contained one or more cases. He began to vomit his meals occasionally: in other respects, he continued the same, and ate and drank well: and although he perspired much both night and day, he made no complaint of increasing weakness until the 14th. The wound in the side discharged freely. He sat up a little, and, to all appearance, showed marked signs of amendment. A slight attack of diarrhœa, just sufficient to awaken vigilance in the then peculiar condition of the hospital, occurred on the 23rd. It was not until the 30th that severe symptoms manifested themselves. Vomiting, rice-water evacuations, and cramps, then rapidly came on, and he sank in less than twenty-four hours.

The body was examined twenty-six hours after death. The left pleural sac was almost full of thin pus. The lung was compressed against the spine. The right pleura and lung were natural. No tubercles existed. The pericardium was universally and firmly adherent. The whole of the intestinal mucous lining was of an ashy colour, and Peyer's patches were much enlarged.

Case II. Under the care of H. Bence Jones, M.D., F.R.S. C. O'K., aged 25, admitted on December 17th, 1856, had been out of health two months. He attributed his weak condition to long continued exposure in his work, and to hard drinking. Three weeks before his admission, he was attacked with cough and acute pain in the left side. He was emaciated, and had a small weak pulse, and a patchy tongue. The right side of the chest was free. At the upper and back part of the left lung there was metallic resonance on speaking and breathing; and on succussion, a splashing was distinctly heard. There were considerable dyspnœa and congestion of the face, which continued for some days; and he scarcely slept at all.

December 19th. Diarrhœa came on. His cough was more troublesome, and was accompanied by a great deal of muco-purulent expectoration. Opiate injections were administered, and port wine given freely.

December 23rd. He had frequent vomiting, profuse perspirations, and great restlessness at night. His appetite was tolerably good.

December 25th. The heart's impulse was very feeble, but most perceptible to the right of the mesial line. The sounds were dull and distant, but there was no murmur. Increased vocal fremitus was perceptible over the right lung. A slight amount of respiration could be heard at the left apex; the rest of that side being dull on percussion.

December 26th. The fluid in the left pleura reached to the level of the heart; and at each beat a metallic sound was heard coinciding with the pulse. The attacks of diarrhœa were less frequent, but he continued to take astringent medicines.

December 28th. Crepitation and bronchial breathing were detected at the upper part of the right lung. The metallic click was more plainly distinguished on the left side, and it reached its greatest intensity on the 1st of January.

January 3rd. The metallic click was not so audible. The splashing upon succussion was as marked as ever. He was troubled with vomiting for the next twenty-four hours.

January 6th. He again rallied, although at night much harassed by the cough. The metallic sound was somewhat modified. It resembled pretty closely the ticking of a watch, and was synchronous with the heart's systole.

January 9th. When I saw him, he was sitting up by the fire, dressed; and in this position none of the sounds peculiar to the left side were heard. When he lay down in the afternoon, those who saw him recognised the metallic ring as clearly as before. Perhaps his change of posture contributed to the dyspnœa from which he suffered during the night, and throughout the whole of the 10th. Paracentesis was contemplated a day later, but he sank before the operation could be performed.

The examination was made thirty-six hours after death. On opening the thorax, a quantity of air rushed out of the left pleural sac with a hissing sound, and the parietes of the chest fell in to a considerable extent. The cavity contained five pints, by measure, of thick creamy pus. By an adhesion of the lung to the costal pleura about midway, the cavity was divided into an upper and a lower reservoir: the walls of both being much roughened by a very thick layer of lymph. The left lung was much compressed, and upon its outer surface near the apex was a small orifice, into which a probe could be introduced. This led into a vomica of the size of a hazel nut, and *here* was a free communication with one of the smaller bronchial tubes. The rest of the lung was carnified. Tubercles and several small vomicæ existed in the apex of the right lung. The heart and its valves were healthy. Nothing abnormal was detected amongst the abdominal viscera.

Case III. Under the care of J. A. Wilson, M.D. J. B., aged 22, a discharged soldier from Canada, came to St. George's

Hospital for the second time in November last. He was discharged from the army in 1851, after an attack of "inflammation on the chest". Previously to this, viz., in 1849, he suffered from pleurisy; and when he recovered, he noticed his heart beating "on the wrong side". The surgeon who attended him used frequently to measure his left side, which gradually enlarged. In the autumn of 1850, his breathing was much affected, and his chest was tapped; 110 ounces of clear fluid being taken away. Five weeks later, 86 ounces were removed. A year after, when recovering from an attack of rubeola, 124 ounces were taken away; in another year, 90 ounces; and twelve months later, the same quantity. The last operation was performed in February 1854, when another 90 ounces were withdrawn.

He came in suffering from slight bronchitis, from which he soon recovered; and, although he had made up his mind to undergo another operation, yet the comparative freedom of his respiration led Dr. Wilson to advise its postponement until more urgent symptoms should arise. He therefore left in the course of two or three weeks. The girth of his chest, which in the summer had been forty-one inches, was reduced to thirty-six inches, as was discovered by the tailor who measured him for a coat prior to his admission. When he went out, the measurement was not more than thirty-five inches.

Case iv. Under the care of W. E. Page, M.D. G. C., a blacksmith, aged 37, who came in on December 1st, had pleurisy three years and a half since; and great bulging of the left side and constant dyspnœa followed the attack. In five months he was tapped, and 66 ounces of clear fluid were removed; two months later, 156 ounces; three months after this, 96 ounces; in four months, 95 ounces; and finally, in December 1854, 65 ounces. From this date up to the time of admission he had been constantly at work; only making complaints of "fluid rolling about in his chest" when going up-hill or up-stairs.

The heart was pushed somewhat over to the right; and there was a difference of about three-eighths of an inch between the two sides. His tongue was coated; pulse quickish; face a little flushed; and respiration slightly hurried. In a day or two these symptoms vanished; he said that he felt quite well; and suddenly took it into his head to depart.

However, on January 28th, he again made his appearance, complaining of increased dyspnœa, and giving an account of some "inflammation on the chest" during his absence from the hospital, which attained its height towards the close of the first week in January. The cough and expectoration had not by any means abated, although the breathing was tolerably clear on the right side.

On February 7th, when the ear was applied just below the left scapula, a distinct metallic ring was audible on succussion. He still remains in the house; and, after taking calomel and opium until soreness of the gums supervened, he has been put upon iodide of potassium three times a day, and a morphia draught at bedtime. The heart is pushed a little over to the right; the affected side measures eighteen inches; the healthy one nineteen. He complains most of a burning pain at the lower part of the left side, and a sensation of faintness after succussion has been tried.

The case may subsequently afford matter worthy of a more extended report; at present, the chief point of interest is the metallic ring on succussion, indicating the presence of air in the pleural cavity. The sound, however, cannot be obtained by simply making him cough or speak; widely different from Case ii, where the signs of pneumothorax were so well marked. That the communication with the external air was caused by ulceration and perforation of a bronchial tube during his late inflammatory attack, there can be little doubt; for when he was a patient in December, no splash of fluid in the chest was heard.

Remarks. The two cases of hydrothorax here brought forward exhibited great bulging of the affected side, quite as marked as in any case of empyema—perhaps, more so. In many other instances of serous effusion, the same obliteration of the intercostal *sulci* has been observed; and it really does not seem very easy to explain what some writers mean when they speak of this dilatation of the chest as a condition peculiarly appertaining to purulent effusion. Great enlargement of the side, which contains a collection of pus, is exemplified in Case i; but in Case ii, where there was also a difference between the two sides of the chest, the contained air must have had much to do with the distension of the left side. In this latter case, had time been afforded for puncturing the pleura, the relief would only have been temporary. With tubercles in the lungs, the man must have sunk; but even had phthisis been absent, and the case progressed favourably, it could not have been set down as a *perfect cure*, if we are only to reckon as recoveries "the instances in which there is a perfect return of the affected side to its normal shape and capacity". Some deformity must have remained; for with a band of lymph stretching from the pulmonary to the costal pleura, such as was discovered after death, the dragging in of the parietes of the chest would have been considerable. If absence of contraction is the criterion of *cure*, then we must exclude Case i from the category. Yet, had cholera not seized upon the patient, there can be very little doubt, notwithstanding his broken constitution, that he would have gone out ultimately in comfortable health. And the very fact of an habitual drunkard, who had not one, but many, diseases to contend against, so far recovering, is a forcible warrant for rejecting the idea of the great danger of paracentesis thoracis; and adds another instance to those already adduced by Dr. Hamilton Roe, in confirmation of its safety.

Original Communications.

INFLAMMATORY ACTIONS, AND THEIR TREATMENT.

By C. Handfield Jones, M.B., F.R.S., Assistant-Physician to St. Mary's Hospital.

There is a pathological state in which, while the functional power of a living tissue is greatly lowered, or wholly arrested, its attraction for the blood is greatly increased. More of this fluid rushes to the spot through dilated arteries, reflux thither takes place through the veins, heat is considerably increased, and fibrinous exudation is poured out. This state is familiar to us all. We call it *sthenic* inflammation. It is often also called *acute*, but this term is less appropriate, because *asthenic* inflammation may run a rapid course, and sthenic again may be *chronic*, or slow in its progress. If the focus of disordered action in sthenic inflammation be extensive, or if the system be irritable, the heart's action is accelerated, and general pyrexia takes place. Sthenic inflammation requires that the general vital power shall not have been lowered either by preceding circumstances, or the exciting cause. I wish to lay particular stress on the part which the local attraction plays in sthenic inflammation. True, it is what we cannot see itself, but its existence seems to me positively determined by the following facts. There is increased arterial afflux, there is venous reflux, the red and the white corpuscles adhere to the sides of the capillaries, and do not become detached until the inflammation is subsiding. Whoever has carefully watched, in the frog's web, stasis occurring, and undergoing resolution, will be convinced, I think, that a dynamic relation between the blood and the tissue is mainly concerned in producing the phenomena observed. The existence of local attraction is also strongly evinced by the common experiment of applying pressure to the inflamed part. In sthenic inflammation it is ill borne, and scarcely excludes the blood even for the time it is applied. Hughes Bennett, W. Jones, Paget, Weber, Virchow, not to mention others, look upon this local attraction as the prime element in sthenic inflammation. I adopted this view in the *Manual of Pathology*, and will now further add, that I think the term *tissue* inflammation is in several respects preferable to sthenic. It specially puts forward the part played by the affected structure in the morbid process, and serves an important distinctive purpose.

The typical condition which I desire to contrast with the foregoing is *asthenic* inflammation, which in some respects might advantageously be designated *nerve* inflammation, for reasons which we shall immediately see. In this the part affected is hyperæmiated, overmuch blood being poured in through relaxed arteries; its functional power is impaired; its temperature is elevated, though less than in tissue inflammation; and it is often the seat of exudation. Respecting the microscopic appearances in such a state, we cannot say anything certainly, but it is probable that the arrest of the blood in the capillaries, and the adhesion of the corpuscles to their walls, would be wanting, or exist in only a slight degree. From naked eye observation, however, we are sure that there is much less local attraction than in tissue inflammation, the hyperæ-

miated parts are much more readily emptied by pressure, and the blood returns into them again much more slowly. If pyrexia exist, and the heart's action is accelerated, the pulse is not hard as in the former case, but yielding. Between these two states there is very much of apparent resemblance, and indeed that which positively differentiates them is only their dissimilar reaction when tested therapeutically. Thus one case of eczema, or psoriasis, will be aggravated greatly by the administration of arsenic, another will be cured quickly by it. One case of bronchitis will be greatly relieved by frequent doses of ipecacuan, another is not in the least benefited by it, but soon gets well under nitric acid and tonics. One case of pleuritis does admirably under calomel and opium, in another the same remedy is only prejudicial. Iritis, though for the most part yielding to mercury, is sometimes controlled better by oil of turpentine. The origin of such inflammations as we are considering is perfectly illustrated by the phenomena observed when the sympathetic is divided in the neck of an animal. The arteries of the part, to which the nerves divided are distributed, immediately dilate, throb strongly, are turgid with blood as well as all the vessels they supply, while the temperature rises considerably. If the animal be weakly, severe conjunctivitis may ensue with muco-purulent exudation. Stimulation of the divided nerve brings about contraction of the arteries, and cessation of the hyperæmia and heat.

Now, in the case of an asthenic inflammation, when we give a nervine tonic, arsenic, strychnine, or quinine, and find the train of morbid phenomena cease and disappear, is it not reasonable to conclude that the remedy acts by stimulating the vascular nerves, and so causing the same effects as in the experiment just detailed? It may further be remarked, that in cases of this nature, the persistent tendency to congestion of a tissue which has been inflamed illustrates well the deficiency of the capillary walls in contractile power. A patch of asthenic eczema, or psoriasis, may be cured by arsenic, so that there shall remain nothing more than an increased redness of the part, effaceable easily by pressure, but returning slowly after the pressure is removed; this, however, is most slow to yield, persists long after all other trace of the disease has ceased, and forms a basis (so to speak) on which this morbid action readily recurs. The cause of this is that the arteries leading to these capillary vessels have contractile coats, which readily respond to the nervine stimulus, while the capillaries, having only walls of simple homogeneous membrane, remain but little affected. As the sympathetic plexuses do not accompany the arteries of the limbs, or but scantily, there appears a difficulty in understanding how the vaso-motor nerves of these parts are supplied. In careful microscopic examination of the fingers, I have found nerve-bands, exactly resembling those of the sympathetic given off from the cerebro-spinal nerves, and it is probably through these that the vessels are influenced. I do not, of course, doubt that the arteries are often directly contracted by cold, but the phenomena of an algide fever could not be thus explained. Though the temperature of palsied limbs is usually lowered, I have observed a case in which it was more than two degrees above the sound one. In this, the paralysis may have involved the vaso-motor filaments.

Could we always have to deal with marked typical cases of sthenic and asthenic inflammations, our practice would be very simple and clear. Annul the tissue irritation in the one case, and give tone to the vessels in the other, *et voici tout.* But it can never be repeated too often, that types are far more rarely met with than intermediate instances, and therefore all our skill and acumen is constantly called into exercise to determine whether a given condition approximates more to the one type or the other, and to regulate our treatment accordingly. We must describe types to have landmarks, otherwise all safe proceeding would be impossible, and I by no means join with them who sneer at book descriptions and say they never meet them in practice. It is possible they may not; but every case they treat they ought to be able to refer to a position marking its approximation to one type or another. In sthenic systems, to annul tissue irritation may be all that is requisite, and it may be needless or even injurious to endeavour to tone the nerves. In multitudes, however, of weakly systems, the first of these indications is very speedily satisfied, or the time for it has passed away; and the second requires long efforts, perseverance, and management. The nerve power is weak and low, and is depressed again and again by trifling causes.

In the above remarks I have taken the case of pure and simple inflammations, not depending on the presence of any actual *materies morbi* in the blood. Among these I include many of the commoner diseases, the every-day instances of conjunctival, bronchial, gastric and intestinal catarrh, the scaly and vesicular eruptions, and inflammations produced by injury. From the therapeutical point of view, appealing as it does to vital reactions, and thus, as it seems to me, penetrating farther than others, we might extend the above list, and include the inflammations of measles, scarlatina, and, I think, continued fever. We deal with these on the same principles as we do with other non-specific inflammations; we do not trouble ourselves much about eliminating the supposed poison, but counteract its effects as well as we can. Even in syphilitic disease, where the system is under the influence of a communicated poison, what is more likely to bring on a relapse, after apparent cure, than any deterioration or breaking down of the general health, and what constitutes a better prophylactic than the maintenance of a vigorous state of the system? Our best curative endeavours do not, I think, go much in the direction of elimination; they rather counteract local manifestations of morbid action, and then seek to raise and maintain the general health and vigour.

Parallel with the inflammations, forming a kind of sister group ("facies non una, nec diversa tamen"), are the fevers. Viewed in a very general way, they present the same types, the sthenic, and the asthenic or low. The former (of which we see scarce anything nowadays) requires and is benefited by venesection, purgatives, antimony, refrigerants, and such treatment as is appropriate to sthenic inflammation. The latter commonly requires a large amount of wine and support from a very early period. The chief character of the first is excitement and irritability of tissue; of the second, vascular paralysis, the contractile power of the heart as well as of the arteries being much impaired.

Two other groups which may be noticed are the fluxes and the hæmorrhages. The *asthenic* form of each depends essentially upon paralysis of vessels, the difference in the profluvium being attributable to some condition of the capillaries or of the surrounding tissue that cannot be exactly defined. Whatever tones the nerves of the vessels will arrest, whatever has the opposite effect promotes these discharges. Depressing mental influence (*vide* Dr. Basham's case in the *Lancet*, Jan. 31st, 1857), cholera miasm as observed by Dr. Prout, and low fever poison as in a case which I recently saw, will all induce hæmaturia. Sthenic hæmorrhages resemble fevers of the same type in being attended with great excitation of the heart's action, the arteries of the part affected being, however, uncontracted, from paralysis of their vaso-motor nerves. The bleeding from the nose, which occurs sometimes during the paroxysm of tropical remittent fevers attended with cerebral determination, is a case of this kind. The sthenic fluxes have, as their principal character, a superexcited state of the tissue whence they proceed. The condition is akin to inflammation, but, owing to some peculiar modification of vital power, the exudation is thrown off on the free surface as fast as it takes place. Choleraic purging is the most marked example of this kind. Nerve-toning remedies which will arrest asthenic fluxes will not stop sthenic; resort must be had to means which will modify the excited state of the affected surface. This may be effected, in some cases, by castor oil (according to Dr. G. Johnson's plan); in others, by repeated small doses of calomel, or calomel and opium; in others again, by repeated mustard emetics; in others, by frequent doses of diacetate of lead and opium. The effect produced by all these when successful (as all have been), is to nullify the excitation of the gastro-intestinal mucous surface. Dr. Billing's treatment by tartar emetic has the same therapeutic intention. The frequent failure of all these measures to attain their end does not show that they were not appropriate, but either that they could not avail to overcome the morbid action, or that the peculiarities of functional power which would make one preferable to another, do not reveal themselves by any outward indication.

To resume: in inflammations, in fevers, in fluxes, in hæmorrhages, we see the existence of the same great types of morbid action; the asthenic, where arterial paralysis (through vaso-motor nerves) dominates; and the sthenic, where tissue excitement and irritation come to play the more prominent part. Nearly the same therapeutic proceedings are appropriate in each of the four sets, the character of the type being the all important circumstance.

Regarding tissue irritation as a prime element of sthenic inflammation, we ought to find notable differences between different parts in the frequency with which they are affected by it. It ought to appear that the greater or less amount of tissue proper is influential on the occurrence of inflammation. Now, it is notorious that membranous tracts and expansions are far

more prone to inflammation than solid parenchymatous organs. Inflammation of the substance of the brain, of the muscles, the heart, the liver, or the spleen, is decidedly rare; of the serous, mucous, or cutaneous surfaces, exceedingly common. One considerable cause of the difference seems to lie in this, that the considerable masses of living tissue persist more steadily in their own normal mode of nutrition, and are not so easily diverted from it into anomalous modes of action. Their functions are all eminently vital, and generally of a higher and more active kind than those of investing membranes. Such parts even of the latter as are more highly organised, and have more important functions to fulfil, are less prone to inflammation. Thus gastric catarrh is infinitely common, but is almost entirely located in the pyloric region, and in the fossulæ of the surface; the special gland-like structure of the splenic and mid regions being very little implicated. The liver, as long as its vital force is unbroken, is rarely the seat of abscess; when, however, it has been overstimulated, and consequently enfeebled, by tropical heat, a casual congestion may produce this effect. The lungs, themselves, though their function be in one sense eminently vital, yet are as liable to inflammation almost as their investing pleura, because their living tissue is scarce more than a mere homogeneous membrane, through which the function of respiration is performed on physical, not vital, principles. The point now referred to certainly puts in a striking view the influence of the tissue of a part on the occurrence of inflammation.

In the foregoing observations, I have frequently made use of the expression "tissue irritation"; and it may be well to attempt to define it somewhat more exactly, and to show what reasons there are for using it. This is the more desirable, because it is what we cannot estimate by itself, or observe so well as we can relaxed and dilated vessels. The term seems legitimate, because the condition to which it refers can be brought about by the application of irritants, such as mustard, or cantharides. The actual condition appears to be one of excitement, as the increased sensibility, blood-flux, and heat would indicate, together with the great tendency to cell development in the exudation. Probably, however, the excitement stage is the earlier, and ceases as soon as general or extensive stasis of the blood has occurred. Indeed, we seem to have evidence of this in meningitis, when the cineritious cortex of the hemispheres is involved, and fierce delirium and raving mark the stage of excitement, while collapse and coma mark that of paralysis of the tissue. In this there is a close analogy to fevers (*vide* Dr. Copland's description, p. 973-983), with their stages of excitement and collapse. In using the term excitement, it is of course not intended to imply that there is any increase of real vital activity and functional power. The action, though an excessive, is a perverted one, tending only to waste and loss of the normal endowment of the part. The difference between this state, and that of healthy excitement, is the same as there is between a sensory nerve in the fulfilment of its natural function, and the same numbed while tortured by the agonies of neuralgia (*vide* Romberg on Anæsthesia dolorosa).

[*To be continued.*]

NOTES ON LIQUOR PEPSINIÆ.

By David Nelson, M.D.Edin., formerly Physician to the Queen's Hospital, and Professor of Clinical Medicine, Birmingham.

Having received, through the Editor of this Journal, an inquiry in what manner liquor pepsiniæ is prepared, I have to say, in reply, that I never either prepared it, nor knew how it was prepared, excepting as laid down in the ordinary standard works on pharmacology; the following of which directions, however, often leads to failure. After using the remedy of gastric juice, in the shape of raw or of dried membrane, I desired to have an elegant and efficient preparation, and requested the chemists to make the attempt. After repeated experiments and failures, as to dimness, thickness, and tendency to putrescence, they at length succeeded in producing that pellucid, savoury, and effective fluid, to which I gave the name of *liquor pepsiniæ præparatus;* but I could not ask them, as *men of business*, to explain their mode of procedure, and have never done so.

Other correspondents have opened up other matters of inquiry, as to the comparative virtues of pepsine, so called; and the question of priority, etc.; which I shall, therefore, touch upon. Recent writings and advertisements have laid stress upon the production of such an article; but I think there are sundry objections to it, not the least of them being the price, and the consequent temptation to adulteration, of which more anon. Let me premise my observations by stating that, while I much admire and use extensively several of these essential principles, such as quinine, hydrocyanic acid, etc., and while the researches of chemists are much to be applauded, even while following out non-practical paths, I yet see no more necessity for pepsine, so called, as an article of the officinal materia medica, than I do for digitaline, ergotine, lupuline, castorine, emetine, lobeline, theine, and caffeine, or the other thousand and one niceties, highly interesting, but practically useless. As long as we can obtain, from sound plants, etc., good tinctures and infusions, we have all that we want for medical purposes; and so is it with the extraction and the preservation of the mysterious gastric juice from the maw of the sucking calf. Nay more, this pepsine, so called, is but a portion of the wondrous gastric juice. It is not, like iodine or sulphur, a simple body, the purer the better; but it is a complex and theoretic substance, the existence of which as a distinct efficient compound is denied by Liebig himself. But, accepting it as a compound radical, it yet acts within the stomach as only co-operative with other agents; and this gives rise to the danger of its losing its peculiar action in the very attempts at over-refinement. The iron of the blood, like the iron of nature, is always allied with a minute amount of manganese; and it is very questionable if over-purified or chemical iron would serve either as a medicine or a nutrient. Porters, ales, wines, and all spirits, possess one common and fundamental principle of spirit of wine; but the common sense of the profession and of the world would rebel against any attempt to supersede the use of these composite beverages by introducing absolute alcohol, or perhaps, by a further refinement in abstracting the useless water, treating us to medicinal or social doses of ether. Recent writers have remarked of the so called pepsine (a theoretic name, be it remembered, for a mysterious essence known only by its effects), that it is exceedingly difficult to separate it from admixtures of acids and salts; but I believe, with Liebig and Gregory and others, that the chlorides, phosphates, and lactates, etc., of the gastric juice, are potent accessories, or even necessaries, to the action of the pepsine; and that, in short, as the whole matter is somewhat dark, the nearer we approach to the imitation of nature the better.

And now for the economical part of the question. An eminent brother physician at a celebrated watering place writes to me, saying, "I have used pepsine in pills. My chemist gives twelve shillings the ounce, and I find a scruple not too large a dose." Now, let us think of the practical working of such a thing. A patient consults a physician, who might order twenty-four doses, to last a week; and, after paying the fee of a guinea, he finds he has nearly as much to pay to the druggist for his medicine. Either the French must be a much more wealthy nation than we give them credit for, or they think they can extract no end of gold out of the dyspeptic tendencies of *milord anglais*. The liquor pepsiniæ, on the other hand, is *retailed* at sixpence an ounce; and a drachm is a good dose. Besides this, it contains all the peculiar salts and acids, as well as the pepsine, which go to constitute the peptic liquor or gastric juice; and it acts with perfect certainty, and is pleasant. We all understand the position and wants of the hard worked practitioner of our country districts. He does not wish to be troubled with niceties requiring this and that series of tests, but to be furnished by a respectable house with a really efficacious and reliable remedy. This is found in the liquor pepsiniæ, useful either by itself or in mixture; and the test of its efficacy may be applied by his good lady in making a milk custard for the youngsters, as one fluid drachm should coagulate sixteen ounces of milk in thirty minutes.

The aforenamed physician also writes, "I read that the pepsine is already shamefully adulterated." This is only to be expected, from the temptation held out by the exorbitant price of the article.

Touching the other question put to me, in regard to priority of introduction (which, however, is but of secondary importance), I beg to say that I have had nothing to do with this recent matter of so called pepsine from France or elsewhere. As may be seen by reference to a correspondence in the *Lancet* for 1856, in connexion with an article on Diabetes in the same journal for 1855, I derived the idea of the employment of gastric juice or peptic liquor from the beautiful experiments of Spallanzani. Other physicians, both before and after, seem to have used it with more or less result, and great merit is due to them. At

the same time, it would appear that they only used it for a limited time, or to a limited degree; and thus it became forgotten or neglected, or, at all events, never was made generally known. As regards mere chronology, it certainly was known and employed by the ancients as "coagulum", though to what precise extent, or for what definite purpose, I leave to be elucidated hereafter. In more modern yet old days, so to speak, it was also medicinally applied, as I find, for instance, on taking from my shelves the *London Pharmacopœia* of 1677, the time when Glisson and Scarburgh were Fellows, and Sydenham among the *Permissi*, that it is there mentioned. Under the general head of "*Catalogus Simplicium ad Pharmacopœiam*," there appears the following, under the subsidiary heading of "*Animalium Partes*".

"Coagulum. { Agni. Equi. Hœdi. Leporis. Vituli."

The great yet simple principle of its application not being then grasped by the profession in general, it must subsequently have fallen into disuse; for neither Dr. Paris nor any other standard writer on materia medica, that I know of, alludes to it in this light of a digestive. It has been my aim since 1851, as distinctive from those who may have used it specifically, to ground its application as a natural solvent of food upon a rational and scientific basis, and to demonstrate its utility in almost all diseases leading to waste of the body. My ultimate conclusion as to its value rests upon a foundation of facts obtained, at the very least, from upwards of 2,500 cases. This is a far greater amount of experience in the matter than any one else, so far as I am aware, can speak to; but all who have tried the remedy, whether as practitioners or patients, testify to the one chief point of its usefulness; and that, after all, is *the* object of our practice.

CASE ILLUSTRATIVE OF THE EFFECTS OF BELLADONNA IN ARRESTING THE SECRETION OF MILK.

By John Burrows, Esq., Liverpool.

Mrs. B., aged 37 years, was delivered of her first child on the 17th of February, 1857. The labour was tedious, and required the aid of the forceps for its completion. The umbilical cord, being coiled three times around the neck of the child, and drawn so tightly as to arrest the circulation of blood within its vessels, asphyxiated the infant, so that no principle of life could be discovered. Resuscitative measures were adopted. Artificial respiration was continued for some time, as also friction along the spine, and the warm bath, without producing any mark of returning vitality. On the fourth day, the breasts assumed their maternal functions; on the seventh, they were full, tense, painful, and knotty, with a slight inflammatory blush, though spirit lotion had been applied. Having read, in *Braithwaite's Retrospect* for December 1856, an extract from the *Lancet*, August 9th, 1856, p. 176, in which two cases are given, exhibiting the efficacy of the extract of belladonna in arresting the secretion of milk, I resolved to use the first opportunity that occurred to try the effect of this remedy in so painful and tantalising a malady, and thought this a good case for testing its antilactescent power. I directed the areola, and a circle extending half an inch beyond it, of each breast, to be painted thickly over with the extract of belladonna, reduced to the consistence of thick paste by the addition of the acacia mixture. As the late Mr. C. T. Haden recommended the use of colchicum for the purpose of controlling arterial action in inflammation of the breasts and nipples, with the same intention I gave the following mixture:—

℞ Infusi rosæ comp. ℥vj; magnesiæ sulphatis ℥j; vini colchici ℥iij; aquæ menthæ piperitæ ℥xv. M. Fiat mistura cujus sumatur ℥j 4tâ quâque horâ.

The result was most satisfactory. In thirty-six hours after the application of the extract, the mammæ were cool, pale, and flaccid; and the knots softened and reduced in size. I advised the repainting of the areolæ; and, in two days after—*i.e.*, three and a half days from the first application—they were so reduced in size that they were smaller than during the latter period of pregnancy, and the knots could scarcely be felt. The effect was truly marvellous, and resembled the magic touch of the necromancer, rather than the therapeutic influence of a medicinal substance.

CONGESTION OF THE LIVER, WITH SEVERE VOMITING, HICCUP, AND CONSTIPATION, DURING TWELVE DAYS.

By T. Hayes Jackson, M.D., Darlington.

Wm. Elwood, aged 30, labourer, a temperate athletic man, came under my care on the 26th of last December, complaining of severe vomiting with constipation, which he attributed to exposure to cold, experienced three days previous to my attendance. His pulse was natural; the tongue was clean and moist; the skin cool; he had no pain in the abdomen on pressure; the bowels were constipated.

The treatment consisted in large doses of calomel and jalapine, pills of aloes with mercury, and of colocynth with mercury, compound colocynth pill, sulphate of magnesia, small doses of croton oil with extract of hyoscyamus, brandy and soda water, prussic acid with creasote; also sinapisms, a blister to the epigastrium, enemata of turpentine and castor oil, etc. All failed during eight days either to relieve the excessive vomiting, or to overcome the constipation.

January 3rd. Vomiting was more intense, with hiccup; his countenance was sunken; the pulse quick, small, and intermitting; the skin was cool; but he had no pain on percussion, nor distension of the abdomen from tympanitis. There was inordinate action of the abdominal aorta. The following medicines were ordered:—

℞ Pulveris opii gr. j; calomelanos gr. j; extracti colocynthidis comp. gr. iij; glycerinæ q. s. M. Fiat pilula 3tis horis sumenda. Mitte xij.

℞ Acidi hydrocyanici (Scheele's) ♏xij; misturæ amygdalæ* ℥iij. M. Fiat mistura, cujus sumatur ℥ss post singulas pilulas.

An enema, composed of one pint of warm water and two teaspoonfuls of mustard, was ordered to be administered every two or three hours, with the intention of stimulating the ganglia or sympathetic filaments of the intestines, and of exciting peristaltic action.

January 4th. The patient expressed himself much relieved this morning, having slept well during the night. Pulse full, soft, and quiet. No vomiting has occurred; but the bowels are still confined.

January 5th. Vomiting returned, after twenty-four hours cessation, though in a mitigated form. He was ordered:—

℞ Pulveris opii gr. j; olei crotonis gutt. j; extracti colocynthidis comp. gr. iij. M. Fiat pilula 3tis horis sumenda. Mitte viij.

After taking three of these pills, the bowels were freely opened.

January 6th. He was much improved. The vomiting occurred at longer intervals, but the bowels were relaxed. The following was prescribed:—

℞ Pulveris opii gr. j; extracti colocynthidis comp. gr. iij; glycerinæ q. s. M. Fiat pilula 3tis horis sumenda. Mitte viij.

Sumat pilulam crotonis cum opio horâ somni pro re natâ.

January 8th. He was improving daily; and was ordered to take a pill of quinine, with sulphate or iron, three times daily.

January 15th. He was convalescent.

Remarks. Physiologists state that the liver secretes from seventeen to twenty-four ounces of bile daily, though by some this amount is considered too high, or variable under certain circumstances. In this case, however, in consequence of the increased morbid action of the liver, pint after pint of fluid, containing biline and bilipheine, were secreted, and, passing along the hepatic duct to the duodenum, were regurgitated into the stomach, and ejected by that organ.

I send this case in further elucidation of Dr. Brittan's opinion, "that intestinal obstructions are best overcome by opium in combination with aloes," rather than by drastic aperients alone. For instance, if a small portion of the intestines were inflamed, or spasmodically constricted, or intussusception had occurred, drastic purgatives in this case would have increased the evil by propelling the excreta to that portion of the intestines thus affected; and, instead of relaxing the contriction, would indubitably have produced a more confirmed lock.

* I have found the mistura amygdalæ, in combination with hydrocyanic acid, most invaluable in vomiting arising from nervous irritability of the stomach.

Diseases
OF
SPECIAL OCCUPATIONS.

No. I.

THE SHEFFIELD GRINDERS.

By John Charles Hall, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

In commencing the first of a series of papers for the British Medical Journal, on the Diseases of Artisans, I shall endeavour, whilst treating of the peculiar disease induced in Sheffield by the calling of a *Grinder*, to give a general description of the habits of these men, the numbers employed in the various branches of grinding, the average ages of those now living, and other particulars of general interest with regard to the town of Sheffield and its geological position; for I quite agree with the editor of this Journal, that these articles will derive no little portion of their interest from containing faithful sketches of the various peculiarities found in the towns which form the homes of those industrious workers in the hives of British enterprise, together with an account of the social and industrial conditions which lead to the diseases of artisans. Of course the Sheffield grinders are liable to various affections, like other men; and to the depressing influences on the animal economy which exist in all large towns; but, when speaking of the diseases of the Sheffield artisans,* I intend to treat only of those which arise in consequence of the occupations in which they are engaged. Our investigations will, I think, be facilitated by directing attention to—

A. The Town of Sheffield, and the Manufactures carried on in it.
B. The Sheffield Grinders, and the Nature of their Occupation.
C. The Grinders' Disease.

A. THE TOWN OF SHEFFIELD, AND THE MANUFACTURES CARRIED ON IN IT.

Sheffield is the principal seat of cutlery and other hardware manufacture, and the capital of the parish which bears its name, as well as of the ancient but not very clearly defined liberty of Hallamshire. It covers for a considerable extent the abrupt declivities and hills near the conflux of the rivers Sheaf and Don. Its canal opens a communication with the river Don, and other navigable rivers and canals; and its various railways afford a transit for passengers and goods to all parts of the kingdom. "Where now", says the historian of Hallamshire (the Rev. Joseph Hunter, F.R.S.), "is collected a numerous and active population, was anciently a deep solitude, the silence of which was broken only by our rivers pouring their waters in natural cascades through the woodland scenery. Who was the first to raise the axe amongst the forests of Hallamshire, or who first established himself and his family in one of its romantic valleys, it is now vain to attempt to discover."

The parish of Sheffield was unknown as one of the ecclesiastical subdivisions of the diocese of York before the time of the Norman conquest: it now comprises three entire Saxon manors, and a considerable portion of a fourth.

Few places in England present a more wonderful contrast between what they were and what they now are, than the town of Sheffield. Wide indeed is the difference now, when compared with that memorable period (from 1570 to 1584) when the unhappy Mary Queen of Scots was for so many years a prisoner, in the custody of the Earl of Shrewsbury, at Sheffield Castle; or when the Governor of Sheffield, Major Beaumont, surrendered this strong fortress to the Parliamentary forces under General Crawford, after a gallant resistance, on the 11th of August, 1644.

The parish of Sheffield is of considerable extent; it is more than ten miles in length, and its average breadth is about three miles, with an area of rather more than 22,000 acres. It contains many populous villages and hamlets, in the centre of which stands the large town of Sheffield, from which the parish derives its name. The following table will at a glance show how the town has increased. In 1615, the population was only 2,207; and, in 1736, the township of Sheffield consisted of 2,152 houses, with a population of 9,695.

Table I.

	Townships.	Population in A.D. 1801.	1811.	1821.	1831.	1841.	1851.	No. of Acres.	Houses in 1851.
Sheffield.	Sheffield	31,314	35,840	42,157	59,011	67,967	83,447	3436	16,943
	Ecclesall	5,362	6,569	9,113	14,279	20,003	24,552	4180	5,194
	Brightside	4,030	6,899	6,615	8,968	10,089	12,042	2680	2,517
	Attercliffe	2,281	2,673	3,172	3,741	4,156	4,873	1336	1,001
	Nether Hallam	1,974	2,384	3,200	4,658	7,275	8,897	1902	1,689
	Upper Hallam	764	866	1,018	1,035	1,396	1,499	8836	304
	Total	45,755	59,231	65,275	91,692	110,891	135,810	22,370	27,658

1856.—Houses occupied	32,472
„ unoccupied	1,568
„ building	989
Total houses	35,029

In 1856, the total population of Sheffield was 161,000. Since then there have been erected 1,307 houses; so that the exact number of houses in the six townships of Sheffield at this time is 36,366, and the population 164,000. The rateable value of the property in the borough of Sheffield is £366,394:15:8. The expenditure of the Sheffield Union, which includes the townships of Sheffield, Brightside, and Attercliffe, last year was £32,000; and of the Ecclesall Union, which includes Ecclesall, Upper Hallam, and Nether Hallam, £9,853:6.

Sheffield of late years has rapidly increased in size and importance, and recent enterprise has greatly added to the wealth of many of our merchants and manufacturers; although, as a rule, the large fortunes are not made in Sheffield that we hear of in Manchester and other towns. Many of our local trades can also be carried on with a very small amount of capital, and hence the very large number of what are called "little masters' in Sheffield. The wages of many of the artisans are also much higher than in other towns.

The neighbourhood of Sheffield abounds in the three mineral productions which are most important to man; namely, *iron*, *coal*, and *stone*. The iron ore is found in many parts of the district, at a depth of from fifty to sixty feet; and, although it was most unquestionably the presence of the "raw material" which first led the inhabitants of the town of Sheffield to manufactures of iron, these mines are comparatively, in this our day, of little importance to the staple branches of their trade. Steel is what is principally required; and the native iron of the district is not adapted for conversion into steel, like the iron of other countries. About 32,000 tons of Swedish iron are annually imported into Sheffield, for the purpose of being converted into steel; and every year from ten to fifteen thousand tons of English iron are made into railway springs, etc. The iron obtained from the ore of the district is either used for castings or made into "rails", "merchants' bar", etc. What may be the effect of the recent process that has been patented by Mr. Bessemer, time alone can show; but we have evidence that foreign iron has been used in Sheffield for the last three centuries; and, in the accounts of the Church Burgesses of Sheffield for the year 1557, are the particulars of a payment to

* After I have finished the diseases of grinders, I intend to communicate a paper on the diseases of file cutters, etc.

Robert Moore "*for one stone and qrter of Danske iron*", and for "*x lib. of Spanysch iron*".

Below the iron lies the bed of coal, one principal seam of which runs under a portion of the town. The mean depth of the coal is about 120 yards, and the thickness of the bed from three to five feet. This bed is a principal source of that large supply of fuel which the manufactures of Sheffield require, and has been so for many years. The existence of railways of late years has of course extended the sources whence the supply is obtained. Previous to the employment of coke, charcoal was used in the smelting of the iron ore, and doubtless led to the destruction of many of our ancient forests. Evelyn has remarked, that "Nature has thought fit to produce this wasting ore more plentifully in woodlands than in any other ground, and to enrich our forests to their own destruction."

A magnesian lime-stone, similar to that of which the Houses of Parliament are built, and which was obtained from the quarries at Anston, is found in the neighbourhood of Conisborough and Roche Abbey. Sheffield is built principally of red bricks, the clay for making which is found in almost every part of the parish. In every direction around Sheffield are quarries of freestone, of various quality, which supply grind and mill-stones, flag-stones, and common roofing slate. Of the stones used for grinding, the greater part come from the neighbourhood of Wickersby and Dalton, about nine miles from Sheffield. These stones vary in size from twelve inches to the very large stones of seven feet diameter used in grinding saws. The "whitening" stones, used for smoothing articles before glazing, are brought from Brincliffe Edge Quarries, about a mile from the town.

In the early years of its history, the only extensive concerns connected with the trades of Sheffield were the furnaces and forges in which the iron was prepared for the use of the manufacturer; and the beautiful Park of Sheffield, in the midst of which stood the prison which so long held the Scottish queen, within the memory of man, was dotted with iron-stone "pit-hills". This land now is used for agricultural purposes, and hardly a trace of the mining operations remains visible. Sheffield did not enjoy in those times that almost entire monopoly it possesses at the present of the staple article of its manufactures—the *knife*. This country had an import trade in knives till the reign of Queen Elizabeth; and in the articles enumerated in the Custom-House books of the reign of Henry VIII (*British Bibliographer*), are *knives of Almayne, knyves of France*, and *knyves of Colloyne*. Stowe informs us that, in the fifth year of her reign, Queen Elizabeth laid some restrictions on this import trade, in order to encourage the London manufactures; London being at that time the principal mart for the finer species of cutlery. Now it is notorious that a very large portion of what is sold as "fine London cutlery" in the metropolis, both scissors, knives, and razors, are

"Sheffield made,
Both haft and blade;"

the name of the London house being stamped upon them here.

The year 1742 is memorable in the history of Sheffield for the introduction of a new manufacture. Mr. Thomas Bolsover, an ingenious mechanic, when employed to repair the handle of a knife which was composed partly of silver and partly of copper, was struck with the possibility of uniting the two metals so as to form a cheap substitute, which should present the external appearance of silver, and therefore capable of being used in the manufacture of articles in which silver only had previously been employed. He confined himself to the manufacture of buttons and snuff-boxes, etc.; but Mr. Joseph Hancock, one of the Cutlers' Company, very soon showed that, by this new method, the finest and most elaborately embossed plate could be imitated. Birmingham very soon obtained a share in the new manufacture; but to the town of Sheffield belongs the honour of the invention, and the "Sheffield plate" is still highly prized for its elegance and durability.

The manufactures of Sheffield in cutlery—knives, scissors, razors; in files, edge tools, joiners' tools, scythes, sickles, shears, saws, circular saws, steel, railway springs, anvils, vices, stove-grates, fenders, fire-irons; silver, plated, and Britannia metal goods,—are celebrated throughout the world. At the great Exhibition of all Nations, held in the Crystal Palace, London, 1851, 12,000 square feet were covered with articles manufactured in Sheffield; and to the town, five council medals, and fifty-five prize medals, were awarded. At the great Exhibition held in Paris, Sheffield fully maintained its world-wide reputation for its manufactured articles in cutlery, edge tools, files, saws, etc.; and, in addition to numerous medals, a grand medal of honour was presented by the Emperor of the French, to the town of Sheffield, "for the superiority of its steel and hardware".

The town of Sheffield is supplied with water by a company, the total area of whose present reservoirs is 173½ acres, and which contain, when full, 898,000,000 of gallons. These reservoirs are situated at Redmires and Rivelin. Very extensive reservoirs are also in process of construction near Bradford, which, when completed, will afford to the town of Sheffield a supply of 10,000,000 of gallons of water daily. The principal store reservoirs at present belonging to the company are at Redmires, seven miles from the town. These are placed at an elevation of 1,200 feet above the level of the sea, and are filled from springs, and from the surface drainage of the land. The quantity of rain water at such an elevation is always considerable. The water is brought along an open stone conduit to the other reservoirs of the company, which are placed about a mile from the town, and they are at an elevation of 460 feet above the lower streets; so that the water, which is conveyed in iron pipes to the town, can be easily taken to the upper rooms of the house of any inhabitant who may require it.

The water is very pure; and an imperial gallon does not contain more than four grains of mineral and organic matters. About a grain of these is in a state of suspension, and can easily be separated by filtration; and about three grains of saline, earthy, and organic matters, are held in solution. The taste is agreeable; and few towns have purer or better water than Sheffield. In addition to private houses, the company supply many steam-engines, breweries, and other manufactories.

The supply of all the necessaries of life is abundant and cheap. Milk is brought into the town in barrels, in carts, and on ponies and asses, by the small Derbyshire farmers around Sheffield.

Two causes, in the first instance, mainly contributed to raise Sheffield into an important town; viz., the possession of vast mineral riches; and water power, by which, before the introduction of steam, grinding was carried on. The first steam-grinding was erected in 1786, when grinding became a separate branch of trade.

"Thus", writes the classical historian of Hallamshire, "has Nature been bountiful to the parish of Sheffield: not by bestowing upon it the most delicious fruits, double harvests, or perpetual summer; but the means and materials of durable and substantial comforts, so placed that they may serve as stimulants to labour. And, accordingly, her sons are an active, acute, and hardy race; patient of toil, unwillingly submitting to unnecessary restraints, aware of the advantages of their situation, proud of the reputation they have obtained for her, attached to their birthplace; and, wherever they go, remembering with more than common affection the tall graceful spire that surmounts the town, the woodland heights around it, and the streams which glitter along its devious valleys. Even the very sound of its waters poured over their broken weirs, or the slow moving wheel, the hiss of the grinding stone, and the noise of the forge, are grateful in recollection on the ear of the genuine son of what is fondly called 'old Sheffield'."

In Sheffield, the artisans have generally a house for themselves, and those who live in the suburbs frequently a garden. In times of good trade, at least, it is unusual to find two families under the same roof; and there is hardly an instance of an inhabited cellar in the town. The average number of inmates to each house is rather more than five; and many of these dwellings either front the street or open into moderate sized yards. It cannot fail to have been noticed, in reading what has already been written, that, at certain periods, numerous houses are returned as uninhabited in Sheffield. During a period of active trade, the demand for cottage houses is very great, and speculators are induced to run them up as slightly and rapidly as possible, in the hope of obtaining, for a time at least, an enormous percentage; and hence, when a reaction takes place in the trade of the town, the speculative builders, who have paid but little attention to what are really the legitimate wants of a population, find to their cost that the cottage accommodation that has been created is far beyond what is required.

I have already stated that there is probably less of the confined alley and narrow *cul-de-sac* in Sheffield than in many other manufacturing towns, and that a good deal has been done of late years to improve the sewers and surface drains of the town; but still much more is required to render perfect the sanitary condition of the inhabitants; and the working classes appear but little aware that all measures for effecting improvements in the drainage of the streets, the supply of water, and ventilation, may be rendered nearly inoperative for the obvi-

ating of the causes of disease, if a nidus of morbific effluvia be permitted to remain in almost every part of the confined court where the artisan opens his window in the hope of purifying his small habitation with the breeze of summer, but gets instead a mixture of gases from dunghills, ashpits, etc., or, what is even worse, because more insidious, from a soil which has become impregnated with organic matters imbibed long before, and now, though perhaps to all appearance dry and clean, emitting the poisonous vapour in its most pernicious state.

The importance of a plentiful supply of pure air and water, as well as of selecting a home that can constantly be cheered and lighted by the sunbeams, appears but little understood by many of the artisans of this country; a home in a dark back court being often selected on account of its cheapness. Some medical writers of no little authority have gone so far as to assert that impure air and want of light are the only real causes of scrofula; and, although other adverse influences may doubtless have a tendency to promote the mischief, impure air and want of light are often, at any rate, essential to its establishment. The scrofulous children of the artisans of Sheffield, admitted under my care at the Sheffield Public Dispensary, are most frequently brought from such abodes. In a very sensibly written essay, M. Baudelocque contends that, even if a child be fed on a sufficient quantity of good and nutritious food, if living in a house so placed that the sun's rays do not reach it, or the fresh air cannot be supplied in sufficient quantities, the strumous diathesis will in all probability be induced. "If", says he, "the house be small, dark, low, and badly aired, scrofulous disease will inevitably intervene;" and it is very certain that, in the houses inhabited by the artisans in the larger manufacturing towns, even when a sufficient supply of food is given, such food cannot properly be assimilated in the absence of light and pure air. What must inevitably be the result of keeping an infant in a close, dark, badly ventilated room? The external lymphatic glands, more especially those of the neck, enlarge; the hue of health will be exchanged for a pallor which gradually creeps over the countenance; the muscles become soft, the abdomen enlarged; and, in a very short time, the tuberculous constitution may be established, and this too in a child whose parents are perfectly healthy, and whose brothers and sisters have never exhibited any symptoms of phthisis. These evils of course exist in degree; and, even supposing a child brought up in such an abode to escape for a time, what must soon or late be the fate of such a one, first reared in a home placed amid the tainted air of some dark narrow back street of a large town like Sheffield, and then, at the age of eight, ten, or twelve, set to labour at the trade of a fork-grinder?

Excessive dissipation, no doubt, has a tendency to diminish the duration of life amongst many of the Sheffield grinders, although I am most happy to bear my willing testimony to the great improvement which of late years has taken place in the habits of these men. The early age at which so many of them commence their calling prevents, in many instances, even the imparting of the rudiments of education. Ignorance, improvidence, intemperance, and crime, are but too often congenial and inseparable companions; and those who have no resources within themselves but too often seek recreation in intoxicating drinks, and in pursuits which are little creditable to the civilisation of the nineteenth century. Still, as I have already stated, the social condition of the grinders has much improved. In my visits to various wheels, it has not been an uncommon circumstance to find the Sunday-school teacher employed in shaping a razor; and some of the most active and intelligent of the Committee of the People's College and the Mechanics' Institution working by their side. The fact is becoming more and more apparent to these men, and it must be made still more so, that the appliances of science can and will lessen the high rate of mortality which at present exists; and that recklessness which only contemplated, in years that are past, "a short life and a merry one", will, I trust, ere long become an exception rather than a rule. My experience as a Director of the Savings Bank in Sheffield also induces me to conclude, from the increased number of depositors, that some of these men are beginning to think more generally of to-morrow, and that habits of economy and prudence are on the increase. It may be added, that many of the grinders are now members of freehold land societies.

There is yet in Sheffield another very lamentable source of dissipation and wretchedness amongst its artisans: I allude to early marriages. How to support a wife never appears for one moment to enter into the calculations of the boys who get married. Many of the grinders select their "partners for life" from girls who, from a very early age, have been employed in warehouses, or from hair-seating weavers and spoon and comb buffers, and who are altogether ignorant of household affairs. What is the inevitable consequence? The wages of the husband are not employed to the best advantage. To *waste*, as a matter of course, succeeds *want;* home is made miserable; and, in the excitement of company at the public house, and in intoxicating drinks, the husband seeks that happiness which he has not at home. The evils produced by these early and thoughtless marriages, I honestly believe, cannot possibly be exaggerated.

In my next communication I shall endeavour to explain the nature of the occupation carried on by a grinder; to describe the wheels in which they work; wet and dry grinding, etc. I shall also show the number of men and boys at present employed; the average age of the men now working in the different branches of the trade; the ages, so far as they can be ascertained from the books at some of the principal wheels, at which, for some years past, the grinders have died; the effects of grinding on the animal economy; and, lastly, the means which appear best calculated to improve the physical and social condition of these artizans.

Surrey House, Sheffield, March 3rd, 1857.

British Medical Journal.

SATURDAY, MARCH 14th, 1857.

THE NECESSITY OF A MEDICAL COUNCIL FOR THE ARMY MEDICAL DEPARTMENT.

In our last impression, we gave our reasons for believing, with Mr. Martin, that for the shifting necessities of war, and for the startling emergencies which continually arise in the field, the medical department of the army should be governed by a medical officer or field inspector, who should be always in advance with the commissary-general, and should be capable, by his skill and forethought, of anticipating the immediate wants of the troops. It must be clear that this great and important office cannot be performed by an authority acting, perhaps, thousands of miles from the scene of action. Instead of being vastly behind the necessities of an army, as metropolitan directors must be in some cases, measured by the time necessary for transferring his orders, he should be always beforehand and forearmed. The deliberative portion of the machinery necessary for the due conserving of a well trained and expensive army—the power which has to deal with problems of a general nature, which can be considered better at headquarters, should, however, be of a very different nature. The medical affairs of the army, and we may say perhaps of the united services, cannot possibly be ordered properly by one man. We have an able medical director-general of our military force as it is, who, we believe, did his duty actively and well in the late campaign, but who was overwhelmed with obloquy by the public press, and burthened with responsibilities for duties which should not have been put upon him. The medical miscarriages of our army were attributed to Dr. Andrew Smith, at the same time that he was only allowed to interpret "regulations," and delegated with the power of a commissary of medical stores! It is clear that the medical department of our army cannot be starved in its authority in this manner; it is equally clear to all thinking men that so important a branch of the public service cannot be delegated to any one man, for the simple reason that no one man can possibly be found who comprises in his own person the necessary qualifications for the office. It is

difficult enough to pick out from the mass of mediocrity such a surgeon as Brodie, a physician as Bright, or a statistician as Farr; it must then be quite clear that it is quite impossible to obtain the eminent qualities of these three eminent men rolled into one, in the shape of a director-general of the army. For the execution of the more deliberative and wider embracing functions of the central medical authority, a council of certainly not less than three picked men, the best that science can afford, should, we think, be established. To these gentlemen should be entrusted the many and complex yet persistent duties necessary to keep our army in a perfectly healthy condition, spread as it is over every portion of the globe, and subject to a thousand different influences of climate, of country, and of peoples.

It may be said that that proposition is only a retrogression to the old medical board which was swept away by the Duke of Wellington; but we reply that it is not the name, but the men, we require. The board or council we plead for is no such scheme as that which was superseded by the appointment of a single director-general, but a real Council consisting of, to use a threadbare term, "the right men in the right place". The military authorities of past days may well have been disgusted with an ignorant and corrupt trio, composed of a successful apothecary from Weymouth, and two gentlemen who knew nothing of soldiers or their diseases but what they saw of the Guards in Hyde Park! It is easy enough to erect a department; but the providing of efficient men to work it is quite a different thing. Our increasing and most costly army can neither be handed over to the tender mercies of a mere Board of incompetent persons, nor should any single man be burthened with a task beyond his might.

When we consider the extent and variety of the duties of a Medical Council consisting of even three good men, we must confess they would prove no sinecure. Its scientific requirements alone would be of the very highest order, not to speak of the necessary administrative powers. In addition to these, it would have to direct the medical inspection of recruits; to select and apportion the medical and surgical stores, and medical comforts, suited to our various colonies; to direct the management of hospitals, and the treatment of disease, in the four quarters of the globe: it would have, in short, to direct all the multifarious medical and surgical affairs of the British army—a population equal to that of a great town, such as Bristol or Birmingham, scattered all over the globe, one month secure in home or colonial barracks, in the next landed perhaps in an enemy's country, and fighting against climate and difficulties of providing food, to say nothing of the casualties produced by fire and the sword. In France, where all the minute details of the army are attended to with scrupulous care, the preservation of the raw material of victory is most certainly not overlooked. The great Napoleon, whose eagle eye was ever watchful to husband the strength and health of his victorious legions, as early as 1802 caused the institution of the *Conseil de Salubrité*. This Council has existed in full force ever since, and only the ablest men are appointed to it. On the breaking out of the Crimean war, this Council was charged with all the medical arrangements necessary to preserve the health of the army; and this it did, as far as it was possible for home authority to do so. The medical department of the French army was the admiration of our own scientific men at the beginning of the campaign; and, if it broke down at the end, it was because the money ran short at home, and because our ally had no such officer of health in the field as Mr. Martin has suggested.

If such a Council for the regulation of the medical and hygienic affairs of our forces as we have spoken of should be established, we trust that care will be taken to infuse into it a due proportion of the civil element. The appointment of mere military surgeons would not satisfy the necessary conditions, inasmuch as we require that scientific enterprise which is not so rife in our army as in our civil surgeons, for the reason that it is not called forth by the incentives to be found in the far greater rewards, honorary and pecuniary, which await the practitioner in civil life. The great importance of remodelling our army medical department is so incontestable, that we shall feel fully warranted in recurring to the subject when occasion requires.

THE WEEK.

Our readers will perceive that we have commenced this week the first of our long projected series of articles on the "Diseases of Special Occupations." When we first contemplated the publication of these papers, we proposed merely to treat of the diseases of artisans; but the more we have thought of the subject, the more it has developed itself; and we now think it quite clear that it would be narrowing it unjustly to limit it simply to a consideration of the maladies of any section of the community. We are all workmen in this busy hive—some with our hands and some with our heads, and we have all of us our peculiar morbid conditions arising from the undue exercise, or from the unhealthy conditions under which we pursue our different occupations—from the domestic servant who suffers with "housemaid's knee", to the priest who is tantalised with the "clergyman's sore throat"; not one link of the social chain is exempt from special physical impairments of some kind or the other. Under these circumstances, we have thought it necessary to enlarge the scope of our subject; and in doing so we trust that many of our associates will be led to contribute to the series, whose class of practice would not have warranted them in writing articles devoted to the diseases of artisans. We do not ask for long and elaborate articles when no time for such can be found. Letters and short articles, setting forth the actual experience of our associates on the very interesting subject under review, will serve materially to create discussion, and to elicit much interesting matter which perhaps may be omitted in more ambitious contributions. It is needless to say that many of our most respected associates have already forwarded us articles, so that the series will be continued without interruption until they are concluded.

The Medical Society of London has recently had under consideration one of those repugnant cases which sometimes interrupt the quiet course of the most carefully regulated of such institutions, but which, in the learned and respectable body of medical men which we have mentioned, are happily of very rare occurrence. The Society, through its Council, has been called on to judge whether the conduct of one of its Fellows has been such as to demand his formal expulsion, in accord-

ance with the provisions made for such an emergency in its laws. To the primary facts of the case attention has already been directed in the Association Medical Journal for Dec. 6, 1856, where some remarks were made on a handbill professedly issued by Dr. F. Richardson of Woolwich, in which the learned doctor undertook the cure of all diseases, setting forth, among his qualifications, that he was a "Fellow of the Medical Society of London". This production, printed in the most approved style of documents of the kind, having been brought under the notice of the Council of the Society, the Secretary was directed to apply by letter to Dr. F. Richardson, inquiring whether he were the author of the said handbill. No reply having been vouchsafed to this application, another letter was sent by the Secretary. To this Dr. Richardson sent an answer, in which he neither acknowledged nor denied the fact inquired into, but endeavoured to turn the Council from their object by adopting a course of special pleading but little calculated to exculpate him. The disrespectful tone of Dr. Richardson's letter, the strong presumptive evidence that he was really the author of the handbill, and the utter absence of that denial on his part which he might have made, caused the Council to recommend his expulsion to the Society at large. Accordingly, a notice was issued to each Fellow, that on the evening of Saturday last, March 7th, a special meeting would be held "to consider the propriety of expelling one of the Fellows of the Society", in accordance with certain of the Society's laws. On the occasion of the meeting, every opportunity would without doubt have been afforded to Dr. Richardson of exculpating himself from the charge. At a meeting of Council, however, held on the evening preceding the general meeting, he tendered by letter his resignation, which was accepted. Under these circumstances, it became unnecessary to proceed to the expulsion; but the Fellows of the Society, in a numerously attended meeting on Saturday evening, unanimously voted their approval of the step taken by the Council in accepting Dr. Richardson's resignation, expressing at the same time their unlimited disgust at the handbill.

We place this case on record, not so much for the purpose of holding up to public view the pitiable spectacle of a member of our profession descending to the adoption of means of which it is unnecessary to express at length our abhorrence, but rather with the object of congratulating the Medical Society of London on the jealous care with which its honour is maintained. To the Council of that body, who had in the first place the unwelcome task of investigating the charges made, praise is due both for the calm patience with which, we understand, they proceeded in so delicate a matter; and for the readiness with which they adopted that course which was most conducive to the honour of the body whose representatives they were. The adoption of any other course than that of at once seeking to remove the peccant member would have been a sad blow to that Society which boasts of the names of Fothergill, Lettsom, and Jenner; and no less would it have been a scandal to the whole profession. But while the Medical Society of London is ready to act as vigorously as on the recent occasion, and while its Councils consist of men who do not shirk the performance of duties however unpleasant, so long will the profession respect that venerable and learned body as one of the oldest and most steady supporters of its moral no less than of its scientific honour.

In the recent debates in Parliament on the Chinese question, the opportunity has not been lost (and, indeed, it could not well be) of commenting on the opium trade with the natives of the Celestial Empire in terms which would serve equally well for the use of the utter denouncers of alcohol or of tobacco. The great mass of argument, or rather of assertion, as to the injurious effects of opium-smoking is well known; but on the more moderate side less has come to the ears of the British public. A "China Merchant," however, writing in the *Times* of March 9th, quotes largely from the *Remarks on the Opium Trade*, published in a Chinese journal by the well-known Chinese scholar and missionary, the late Dr. Medhurst. The learned doctor wrote in condemnation of the opium trade; but the summary derivable from his remarks is thus given by the "China Merchant."

"The use of foreign opium among the Chinese is limited to comparatively a few." (If each man used one drachm a-day—and many use more—the total number of smokers in China, according to Dr. Medhurst, would be 2,000,000, or 0·6 per cent. of the population.) "Its effects vary according to the moderation or excess of each smoker. As to the illegal nature of the traffic, it is against the letter of the law, but not against any regulation that is even attempted to be enforced. The evils of the trade exist chiefly in the imagination of those who do not understand it. If they will let it alone it will probably before many years are passed die a natural death, from the Chinese growing sufficient opium for their own consumption. As Chinese opium is scarcely half the price of that imported, and now nearly as good, it will gradually take the place of that of foreign growth. Year by year it increases, and will ere long supersede it."

An able leading article on the same subject has also appeared in the *Times* of March 10th.

We do not advocate opium-smoking, and would strongly denounce the practice in this part of the world; but it must be remembered that there are certain eastern nations to whom the practice has become what the drinking of spirituous liquors and tobacco-smoking are with us; and in this case, as in others, it would be well if those who are so lavish in their denunciations would first take the trouble to ascertain whether all who smoke opium are really, any more than all beer-drinkers and all tobacco-smokers, in a hopeless state of perdition.

We have only just time, before going to press, to allude to the aggregate meeting of Medical Students which took place on Thursday evening in St. Martin's Hall. Upwards of five hundred students were present; and the meeting went off with an unanimity and spirit which must greatly aid the good cause of Poor-Law Medical Reform. We shall give a full report of the proceedings next week.

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A Meeting of the Committee of Council will be holden at The Queen's Hotel, Birmingham, on Tuesday next, March 17th, at 1 o'clock.

Philip H. Williams, *Secretary.*

Reports of Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, February 3rd, 1857.

Thomas Watson, M.D., President, in the Chair.

REPORT ON DR. SIBSON'S SPECIMEN OF PERFORATING ULCER OF THE STOMACH.

BY W. BRINTON, M.D., AND J. HUTCHINSON, ESQ.

The conclusion arrived at was, that the disease was not malignant. Among the indurated tissues were small, isolated portions of pancreatic gland structure. Dr. Brinton's careful microscopic examination had not been able to discover any cells resembling those of cancer.

GANGRENOUS ABSCESS IN THE LUNGS. BY J. S. BRISTOWE, M.D.

A man, aged 28, had been admitted under his care into St. Thomas's Hospital, on account of pleuro-pneumonia. He improved somewhat at first, but subsequently relapsed. Some weeks after his admission it was noticed that when he coughed his breath had a fœtid odour, which was not perceptible during ordinary respiration. About the same time he began to expectorate a prune juice fluid, which was also fœtid. Both these symptoms continued until the time of death, which occurred two months later. Cavernous breathing had been heard over the lower part of the left lung. At the autopsy, two spots of commencing gangrene, with consolidation around them, were found in the right lung. In the apex of the left was a gangrenous cavity of some size, and in its lower lobe was a yet larger one, surrounded by much old induration. No tubercles were found in the lungs. The lower part of the ileum was found much distended, the cœcum being obliterated and much constricted by the cicatrices of old ulcers. Smaller ulcers of the same character were found in other parts of the mucous membrane of the ileum. Dr. Bristowe suggested that the disease, both in the lung and the intestine, had commenced by the deposit of tubercle, a supposition which was supported by the fact that hæmoptysis had been among the earliest symptoms.

AMPUTATION OF THE HIP-JOINT. BY T. B. CURLING, ESQ.

Mr. Curling read a report of the conclusion of a case which he had formerly brought before the Society, in which amputation of the hip-joint had been performed.

The patient, a woman in very bad health, had submitted to amputation on account of a large tumour on the thigh. After removal, the disease proved to be medullary cancer deposited in the intermuscular areolar tissue, and not connected with the bone. The patient recovered well, and lived nearly ten months afterwards. Her last illness had been attended by the symptoms of a large growth in the chest. The autopsy had been performed in the country. The left lung was found compressed by a very large growth in the pleura, which the surgeons who performed the autopsy agreed in describing as medullary cancer. There was, however, no deposit in any other organ of the body, and the lung tissue itself was quite free from disease. A portion of the tumour had been sent up to town and carefully examined by Dr. Andrew Clark, who reported that it consisted merely of inflammatory products, and did not contain any of the elements of cancer. Remembering the circumstance that there were no deposits in the lumbar glands, or in any other viscera, Mr. Curling was inclined to agree with Dr. Clark, and to think that his patient had died from inflammatory disease, and without any recurrence of the original one.

PNEUMOTHORAX: METALLIC TINKLING PRODUCED BY THE HEART'S IMPULSE. BY H. BENCE JONES, M.D., F.R.S.

The patient, a man aged 25, had been ill two months, when he was admitted into St. George's Hospital on account of pneumothorax of the left side. The usual symptoms were present, and a splash might easily be produced by succussion. On auscultating the back of the chest, a metallic tinkling sound was found to be produced by each stroke of the heart. This continued to be a very distinct sign up to the time of death, which occurred more than a fortnight later. It was repeatedly listened to by the students, and the pulse could easily be reckoned by counting the tinkles. The autopsy showed pneumothorax, the fistula in the lung tissue being long and oblique. The pleural sac contained about five pints of thick fluid, and the pleural layers were very much thickened. Dr. Bence Jones remarked, that in an experience of about twenty years at St. George's Hospital, he had only met with one similar case.

BONY UNION AFTER FRACTURE OF THE CERVIX FEMORIS WITHIN THE CAPSULE. BY T. BRYANT, ESQ.

Mary H., aged 60, a lunatic inmate of the asylum at Guy's Hospital five years ago, when walking in the garden, fell and fractured her right thigh-bone. All the symptoms of fracture of the neck of the femur within the capsule were present, clearly indicating the character of the injury. A long splint was applied; but much difficulty was experienced in preserving the leg in the right position, from the restlessness of the patient. After some weeks confinement she was allowed to sit up, but her health soon began to fail, and she never walked again, and on June 30th she died. The specimens shown consisted of the upper parts of both thigh-bones. On the injured side union was complete, and had partly been effected by bone, partly by cartilage, and in part by fibrous tissue. The whole of the neck had been absorbed, and the articular head was united directly to the base of the great trochanter. The union was very firm, and the head of the bone was much indurated.

ANEURISM OF THE CORONARY ARTERY. BY T. OGIER WARD, M.D.

An old man had been seized in bed, while passing urine in the recumbent posture, with extreme oppression, and died in about fifteen minutes. The chest only was examined. The lungs were healthy. The heart was rather enlarged, and its right cavities dilated. It was covered with fat, and was empty, and flattened by the pressure of a large clot, weighing half a pound, that completely enveloped it, and with about four ounces of bloody serum distended the pericardium. This hæmorrhage proceeded from a false aneurism at the root of the aorta (which was generally dilated), involving the orifice of the right coronary artery, and opening by a very small aperture into the pericardium. The size of the aperture perfectly explained the mode of death by compression of the heart, and why it did not immediately follow the rupture.

TWO SPECIMENS OF DIFFERENT FORMS OF ADENOCELE. BY JOHN BIRKETT, ESQ.

In one case a small mammary glandular tumour had been removed from the breast of a young woman, in whom it had commenced to grow at the age of sixteen. The tumour was solid, and consisted of very perfect gland tissue, wanting only the efferent ducts. The second had been removed by Mr. Teale, of Leeds, from the breast of a lady, aged 56, the mother of eleven children, who had ceased to menstruate fourteen years ago. It had grown rapidly. It consisted of a cyst of some size, containing fluid, and large masses of intracystic growth. The solid structure showed the elements of gland tissue loosely formed, and wanting the due proportion of connective membrane. The latter was a good illustration of Sir Astley Cooper's "Cysto-sarcoma," and the former of the "Chronic mammary tumour;" yet both were proved by the microscope to be the same structure. Mr. Birkett drew attention to the difference in age of the patients; the difference in rapidity of growth in the two tumours, etc.; remarking that the only difference in elemental constitution, was the substitution of surrounding fluid, in the one case, for the developed fibrous or connective tissue binding together the gland acini of the other. Might this serous fluid be regarded as the plasma from which the fibrous tissue ought to have been developed, had the rate of growth been slow enough to permit of it?

HAIR-PIN REMOVED FROM THE FEMALE BLADDER. BY. T. HOLMES, ESQ.

A young married woman had passed a hair-pin of the usual bent form into the urethra, and three weeks later consulted a surgeon respecting it. Mr. Faithorn, of Chesham, under whose care she came, succeeded in removing it with forceps without any previous incisions or dilatation of the urethra. It was much bent in removal. It came out thickly crusted with phosphates. She recovered quickly, and no inconvenience remained.

COLLOID CANCER OF THE OMENTUM. BY W. BRINTON, M.D.

An elderly lady had died, as was supposed, of cancer of the liver. She had been much distressed by vomiting, but no hæmatamesis had occurred. The liver had been felt enlarged, but there was also a distinct tumour below it. The autopsy showed colloid cancer in the liver, and also in the omentum.

CARCINOMA OF THE STOMACH UNDERGOING A CURE.
BY S. WILKS, M.D.

Martin F., aged 65, was admitted, under Dr. Gull's care, into Guy's Hospital, on August 6th, 1856, and died November 24th. For a year before admission he had suffered from vomiting, and other gastric symptoms, accompanied by great emaciation, indicative of an obstruction at the pylorus. He was so weak that he was obliged to be placed in bed, and he appeared as if he could not survive many days. A tumour was felt at the pylorus. He took but little food, and this, in part, remained down. After the expiration of three or four weeks the vomiting was less urgent, so that he soon was able to pass several days without any sickness at all. After this his condition was tolerably uniform; he did not improve in general health, although he did not retrograde. The nourishment he took was small in quantity, but remained on his stomach, and at the same time the pyloric tumour was less distinct; in fact, fresh visitors to his bed side were unable to detect it. He died at last rather suddenly.

The *post mortem* examination showed a recent pleurisy as the immediate cause of death. There was no other disease in the body, except that of the stomach. Some large glands were seen occupying the lesser curvature, and the pylorus felt hard, and, in fact, constituted a tumour, owing to the neighbouring tissues being adherent to it. On opening the stomach the little finger could be passed through the pylorus. The walls were not thicker than usual, although diseased; the coats were blended together, and amongst them was a yellow, amorphous material, which was, probably, dead cancer. Two of the enlarged lymphatic glands in the lesser curvature, each of which was about the size of a walnut, contained a soft semi-fluid material, such as is seen in decayed exudations, particularly cancer. In a third gland some true encephaloid matter was found; this emitted a milky juice, and showed large nucleated cells beneath the microscope. In the midst of it, however, was some degenerating structure, as in the others, which sent out radiating streaks throughout it; so that it was very clear that in a short space of time, even his remnant of cancer would have disappeared; and then the question would have arisen as to the nature of the gastric disorder from which this man had died. It was tolerably certain that this case exemplified the instance of a man who had been suffering from cancer of the stomach for the usual period, and that then being placed under different circumstances (to say nothing of medicine), the disease not only ceased to grow, but the morbid deposit which already existed began to decay. A relief to the symptoms followed, and an unexpected prolongation of life. Should this result have been due only to the man's feeble powers, which were unequal to the formation of new structures, it would show that cancer may sometimes be starved out.

GREAT ENLARGEMENT OF THE HEART WITHOUT VALVULAR DISEASE
BY S. WILKS, M.D.

Charles G., aged 45, was admitted, under Dr. Wilks' care, into Guy's Hospital, in December, 1856. He had had good health until about three months before, when he began to experience oppression at the chest and difficulty of breathing. These symptoms increased until swelling of the legs came on; and, on his admission to the Hospital, he had all the appearance of a man labouring under advanced heart disease. From the extreme fatness of the patient, the cardiac sounds were with difficulty heard, but no bruit was audible, while the systolic sound was slightly double. Hæmoptysis came on, and other symptoms of severe pulmonary apoplexy; and the man died about a month afterwards. The body presented the usual appearance of death by heart disease. While the heart itself was very much increased in size, weighing above a pound and a half, its form was normal, as the due proportion was maintained between its several parts, but there was no valvular disease. The muscular structure was slightly fatty, and the coronary arteries were excessively diseased, as were also the small arteries in other parts of the body. This case is an example of a class occasionally met with of great enlargement of the heart without valvular disease: in the present instance the morbid condition of the small vessels may in all probability be considered as having been productive of an obstruction in the arterial system, the impediment to the circulation being at the periphery instead of at the trunk, and so leading to the usual consequence on the heart itself.

EXTENSIVE DISEASE OF THE KIDNEYS. BY GRAILY HEWITT, M.D.

From a case in which death was preceded by puerperal convulsions. The case from which the specimens exhibited were taken was one of considerable interest. A woman, aged 26, was seized twelve hours after delivery with dimness of vision, and quickly following convulsions, the attack of convulsions leaving behind it coma of a peculiar character. Convulsions occurred at intervals of about half an hour to an hour for the next twelve hours. Death took place sixteen hours after the first attack, and twenty-eight hours after the birth of the child. The left kidney was found exceedingly atrophied, weighing only 170 grains. The right kidney exhibited an advanced condition of that known as granular fatty degeneration. Its weight was eight ounces. The cortical substance was atrophied, of a dull yellowish white colour, with red striæ consisting, apparently, of enlarged veins. The tubular substance was also atrophied, and paler than usual. The texture of the kidney was very loose and flabby. Urine, bloody and albuminous, was found in the bladder. The valves of the heart were somewhat thickened. The walls of the left ventricle were about one-third thicker than normal; in places much exceeding this measurement. The endocardium was thickened, opaque, and of a dull yellow colour. The woman had lived for some time under great privations. It was afterwards ascertained that the lower extremities had been anasarcous six weeks before death.

Editor's Letter Box.

SPLINTS FOR OBLIQUE FRACTURES.

Letter from W. H. Winchester, Esq., F.R.C.S.

Sir,—In the Journal for February 28th, I see an account of the use, in St. Bartholomew's Hospital, of a new *railway splint*, invented by Professor Dummreicher, for the treatment of oblique fractures, and of which a full description is given in the *Medical Times and Gazette* for February 7th.

The introduction and use of such an instrument shows clearly the state of uncertainty in which the treatment of fractures is at present involved; and, indeed, until some fixed principle is established and recognised by the profession, it is impossible that it can be so uniformly successful as it ought.

I have on former occasions endeavoured to point out what I conceive to be the only correct method of treatment, and I would again direct attention to that principle, and earnestly solicit for it the serious consideration of the profession; believing—and from experience knowing—that by its adoption not only will oblique, but also compound or comminuted fractures be rendered as easily amenable to treatment, and indeed even more so, than many simple transverse fractures by the ordinary methods.

It would be well if the terms used were to be in some measure modified, in order that they may convey a more exact meaning. For instance, the word *straight* is used to denote an idea of perfection of treatment. Now, as no limb is perfectly straight, it is evident that it conveys an erroneous impression, and is likely to lead the inexperienced into difficulties, particularly when taking into consideration that the direct tendency of all the ordinary forms of apparatus is literally to produce such a state. *Natural form*, therefore, ought to be substituted for it. Again, as regards extension and counter extension, these terms should be confined solely to that process by which reduction is effected in cases of displacement; beyond this they should not be used,—for, implying as they do an active force in operation, the persistence of it cannot but be injurious. A *passive force* is required, viz., *retention*, in imitation of the natural process. During the integrity of bone, the muscles are retained within certain fixed points, their attachments, beyond which it is impossible to stretch them with impunity; but so long as they remain within these bounds, they are, as it were, in a passive or quiescent state. Our object, therefore, should be to retain them in the same position.

The treatment then resolves itself into these two heads, viz., *reduction*, or the obtaining, and *retention*, or preservation of position; and now the question arises, How is this to be accomplished? We know that early after a fracture reduction is easily effected; it is, therefore, to the retention of such position that the care of the surgeon must be directed, and for this all his skill and ingenuity are required. Now, as the limbs of no two persons are precisely similar, it is absurd to suppose that any one fixed form of apparatus can be applicable to all cases. To be beneficial it becomes necessary that it should have the power of adjustment, so as to enable it to be adapted to the

peculiarities of each individual case. Such particular form should be given to it, whether intended for lateral or posterior application, by previous adjustment to the sound limb; but should this be impracticable, it should be adjusted to the injured limb after reduction has been accomplished, and previously to its being obscured by the application of any bandage whatever. The apparatus having been arranged, a many tailed wet bandage should be applied to, without moving, the limb; and against the side the previously adjusted splint is to be laid; and, the splint being temporarily fixed by a strap so as to steady the limb, the roller is to be applied. Having done this, all that is necessary is to guard against displacement, either from accidents or, what is a more common cause, the movements of the patient himself. This is accomplished by allowing the splint to move freely with the limb; and therefore I have condemned the constant but injurious practice of fixing the splint to the bed, or in any way impeding its motion. So long as the limb is firmly secured to the splint, and that splint has assumed the natural form, affording thereby complete support throughout the entire shaft of the bone, there is no fear in allowing freedom of motion. By so doing the patient's comfort is considerably increased, the irritability and restlessness of a confined or constrained position is prevented, and speedy and perfect union is effected.

I will now briefly relate two or three cases, to show that by attention to the above principle, the treatment of cases, in themselves hitherto considered troublesome, is rendered easy and successful.

In the Middlesex Hospital, under the care of Mr. De Morgan, a case of oblique fracture of the femur, extending into the knee-joint, was treated as above described; and although the patient was, I think, upwards of sixty years old, he was walking about the wards at the end of six or seven weeks, and left shortly afterwards with free use of the joint.

Another case, under the care of the same gentleman, of oblique fracture of the leg, was treated in the same way; and in five weeks union was so firm, that the patient was enabled to put on his military boots, and left the Hospital at the end of six weeks quite strong.

Another case has recently occurred in the practice of my friend Mr. Norway; viz., a fracture of the neck of the femur in a woman 77 years of age. My long adjustible splint was used; and at the end of seven weeks was removed, when the union was so firm, that the head of the bone could be felt freely to move in the socket.

I would refer, for a more full description, to the *Lancet* for August 20th, 1853, and March 1st, 1856; *Medical Times and Gazette*, September 1st, 1855, and December 29th, 1855; and the Association Journal, November 4th, 1853. I may also state that the different forms of my apparatus may be obtained of, and seen at the establishment of, Messrs. Savigny and Co., St. James Street, and that I shall be happy to give further explanation to any one who will favour me with a call.

I am, etc., W. H. Winchester.

Surgeon to the Westbourne Dispensary.

14, Westbourne Terrace Road, W., March 4th, 1857.

OSSIFICATION OF THE PLACENTA.

Letter from J. Scholfield, Esq.

Sir,—It is now upwards of thirty years since I had two cases of partial ossification of the placenta and its appendages. In one case, after delivery of the child, the patient had uterine hæmorrhage. I found partial separation of the placenta; and in detaching it I found its adhesion to the lining membrane of the uterus very strong, except where the separation existed. Innumerable vessels ran from the membrana decidua directly into the surface of the placenta; they felt like icicles, and made the surface of the placenta feel hard. This was evidently a state of ossification. The woman recovered very well from her confinement. In about a year and a half after this she again fell in labour, and was attended by an old woman in the village. I was sent for, but was met before my arrival at the house and told that the patient was dead from hæmorrhage. Not many months after this I had a similar case; and these are the only two I ever had of this description, although I have been in practice upwards of fifty years. My opinion is, that the membrana decidua is the only medium by which the fœtus is supported; and if it was possible to reach the placenta and separate it, hæmorrhage would cease; but this is not practicable. An old assistant, who has been with me nearly thirty years, had a case of placental presentation, where the placenta was expelled four hours previously to the birth of the child. No hæmorrhage ensued after the expulsion of the child. On my stating my opinion to a medical friend, a few days since, he told me he had had a protracted case of midwifery the day before. The child was lost in consequence of a protrusion of a portion of the funis for some time before its birth. I recommended, in such cases, to return the cord and follow it up as high as possible by a plug, made with a linen rag or small silk handkerchief, smeared or not with a little lard. I know of no other plan for such an unfortunate circumstance.

I am, etc., James Scholfield.

Middleton, near Manchester, Feb. 11th, 1857.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—The present aspect of political affairs renders it desirable to postpone the general meeting of Poor-law medical officers until the forthcoming elections have taken place. In the mean time I trust every union medical officer will make it his especial business to lay the grievances of the Poor-law medical staff clearly and forcibly before the candidates for parliamentary honours. Let the profession positively refuse to vote for any man unless he give a distinct promise that he will do his utmost to obtain justice for us. Let each of us point out the iniquity of the system which compelled 290 medical men to throw up their appointments in 1855, and 249 in 1856, and which allows an average payment of 2*s.* 9¾*d.* only for attendance on the sick poor in an illness of a month's duration; that this paltry sum of 2*s.* 9¾*d.* is to cover the cost of drugs, instruments, pharmaceutical appliances, servant, horses and carriage, tolls and taxes, besides numerous other inevitable expenses incidental to a medical practice; that the education required to qualify and render us eligible for our important and responsible duties is laborious and dangerous, as well as expensive, and involves the sacrifice of several years for its attainment; that the duties are most arduous, demanding attendance by day and by night, and exposure to every variety of weather which the recurring seasons can produce, and to every morbid poison and source of infection and epidemic disease by which life can be shortened; that the remuneration for medical attendance on the inmates of sixty-six prisons is at the rate of 14*s.* 5¼*d.* per head, or probably twenty times that sum for each case of actual illness, clearly showing that more sympathy and care are evinced in procuring professional aid and medicines for the convicted offender than for the sick and innocent poor; and that attention in the former case is recognised as worthy of its reward, whilst in the latter it is deemed so unimportant that it may with perfect indifference, as far as the executive is concerned, be the occasion of loss; that it is the very natural result of this system that the public suffers both in the diminished service it receives from the labouring class and in the increase of poor-rates; in confirmation of which it has been stated "the number of paupers, made paupers by sickness, constitutes seventy-two per cent. of the total of paupers." Let the union medical officers be firm in their resolves to obtain justice, and success will ultimately crown their efforts; that our exertions have not been entirely fruitless, is apparent from the fact that last week the Poor-law Board issued a circular letter to each union, recommending a modified form of the district medical relief book, by which our labours will be slightly lessened, as each sheet is ruled for a month instead of a week; it is a copy of one of the forms transmitted by me to the Poor-law Board in July last, slightly altered, but not improved; the large space left at the end of each line for observations would have been better divided into separate columns, and placed in juxtaposition with the necessaries ordered for each week. By the substitution of this form the ratepayers will be considerable gainers, as there are 2597 district medical books constantly in use, which will last at least twice as long as formerly.

In my last letter I advised the union medical officers to request an order from the relieving officer or overseer when required to attend on consultation paupers out of his district. This has already been acted on by a gentlemen in this neighbourhood in the case of an arm-presentation, for which he is entitled to receive £2; whereas, by the old plan, he would have had an approving conscience only for his reward. Let every union medical officer do likewise, and some of the savings in the union books may pass from the ratepayers pockets into those of the profession.

In the name of the Poor-law Medical Reform Association I

beg thus publicly to offer our most cordial thanks to the students of nearly all the Hospitals and schools of medicine in England for their noble conduct in voluntarily coming forward to tender us their aid in this prolonged struggle for justice. I have also the pleasure to acknowledge (as particularly requested) the receipt of £2 17*s.* from the students of St. Thomas's Hospital, which sum has been carried to the account of the association. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, March 7th, 1857.

P.S. The length of this letter (in which I have largely quoted from the rough sketch of a petition hastily penned by our friend Dr. Hodgkin just before his departure for Palestine) prevents my sending a continuation of my correspondence with the Weymouth Board of Guardians, who have not yet given me a copy of the charges upon which the resolutions were founded. I shall not, however, let the matter drop, as guardians must be taught that union surgeons are not to be trampled on with impunity. The chairman of the Board has resigned; and a guardian said publicly it was in consequence of my "violent conduct"; but this I cannot credit, as another reason was assigned.

POOR-LAW MEDICAL REFORM: THE APPROACHING PARLIAMENTARY ELECTIONS.

Letter from Charles F. J. Lord, Esq.

Sir,—In furtherance of Poor-Law Medical Reform, I beg *now* earnestly to call the attention of all concerned in the question to the approaching Parliamentary elections, which unforeseen events have so accelerated.

The excitement created by the renewed efforts of the medical officers so long ably marshalled by Mr. Griffin, and the spontaneous demonstration this week so nobly making by the medical students of the land, render this period eminently adapted for the movement I proposed to the Editor of the *Civil Service Gazette* on the 21st ult.

A force should be immediately organised to secure outspeaking to every candidate for a seat in the House, and to his canvasser for votes. At every hustings, promises should be sought of the candidate, that attention shall be given to Poor-Law Medical Reform; and, in many cases, pledges secured from him, giving an assurance of his support and cooperation when "returned".

Men familiar with electioneering tactics, can best say *how* these efforts should be brought to bear to secure the proposed end. Short statements of the case might be prepared, printed and well circulated in every county and borough; loud knocks should be made at the committee rooms of the rival candidates.

Judicious but "well-seasoned" handbills might be freely distributed—*facts*, not *caricatures*—though the former are so *outré* that they might be readily taken for the latter. Pithy "posters" something like the following:—

VOTE FOR "HEART OF OAK"!!

THE FRIEND OF THE POOR,

AND

THE FRIEND OF THE POOR MAN'S DOCTOR!

DOWN WITH "SCROGGINS"!

WHO LEAVES THE POOR MAN AND WOMAN IN SICKNESS

TO BE DOCTORED FOR A MONTH

At Fourpence per Case!!

Hitherto I have never taken an active part in a Parliamentary election beyond voting; but under the circumstances I suggest, I would do so. The poor-law medical staff has been delicately patient long enough, mildly remonstrating, respectfully petitioning and memorialising. These measures, and public meetings *alone*, are "used-up". The agitation I urge would be general, well-timed, special, well-aimed, "*telling*", through advertisements in every London and provincial paper, simultaneous letters to each editor, and sometimes leaders in furtherance of the righteous cause—the poor man's cause, and the cause of him who succours the poor man in sickness and at death.

To aid in effecting this object, I should feel it my duty to contribute £5 to an electioneering fund: some would give more, others less; the expense and trouble would be great, so also would be the gain; let us have "the long pull, and the strong pull, and the pull altogether". Three thousand poor-law medical officers, 16,000 medical men! The profession is too indifferent to its just public rights: science and benevolence may well go hand in hand with the exercise of political influence. I am, etc.,

Charles F. J. Lord.

New Finchley Road, Hampstead, March 10th, 1857.

ON THE SOUNDS OF THE HEART.

Letter from A. P. Stewart, M.D.

Sir,—I have read with interest Dr. Halford's reply to Dr. Markham, in this day's Journal, and beg you will do me the favour of inserting, in your next number, a few words in regard to the experiments at the Middlesex Hospital. It appeared to me, in common, as I believe, with all who watched the experiments closely, that the proof of the correctness of Dr. Halford's views, as to the regulating function of the pericardium, and the mode and direction of the heart's contraction, was complete. I am not yet convinced, however, that he has *entirely* made out his main doctrine, that the first sound is wholly caused by the tightening of the valves. Though at once convinced that the first sound had *in great part* disappeared, I remained, after repeated and very careful trials, decidedly of opinion that there was still present, as I expressed it, "a remnant of sound," quite distinct from the friction of the heart against the stethoscope, and very much resembling what is heard on listening, with the stethoscope, to the sounds produced by a mass of contracting muscle, *e.g.*, the fleshy part of the thumb. Dr. Goodfellow, I think, shared my opinion; but Dr. Seth Thompson, from whom I never differ without half-suspecting the accuracy of my own judgment, did not agree with me. He, however, very truly remarked, that the place for such an experiment was a quiet room, with three or four observers present; and that no reliable conclusions could be drawn from even the most careful observations made in a crowded theatre.

I am, etc., A. P. Stewart.

Grosvenor Street, Grosvenor Square, March 6th, 1857.

DISEASES OF SPECIAL OCCUPATIONS.

Letter from Edward Smith, M.D., LL.B.

Sir,—It would confer a great favour, if any of our associates could inform us, from their own knowledge, of the diseases, if any, to which those who use the diving-bell are especially subject, and chiefly in reference to diseases of the lungs.

I am, etc., Edward Smith.

63, Grosvenor Street, March 11th, 1857.

ON THE AMOUNT OF MORTALITY FROM CHLOROFORM.

Letter from James Arnott, M.D.

Sir,—In the letter of the 7th February, which I had the honour of addressing to you, upon the subject of chloroform, I limited myself to remarks bearing on certain opinions which had been previously published in the Journal; but, in doing so, it was necessary to advert to circumstances which, I find, may be misunderstood without further explanation. The great importance of the subject will, I hope, excuse this extension of my communication.

I conceive there is no question at present before surgeons requiring greater consideration than that of the effect of chloroform on the results of operations. Probably no more extensive or rapid change than the introduction of etherisation ever occurred in the medical art; but there are few, I think, who will now deny that there are at least grounds for the grave suspicion that we have been so dazzled by the discovery of a means of preventing the pain of operations, as not to perceive that this great advantage has only been obtained at a great sacrifice of life.

No one now disputes that a great number have died from the immediate or primary effects of chloroform; but it is still maintained by many, that these are its only fatal effects, and that there are no ulterior evil consequences.* The opinion

* In my former letter there is an error of the press, respecting the list of sudden deaths from chloroform in the Association Medical Journal. The correct statement is, that this list makes them amount to twenty-six in October 1853; whereas, in Dr. Crisp's, they amounted to forty-two in June of the same year.

[The list to which Dr. Arnott refers, was published in the Association Journal on February 11th, 1853; and therefore could not have given statistics up to October of that year. Editor.]

that the after effects are beneficial, and that they promote the healing of the wound, has, I presume, been abandoned since the exposure of the fallacies contained in the statistical tables on which that opinion was founded.

The result of my own inquiries on this subject is, first, that if surgeons were aware of all the cases in hospital and private practice in which chloroform had proved suddenly fatal, they would hesitate before exposing their patients to so great a hazard as arises from its administration; and that, if even this amount of mortality had been foreseen on the first proposal of etherisation, it would never have been generally adopted: secondly, that the *sudden* deaths from chloroform constitute a very small proportion of the whole amount of mortality produced by it.

The ulterior and more numerous bad effects of chloroform can only be ascertained by statistics; that is, by learning whether more die now from operations than before its introduction, without our being able to assign any other cause for the increased mortality. It has been said by Dr. Snow and others, that we cannot attribute the deaths that occur some time after its administration to chloroform, because they are not marked by any peculiarity, or preceded by any peculiar symptoms; and because we cannot explain its mode of fatal action. Even granting the correctness of the assertion that chloroform produces no ulterior symptoms of a specific character, this reasoning would be incorrect, and opposed to analogy. We know that foul air and hæmorrhage exert a very fatal influence on the results of operations, yet the effects of neither are cognisable by any peculiar symptoms; nor do we know more of the mode in which they prove injurious, than we know how bark cures an ague.* No one would now dream of producing anæsthesia by syncope from blood-letting; yet Mr. Wardrop, in a case of anæsthesia (*Medico-Chirurgical Transactions*, vol. x) produced by taking fifty ounces of blood, says that the patient "suffered little from the effects of the operation; and, though she remained pale and feeble for a few days from the profuse bleeding, yet in a week she was better than most patients are who have undergone so severe an operation." This is the very language that has often been used in describing the condition of patients after etherisation. But it is not correct to say that there are no ulterior symptoms produced by chloroform. The excessive and long continued prostration that so often follows etherisation is surely contradictory to this assertion; so are the cases to which attention has lately been directed by Mr. Mowat (*Proceedings of the Crimean Medical Society*), in which "reaction is never thoroughly established, and the patient dies from exhaustion in from twelve to twenty-four hours;" and the similar cases still more recently noticed by M. Chassaignac (last number of the *Lancet*), in which "it would seem the injury done to the vital forces by the chloroform has been so profound that the patient could not recover from it. He recovers, it is true, from the primitive anæsthesia; but he remains in a state of half-stupor and prostration, and in a short period succumbs." Some time ago, I was informed of a case (not publicly reported) in which convulsions continued during twelve hours after etherisation, and which terminated in death.

It has been objected to the determination of this question by statistics, that the attempt to do so is yet too early. But surely, if eight years experience be not enough, what question of this kind can be so determined? If the results of a statistical inquiry be well marked, a much shorter period than this is amply sufficient. If half the number of cases of amputation and lithotomy were to prove fatal after chloroform, in the various hospitals of the kingdom, instead of one case in four or five, as formerly, during a period of one or two years, and without any other assignable cause than chloroform, would it not be monstrous to continue this terrible loss of life, under the plea that time enough had not elapsed for accurate statistics?

I have published statistical returns showing that there has been an increase in the mortality from amputation and lithotomy in the London hospitals, for the last three years and a half, to the enormous extent of 12 and 28 per cent. respectively; and the similarity of these hospitals in all important circumstances has given me an opportunity of doing so. As there are great differences amongst provincial hospitals, in respect to site, accommodation for patients, etc., such a standard for comparison cannot be formed as I have used for London; but it would be very useful if the mortality at the two periods were compared in separate hospitals independently. With this view, I subjoin a table showing the mortality in five hospitals. These are not selected; but they are all the hospitals, so far as I know, in which exact records have been kept and published, adapted for the present inquiry; and from the three first I formed the standard of the former rate of mortality in London.

Before Chloroform.

Hospitals.	Authorities.	Period of observation.	Cases.	Deaths.
St. Bartholomew's	Mr. Haig	1846	22	4
St. Thomas's	Mr. South	1842-47	49	13
University College	Mr. Porter and Mr. Cadge	1835-46	103	24
Guy's	Dr. Fenwick	1843-45	36	4
Oxford	Mr. Hussey	1838-47	69	5

After Chloroform.

Hospitals.	Authorities.	Period of observation.	Cases.	Deaths.
St. Bartholomew's	Medical Times and Gazette.	1855-56	31	9
St. Thomas's	Medical Times and Gazette.	1855-56	23	9
University College	Medical Times and Gazette.	1855-56	21	7
Guy's	Medical Times and Gazette.	1855-56	59	17
Oxford	Mr. Hussey	1848-52	32	8

Increase of Mortality since Chloroform.

Hospitals.	Per Cent.
St. Bartholomew's	10·9
St. Thomas's	12·5
University College	10·
Guy's	17·6
Oxford	17·8

If similar tables to the above were constructed, showing the difference in other hospitals, I am confident, from the great average increase during the last three years and a half, both in London and the country, that the same result would appear; and that, if, amongst a large number of patients, there should be only a slight increase or a decrease in the mortality, the exception could be accounted for by alterations in the construction of the hospital, or improvement in the general management.

After ascertaining that there has been a great increase of mortality, the next point to be determined is, whether other causes than chloroform might not have produced it. Now, we know that chloroform is a sufficient cause; we know its poisonous nature, from the large number of sudden deaths it has produced, the frequent asphyxias occasioned by it, and the effects described by Mr. Mowat and M. Chassaignac. What other likely causes can be assigned? When Dr. Simpson (in a discussion in the Edinburgh Medical Society) asserted that there had been a saving of life from chloroform, Mr. Syme attributed this, if it really existed, to improvements in the art of operating; so I have learned that the actual increase of mortality has been ascribed to a retrogression in surgical skill! Some, again, have assigned an increase of pyæmia as the cause; but statistics have shown that pyæmia was as common before the introduction of chloroform as after it, unless, indeed, one of the modes by which chloroform proves fatal be by predisposing to this affection. Or it may be alleged that hospital gangrene has existed in certain localities, and at certain times; but, if this were the case, it would not account for the long continued, steady, and extensive increase of the mortality. To ascribe the amply proved great increase of mortality to such causes, when we have one so obvious and sufficient in the universal use of chloroform, would be a strange departure from the usual rule in reasoning on such subjects.

I am, etc., James Arnott.

London, February 21st.

[We must decline inserting any further letters on this subject. Editor.]

* *Post mortem* examination has thrown no light on this question; but it has often afforded consolation by exposing organic disease, which, under any circumstances, would have soon cut off the patient. In an unreported case of death from chloroform, lately brought under my notice, the arteries of a thigh, which was about to be operated on, were so diseased as to have rendered death from secondary hæmorrhage almost inevitable.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

*Coates. On March 4th, at 10, Circus, Bath, the wife of C. Coates, Esq., Surgeon, of a son.

Collins. On March 3rd, at 46, Gloucester Road, Regent's Park, the wife of W. J. Collins, M.D., of a daughter.

*Cooper. On March 10th, at Cromer, the wife of James Cooper, Esq., Surgeon, of a daughter.

Heward. On March 9th, at 56, Grosvenor Street, Grosvenor Square, the wife of Thomas Spencer Heward, Esq., of a daughter.

Ledger. On March 4th, at Kensal Villa, Harrow Road, the wife of Matthew Ledger, Esq., Surgeon, of a son.

Wilkinson. On January 30th, at the Ventine, Barbadoes, the wife of J. Lyte Wilkinson, M.D., member of the General Assembly, of a daughter.

MARRIAGES.

Godfrey—Rush. Godfrey, John Blennerhasset, M.D., to Mary, third daughter of John Roger Rush, Esq., of Craven Hill, Hyde Park, at St. James's, Paddington, on March 7th.

Wise—Sibbald. Wise, Thomas, Esq., Surgeon, to Anne, third daughter of Thomas Sibbald, Esq., of George Street, Edinburgh, on March 4th.

DEATHS.

Baker. On March 9th, at Staines, Middlesex, Sophia, wife of James Baker, Esq., Surgeon.

Clark. On March 5th, Harriet, wife of Frederick Le Gros Clark, Esq., Surgeon, of Spring Gardens.

Joseph, E., Esq., Surgeon, of Manchester Street, aged 52, on March 7th.

MacIntyre, William, M.D., late of Harley Street, at Brighton, aged 65, on March 2nd.

Mackinnon. On March 3rd, at Wiesbaden, Nassau, Jane Pryce, third daughter of the late Donald Mackinnon, M.D., formerly of Great George Street, Westminster.

Philp. On February 27th, at Nice, aged 19, Eleanor Read, eldest daughter of Francis R. Philp, M.D.

HEALTH OF LONDON:—WEEK ENDING MARCH 7TH, 1857.

[From the Registrar-General's Report.]

The deaths registered in London, which in the first week of February rose to 1368, have continuously decreased since that time, and in the week that ended last Saturday were 1175. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1160. For the purpose of comparison, this average must be raised proportionally to increase of population; in which case it will become 1276: and it will appear that the public health is at present so far good that the deaths last week were less by 100 than the number that would have occurred if the average rate of mortality had ruled.

The mortality from diseases of the zymotic order was last week unusually low, for the deaths referred to these did not exceed 171; whilst the corrected average for corresponding weeks is 244. Small-pox was fatal in only two cases, both of which were those of young children, and occurred in Clerkenwell; and it may be stated that London enjoyed almost complete immunity from this distemper or from its fatal attacks. Whether it be the result of causes that are temporary in their operation or otherwise, it is probable, considering the greatly increased population, that small-pox has never been less prevalent, or more subdued in its character, than at the present time. Measles in the previous six weeks averaged 27 deaths weekly; the number fell last week to 10. Twenty-two children died of scarlatina, a number which shows a decrease also in this complaint. The deaths from typhus declined to 26, and those from diarrhœa to 12. The most fatal complaint in the zymotic class was hooping-cough, which carried off 70 children. The deaths caused by diseases of the organs of respiration, which in the previous week were 304, declined last week to 262, of which 136 were from bronchitis, and 100 from pneumonia. Two deaths are recorded as caused by privation; two by intemperance. Six persons are returned who had attained the age of 90 or more years; and in this number is a pensioner in the Royal Hospital at Chelsea, whose age is stated to have been 100 years.

Last week the births of 970 boys and 888 girls, in all 1858 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1649.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·122 in. The mean reading of this instrument was above 30 in. daily during the last ten days of February, and the first five of the present month. The highest reading last week was 30·43 in., and occurred on Sunday (the 1st instant). The mean temperature of the week was 43·1°, and was 2·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The highest temperature in the week occurred on Sunday, and was 55°; the lowest occurred on Thursday, and was 29·5°. The range of the week was therefore 25·5°. The mean dew-point temperature was 37·9°; and the difference between this and the mean temperature of the air was 5·2°. The wind which blew on the first two days from the east, was afterwards generally in the west. There was no appreciable amount of rain. The horizontal movement of the air varied frem 10 miles a day to 150.

The late Snow Storm. Mr. J. W. Carr, of Colchester, thus writes to the *Times* of March 10th:—"The most remarkable change of temperature took place yesterday (March 8th) that I ever observed. The morning was clear, with a brisk wind from the north-west. A few minutes past 10 a.m. there was thunder and a terrific gust of wind from the south-east, which lasted about forty seconds. The wind again veered to the north-west, but the temperature rose to 56° Fahrenheit in the shade. At three minutes past 11 a.m. there was a heavy fall of hail and snow, and in the course of seven minutes the thermometer fell 19½°. This extraordinary change was registered on two instruments, one with a north aspect and the other south. The barometer was 29§ inches."

TO CORRESPONDENTS.

Letters and other Communications for the Journal should be directed to the private address of the Editor, 39, Curzon Street, May Fair.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Mr. Paget's paper on Laringismus, published in last week's number, was read before the Leicester Medical Book Society on February 11th.

Communications have been received from:—Dr. John Green; Mr. J. S. Gamgee; Mr. Richard Griffin; Mr. H. W. Rumsey; Dr. Cockle; Dr. Hayes Jackson; Dr. J. C. Hall; Mr. W. H. Winchester; Dr. G. Goddard Rogers; Mr. Augustin Prichard; Dr. C. Handfield Jones; Mr. John Burrows; Dr. David Nelson; Mr. J. Scholfield; Mr. W. M. Clarke; Dr. Edward Howell; Mr. Drew; Mr. Holmes Coote; Mr. R. H. Dawson; Mr. Hinton; Dr. W. Budd; Dr. W. Pruen (Penang, East Indies); B. L. (Cheadle); Dr. E. H. Niven; Mr. J. Hutchinson; Mr. C. F. J. Lord; Mr. Holmes; Dr. H. Jones; Mr. W. T. Fox; Dr. T. Boisragon; Mr. James Cooper; Mr. George Terry; and Mr. Stone.

ADVERTISEMENTS.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XII.] LONDON: SATURDAY, MARCH 21, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

TREATMENT OF VARICOSE VEINS BY LIGATURE AND SUBCUTANEOUS INCISION.

Under the care of H. LEE, Esq.

HENRY M., aged 40, a pensioner, was admitted under Mr. Lee's care, for the first time, on February 18th, on account of a varicose condition of the saphenous vein and its branches. There was then a considerable enlargement of the branches of this vein below the right knee, for which he had been under treatment, by means of mechanical applications, for about six months, but without benefit. The infirmity occasioned by the enlarged veins had necessitated his discharge from the army. On the 21st, Mr. Lee passed four needles under the vein below the knee, and enclosed it in ligatures; and, on the 25th, he divided it in two places by subcutaneous incision between the needles. The needles were withdrawn on the 27th. The patient was able to walk about on the following day; and, on March 2nd, he was discharged from the hospital.

He commenced immediately to exert himself a good deal. Another part of the vein higher up now began to enlarge; and a large varix was formed, the skin over which was so tense, and the vein so full of blood, that it was feared it would give way. He accordingly reapplied for admission; and, on March 9th, Mr. Lee passed three needles under the enlarged vein, which he divided subcutaneously in two places, between these points, on the 11th. The needles were withdrawn on the 13th; and, on the next day, the man began to walk about, but was sent to bed again as a precautionary measure. The part of the vein included in the operation seemed quite closed by coagulum; the varix was quite flaccid, and the skin loose.

It should be mentioned, that a bandage was at first applied, in order to accustom the deeper veins to the increased flow of blood that would follow the obliteration of the saphena.

REMARKS. This case is reported to show the extreme rapidity and painlessness of the treatment pursued. The great relief which it affords (for the time, at least) can only be estimated by seeing the patient before and after the operation has been practised. It also shows that a return of the disease, in some neighbouring portion of the vein, is apt to occur, especially after a too speedy exposure to hard labour. This, however, is seldom or never so severe as the original complaint, and is easily treated in the same manner.

ST. MARY'S HOSPITAL.

I. OVARIAN CYST INJECTED WITH IODINE.

Under the care of I. B. BROWN, Esq.

MR. BAKER BROWN operated recently on a case of ovarian cyst. The patient was 40 years of age, unmarried, and had been the subject of this disease for a long time. The cyst had been tapped some years ago, and had since remained in a quiescent state, but had recently enlarged with some rapidity; and the weight caused her annoyance. It appeared to be of the unilocular form, and there was no tension of the abdominal parietes. The case seemed in all respects one in which treatment afforded a very good prospect of cure. The first proceeding was to evacuate the contents of the cyst. This was done by tapping with a large trocar in the left semilunar line, in the recumbent and semiprone position. This is Mr. Brown's usual practice, and is recommended in his work on the subject. It has the advantage of exposing the patient less to the risk of syncope, of requiring none of the cumbrous appliances of bandages, etc., round the abdomen (atmospheric pressure being sufficient to produce gradual evacuation of the contents), and of ensuring a more complete emptying of the sac by changing the position of the patient as it may be necessary. Sixteen and a half pints of fluid, not containing much albumen, were obtained; and the parietes of the abdomen thus left quite flaccid and concave. Then six ounces of the strong Edinburgh tincture of iodine, undiluted (three times as strong as the ordinary tincture), were injected, and left in. The precaution was taken of turning the patient over on her side again, in order to see that none of the tincture would run out; and therefore that the sac had not been over filled. This application did not seem to produce the slightest pain or inconvenience at the time. Iodine was detected in the saliva five minutes after the operation. Severe vomiting ensued, and continued all night, accompanied by considerable prostration, requiring the frequent administration of stimulants. All the secretions (vomit, urine, saliva, etc.) contained iodine in large quantity. She suffered much for some days from weakness, loss of appetite, and pain in the abdomen; but, when last seen, on March 17th, she was rapidly recovering. The secretions (for the first time) were free from iodine; the expression was tranquil; she could bear deep pressure on the parietes of the abdomen (which were quite flaccid) without any particular inconvenience; and was quite free from fever. The tongue, however, continued much coated.

II. OPERATION FOR VESICO-VAGINAL FISTULA.

Under the care of I. B. BROWN, Esq.

Mr. Brown also operated again on the case of vesico-vaginal fistula, previously reported in this JOURNAL, pp. 146 and 165. The rent had been considerably diminished by the previous operation. The same method was again followed, viz., that of Dr. Boseman, four wires being passed through the cleft, and secured by means of perforated shot on a silver shield. When she was last seen (seventh day after the operation), no water had passed through the wound.

The operation for ruptured perinæum, reported at p. 165, has not succeeded. The wound went on well for two days, then assumed a sloughy aspect, coincident with the appearance of the catamenia out of their usual course. Menstruation has continued rather profusely ever since; the slough has not yet separated, but it is plain that the posterior part of the wound will not unite.

SAMARITAN HOSPITAL.

OPERATION FOR VESICO-VAGINAL FISTULA.

Under the care of T. SPENCER WELLS, Esq.

MR. SPENCER WELLS operated, on March 11th, on a case of vesico-vaginal fistula, which had before been the subject of frequent operative proceedings. The cleft on this occasion was large enough to admit the end of the finger, and presented the formidable complication of being formed in great part by the uterus itself. There had been great loss of substance, and there was a fissure also on the anterior part of the uterus. The operation consisted in refreshing the edges of the cleft, paring off a portion of the mucous membrane from the cervix uteri, and laying the parts in apposition by means of a hare-lip suture, three pins being passed through the substance of the refreshed edge, so as not to involve the bladder. Thus the edges of the vaginal portion of the cleft were in part applied to the refreshed surface of the uterus. The pins were covered below with cotton wool, and collodion painted over the edge of union.

ST. GEORGE'S HOSPITAL.

CONGENITAL FISSURE IN THE HARD PALATE.

Under the care of G. Pollock, Esq.

A rare form of congenital defect of the palate has been operated on by Mr. Pollock at St. George's Hospital. The patient was a young female. There was a small perforation in the posterior part of the hard palate, situated in the middle line, and divided into two parts by a thin strip of the mucous membrane of the mouth bridging over the fissure. The uvula also was bifid, and the left segment adhered to the edge of the soft palate near the tonsil, producing a very singular appearance. The chief inconvenience which resulted from the defect in the hard palate, was that distinct speech was much interfered with by a sort of whistle produced by the passage of air through the small hole at each utterance. The operation was not very difficult; the edges of the cleft were pared, and the surrounding mucous membrane was dissected up and united across the cleft; tension being obviated by lateral incisions. Two sutures were then passed through the flaps, and a stout piece of silk through the lateral incisions, from one to the other behind the flaps, partly to press the latter together, but also and mainly to prevent the too speedy union of the incisions, which often occurs before union is completed, and produces tension on the wound.

Remarks. It may be observed that Mr. Pollock usually adopts the plan of freeing the mucous membrane from the hard palate by dissection carried on from the lateral incisions towards the cleft. This is not only more easy to do in the majority of cases, but has the important advantage of leaving a perfectly fresh and uninjured edge, when the latter has been pared. If the dissection is carried on from the cleft outwards, it is difficult to avoid bruising the edges which are to be united, and which are thus, of course, rendered more liable to slough.

ST. BARTHOLOMEW'S HOSPITAL.

NECROSIS OF THE FEMUR.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

At St. Bartholomew's Hospital, Mr. Stanley operated again upon the case of necrosis of the lower end of the femur, mentioned at page 102. There was still some dead bone in the outer part of the femur, and a sinus existed, from which the probe passed into the shaft and touched dead bone. The present operation consisted in making an incision of four inches in length on the outer side of the limb, and removing part of the outer wall of the bone with a fine saw, when some pieces of necrosed bone were readily found and removed. Two of the pieces measured two inches each in length, and there were many smaller. The operation was very long and tedious, and the patient was kept under chloroform for an hour and a half, but there was no considerable hæmorrhage. A good deal of sickness followed this protracted exhibition of chloroform. The result of this case will be given at a future time.

CITY DISPENSARY.

CONTRIBUTION TO THE PATHOLOGY OF INTRATHORACIC CANCER.

By John Cockle, A.M., M.D., Physician to the Dispensary; and to the Margaret Street Dispensary for Consumption, etc.

In a paper, published in the Association Medical Journal for November 3rd, 1854, I endeavoured to point out the occasional difficulty of diagnosis characterising some forms of intrathoracic cancer. The case reported was one of nodulated cancer of the lungs. The intervening parenchyma being healthy, and the signs of pressure absent, no physical phenomena, during life, revealed the character of the disease. The present contribution illustrates the difficulty of differential diagnosis, even when well marked physical changes lent their aid to the physical investigator.

Mary Firmin, aged 26, of healthy family, was admitted under my care June 28th, 1856.

Previous History. She has felt pain in the lower part of the left side, occasionally, since her marriage, five years ago. There is reason to believe that a blow was received on the side about this period. At Christmas, she began to suffer from shortness of breath. For the last four months, the dyspnœa and pain have been greatly increased; the latter extending to the epigastrium, and passing backwards between the shoulders. She is, in addition, troubled with cough, attended with thick yellow expectoration. Blood has never been observed in the sputa. At the commencement of this period, she was compelled to keep her bed, and could lie only upon the right side. At the end of a fortnight, she was enabled to resume her domestic duties. She suffered subsequently several relapses, which confined her to her bed, and from which she again partially recovered. She has so continued to the date of admission.

Present State. The patient does not suffer so much from the pain in her side, but feels her breath very short. She complains of pain in the back of the neck; she coughs a great deal, and expectorates yellow phlegm; suffers from palpitation, and feels her heart beating upon the right side; feels sick in the morning; perspires at night, and feels very faint; considers she is decidedly losing flesh. The bowels are regular, and there is diuresis. The catamenia are generally regular, and upon the last occasion were profuse; there is no swelling of the ankles. She can now lie only upon the right side.

Inspection. She is of short stature, somewhat thin, of fair complexion, with light-coloured hair. There is no great action of the nares during respiration. There are observed to be distension of the cervical veins, and pulsation of the right jugular immediately above the clavicle; as well as distension of the mammary veins at the axillary line, more marked upon the left side. The heart pulsates upon the right side between the second and third ribs down to the right nipple. There is marked fulness of the left mammary region, and apparent contraction at the left base, anteriorly and laterally. There is a blister mark under the clavicle. The respirations are 38 per minute, exaggerated in type.

Palpation. The cardiac impulse is absent over the normal site, and the normal fremitus is absent over the left side. Pulse 108, small, weak, regular, equal in both wrists.

Percussion. There is marked dulness from below the left clavicle over the left side, anteriorly, laterally, and posteriorly, excepting at the upper and vertebral angle of the scapula. The dulness passes the median line anteriorly towards the right.

Measurement. Three inches below the nipple, the right side measures 14⅛ inches, the left 13½; above the nipple, the right side measures 15¼ inches, the left 16.

Auscultation. No respiratory murmur is audible over the left side, with the exception of somewhat hoarse murmur immediately below and above the left clavicle, and at the upper and vertebral angle of the scapula. No ægophony is heard. Upon the right side, laterally and posteriorly, exaggerated blowing respiration is heard. The maximum of the heart's sounds is over the site of visible impulse; these sounds are normal, and unattended by murmur.

July 4th. There were dyspnœa, and cough with scanty yellow expectoration. The patient lay upon the left side, and had a distressing sensation of the heart beating upon the right side. Last night, the lower part of left side seemed swollen. The kidneys act freely. The patient has pains in the neck, ascending to the face. The pulse, respiration, etc., and physical phenomena, are unchanged.

July 8th. Dyspnœa has increased; the cough is relieved; there is no expectoration. The patient complains of pain in the chest. Dorsal decubitus. Respirations 40; pulse 120, small and weak; perspirations.

July 11th. Dyspnœa is increased; the cough is still less; the decubitus is left-sided or dorsal. The kidneys do not act so freely. Friction sound is heard at the inferior part of the left side; the breath-sound is somewhat more distinct at the spine. About this period, the patient suffered severe relapse, with increase of dulness and perfect absence of respiratory murmur in the clavicular and postero-superior region.

Some few weeks subsequently, the patient was admitted into St. Thomas's Hospital, under the care of Dr. Risdon Bennett. This physician thought it advisable, in order to clear the diagnosis, to recommend an exploratory puncture in the ordinary site of empyema. A small quantity of blood alone escaped; shortly afterwards, an oblong diffused tumour appeared in the left axilla; and now Dr. Bennett felt confirmed in the suspicion, that the case was one of malignant growth.

The patient again came under my notice on October 24th. The symptoms were steadily progressive, and the following phenomena were then accurately noted.

Inspection. Emaciation is general; the face is flushed; a large distended vein runs down the forehead. The respirations, exaggerated in type, are 32 per minute; pulse, 125, weak, equal in both radials. The jugular veins are moderately distended

and pulsating; they are intensely distended during coughing. The left post-clavicular region is somewhat fuller than the right. There is great prominence of the left side, particularly at and above the nipple. The spine is straight; the inferior angle of the left scapula is one inch further from the spine than the right. The left scapula is almost motionless during respiration. There is general fulness of the left side posteriorly. There is permanent distension of the mammary veins, more particularly the left. A diffused flattened tumour exists in left axilla, corresponding to the axillary line: it is painful at times, and always tender upon pressure. A scar of puncture is seen four inches below the axilla, a little to the left of the axillary line, between the fifth and sixth ribs. The abdomen is tumid. There is anasarca of the inferior extremities (increasing).

Palpation. Vocal fremitus is entirely absent over the left side, before and behind. There is well marked sensation of fluctuation between the third and fourth ribs anteriorly, immediately above the nipple. The apex of the heart is felt one inch to the right of the right nipple; the base apparently corresponds to the osteo-cartilaginous junction of the second right rib.

Measurement. In the axilla, the left side measures 16 inches; the right side, 15¾ inches. Immediately above the nipple, the left side measures 17 inches; the right side, 15½ inches. Three inches below the nipple, the left side measures 14½ inches; the right side, 15¼. The left nipple is two inches higher than the right. Both are equidistant from the median line.

Percussion. The left side is universally dull, anteriorly and posteriorly; the dulness passes the median line in front, and extends between one and two inches to the right. The stomachal note is heard in the left hypochondrium. Upon the right side, tolerable resonance exists laterally and posteriorly. The abdomen yields a markedly tympanitic note above, but acquires a comparatively dull character in the lower region, with increased resistance.

Auscultation. Immediately beneath the left clavicle, distant tubular breathing is heard; while, over the remaining portion of the left side, the respiratory murmur is absent. The heart's sounds are heard over the mammary region, diminishing inferiorly. Upon the right side, blowing respiration is heard under the clavicle, with *râle sonore* during inspiration, extending down the lung, laterally and posteriorly. Posteriorly, the respiratory murmur retains, generally, the blowing character; but râle at times mingles with the acts of both inspiration and expiration, acquiring with the latter the character of shrill sibilus. Vocal resonance is somewhat exaggerated over the entire right side of the chest. The maximum of the heart's sounds remains as before stated.

Subsequent examinations did not elicit any additional fact of importance, with one exception; viz., during the last three weeks of life, the apparently gradual extension of a weak respiratory murmur over the middle and posterior portion of the left lung.

The infiltration of the lower extremities, and the abdominal effusion, gradually increased, and the function of the kidneys as gradually became impaired; the dyspnœa became, *pari passu*, more distressing, and attended with suffocating paroxysms, and permanent semicyanotic tint of the nails. So marked was still the sense of fluctuation upon coughing between the third and fourth left ribs, that I was tempted to advise the introduction of a fine exploring needle over the most prominent portion of the swelling, with the view to momentary relief, should empyema coexist. The operation gave pain, and only a drop or two of blood trickled down the groove of the needle. During the last three days of life, signs of centric pressure developed themselves, and nourishment could only be taken in the erect and forward position. Death, apparently by asthenia, occurred in the latter end of December.

Autopsy. Present: Dr. Sibson, Dr. F. C. Webb, Mr. Selwood, and Mr. Broughton. A general tendency to decomposition was observed. Upon opening the thorax, a large tripartite mass was seen, exceeding in aggregate bulk an adult head, and of so semifluid a consistence that, in detaching it from its connexions, large quantities of grumous blood and encephaloid matter escaped. The portions of the mass were invested with a fine bounding membrane of glistening character. The large rounded portion occupied nearly the entire left side of the chest, crushing the lung along the vertebral column, and adhering to its anterior face. Firm adhesions existed on this side throughout, particularly between the tumour, spine, and mid portions of the fourth, fifth, and sixth ribs, which latter were markedly softened, and formed a medium of connexion between the tumour and the oblong swelling upon the outer chest-wall. The tumour had carried the heart before it as far as the right nipple, but did not itself extend far beyond the right costal cartilages. By this encroachment, however, together with that of the displaced heart, the right lung also was lessened in volume to the extent of at least one-half, and bound down by adhesions. The second portion of the tumour, of the size of an orange, nearly separate from the larger mass, lay behind the manubrium sterni; and a still smaller portion, of the shape of a fig, was situate below the xiphoid cartilage. The heart was normal in size and structure. Considerable effusion existed in the peritoneal cavity. The liver and spleen, etc., were in a physiological condition.

Microscopic examination of the tumour revealed the characteristic elements of malignant growth.

Remarks. The case detailed is replete with practical interest. In its early stage, there were, as it appears to me, some grounds for regarding it as one of empyema, for which affection, indeed, I mistook it. It may, therefore, be instructive briefly to analyse the symptoms, with the view to determine how far such an opinion was tenable. The early symptoms were pain in the left side, cough with catarrhal expectoration, dyspnœa, difficulty of lying upon the affected side, constitutional excitement, etc. The case was at this time considered and treated by her then medical attendant as one of ordinary pleurisy. At the mid period of the history of the case, both vital symptoms and physical signs appeared to conform to such a view. These were pain, cough, dyspnœa, oppression, and hectic phenomena, as emaciation, night perspirations, small rapid pulse. On inspection, the side was enlarged (markedly so in the mammary region) and motionless during respiration; the percussion sound was dull; respiratory murmur and vocal fremitus were annulled, except beneath the clavicle and near the spine; the heart was displaced; the decubitus upon the affected side.

It is scarcely necessary to recapitulate the phenomena of the later phase of the disease. From the period of the puncture test and the appearance of the external swelling, no rational doubt could be entertained as to the presence of intrathoracic tumour, even assuming the coexistence of empyema to a greater or less extent. In further support, however, of the diagnosis of effusion in the first and second stages of the disease, it may be argued, that left sided pleurisy is by far the most frequent, and that contraction ordinarily commences at the base; so that, remembering the several attacks and partial restorations, it was not unreasonable to infer that such adhesions had commenced below, and acquired sufficient firmness to prevent gravitating effusion from renewed attacks. Such effusion might, therefore, thus occasion bulging of the mid portion of the chest, and even tend to the production of an empyema of necessity. The pericardium also, from its extreme traction to the right, might have dragged the left side preternaturally inwards, and further augmented the apparent contraction of the base. Should it be contended, however, that the marked enlargement of the mammary region, the extent of dulness to the right of the mesial line, the enlargement of the mammary veins, the persistent pain, and frequently recurring attacks, the anasarca, etc., should have awakened suspicion of solid growth, we can only remark, that even these signs do not suffice for a differential diagnosis. Many cases are on record of empyema associated with all these signs to a greater or less extent. (See particularly Gintrac, *Diagnosis des Affections Thoraciques;* Mohr, *Monograph des Empyems;* Heyfelder, *Essay on Chronic Pleurisy*, in his *Studien im Gebiete der Heilwissenschaft;* Broussais, *Phlegmasies Chroniques;* Andral, *Clinique*, etc., art. iv, obs. 260; and particularly that most singular case of relapsing empyema recorded in the *London Medical Repository.*)

The sensation of fluctuation so evident in this case, and caused by the semi-liquid character of the mass, has been indicated by other observers in malignant intrathoracic disease, especially by Swett, *Diseases of the Chest*, p. 335; and is constantly pointed out clinically by the surgeon in fungoid disease occurring in parts more accessible to observation. It must, therefore, not be lost sight of in the category of phenomena common to internal malignant disease.

One question must be left for the reader to solve, viz., the origin of the disease. Were the signs of pleuritic irritation to be regarded as the result of changes induced by a tumour of independent growth, or was the mass the result of a *metamorphose* of a primary albuminous pleuritic effusion, as described by Zehetmeyer (*Grundzüge*, p. 138)? An argument against this view would be the apparent absence of cancerous growth in other organs—a consequence considered as almost

necessary by this observer. (See, moreover, a most interesting case, detailed in p. 339 of his work.)

There yet remains a phenomenon in the case I have recorded which requires comment; I allude to the partial reappearance of a weak respiratory murmur over a portion of the postero-middle region, towards the close of the case. If this were not a conducted murmur from the right lung (which was doubted by some observers), I can only explain it on the hypothesis that a portion of the tumour had yielded, and permitted part of the left lung to expand into its place.

Finally, with reference to the differential diagnosis of intrathoracic tumour: when we consider the possible sources of error inseparable from the very nature of certain cases of chest affections and their associate signs, such as those very recently described by Drs. Moutard-Martin and Oulmont (*Med.-Chir. Review*, Oct. 1856); and when we find how, at times, the very ablest observers have been at fault in the diagnosis of malignant disease of the chest, alike from the consideration of the symptoms and the physical signs (the latter, perhaps, are at their minimum of value here), we cite, in special illustration, the well known cases of Boerhaave, Corvisart, Graves, and Stokes, etc., others of less ability may well be excused for hesitancy and doubt. Indeed, it would appear, from a careful collation of the cases extant, that where the family history shows an absence of cancerous disease, where the expectoration is simply catarrhal, marked signs of centric pressure absent, and no external tumour present, the physical signs and symptoms correspond so closely with those of pleurisy, either general or circumscribed, that the diagnosis of intrathoracic cancer, at its early stages, is in most cases difficult, and in others, perhaps, occasionally impossible. At the same time, it must be borne in mind that relapsing pleurisy, with pain more or less constant, and radiating far and wide, combined with alteration of the chest-wall, and obstinately intractable to treatment, should at all times excite grave suspicion.

Original Communications.

INFLAMMATORY ACTIONS, AND THEIR TREATMENT.

By C. Handfield Jones, M.B., F.R.S., Assistant-Physician to St. Mary's Hospital.

[*Continued from page* 216.]

If we regard therapeutic agents as *tests* of the character of the actions going on in the living body, it may be of much interest to consider some of them in their bearing upon the subject before us. Let us take first the ordinary reputed remedies for sthenic inflammation.

Venesection must be considered as addressed chiefly to the attending constitutional disturbance, rather than to the local affection; it works its end, when beneficial, by taking off the stress of the circulating current, and diminishing the force of the heart's contractions, as indicated by the softer, more yielding, and sometimes slower pulse. It is to be regarded as a heart and artery sedative. The sedative action upon the arteries is shown by their becoming less contracted, and yielding more to the force of the heart, and to the pressure of the finger in exploring the pulse. Thus a small, wiry pulse will become larger and softer under bloodletting, because the contractility of its coat (muscular) is diminished. The heart will now act more freely and send the blood more equally over the general system, and so the local determination will be relieved. The increased tolerance of bloodletting in sthenic inflammation is a very striking circumstance, and cannot be well referred, I think, to any other cause than to an increase of nervous force in those ganglia or centres which influence the heart's action. A strong contractile action of the heart, and a tense, contracted state of the arterial coats generally, must imply, I think, increased innervation of these parts, since the opposite state is observed in all morbid conditions wherein nervous power is materially lowered. At the present time, together with an absence of all conditions that require or justify venesection (speaking generally), I meet with instances of impaired action of the heart, sometimes amounting to serious danger. This is associated with other symptoms of depressed nervous power, which appear to be most reasonably attributed to some kind of epidemic influence, much resembling that of malarious disease. The reaction which occurs after venesection, and which is stilled by opium, can hardly be otherwise regarded than as a phenomenon produced through the nervous system. That venesection (when performed so as to abstract blood rapidly) can produce also local effects, is shown by the occurrence of nausea and vomiting, and the breaking out of perspiration, which it not unfrequently occasions. In this case it acts evidently in the way of shock through the nervous system, as the same phenomena may result from the sudden rupture of a bloodvessel within the cranium.

That *local bleedings* exercise a sedative effect upon an irritated tissue in sthenic inflammation seems to be certain, not only from the good effects so commonly observed from it, when performed on a part whence blood can be directly abstracted from loaded vessels, but much more from the benefit obtained when this is not possible. No one can doubt that leeches applied to the epigastrium will very materially relieve an inflamed stomach, yet how is it conceivable that this relief is effected? It surely is not by the quantity of blood abstracted from the general system (as in venesection), and it certainly is not by any direct depletion of the gastric vessels themselves. We seem to be absolutely shut up to the conclusion, that the modification of one part in its nutrition can affect an adjacent, in such wise that a state of irritation, and active determination of blood thither, shall be diminished. The same remark applies to the leeching of the temples to relieve hyperæmic and irritated conditions of the encephalon, and to many other like cases. Had it not been for experience, we should have thought the proceeding quite irrational; but in this, as in other instances, we are instinctively, if not divinely, led to do the right thing first, and at a later period we come to reflect, and try to discover the principle, or reason, of our practice.

Cold, it will not be questioned, exerts a sedative action on an irritated tissue. It benumbs nerves, and impairs the play of muscles, if at all considerable, and it is, therefore, likely to act similarly on an inflamed part. In orchitis, Mr. Curling has proved its adequacy to cure by repeated and prolonged applications; and in meningitis and maniacal excitement, its beneficial action is well known. Similarly, in inflammatory states of the stomach, lumps of ice are administered with much advantage; but, if the vomiting depend merely on deranged innervation, they are productive of little or no good. In all these cases, it seems impossible to refer the good effects of the cold solely to its causing contraction and shrinking of the bloodvessels, though this operation may have some share in the result. In fact, the sedative power of cold is most strikingly shown by its power of arresting the circulation in a part, and causing it to become blue, or livid, from stagnating or slowly moving blood. This is unlike the usual action of cold in rendering a part pale and bloodless by contracting its arteries; the retardation of the blood must depend on a paralysis of the normal nutritive processes, which have so much influence in modifying its distribution.

Antimony and *ipecacuan* have strong claims to be regarded as sedatives of certain tissues, although their local application in a more concentrated form is strongly irritant. That they will subdue sthenic pulmonary inflammations is for me a certain fact, as also that they will aggravate and increase asthenic. I suppose also that their power, when given early as emetics, to arrest or check acute tonsillitis, orchitis, and adenitis, may reasonably be admitted. The benefit produced by ipecacuan in sthenic dysentery, when given in frequently repeated doses, is also, I believe, unquestionable. The powerful effect of antimony for good in croup is not a matter of doubt. Whatever be the exact way in which these remedies act, whether directly on the tissue, or through the nerves, it must be, I think, admitted that they do modify that morbid tendency to accumulation and arrest of blood in the suffering parts, which we have regarded as a main feature of sthenic inflammation. They are contra-stimulants. The muscular relaxation and general debility induced by full doses of antimony and ipecacuan, as well as their diaphoretic action, show that they must act powerfully on contractile tissue, voluntary and involuntary, and this in a way of paralysing and weakening its power. This points also in the direction just indicated.

Colchicum, with its magical action in reducing the articular inflammation of sthenic gout, must also be alluded to. Its action in acute rheumatism, though much more uncertain, is also, according to Dr. Watson's testimony and Dr. Fuller's, almost as striking. My experience agrees with that of these physicians, as to its being most appropriate to the synovial or articular form of rheumatism. These instances of the beneficial operation of colchicum are not necessarily connected with its

purgative effects. I cannot think we are far from the truth, if we assume that this drug acts on the articular tissues in such a way as to nullify the morbid nisus to inflammatory congestion. It is an articular sedative. From one experiment which I made on a healthy individual, it resulted that colchicum neither increased nor diminished the quantity of uric acid in the urine. The amount before the experiment having been in 24 hours 6.10 grains, it was during the administration of the drug 6.11 grains. The urea, on the other hand, was diminished from 336.600 grains to 272.075 grains in twenty-four hours. The acidity was somewhat diminished.

In the list of tissue sedatives, I think *alkalies* may be enumerated, at least when given in such quantities as to influence the system decidedly. Among these, the citrates, tartrates, etc., may be included, which are converted into carbonates in the blood. Dr. Fuller testifies to their "acting most powerfully as sedatives, and calming the action of the heart and arteries." In more precise language, this means that they quiet the action of the heart, as shown by the great diminution in the frequency and force of the pulse. The increased action (throbbing) of the arteries is of course only apparent, as these tubes can have no other active function than that of contraction; a hard, wiry pulse would indeed indicate increased arterial action, but this was not the character of the pulse in the cases referred to by Dr. Fuller. Their effect also on the inflamed joints in rheumatism is very positive, and equally so on the inflamed patches of sthenic eczema, lepra, and psoriasis. Dr. Bennett treats eczema effectually solely by alkaline lotions; and in the squamous skin diseases, there is much evidence of the good effect of liquor potassæ given internally. In prurigo senilis, I have found marked benefit result from the use of alkaline baths. I strongly suspect that much of the benefit produced by the administration of soda in irritable state of the stomach and intestinal canal, depends not on its neutralising the acidity (which is normal), but on calming the irritable tissue when conveyed to it by the blood. The advantage which Dr. Owen Rees states to be derived from the employment of alkalies in cases where the mucous membrane of the urinary passages is inflamed and secreting muco-pus (so rendering the urine alkaline), depends, I conceive, rather on the general sedative action of these remedies on inflamed tissues, than on their rendering the urine less acid and irritating. This is rendered the more probable from a circumstance which he himself states, viz., that small doses of liquor potassæ, ℥xv-xx ter die, sometimes render an alkaline urine acid. They surely do this rather by a direct action on the inflamed tissue, than by rendering the urine less acid. Maunsell and Evanson speak of the alkalies and alkaline earths as exercising "a decided sedative influence, especially upon the mucous membranes when in a state of irritation or chronic inflammatory action." Competent observers have assured themselves of the good effects of alkalies in the less severe degrees of bronchitis. An over use of alkalies induces a cachectic condition, "characterised by paleness, debility, general tumefaction of the tissues, passive hæmorrhages, and finally emaciation." (Trousseau.) The general tenor of all these statements accords very much with the view that alkalies act as tissue sedatives.

The influence of *mercurials* given so as to affect the general system is yet a moot point. Some, and more particularly those of the Edinburgh school, seem to deny their efficacy altogether, or rather to think them injurious. On the other hand, the testimony of Tyrrell, Watson, Copland, Williams, Graves, Wilde, not to mention a host of others, is as positive as anything can be to the powerful remedial action of mercury *properly administered*. But in that word, *properly administered*, lies a great deal; and how much it implies is, I think, not sufficiently considered by those who speak of mercury as useless or injurious. Mr. Tyrrell, writing nearly twenty years ago, has given in his work as excellent directions as any that I know for the proper management of this powerful agent; and all that need further be added is, I think, that the type of disease which reigns at present, and which seems to have prevailed more or less since the appearance of pestilential cholera among us, is decidedly unsuited to the beneficial action of mercury. There is now little of sthenic inflammation; bleeding and tartar emetic are but sparingly needed, while quinine, strychnine, and other tonics, with opium and cod-liver oil, are continually in requisition in our efforts to raise and maintain failing power. Remembering the tendency of mercury to destroy red blood, to cause prostration, and even fatal syncope (as in hydrargyria), I am sparing of its use in all feeble systems, especially seeing, as I do occasionally, embarrassment or partial paralysis of the heart's action from some morbid influence telling upon the nerves. But even now, in appropriate cases, I think there is much evidence in favour of the view that mercury acts as a sedative of sthenically inflamed tissues. The testimony of my friend Mr. White Cooper is most express as to its good effects in iritis independent of depletion. Just at the time that the gums become affected, the red zone declines, and all the other symptoms begin to improve. Mr. Critchett has some excellent remarks also testifying to the efficacy of mercury, and pointing out the best means of bringing it to act beneficially in cases where unskilfully employed it would be most injurious. (*Lancet*, Jan. 20th, 1855.) Of its efficacy in orchitis we cannot doubt, nor in myringitis, nor in many cases of pleurisy and peritonitis. In lichen agrius, I have found the good effect of mercurials very positively marked; and, except alkaline baths, I know of scarce any other remedy that is of much avail. Now, according to my observation, the subjects of lichen agrius are generally possessed of much vigour and strength of system, so that mercury might be expected to suit their disorders. Dr. Watson states "his persuasion that in the early period of acute inflammation of the encephalon, if the mercury comes in a short time to produce its specific influence upon the gums, a great change for the better will often be perceived." The highly interesting cases published by Mr. Solly, afford valuable evidence of the good effects of mercury in conditions more or less similar. They are very parallel to those of ocular disease recorded by Mr. Tyrrell, the same judicious delicate management having been exercised in both. I might in passing say here how much profit I have always found from the perusal of well recorded cases, such as those just alluded to. Abstract descriptions leave the mind quickly, but well told cases remain as abiding lessons.

[*To be continued.*]

CLINICAL OBSERVATIONS ON THE TREATMENT OF FRACTURES BY THE IMMOVABLE APPARATUS.

By Joseph Sampson Gamgee, Staff-Surgeon of the First Class, and Principal Medical Officer of the British Italian Legion during the last war; late Assistant-Surgeon to the Royal Free Hospital, House Surgeon to University College Hospital, etc.

[*Continued from page* 190.]

We have now sufficiently commented on the main features of the plan of treatment under consideration to be able to state the question at issue.

The three main features of an immovable apparatus applied to a broken limb being *immediate reduction, gentle uniform compression of the soft parts to cure and prevent their swelling, and absolute and complete immobilisation of the fragments*, it is necessary to determine how far these principles of action are sanctioned by sound doctrine and experience; and to inquire whether the plan of treatment under consideration be applicable and specially advantageous in so large a number of fractures as materially to simplify this department of surgery. *Simplex sigillum veri* was the favourite motto of that great practical surgeon, Mathias Mayor—a motto embodying a principle which through all time has been, and must endure, the dominant idea in sound surgical minds.

It will be necessary, before entering upon the doctrinal and experimental consideration of the question as just stated, to describe an immovable apparatus, and its mode of formation. For this purpose, I shall assume having before me a simple case of broken leg in a muscular adult; the two bones broken across, or very nearly so, about the middle; no shortening; little tendency to displacement; no injury to the skin, or swelling beneath it. The fragments having been brought into perfect contact, the great desideratum is to maintain them in that position, at the same time to prevent the occurrence of complications, of which swelling is the most probable. These objects are attained by the construction of a solid casing, including the joints above and below the seat of fracture, and closely fitting to every inequality of the limb. Such a casing may be constructed with bandages impregnated with plaster of Paris, or with common bandage and pasteboard smeared with starch.

1. *Plaster of Paris Bandage.* For the preparation of this bandage, an unglazed thin cotton texture is best suited; the wider its meshes, the more desirable. By rubbing into it as much dry powdered plaster of Paris as it can hold, the bandage is prepared for rolling and application. The skin is first to be pro-

tected by a single bandage, which should be adapted to the surface of the limb with the most perfect accuracy. Reverses should be avoided, as they form ridges, likely to irritate. As the sole object of this first bandage is to cover the skin perfectly, a little practice will teach the best mode of applying it so as to secure the desideratum without chance of mischief. The plastered bandage is next applied, with the same precaution as to accurate evenness; but, as a preparatory step, the roller, impregnated with dry plaster of Paris, requires to be moistened: for this purpose, cold water should be gently poured into it at each end. In such a case as we have assumed to be under treatment—simple fracture of both bones of the leg—the protective bandage having been applied from the toes to the middle of the thigh, it is to be covered with a layer of the moistened plaster bandage. To secure the desired solidity of the casing, and absolute immobilisation of the fragments, *plastered bandage splints* are to be applied along the sides and back of the limb as may be deemed requisite. These splints are made by supraposition of two, three, or more layers of the dry plastered bandage, cut to the required length, from the knee to the middle of the thigh, if requisite. The layers are moistened before application, and fixed by a few turns of similarly prepared bandage. To fix the ankle, it will be found advisable to place one of these splints in front of the joint, from the roots of the toes to the lower part of the leg. In about ten minutes, the casing is as hard as stone, yet very light, and removable either with a pair of cutting pliers, or by unrolling the bandage, and detaching the solidified splints. Four bandages, one of which is plain and the other three plastered, constitute an effectual apparatus for a broken leg, under the circumstances assumed for this description. The plaster having been previously rubbed in by an assistant, the process of application itself is clean and rapid; and, when the number of minutes requisite for desiccation of the moist plaster have expired, the patient may walk about with perfect impunity. Thus a stout man may walk on crutches, and *à fortiori* ride in a cart, or on the back of a mule, an hour after he has broken his thigh, and as soon as it has been set according to the foregoing method. Any one experimenting with this bandage will find how perfectly efficient and economical a contrivance it is in all cases requiring immobilisation of joints. Its originators, Mathijsen and Van der Loo, of Holland, have bequeathed to surgeons a contrivance admirably simple, and destined, I believe, to effect a greater change in surgical practice than any innovation of modern times. In expressing this opinion, I simply desire to stimulate trials to test the value of anticipations which I have been led to entertain; I have in no manner or degree presumed to prejudge the question at issue, but rather to facilitate its solution in accordance with the sentence, *Experientia docet.*

[*To be continued.*]

16, Upper Woburn Place, Russell Square, March 9th, 1857.

Case of Mr. Dyce Sombre. *Court of Chancery, Lincoln's Inn, March 6th.* (Before the Lords Justices of Appeal.) Mr. Hobhouse appeared in support of a petition by Mrs. Dyce Sombre, the administratrix of the personal estate of her late husband, praying the payment out of court of a sum of money standing in the lunacy, and for the taxation of certain costs. Mr. H. Stevens, for the next of kin and the co-heiresses of Mr. Dyce Sombre, did not offer any objection to the application, but asked that some special directions should be given as to title-deeds. Mr. F. P. Morris, for Mr. Larkins, asked that before the papers in his hands were delivered over to the committee they might be examined by the Master in Lunacy, and so arranged that those which were of a private nature might be left in Mr. Larkins's hands. Among the papers, almost innumerable, were letters of Mr. Dyce Sombre, the disclosure of which might be painful, and could do no good to any one. Mr. Teed appeared for another party. Lord Justice Knight Bruce—I conclude that their being seen or being kept secret would do no good or harm to any human being. If they were handed over, in all human probability no one would be at the trouble of reading them. They might, no doubt, be pasted up at the corner of the street with perfect safety. Why should the Master be troubled with such a duty? Lord Justice Turner suggested that the papers should be handed over; they might be examined by the party himself, and he might upon affidavit allege what were of a private confidential nature; and if the parties differed the master might then decide. Lord Justice Knight Bruce agreed to this, and so the order was made. It was true, said his lordship, that it was about waste paper, but even waste paper was said to be of some use.

Diseases of SPECIAL OCCUPATIONS.

No. I.

THE SHEFFIELD GRINDERS.

By John Charles Hall, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

[*Continued from page* 220.]

B. THE SHEFFIELD GRINDERS, AND THE NATURE OF THEIR OCCUPATION.

Grinders may be divided into three classes—1. Dry grinders, using only the dry stone; 2. Mixed, or those who partly grind on the dry, and partly on the wet stone; and 3. Wet grinders.

The trade of a grinder is carried on in a building called a *wheel.* In and near Sheffield there are about ninety-six wheels, and of these eighty are steam wheels, and the remaining sixteen water wheels. Each wheel has a number of separate rooms, which vary in size and the number of the stones they contain, in which the grinders work. As a general rule, wet grinding, and the heavier branches of the trade, are carried on down stairs; the lighter branches in the rooms on the upper stories. The heavier branches of grinding are, scythes, saws, table knives, machine knives, edge tools, files, etc. The lighter branches include spring knives (pen and pocket knives), razors, scissors, forks, spindles, needles, etc. Needle grinding is not extensively carried on in Sheffield. Some of our opticians employ a good many hands in grinding glass.

The rooms in which the men work in the different wheels are called *hulls,* the literal meaning of which is a *stye;* and a visit to some of them would convince any of my readers that it would indeed be difficult to select a more appropriate appellation. In each room are placed a number of *trows* (troughs), more or less in proportion to its length. Some rooms will contain as many as ten; some not more than two. The trough, which is made of cast metal, is received into the floor of the room, and contains the water in which the grinding stone revolves. When the stone is run dry, the water is removed from the trough. Each trough has several divisions, one for the "stone", one for the "glazier" or "lap", and one for the "polisher".

The *glazier* is a wooden wheel, varying in size from four inches to four feet in diameter: it is covered with leather. This is dressed all over with glue and emery; and, when this application has set, the surface is well rubbed with emery cake, which is a compound of suet, beeswax, and emery.

The *lap* is a wooden tool, faced with lead, on which the sides of penknives, the sides of razors, and the flat sides of the better finished scissors, are rubbed, to give them a flat surface. The effect of this will at once be evident to any one who may have a first class Sheffield knife, on comparing the pen with the pocket blade, or a razor with a table knife. The lap is coated with oil and emery.

The *polisher* is placed at the back part of the hull; it is a somewhat smaller wooden wheel than what has already been described, covered with leather, and is made to revolve much more slowly than either the grinding stone or the glazier. If it were made to revolve rapidly, the blades either of the knives or the razors that were undergoing the process of polishing would become heated, and their fine temper destroyed. Although the glazier revolves with considerable rapidity, the paste with which it is coated prevents this effect. A dry powder, called "crocus", which is in fact an oxide of iron, is used for polishing. Boys first begin to learn their trade by polishing the different articles. Boys are apprenticed to the lighter branches at from nine to thirteen years of age, and to the heavier branches of grinding at from twelve to fourteen.

Some go to the trade even younger than this. In my recent visits to the wheels, I met with one boy only eleven years old; he had been in the hull since the age of eight: he had a fearful cough, and, on examination, I found the upper portion of both lungs extensively diseased.

In the back part of each room is a drum, or wheel of much larger dimensions than any of those already noticed, which is set in motion by the steam-engine; and to it the grinding stones, glaziers, and polishers, are attached by the wheel-bands. The wheel-bands consist of broad leather straps; and the connexion between the different wheels and the drum can be effected or discontinued in a moment, with the utmost facility, by putting the wheel-bands on or off.

The different kinds of stones used in grinding, and the sizes employed, have already been described.

In manufacturing a razor, both the dry and the wet stone are employed; and therefore a description of the different processes a razor undergoes will best explain the operations carried on in the hull of a grinding wheel.

The razor is first forged out of a bar of steel. It is then sent to the grinder, who shapes it on the dry stone into the required pattern, whilst it is in the soft state. After the razor has been "shaped", it is returned to the forge, to be "file-cut" and "marked": the mark stamped upon it is very frequently that of some distant firm; it may be in London, or Glasgow, or any other town. Why our manufacturers allow this, has often been a puzzle to me; for it most certainly has enabled others at a distance to gain a reputation they would never have obtained but for this procedure. The razor next undergoes the process of hardening and tempering, after which it is once more brought to the wheel, and ground to an edge on a wet stone. It is then "laped" on a tool the exact size of the stone on which it has been ground. The back and the end of the tang is "glazed"; and the whole of the blade is then wiped quite clean, and afterwards highly polished with crocus. It is next sent to the hafter, who places it in the "scales" (handle), and "sets" (sharpens) the razor ready for use. Serviceable razors can be made at all prices, from one shilling to the elaborately finished and costly articles which were specially manufactured for the Emperor of the French.

The following table will show the immense quantity of steel-dust that must of necessity be created in the first process a razor undergoes on the dry stone.

Table II.—*Shewing the weight of a dozen of razors in the different stages of their manufacture.*

Shape of the razor: quill backs.	lbs.	oz.	Shape of the razor: swaged backs.	lbs.	oz.
Twelve razor blades, forged in the rough	2	4	Twelve razor blades, forged in the rough	2	0
Twelve razor blades, shaped	1	15	Twelve razor blades, shaped	1	10
Twelve razor blades, finished	1	10	Twelve razor blades, finished	1	8
Loss in shaping, five ounces per dozen, principally on a dry stone.			Loss in shaping, six ounces per dozen (dry).		
Loss in grinding on the wet stone, five ounces per dozen.			Loss in grinding, two ounces per dozen (wet).		

The above varieties of razors have been selected as patterns generally in use; and the experiments were kindly made for me by Mr. John Wilson, a most intelligent pen-blade grinder in the wheel belonging to the well known and celebrated firm of J. Rodgers and Sons, cutlers to Her Majesty. In some of the very large and heavy kinds of razors—for example, such as those used in the shaving of velvet—a much greater quantity of steel-dust will be made in shaping them. Some little difference will also arise from the way in which the different razor-blades have been forged.

Great friction is required to grind a razor to its proper shape. Razor backs are for the most part round; and the pressure during the process of shaping is so great that no wet stone could sustain the rolling friction; the stone would soon become uneven, like a hammer-stone, and so pulverised that, after shaping four or five blades, the workmen would be unable to hold the blade on the stone. Forks, razors, table-knife-bolsters, scissors, shanks, and needles, undergo the rolling process, and consequently require the dry stone. Spring knives (pen and pocket knives, etc.), twenty years ago, were ground on the dry stone: the march of improvement, however, has superseded that process; and these blades are all now ground on a small wet stone, which is made to revolve with great rapidity. In shaping razor-blades, etc., on the dry stone, an immense number of red hot particles of steel fly about in all directions; from these "motes", as they are called, the eyes of the grinders were constantly injured, and in some cases permanently lost. The danger is now obviated by wearing large spectacles of ordinary window-glass: the protection they afford is very obvious; for, on examination after they have been a short time in use, the glasses are found spotted all over with the marks made by the particles of heated steel on their surface. In shaping a dozen large razors on a stone seven inches in diameter, the stone would be reduced nearly one inch.

During the process of dry grinding (and in dry grinding the greatest danger to the workmen arises), the dust which is created from the stone and the metal pervades the room in considerable quantities. But it is not only in grinding that dust ascends: much of the evil resulting from the trade of a grinder (and to this dry and wet grinders are alike liable) proceeds from "hanging" and "racing" the stones. The stones are received at the wheels from the quarrymen in a rough state. The grinder then drills a hole through the centre, and, fixing it on the axle, places it in the "trow"; it is then made to revolve slowly, in order that the steel which is used in the process of racing may bite. With this bar of steel, the asperities of the stones are removed, and their surface rendered level and smooth. During the operation, the rooms are unavoidably filled with dust; the dust also arises in perfect clouds when the sides of the trow are swept, after the process of racing is over: it takes about half an hour to race a large stone. The stones are now fitted with plates and screws, instead of with wedges, as was formerly the practice; and the number of accidents from the breaking of a stone are at present much less frequent than when the old plan was in operation. The saw-grinders at one time were often very seriously injured from the stones breaking whilst they were at work. The large size of the stones, and the weight and length of many of the saws they have to grind, will easily account for this branch of the trade being more dangerous, from the breaking of the stones, than when the articles are smaller and lighter.

Much dust is also created in glazing and polishing: the amount will depend in a great measure on the nature of the glaze used; that employed in the glazing of forks is the most injurious.

It has already been intimated that grinding may be divided into dry, mixed, and wet. Forks, needles, brace-bits, spindles, etc., are ground entirely on the dry stone; and, in addition, table-knife-bolsters, shanks, shaping razors, humping scissors (or giving the rounded form to the blade), etc., etc., all require the dry stone to be employed. Some trades never use the dry stone, as, for example, saws, files, sickles, etc. Table-knives, edge tools, saws, scythes, etc., are only ground and glazed. There is also in Sheffield a numerous class called jobbing grinders, who work on the wet stone, and who are employed in grinding engravers' steel-plates, hammers, fenders, fire-irons, stove-grates, busks for stays, candlestick-bottoms, nippers, garden-shears, hoops, etc.

The following statistics with regard to the present condition of the Sheffield grinders have been collected with no little care and trouble. Formerly, these statistics could be much more readily obtained, because most of the trades were organised; now, many of the unions are broken up. The information has been obtained by personal inspection of many of the wheels, and by employing an old and intelligent grinder to go from wheel to wheel to collect returns from the presidents and secretaries when the trade was organised; and, when this was not the case, from the secretaries of the different wheels, and from the men employed in them. These returns I have afterwards read over to several of the most intelligent grinders in each branch, and they one and all agreed that they were as accurate as it was possible to obtain. They may, I am certain, therefore, be taken as a close approximation to the truth.

Fork Grinders. The men employed in grinding forks work on a dry stone. It is by far the most destructive of the grinding trades carried on in Sheffield. One hundred and sixty men, and one hundred and twenty boys, are at present engaged in it. Excluding the boys, or all under twenty-one years of age, the average age of the hundred and sixty men only amounts to twenty-nine. Some notion of the known fatal nature of fork-grinding may be gathered from recording the observation made to me by a fork-grinder in one of the wheels: "I shall be thirty-six years old next month; and you know,

measter, that's getting a very old man in our trade." Individual instances of men living longer than this, no doubt, can be found at present in Sheffield amongst fork-grinders; but it is an undoubted fact that a great many of these men are cut off before the age of thirty; and that, if commencing, as most of them do, the trade at ten years of age, at the age of twenty-one, if constantly at work, the expectation of life would not most certainly exceed fourteen years. The calculation of Dr. William Farr, in the sixth Report of the Registrar-General, of the probable duration of human life in England at the age of twenty-one, is thirty-nine years; so these unfortunate men, we may conclude, are exposed to influences which have a tendency to rob them of twenty-five years of their lives, to deprive to that extent their wives and families of the benefits of their labour, and to fill the union houses with their widows and orphans. No more graphic picture can possibly be drawn of the effects of this trade than in the address presented some years ago by the fork-grinders to the public; they said: "It is part of our duty to allude to the destructive influence of our trade; for be it known that, in respect to the pernicious effect of grinding trades upon health, our branch is by far the worst. We can show by irresistible facts, drawn from the statistics of our trade, that the average age of fork-grinders does not exceed thirty years. Nor is this to be wondered at, considering the poisonous atmosphere we have to breathe, which renders the far greater part of us mere shadows of men, and produces a complication of diseases, of which the most formidable is the asthma and dry cough, known by the name of the 'grinders' complaint', attended as it is by consumption, which no medical man can cure. In such cases, life is a burden to the poor sufferers, and their frames are gradually emaciated and wasted by a repetition of slow tortures."

This is unfortunately an "o'er true tale"; nor will I by a word direct attention from a picture which has been so faithfully drawn, except to remark, that poverty often obliges these men to labour when they are altogether unfitted for their calling, and causes them to go to the hull a day or two in each week for a few hours, to inhale additional dust, and thus to increase the disease that is rapidly destroying them, in order to obtain bread.

Razor Grinders. There are now engaged in razor-grinding three hundred men and two hundred and twenty boys. The average age of these men does not exceed thirty-one. This, as before stated, is one of the mixed varieties of the trade, and one of the most destructive.

Spring Knife Grinders. Pen and pocket knives are now ground entirely on a wet stone; about six hundred and eighty-five men and six hundred boys are at present engaged in it. The mortality in this branch has very much diminished since the grinding has been carried on with the wet stone only.

Scissor Grinders. These men work partly on a wet and partly on a dry stone. The most destructive part of the work of a scissor-grinder is when giving the rounded form to the blade, which is called "humping". There are at present three hundred men and two hundred boys employed in grinding scissors. Hundreds of these men perish before reaching the age of forty. The average age of the men now at work is thirty-two.

File Grinders only use the wet stone. About one hundred and sixty men and eighty-five boys are at present employed. The mortality is much less in this branch than in some of those already mentioned.

Saw Grinders employ the wet stone. One hundred and sixty men and fifty boys are engaged in grinding saws. The average age of the men at present is about thirty-eight.

Scythe Grinders. Scythes are not very extensively ground in Sheffield. Both scythes and sickles are ground at and near Hackenthorpe, a few miles from Sheffield. As a general rule, country grinders are more healthy, and live longer, than those who reside in the town; and I have reason to believe that some of the scythe-grinders employ a portion of the year in making, so that they are not at all times in the wheel. There are about sixty persons (men and boys) employed in grinding scythes.

Wool Shears and *Edge Tools* are classed together by the trade. Of the different branches of wet grinding, that of wool-shears, from the peculiar kind of soft stone used, is the most pernicious. The average age of the men working at it, now living, does not exceed thirty-two.

The following table shows the number of grinders at present employed in the different branches of the trade, and the average ages of all the men now living, those under twenty one being excluded.

Table III.

Number of grinders, 1857.	Men.	Boys.	Average age of all the men now living.
1. Forks	160	120	29
2. Spring knives	685	600	34
3. Razors	300	220	31
4. Scissors	300	200	32
5. Table knives	800	250	35
6. Edge-tools and wool-shears	200	80	32
7. Saws	160	50	38
8. Surgeons' instruments	15	12	—
9. Files	160	85	35
10. Sickles	50	20	40
11. Jobbing grinders	280	210	—
Total	3110	1847	

	Total men	3110
	Total boys	1847
add about	Scythe grinders (men and boys)	60
	Needle grinders	12
	Number of grinders in and near Sheffield	5029

On getting the returns just given in the above table from the different trades, I resolved to test their correctness, as to the average age of those at present employed, by going to two of the largest wheels in Sheffield, and personally taking down the ages of all the men employed in each hull. The wheels I selected were the Soho and the Union. The Soho wheel has fifty hulls, and, on an average, five hundred men and boys work at it. The Union wheel contains forty-six hulls, and from three hundred to four hundred men and boys are employed. I found the average age of all the razor grinders to be 31; and, in the men I examined, I found one aged 55, one aged 49, one aged 46, one aged 42, one aged 40, and one aged 39. I found the average age of all the scissors grinders to be 32 years and 4 months. In this number were two aged 60, one aged 55, one aged 54, and one aged 49. When men are found working at razor and scissor grinding at these ages, it often happens that they have been away from the trade some years, or have not worked regularly at it, or that they have taken unusual care of themselves, and have always employed of late years a *fan*. But, even taking the men at these ages, the average of all the men employed was little more than 32. The average age of the spring knife grinders was 34, and of the table knife grinders 35. The average age of the fork grinders at these wheels was only 28. At the Soho wheel, a fine young man, a fork grinder, aged 26, remarked, "that he reckoned, in about two more years, at his trade, he might begin to think of dropping off the perch;" adding, "A fork grinder is an old cock at 30." The average age of all the grinders in the different branches at work at the Union Wheel was 34, and all boys under 21, are excluded from my calculations.

[*To be continued.*]

A Pauper Lunatic Scalded to Death. A young woman, named Ann Larner, aged 24, an epileptic pauper lunatic in the asylum at Gloucester, died on Friday, March 13th, from the injuries she sustained from falling into a hot bath. It appears that the deceased was, from the nature of her maladies, of dirty habits, and frequently required the bath. On Thursday morning week, the head nurse of the ward in which the deceased was, prepared the bath by turning on the hot water; she then carried down the deceased from her bed, being assisted by another nurse. Thinking, by the steam on the water, that it was too hot, she told the other nurse to hold the deceased while she turned on the cold water tap, but from some cause no water ran out. The deceased was sitting on the edge of the bath, and having a strong dislike to bathing, she kicked and struggled, and fell backwards into the bath. She was immediately got out; but her back and arms were severely scalded, and she died the next night. The jury returned a verdict of "Accidental Death"; and censured the head nurse of the ward, Hester Summerhill, for her carelessness in not ascertaining the temperature of the water before she brought down the deceased; and recommended that a regular supply of cold water be insured.

British Medical Journal.

SATURDAY, MARCH 21st, 1857.

THE ELECTIONS: WHY ARE THERE NO MEDICAL CANDIDATES?

From one end of the country to the other, every county, city, and borough, is rife with electioneering preparation. We regret to see, however, that Medicine takes little or no part in the struggle which has commenced. There is hardly any profession, trade or calling, some members of which are not to be found trying at this busy time to make their way into Parliament. Medicine alone stands apart, as if she and her followers could take no share, and had no interest, in constitutional government. We live apparently beyond the pale of the laws; for medicine at present is certainly to a great extent lawless, and we seem to wish for no share in the legislature, or in Parliamentary affairs. Yet we have plenty of grievances. Medicine, as a profession, is down-trodden and depressed, as compared with the Church or the Law. We hear spasmodic cries for army medical reform, navy medical reform, poor-law medical reform, sanitary reform, and other matters, not to mention the great cry, every year becoming louder, for the reform of the laws relating to the entire profession. We see the presidency of the Board of Health bandied about from one quackish politician or feeble official to another. We see the Poor-law medical affairs presided over by a lawyer. The health statistics of the kingdom are managed at the Registrar-General's office by a major of dragoons, who has the great merit of being brother to a party statesman. The lunatic population of the realm is regulated chiefly by lords, laymen, and lawyers. Wherever medicine should crop out in the state, she is buried by political formations. Yet in all the departments which we have noted, the real work and toil are done by medical men.

Ought such a state of things to exist or continue? And who is in fault? We fear medical men are themselves chiefly to blame. Those who have reached the highest places in medicine, as regards practice and emolument, appear to look upon medicine as a mere means of money-getting, or they are satisfied with the poor and paltry honours which wait upon court appointments, corporate places, or offices in our hospitals and scientific societies. But surely every medical man is a citizen, as well as a member of a cosmopolitan profession: and our profession suffers grievously from the want of a political status, and because her followers do not fulfil their duty towards her by making, or attempting to make, her voice heard in the state.

What are the more prominent causes which have led to the present state of things? Are they valid and irremediable, or are they unreal and imaginary? Time was when party feeling ran so high that a medical man taking part in politics might expect losses in practice; but this hardly applies to the present time, when party distinctions are faint, or have almost disappeared. The most common argument alleged against the possibility of medical M.P.s is, that the professional man has no time for attendance upon parliamentary duties. Let us examine this plea. Parliament sits about six months in the year. Wednesdays and Saturdays are holidays; and, with other adjournments, there may be about ninety sittings in the year. Few individual members attend more than two-thirds of the sittings; and, on the average, Parliament breaks up before midnight, the later sittings being the exception, not the rule. The work of Parliament rarely begins till after six o'clock—the time when most of our consulting practitioners, at least, have done their work. We believe we could name at least twenty men in practice in London who have country houses, and who go into the country every day regularly at five or six o'clock. We further believe that in no profession is so much time wasted in dinner parties and social meetings, as in the medical microcosm. The plea of want of time, therefore, is of little value.

The lawyers are not so much afraid of work. Look at the late Attorney-General, Sir Alexander Cockburn, for instance. He had the leading practice at the bar in London and in his circuit; he performed his official duties as the public prosecutor and adviser of the Crown; and he worked hard in Parliament at law reform and general politics. There is nothing in the labour of the consulting masters of medicine and surgery like this. We seem to have degenerated in modern times. Radcliffe and Friend led the profession, and represented constituencies in Parliament. Mead lived in Great Ormond Street, sat in Parliament, and was a prominent political character at St. Stephen's. While we of medicine have receded from politics, every other class of the community is pressing towards it. There are nearly two hundred lawyers in the present Parliament; and the number in the next will probably not be diminished. Though we see no medical candidates for the approaching elections, there are plenty of hard worked but ambitious tradesmen, manufacturers, merchants, and so forth.

It cannot always be that such a lethargy will envelope our profession. It is not so in other countries. In the despotic states of Europe, medical men have a considerable share in the government. The same may be said of the United States; and even in our great colonies of Australia and Canada, many of the prominent political personages are medical men. There are two classes of medical men who might properly become candidates for seats in Parliament: medical men in the provinces who are independent as regards means, and medical men living in London who would be public-spirited enough to combine practice with the duties of Parliament.

We do not dwell on these shortcomings without desiring to point out the remedy. We believe that there are many boroughs in which particular medical men have great interest, or in which the united strength of the medical residents would be able to carry candidates. We earnestly wish such men would come forward and place themselves at the service of the profession by asking for medical candidates. There is not a day to lose; and we may mention, that we know already of several candidates, in every respect eligible, who would be happy to undertake the trouble and expense of an election, and contest any place where there was a fair chance of success, and who would do their duty afterwards to the profession and to their constituents. Some one must speak out; and it would give us the greatest pleasure to be the medium of communication between such parties.

THE WEEK.

Army Medical Reform has formed the subject of debate in the House of Commons, twice since our last. This fact will convince our readers of the necessity that is felt by our legislators, as well as by ourselves, for a thorough remodelling of a department which, from causes altogether without the control of our profession, reflects anything but credit upon us. Mr. Stafford is deserving of the thanks of every medical man for the pertinacity and courage with which he does battle with Mr. Peel, on behalf of the medical officers of the army. Notwithstanding the recommendation of the Committee which sat last year with respect to the justice of the demand of these officers for more pay and a fair share of honour, nothing yet has been done. Mr. Peel, who fences with every question he has to do with, informed the House indeed that the army medical expenditure in Great Britain and Ireland had increased since 1852 by upwards of £40,000 a year; but he does not, of course, mean to assert that this sum has gone into the pockets of the medical officers. There is a question, however, beyond that of pay, which was only just touched upon in the debate of Friday last—a question which goes to the bottom of the present position and authority of the army medical department. Sir W. F. Williams, speaking of the efficiency of the military hospitals at Woolwich, informed the House on that occasion, that "a few weeks since he had the honour of escorting Miss Nightingale over the whole of the establishment, when she expressed herself highly pleased with the arrangements; and on the following day, Colonel Lefroy wrote to him expressing the great gratification Miss Nightingale had derived from her visit to the Artillery and Cadets' Hospital, and her opinion that they were among the best military hospitals she had seen."

We cannot write this quotation of Miss Nightingale's "approval" of our hospital arrangements without a blush of shame and indignation. To what condition is the army medical department reduced, that its opinion is never even quoted upon a matter of such vital importance as the condition and arrangements of our large military hospitals? What would Convocation say if Miss Nightingale's, or any other lady's opinions were quoted in high approval of the government of the Church? What would Lincoln's Inn or the Temple say if a second Portia were to signify her approval of a measure of Legal Reform? For Miss Nightingale we feel the highest respect, and we have no doubt whatever that her opinion upon hospital arrangements is of great value; but is that any reason why the Medical Department of the Army should be reduced to such a state of *impotence*, as this quotation of her opinion would seem to imply? Miss Nightingale thinks with a fine as well as with a common sense, unfettered by routine; hence her vivifying powers, and the weight that her opinions carry with them. Our present Medical Department, imperfect as it is, is allowed no freedom of this kind, it is simply the mouthpiece of the Secretary at War; hence no one heeds its voice, and no one looks to it for one single suggestive idea. We have reason to believe that the Government have had the necessity of improving the organisation of this very important department of the army forced upon them, and that we shall see changes made in the new Parliament which will place military medicine in a condition far more independent than it at present enjoys, and which will render it infinitely more serviceable.

The Students' Meeting on behalf of Poor-Law Medical Reform, on Thursday week (a full report of which will be found in another column), was a decided success. St. Martin's Hall—no small gathering ground—was crowded in every part; and the body of the meeting, composed of as many different groups as there are large hospitals in the metropolis, was alive with that intelligence and pluck necessary to carry the movement to a successful issue. The students have one great advantage over medical men already in office: they can speak out loudly and indignantly, without fear of offending their taskmasters; they can use ridicule and a just scorn, without being called to account for their speech by guardians, who may happen at the same time to be private patients. Mr. Griffin will, we trust, accept the services of these light skirmishers "unattached", who have both the will and the ability to do excellent service in the movement, which has now, we hope, impetus enough to go on successfully to the end. We cannot help congratulating the rising generation of medical men upon the ability they have shown in their conduct at this meeting. The speaking was excellent throughout; and many new arguments were brought forward in favour of the just rights of the Poor-Law medical officers, which we trust Mr. Griffin will stow away in his armoury for further use. With Mr. Layard as the champion of their cause in the new House (if he has the good chance to be elected), the Poor-Law surgeons need not fear that their voice will be any more stifled. The President of the Poor-Law Board will not be able to put him down by specious promises of inquiry, when the time comes for a full discussion of the subject. We trust that the students will "agitate, agitate, agitate," to use the old reform cry; and that meeting after meeting, such as that which shook the walls of St. Martin's Hall on Thursday, will be held in different parts of the metropolis. We must cry loud enough, if we wish Parliament to listen to our grievances. The students are the *fly wheel* of the movement, and their swing and enthusiasm will lift it out of the "dead lock" which it has unfortunately fallen into of late. Mr. Griffin should, therefore, make much of these gallant volunteers, whose generous enthusiasm will, we hope, induce the Poor-Law surgeons who have not yet joined the movement to come forward. Surely they don't intend to let the *boys* do all their work for them.

At the Spring Assizes of the Norfolk Circuit, held at Aylesbury on March 11th, a man named Philip White, residing at Chesham, was arraigned for administering *hiera picra* to one Ann Seaward, on the 3rd and 7th of December last, with intent to procure miscarriage. A charge had also been preferred against the prisoner for poisoning his wife with arsenic; but the bill was thrown out by the grand jury, there being evidence that the wife had taken arsenic herself to procure miscarriage. During the inquest on the wife, Ann Seaward, in giving evidence, made disclosures which led to the preferring of the charge of attempting to procure abortion against the prisoner. She stated that—

"Having informed the prisoner of her apprehension that she was in the family way by him, he said he could give her something to 'set her right'; and on the following day, December 3rd, he gave her 3*d*., with directions to buy half an ounce of

what he termed 'hicra picra'. The girl obeyed his directions; and having procured the drug (which was stated to be in common use among women as a cordial aperient, a dose being about ten grains), placed it in the hands of the prisoner, who mixed a portion of it in gin and something else, and gave it to her to drink, saying that it would make her poorly and sick, but would set her right."

The large quantity of the drug administered on each occasion to the girl had in fact been her safety, as she had vomited it on each occasion. To show that the prisoner knew the nature of the drug, the keeper of the lock-up at Chesham stated that the prisoner had remarked: "If I had a fast breeder, I would give her some hiera picra, if it would not hurt her." The prisoner was found guilty, and transported for life.

The letter of Mr. Gamgee in this day's Journal calls attention to a subject of extreme importance. For some time past there have been rumours (which have found their way into the House of Commons) that a portion of the cattle imported from the Continent, for the alimentary use of the inhabitants of London, has been in a diseased state. Mr. Gamgee, whose course of study, together with the aids at his command, well fit him for the duty, has undertaken the task of first verifying, by his own observation, the correctness of the statements made, and then of concisely pointing out the direction in which the remedies for the evil should be applied. The measures recommended by our correspondent appear simple, and at the same time effective; but, in the hope of meeting soon with a more extended development of his views, we abstain for the present from any further remark.

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, March 1856.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 10th, 1857.

Cæsar Hawkins, Esq., F.R.C.S., President, in the Chair.

ANATOMY AND PATHOLOGY OF THE ADULT PROSTATE.

BY HENRY THOMPSON, M.B., F.R.C.S.

The observations are based upon upwards of sixty dissections, fifty of which were preserved and exhibited: these had been examined on a uniform plan.

The organ had been clearly dissected from adjacent parts. At the neck of the bladder, the muscular and other fibrous structures which surround the vesical orifice of the urethra were pared away pretty closely. Some portions might have been left, as it does not appear possible to mark any absolute limit between prostate and bladder; anteriorly, although the same condition exists, it is less difficult to determine, approximatively, a boundary line. The prostate was then measured, in three directions, as follows:—from base to apex; in the extreme transverse direction; and in the extreme recto-pubic direction. Next, it was weighed. After this, the urethra was laid open, the existence of "concretions" sought in the canal, and afterwards in various parts of the prostatic substance. In most specimens, free sections were made with Valentin's knife, and a series of microscopical observations pursued in normal and abnormal conditions of the organ, illustrated by about one hundred specimens, mounted on slides, with preservative fluid. The greater part of these prostates were taken from the bodies of elderly persons, as they consecutively appeared in the dead-house of a large institution, containing a due proportion of healthy and diseased lives, and no kind of selection was made. The particulars of age, weight, and measurement, are arranged in tables exhibited. The observations made are presented under the following heads:—

I. *Frequency with which enlargement appears in advanced age.* The opinion has long been current that the enlargement of the prostate is one of the changes natural to old age. The specimens in question showed the incorrectness of this view. Of the 50 specimens, 43 were taken from individuals of fifty years old and upwards. Of these 43, two were very small, probably atrophied, leaving 41. Of these 41, 14 exhibited enlargement, or a tendency thereto, manifested by the presence of tumour, more or less developed. Of these 14, 9 exhibited it in a very slight degree; in the remaining 5, enlargement was considerable, and gave rise to symptoms during life. Only one died of the affection.

An appreciable enlargement existed at the rate of 32 per cent.; notable enlargement, causing symptoms during life, at that of 12 per cent.

Of the 41 cases above fifty years of age, 29 were therefore unaffected in the slightest degree, and amongst them were the oldest individuals of the series—one at ninety, one at eighty-five, and two at seventy-nine years. It was then held to be established, that enlargement of the prostate, so far from being a change natural to old age, was an exceptional condition.

II. *Size and weight of the adult prostate.* From the 50 cases of all adult ages, 14 being deducted as enlarged, and 3 as unnaturally small, 33 specimens remained healthy; the average weight of these was 4 drachms 38 grains; there was very little deviation, most of them ranging between 4 and 5 drachms.

The measurements given by authors generally were corroborated. The prevailing measurements were:—From base to apex, 1¼ to 1½ inch; greatest transverse diameter, about 1¾ inch; greatest thickness, ⅝ to ¾ inch; measurement from the centre of the urethra, outwards and downwards to the periphery of the organ, the line of section adopted in lithotomy, varied from ¾ to ⅞ inch.

III. *Nature of a part commonly called "the third lobe".* The history of this term, and its employment to indicate a distinct portion of the organ, was discussed at some length. There is no portion marked out with sufficient distinctness to entitle it to such an appellation. Its existence appeared to have been the subject of discussion during some years in the course of the last century, long before the time of Sir Everard Home, the result of which was then a decided denial of its existence; Morgagni especially, after repeated examinations, strongly

opposing its claim to be considered a distinct part of the healthy organ. It was proposed now to term the stratum of prostatic substance, which united the two lateral lobes behind and below the urethra, the "posterior median portion", as more correctly indicating the part referred to, and at all events as not involving assent to the disputable theory which assigned to it an independent character.

IV. *Existence of distinct tumours in the prostate.* The existence of solid tumours of different kinds is by no means rare in the prostate. They were pointed out by Sir E. Home, and by him supposed to be of the nature of apoplectic clots. Subsequently, they have been regarded as fibrous tumours, and more lately it has been shown that some possess a structure approaching very nearly to that of the secreting tissue contained in the prostatic substance around. It was shown that enlargement of the prostate is very frequently associated with the development, more or less marked, of such growths in some one of three forms; in short, that the production of defined tumour is more frequently than otherwise the essential element of the pathological condition known as hypertrophy of the prostate. Of fourteen enlarged prostates in the series, six exhibited numerous fibrous tumours in the substance of the lateral lobes; the others show polypoid enlargements, single, binary, or multiple, springing from the posterior median portion. The varieties may be briefly noticed as follows:—

1. A simple fibrous tumour, small, nearly isolated, made up of closely-packed organic muscular fibres, with some areolar tissue, intimately resembling those found imbedded in the walls of the uterus.

2. A tumour composed of the same elements as the preceding, but containing, in addition, some of the glandular substance of the prostate, more or less imperfectly developed. This also may be imbedded, with or without a cyst, seeming sometimes to partake more of the character of a local enlargement, limited to a small portion or lobule of the prostate tissue, and only partially isolated. Although separating this class from the previous one for facility of reference, it was more than probable that the two nearly merge into each other at their adjacent limits, the latter approximating to the former by insensible gradations; so that some tumours which appear to be purely fibrous at first may be found to exhibit slight traces, in parts of its structure, of the glandular element. In *all*, however, the basis is *muscular fibre*.

3. A tumour composed entirely of the ordinary structures of the prostate fully developed, and enjoying activity of function in common with the rest of the organ. It asssumes a pyriform shape even in its earliest stage, and springs from the posterior median portion. It may vary in size from that of a pea to that of a middle-sized pear. The analogies between these and the tumours of the uterus are considerable. Pointed out by Velpeau and others, modern researches seem to indicate them more plainly.

a. There is a ground of analogy derived from the two organs, prostate and uterus, being undoubtedly morphological equivalents in the two sexes, the analogue of the uterus and vagina combined being found in the prostatic vesicle or utricle of man. Numerous authorities are referred to in support of this view.

b. A stronger ground may be found in the fact, that the prostate and uterus are organs whose bulk is constituted by the same tissue—viz., the organic muscular fibre. No other organ in the body besides these two is similarly constructed by thick masses of this tissue; elsewhere, it is distributed in very thin layers.

c. Both organs exhibit growths identical both in external and histological characters. Isolated tumours imbedded in the substance of the organ, and polypoid outgrowths intimately connected with its structure, are seen in both. The occurrence, in some prostatic tumours, of a very small proportion of partially developed gland tissue, intermingled with the muscular basis, should be regarded rather as an accident of situation than as indicating any material difference between those and the purely muscular tumours.

d. The two organs are subject to considerable hypertrophic enlargement, mainly consisting of their constituent fibrous and muscular elements, and in both this may be associated with some tumour-formation, or may exist independently of it; may, in the latter case, be local or general, affecting the whole or certain parts of the organ, and, when local, affecting particular spots more commonly than others.

e. The two organs are liable to these changes after the prime of life has passed. Bayle, quoted by Rokitansky, and confirmed by Dr. Robert Lee, says that 20 per cent. of women, after thirty-five years, have fibrous tumour of some size in the uterus. These preparations show prostatic tumours in 30 per cent. of males after fifty.

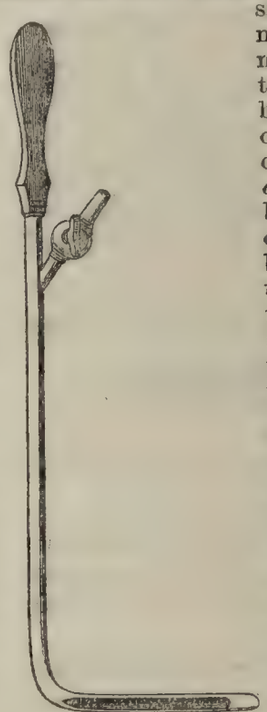
The President said it was remarkable how little was formerly known of the anatomy of the prostate gland compared with the pathology; and he also inquired if Mr. Thompson was aware of the statement of Dr. Beith, in the *Pathological Transactions*, that enlarged prostates were exceedingly rare in very old persons.

Mr. Solly asked if Mr. Thompson, in speaking of enlargement in old age, excluded all tumours, or merely alluded to the hypertrophy of the organ.

Mr. Thompson said he was not aware that Dr. Beith had made any numerical statement, though he recollected that gentleman presenting some specimens of enlarged prostate early in the history of the Pathological Society. Of the 41 specimens referred to in his (Mr. Thompson's) paper, 14 were enlarged; of these, six contained isolated tumours; the others being specimens of the ordinary kind of enlargement, commonly known as hypertrophy.

A RECTANGULAR CATHETER-STAFF FOR LITHOTOMY.
BY J. HUTCHINSON, ESQ.

The main peculiarities of the instrument were its rectangular form and its catheter stem. The advantages *of its form* were—1st, that it made the direction into the bladder straight, and thus obviated all danger of the knife leaving the groove; 2ndly, that the angle projecting prominently into the perinæum was more easily found than the curve of an ordinary instrument; 3rdly, that its groove commencing only at the angle, there was no chance of the urethra being opened too far forward, or the artery of the bulb being wounded; 4thly, that when once introduced, it did not easily change position. Its being a *catheter as well as a staff* was important; 1st, because it allowed the surgeon to be quite certain of its being really in the bladder before commencing the operation: 2ndly, because it permitted of the bladder being injected without any change of instruments, and thus prevented the risk of the water escaping. It was provided with a stopcock. The author insisted strongly on the importance of operating with a full bladder and the dangers of its neglect, and believed that one great recommendation of his instrument was, that it would much encourage and facilitate the practice. Adverting to the causes of accidents in lithotomy, he stated, that of a series (nine) which had come under his notice during the last few years, chiefly in the practice of the London hospitals, they had been due to—1st, the knife leaving the groove in the staff; 2ndly, the staff being at the time not really in the bladder; 3rdly, injury of the fundus of the bladder with the point of the knife; and expressed a strong opinion that the employment of the "rectangular catheter-staff" would have prevented them all. The instrument shown to the society had a side groove, and was adapted for the use of any form of knife the operator might prefer. It had been made by Messrs. Fergusson, of Giltspur Street. It had been tried in the dead-house a great number of times, and once upon the living subject, and always without any inconvenience. There was no difficulty whatever in its introduction. It was advised to be held in the usual way, moderately hooked up under the symphisis pubis, but by a slight movement of the handle its angle might be made to project more or less into the perinæum, according to the operator's wish. Mr. Hutchinson wished distinctly to state that he made no claim to originality of design. Dr. Buchanan, of Glasgow, had long ago recommended and used an angular staff for lithotomy, and more recently Mr. Fergusson had devised a grooved catheter for perineal section. The present instrument was merely a combination of the two principles. He believed, however, that it possessed in its catheter stem a



The groove, as shewn in this cut, is not nearly large enough at the angle. It ought to extend both further back up to the bend, and also to widen out, so as to include the under as well as the side surface. The wider the groove is at the angle, the more easily it is found by the knife.

very important advantage over Dr. Buchanan's, since it enabled the operator to ascertain with positiveness whether he was in the bladder. With instruments of the ordinary curve this is done by striking the stone, but as an angular one is very inconvenient for sounding it is liable, when made solid, to the objection that the surgeon might occasionally have to operate in uncertainty. The author also laid before the Society several other modifications of the angular staff which he had had made in the course of a long series of experiments as to the safest instruments for lithotomy. One of these had the groove beneath, and the knife adapted to it was a double cutting gorget, the beak of which was so made that when once placed it could not leave the groove. This he had once used on the living without inconvenience; but as it was liable to some objection, and as the side groove allowed of the operation being completed by a single knife and much simplified the apparatus, he had at length abandoned the principle which distinguished the former.

Mr. Spencer Wells said the rectangular staff had been described eight or nine years ago by Dr. Andrew Buchanan, of Glasgow, in a Scotch journal. That gentleman laid especial weight upon the point, that in his operation the staff should be pressed downwards, and not drawn upwards, so that the rectum, instead of being drawn into danger, might be pressed out of it. The projecting angle of the staff was brought very near the anus in the median line, and the forefinger of the left hand passed into the rectum to feel the apex of the prostate, taking care that the projecting angle was immediately in front of, and not behind, the prostate. Dr. Buchanan made a very different incision from that made in the ordinary lateral operation. The knife was passed into the groove of the staff, directly in front of the anus, and held horizontally, as if the operator were going to cut towards the tuberosity of the ischium, and in withdrawing the knife it was brought out downwards, so that the incision resembled one-half of the incision made by Dupuytren in his bilateral operation, except that it was much nearer the anus. In this way Dr. Buchanan considered that the rectum could not be injured. In his (Mr. Wells's) experiments on dead subjects, he had found that unless the assistant was careful, and the surgeon also, the angle of the staff was apt to slip into the bladder, and the prostate was pushed forwards towards the perinæum; and thus the bladder was opened either through the substance of the prostate or behind it, the old operation of cutting upon the gripe being thus performed. This was likely to take place unless great care was taken to feel with the forefinger in the rectum that the angle of the staff was made to rest exactly at the apex of the prostate; in fact, that the prostate was between the finger and the horizontal branch of the staff.

Mr. Gamgee had seen Dr. Buchanan operate with the rectangular staff in the way described by Mr. Wells. He had seen Dr. Buchanan perform his sixteenth operation; and in this case, owing, apparently, to the rectum overlapping, as it were, the staff on either side, it had been wounded. He (Mr. Gamgee) had recently brought before the profession the method practised by the Neapolitans, after Moreau, who held the staff in the left hand, and made the curve project in the left side of the perinæum, and kept it constantly pressed towards the wound, opening the urethra at the apex of the prostate, and incising it to a very small extent.

Mr. Erichsen said that he thought Mr. Hutchinson's staff likely to prove of considerable value. He could give no opinion as to the merit of the rectangular shape, having had no experience of it, but he thought the combination of the catheter with the staff peculiarly valuable: it enabled the surgeon to inspect the bladder without changing instruments, prevented the escape of the injected fluid, that was apt to ensue between the withdrawal of the ordinary catheter and the introduction of the staff, and would tend to prevent some of the accidents that might befal a surgeon in lithotomy. Had he been provided with such an instrument an accident that had once occurred to him might have been avoided. A patient was sent to him with stone in the bladder, which was at once detected on sounding. When about to be cut the staff was introduced, apparently into the bladder, but no stone could be felt. A hollow sound, with a short beak, was then passed, and the calculus at once struck. The staff was again introduced, and, as it passed without difficulty of any kind, and the point could be felt on depressing the handle above the pubes, it was supposed by Mr. Erichsen, and those assisting him, that it was in the bladder; but that, having a large curve, the stone probably lay in this. Mr. Erichsen proceeded to cut the patient, and, on opening the groove of the staff found it was not in the bladder. Having satisfied himself of this, he withdrew the staff, and passed the hollow sound, with which he had previously felt the stone, cut upon this, and extracted a large calculus. The patient unfortunately died; and after death three old false passages were found leading from the urethra into the abdominal space, and by the side of the bladder. It was into one of these that the staff had passed, but the sound being larger, and having a short beak, escaped it, and entered the bladder. Now, had the staff been hollow, as in Mr. Hutchinson's instrument, such an event could at once have been recognised by the non-escape of urine. Since this case had occurred, Mr. Erichsen had heard of several instances in which a similar accident had happened. This led to the inference that the proper rule of practice should be, to feel the stone with the staff rather than with a sound when the patient was on the table. He did not know whether the use of the hollow staff in perinæal section originated with Mr. Fergusson or Mr. Thompson, but he had used the instrument with great advantage during the past twelve months.

Mr. J. Clover said he had adopted the plan, also suggested by Mr. Henry Thompson, of injecting two or three drachms of olive oil, whenever he anticipated any difficulty in passing the instrument.

Mr. Henry Thompson did not know who was the first to employ a grooved staff for cutting the perinæum. He used it a twelvemonth ago, and certainly preferred it to the plain staff. He employed it in connection with Syme's shoulder-staff, allowing the groove to run through, so that if there was any doubt as to whether the instrument was in the bladder, it could be at once set at rest by turning the tap, and allowing the urine to flow. The injection of oil, to the extent of half an ounce or an ounce, he had found of much greater service than oiling the instrument.

Editor's Letter Box.

THE CATTLE EPIDEMICS AND DISEASED MEATS, IN CONNEXION WITH THE PUBLIC HEALTH.

Letter from Joseph S. Gamgee, Esq.

Sir,—I last evening made a communication to the Pathological Society of London on the subject of *Cattle Epidemics* and diseased meats in relation with the public health. The President and members expressed a general and very decided opinion, by the manner in which they received my statement, that I had not overrated its importance; and if you, sir, entertain the same belief, I trust to your bringing the following facts to the public notice.

The statement I am about to make is substantially the same as I made to the Pathological Society last night; my note books contain many more facts of a similar nature, and they shall, with the least possible delay, be published with the results of the inquiries I am personally conducting. I pledge myself to make no statement without the fullest and most strictly accurate evidence.

On Monday morning, the 16th instant, I proceeded to the New Cattle Market, in Copenhagen Fields, to inspect the live and slaughtered cattle. The live beasts were generally extremely well conditioned and thoroughly sound, but standing among them were three beasts diseased. One of these was emaciated and hidebound, with abscesses in various parts of the body, particularly over the region of the head and neck; from the clinical observations I made on diseased cattle nine years ago, I believe this case was most probably one of pyæmia following typhoid fever. A second beast was in ill health, viz., thin and feverish, but I could not make a precise diagnosis. The third diseased beast was a fat one. It was lying down moaning, looking round anxiously at flanks; pulse 110; respiration 45; pleuro-pneumonic. I now proceeded to the slaughter-house of the market.

In that slaughter-house I saw five carcases, three of oxen, two of sheep. One of the latter was of magnificent shape and condition, so far as fat was concerned, but the whole carcase had a uniform dusky red colour, evidently the result of general infiltration with bloody serosity. The carcase having been trimmed and completely dressed for the butcher, I had no means of inspecting the viscera. Two of the oxen were much emaciated, and had apparently died with typhus or typhoid; they presented numerous bloody extravasations in the subcutaneous cellular, intermuscular, and subpleural cellular tissue. I should have required to see the intestines in order to state

accurately the nature of the disease, but the viscera had been removed. The third ox was large, moderately fat, pleuro-pneumonic. I carried away the lungs of this beast; they were infiltrated with solidified plastic matter in almost their whole extent; so that, whereas their average weight should have been about eight pounds, it was twenty-seven pounds. The disease was in its acute stage; although the carcase had been very skilfully trimmed and dressed, the flesh in the walls of the chest and abdomen bore unmistakeable marks of disease. The slaughterman stated that these carcases would be conveyed to the city markets, where they would be sold as food. In his opinion these carcases were not diseased, nor would they be considered such by the city meat inspectors. He even maintained that the lungs were not diseased; they only contained congealed healthy blood!!

I yesterday (17th instant) proceeded to the Mansion House with a portion of the above diseased lungs, and of a healthy lung, to demonstrate the difference. I was not permitted to make a statement of the facts in open court, the clerk stating such a course could not be pursued. As the Lord Mayor did not sit in court yesterday, I took the liberty of sending in my card to his lordship, with a prayer for an interview, which was most graciously granted; but his lordship could not, in his capacity as magistrate, hear any verbal statement; and he suggested that I might take out a summons against any guilty party, or submit him a written statement which he would submit to the city markets commission. I most sincerely thanked his lordship, and applied in the court for a summons against Thomas William Farey, the slaughterman whose name was painted on the door of the building in the New Cattle Market wherein I saw the diseased carcases, and whence I had carried away the lungs; being careful, however, to obtain full evidence that those lungs had belonged to a beast slaughtered and hung up as fit for human food by a servant of the said Thomas William Farey. But the summons against this individual was not granted me, on the plea that the New Cattle Market in Copenhagen Fields is not in the city police district, but in a totally different one, in which jurisdiction was exercised by the magistrate sitting in Westminster. His worship received me most kindly, and with great pains examined with me the Acts of Parliament under which we might summons Thomas William Farey. His worship stated that the case was new to him, that he did not feel that he had any jurisdiction under the circumstances, but he pressed me to continue my researches, with the certainty of being of great public utility.

The amount of diseased meat sold in London is enormous. Sanitary legislation with reference to this particular subject, is defective in principle, in so far as based on insufficient knowledge; it is useless in practice, in so far as it is entrusted for execution to a very few persons, neither fitted by education nor station to protect the public health. I shall demonstrate the whole nature and extent of this gigantic evil,—point out the errors in legislation, errors of omission and commission, and propose simple, economical measures, which, if immediately carried into effect, will arrest the evil all but instantly. Inspectors, competent in knowledge, sufficient in number, must be appointed at all ports of importation, to live and dead meat markets; those inspectors must be professional men who can distinguish between simple pneumonia, epidemic pleuro-pneumonia, typhoid fever, and pestilential typhus, to all of which diseases cattle are extensively subject. These inspectors must be men of energy, and the work must be begun immediately and thoroughly. All private slaughter-houses in large cities, in London more particularly, must be abolished. Public slaughter-houses must be established; they will pay their own expenses, and sufficient guarantee can then be given that healthy beasts are killed and distributed to the population.

In conducting these inquiries, in appreciating the evil, in legislating for it, the interests of all parties must be duly weighed and provided for. The question must be treated with the lights of medical and veterinary science, in strict accordance with the principles of political economy.

My machinery for the work is sufficient. My brother, who is professor at the Royal Veterinary College, Edinburgh, is pushing the inquiry in every direction. My father, a veterinary surgeon, is my assistant; and, so far as I am personally concerned, I am prepared to stand or fall by the issue. The evil shall be exposed—the remedy proposed: as a councillor of health I shall then feel to have done my duty. Let legislators do theirs. I am, etc., Joseph Sampson Gamgee,

Late Staff-Surgeon of the first class.

Upper Woburn Place, March 18th, 1856.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, March 12th.

ARMY MEDICAL REFORM.

The House went into Committee of Supply; and

Mr. Peel made the motion on the army estimates.

Mr. Stafford expressed his regret that nothing had yet been done to carry out the recommendations of the committee which sat last year in reference to the medical officers of the army. Their position in the army remained now exactly as it was when the war broke out, although the present Government, when it came into office, had given a distinct assurance that the department should be completely revised. Under the Government of the noble lord, the army in the Crimea had been brought into a state of the highest efficiency; the comfort and health of the soldiers had been promoted in every way; but now that other topics had taken possession of the public mind, he was afraid that the Government might put off army medical reform on the score of economy. The state of suspense in which the Army Medical Department had been kept for nearly two years had created among them a feeling of disappointment, vexation, and a disinclination to continue in the service; and they desired to be told one thing or the other—either that the Government were going to do something for them or nothing. If the bravery of the British soldier, his fortitude, discipline, and good conduct, rendered his life and comfort very precious, and if his life was made still more valuable by the impossibility of filling up gaps in the ranks proceeding from death by conscription, then he called upon the House, by the remembrance of the Crimean difficulties and the recollection of the Crimean glories, to see that the care of the soldier's life was not left to a class into which the scale of pay and position obtained were not calculated to attract young men of the greatest eminence and promise; while, at the same time, the East India Company, the large steam-packet establishments, the requirements of the colonies and of an increasing population, draw from the army medical profession many men of ability.

Sir De L. Evans said, that no department had been more exposed to difficulty in the Crimea than the Medical Department of the Army; and he trusted that, when the army estimates came before the next Parliament, some general statement would be made in reference to that department. For the sake of the efficiency of the army before the enemy, it was important that the utmost attention should be paid to the state of the medical department. In reference to another department —the Commissariat—the discussion which had taken place had brought to the painful recollection of the House that that branch had been almost entirely neglected before the recent war. Public attention had been drawn to this subject very much; and he had seen, in an extremely sensible work published by a Commissariat officer, the suggestion that, instead of being a civil department, the Commissariat, with the exception of the accountant branch, should be altogether military. Such was the case in India; and, in respect to his division in the Crimea, great advantage was derived from the assistance, for commissariat purposes, of two or three military officers, who, however, could not continue that aid when their division came before the enemy. He ventured to hope that the Government would take this point under consideration before the meeting of next Parliament.

Sir J. Fergusson observed, that the committee of which he was a member had recommended that an extra assistant-surgeon should be appointed to every regiment; for it was found that, as there was only one assistant-surgeon to each regiment, not only was it impossible for the surgeon and his assistant to discharge their duties efficiently, but those officers were unable to obtain leave of absence. If, from sickness or any other pressing cause, the medical officers were compelled to absent themselves from their regiments for any length of time, they were obliged, at their own cost, to provide for the medical charge of the troops during their absence. He believed the Duke of Cambridge had expressed a decided opinion that an extra assistant-surgeon should be appointed to every regiment, and that medical officers ought to receive leave of absence on the same scale as the other officers. At the commencement of the late war, there was no department of the army in which there was so marked a deficiency as in the

medical department. After the battle of the Alma, the wounded remained on the field for at least twenty-four hours before they received medical attention, owing to the want of a sufficient number of medical officers. He thought that, in whatever department of the army reductions were effected, there ought to be no diminution in the number of regimental medical officers.

Colonel North said, he was a member of the committee referred to by the hon. baronet, which was most fairly constituted and which had recommended an increase of pay to medical officers of the army; and he hoped the Under-Secretary for War would be enabled, when the report of supply was brought up, to state whether the Government intended to take any steps to carry out the recommendations of the committee with regard to a most meritorious class of officers.

Mr. Peel could assure the committee that the state of the Medical Department of the Army continued to receive the attention of the Government. He had himself been a member of the committee, but he did not remember that they recommended the employment of an increased number of medical officers. If that were the case, however, the Government had carried out their recommendation; for there had not only been an increase in the number of surgeons attached to infantry regiments, but there had also been a very large increase in the medical staff. Comparing the expenditure for the medical staff of Great Britain and Ireland in 1852, 1853, and 1854, with what it was at present, it would be found there been an increase amounting to about £40,000 a-year.

Mr. Stafford said, the hon. gentleman (Mr. Peel) had not given an answer to his question. He had not stated what were the intentions of the Government with regard to the Medical Department of the Army.

Sir W. Codrington said that, with regard to the regimental medical officers, he could assure the committee that they were not adequately rewarded for their services. He knew many of them who had served during the whole war with the army in the East, who had encountered what he might term all the medical difficulties besides the war difficulties, who had grappled with the cholera in Bulgaria, who had subsequently attended the army in the Crimea, who had discharged arduous duties on battlefields and in the trenches, but who now remained at home without reward, promotion, or distinction of any sort. [*Hear, hear.*]

Friday, March 13th.

ARMY MEDICAL REFORM.

Mr. Stafford repeated the question which he had put to the Under-Secretary for War on the previous night, on the subject of the Medical Department; not that he had any hope of receiving a favourable answer, for if the hon. gentleman had had any reform to announce, he would not have been silent on it last night. He would, however, enter his earnest and mournful protest against sending out troops for active service in China, without some steps being taken to insure them against a recurrence of the terrible calamities which had happened in our military hospitals at the commencement of the last war. When those troops disembarked in China, another general hospital would be opened on those shores, which would be conducted on the same principles,—or rather with the same want of principle, and would be exposed to the same confusion of departments, and the same clashing of authorities, which had made Scutari what it was. His complaint was, that the promises made by the Government, and more particularly by the noble lord at the head of the Government two years ago, that the Army Medical Department should be thoroughly reformed, had been set at nought. As a mere matter of economy, and apart from philanthropic motives, every care ought to be taken of the lives of our soldiers, and every measure adopted which experience showed to be necessary to make the Medical Department completely efficient. He should be glad to hear from the Government that they were prepared to redeem the promises which they had made when they went into office, and if he had the honour of a seat in the next Parliament, he should bring the whole subject before it.

Mr. Peel said, the question now put to him by the hon. gentleman was not exactly a repetition of that which he asked last night. The question asked by the hon. member last night was, whether the Government had taken, or contemplated taking, any steps to carry into effect the resolutions agreed to by a committee of last session with reference to the state of the Army Medical Department. Since last evening he (Mr. Peel) had read those resolutions, and he found that the more important recommendations contained in them were, that there should be an increase in the scale of pay of medical officers, and that additional facilities should be afforded for their retirement upon half-pay. He agreed with those resolutions. He would not deny that the advantages offered in other departments of the service had the effect of preventing the most able medical men from competing for employment in the Army Medical Department, and he was anxious that the medical officers of the army should possess at least equal advantages with those enjoyed by the same class of officers in other departments. The hon. gentleman was aware that the amount which the Government could expend upon the army was restricted, and it was necessary to make a selection among the various improvements that were suggested. Those improvements which were regarded as of the greatest importance were first carried into effect; and others, which, though important, were of less pressing necessity, were postponed. This was the reason why the improvements, to which the resolutions referred, had not been carried into effect. The hon. gentleman had expressed his confidence that there was no prospect of anything being done by the Government. He (Mr. Peel) did not know on what grounds the hon. gentleman could justify such a statement. He believed that the hon. gentleman was as well aware as he was himself that it was the intention of the Government to issue a commission to inquire what alterations and improvements could be effected in the existing arrangements of the Army Medical Department; and he (Mr. Peel) confidently believed that the recommendations of that commission, coupled with the resolutions of the committee of last session, would enable the Government to deal with this question in a manner which would be satisfactory to the medical officers and beneficial to the service. The hon. gentleman had indulged in very gloomy predictions with regard to the sanitary state of the troops who were about proceeding to China. The climate of that country was undoubtedly unfavourable to European constitutions; but he was confident that all possible arrangements for preserving the health of the troops would be made, so far as that object could be effected by the provision of ample hospital accommodation, the supply of all requisite medical stores, and the sending out of a numerous body of medical officers.

Mr. Stafford observed, that what he had stated was, that the defective organisation of the general hospital system was one of the chief causes of the mortality at Scutari; and that that system had not been improved.

Sir W. F. Williams said the honourable gentleman (Mr. Stafford) had referred to the inefficiency of the hospitals at Woolwich; but he could assure the honourable member that he had been totally misinformed on that subject. He (Sir W. F. Williams) invited the honourable gentleman, and any other members of that House, to visit those hospitals. A few weeks since, he had the honour of escorting Miss Nightingale over the whole of the establishments, when she expressed herself highly pleased with the arrangements; and on the following day, Colonel Lefroy wrote to him, expressing the great gratification Miss Nightingale had derived from her visit to the Artillery and Cadet Hospitals, and her opinion that they were among the best military hospitals she had seen.

Mr. Stafford said, with reference to the observations of the gallant general (Sir W. F. Williams), that he had no doubt Miss Nightingale had praised the efficiency of the Woolwich hospitals; but he would ask whether the sites, the structure, and the sanitary arrangements of those hospitals, were such as would be approved by medical men? That was all he (Mr. Stafford) had meant to say, without intending to cast the least imputation upon the officers of the Army Medical Department, either at Woolwich or Portsmouth.

PROFESSORSHIP OF MILITARY SURGERY IN THE UNIVERSITY OF EDINBURGH.

Mr. Cowan asked whether it was the intention of the Government to fill up the Professorship of Military Surgery in the University of Edinburgh, which became vacant by the death of Sir G. Ballingall, about the end of 1855?

Mr. Peel replied that it was the intention of the Government to appoint a Professor to the Chair of Military Surgery in Edinburgh. Arrangements were being made for that purpose, and the appointment would take place in the course of a short time.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

*Butler. On March 16th, at Chapel Street, Pentonville, the wife of William Butler, Esq., Surgeon, of a daughter.

Halse. On March 17th, at 4, New Bridge Street, Blackfriars, the wife of Charles Smith Halse, M.D., of a son.

James. On March 17th, at 25, Nelson Terrace, Stoke Newington, the wife of Joseph W. Wilmot James, Esq., Surgeon, of a son.

Price. On March 11th, at Marlborough, the wife of Richard Edmonds Price, Esq., Surgeon, prematurely, of a daughter.

Read. On March 17th, at 1, Gordon Place, Kensington, the wife of Thomas L. Read, Esq., Surgeon, of a daughter.

Stewart. On March 12th, at Edinburgh, the wife of A. Stewart, Esq., Surgeon, of London, of a daughter.

Tipple. On March 13th, at Lower Mitcham, the wife of F. A. Tipple, Esq., Surgeon, of a son.

*Warden. On March 12th, at 9, Cherry Street, Birmingham, the wife of Charles Warden, M.D., of a son.

MARRIAGES.

Munro—Bell. Munro, William, M.D., Surgeon 93rd Highlanders, to Dora Laidlaw, daughter of the late James Bell, Esq., at Southsea, on March 13th.

Tassell—Harvey. Tassell, Robert, Esq., Surgeon, of Iver, Bucks, to Ann Maria, eldest daughter of John Fagg Harvey, Esq., of Godmersham, Kent, on March 17th.

Wise—Suther. Wise, Thomas Taylor, Esq., R.N., to Mary Anne, daughter of P. Suther, M.D., Deputy Medical Inspector of Hospitals and Fleets, at St. Saviour's, Jersey, on March 10th.

DEATHS.

*Martin. On March 15th, at her son's residence, St. Bartholomew's Hospital, Mary, wife of Peter John Martin, Esq., Surgeon, of Pulborough, Sussex, aged 72.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, March 6th, 1857:—

Jackson, Thomas Vincent, University College
Jones, William Podmore, Old Kent Road
Liddard, Thomas, Notting Hill
Rawling, William Thomas, Thurloe Square, Brompton
Roberts, David Lloyd, Manchester
Sang, William Burnup, Newcastle-on-Tyne
Siddall, George Oldham, Alfreton, Derbyshire
Sweeting, Thomas, Reading, Berkshire

Friday, March 13th:—

Armstrong, George Dawson, Norwich
Batten, Rayner Winterbotham, Plymouth
Clark, Charles, Cambridge
Davy, Francis Jefford, Knighton, near Newton Abbot, Devon
Duke, Roger, Hastings
Edwards, Henry John, Bampton, Devon
Gross, John Edward, Earl Soham, Suffolk
Littleton, William, Saltash, Cornwall
Olivey, Hugh Pengilly, Mylor, near Falmouth
Sharpin, Edward, Bedford
Spencer, Robert, New Malton, Yorkshire
Thane, George Dancer, Camden Town

Licentiates in Midwifery admitted at a meeting of the Board, on March 16th:—

Coventry, George Mallet, Ottery St. Mary: diploma of membership dated December 19th, 1851
Dyer, George Henry, Plymouth: February 20th, 1857
Edwards, Henry John, Bampton, Devon: March 13, 1857
Gross, John Edward, Earl Soham, Suffolk: March 13, 1857
James, Moses Prosser, London: October 30th, 1856
Rengifo, Pio, New Granada: February 27th, 1857
Riley, James, St. George's Road, Belgravia: July 4, 1856
Robson, Frederick Abercrombie Hope, Kensington: June 27th, 1856
Scott, Francis, Crondall, Hants: March 14th, 1856
Smallman, Joseph Clement Bruce, Chester Street, Grosvenor Place
Smith, Frederick Henry, Blackheath Road: February 27th, 1857
Spode, Josiah, Tasmania: May 12th, 1856
Storrs, Robert, York: December 12th, 1856
Sweeting, Thomas, Reading, Berkshire: March 6th, 1857
Watts, Robert George, Clifton, Bristol: April 13th, 1855
Williams, Joseph, Westerleigh, near Bristol: February 27th, 1857
Wilson, Frederick William, Clarence Terrace, Regent's Park: July 9th, 1855

Apothecaries' Hall. Members admitted on Thursday, March 5th, 1857:—

Ashton, Edward, Wainfleet, Lincolnshire
Brooks, Richard Birkett, Sleaford, Lincolnshire
George, Charles Frederick, Kirton-in-Lindsey
Griffiths, Francis John, Bilston, Staffordshire
Jackson, Henry William, Louth, Lincolnshire
Palmer, Frederick Augustus, Landport, Portsmouth
Read, Joseph, Southam, Cheltenham
Young, John Augustine, Maidstone

Thursday, March 12th:—

Brook, Henry, Caxton, Cambridge
Carver, Charles Handasyde, Great Yarmouth
Reed, Frederick, Kensington
Russell, George, Merthyr Tydvil
Yarwood, Charles, Birmingham

HEALTH OF LONDON:—WEEK ENDING MARCH 14TH, 1857.

[From the Registrar-General's Report.]

The total number of deaths registered in London, which in the previous week was 1175, was in the week that ended last Saturday 1156, showing again a decrease which has been maintained during the last five weeks, and which in circumstances as favourable as those of the present time is to be expected towards the end of the first quarter of the year. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1199. If this is raised in proportion to increase of population, it becomes 1319, and represents the number of deaths which the average rate of mortality would produce at the present time; and it is shown by a reduction in the actual number to the extent of 163 that the public health is at present decidedly better than usual.

The number of births exceeded the number of deaths by 488. Of the 1156 persons who died, 573 were males and 583 females.

The deaths referred to diseases of the zymotic character were last week 217; the corrected average of corresponding weeks is 245. Five children and a person of middle age died of small-pox, 11 children of croup, 24 of scarlatina, 27 of measles, 38 of typhus and common fever, and 72 of hooping-cough. The deaths from diarrhœa declined to 9. The southern division—namely, all that part of London which lies on the south side of the river—is at present unusually free from epidemics. No deaths occurred in it last week from small-pox; only one from measles, four from scarlatina, ten from hooping-cough, two from diarrhœa, and eight from typhus. The total number on the south side from these six diseases was 25, being the seventh part of the total number in the metropolis, though the population of the former is to that of the latter nearly as one to four. The registrar of Somers Town states that there are some cases of small-pox in the neighbourhood of Pancras Square. Bronchitis was fatal last week in 135 cases; pneumonia in 100; the mortality from the latter disease now becoming greater relatively to that of the former. A woman died in the Greenwich Workhouse from mortification, the effect of frost two months ago. Only one nonagenarian died in the week; viz., the widow of a coachman in Clerkenwell, who had attained the age of 96 years.

Last week the births of 858 boys and 786 girls, in all 1644 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1606.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·607 in. The highest reading

in the week was 29·92 in., on Thursday. The mean temperature of the week was 37·2°, which is 3·3° below the average of the same week in 43 years (as determined by Mr. Glaisher). On Wednesday, the mean temperature was only 33·3°, which is 7° below the average. The lowest temperature occurred on Tuesday, and was 28°; the highest was 56·6°, and occurred on Saturday, the only day on which the mean temperature was above the average. The entire range of the week was 28·6°. The mean dew-point temperature was 31·9°, and the difference between this and the mean temperature of the air was 5·3°. The wind which was generally in the north and N.N.E. at the beginning of the week, blew afterwards from the south-west. Rain or hail fell to the amount of 0·33 in. Heavy hail storms occurred on Sunday (the 8th instant). During one storm, the temperature fell 9° in five minutes; and in another, the balls were unusually large, and measured in some instances three inches round at their base.

A Pretended Doctor. At the Marlborough Street Police Office, on Tuesday, March 10, Charles Clark was charged with obtaining money from Lord Frederick Calthorpe, of Grosvenor Square, by false and fraudulent pretences. Lord Calthorpe—The prisoner in June last introduced himself to me as Dr. Domville, of Southwark, and represented that he was in the habit of giving medical advice and assistance to poor people in the district gratuitously; but as his means of doing good were limited he was obliged to ask the assistance of the benevolent in cases of a deserving character. The prisoner then proceeded to detail the case of a poor woman, for whom he said he was interesting himself. Believing the prisoner's statement I gave the pretended doctor a sovereign, without having made previous inquiry. I mentioned the circumstance at the Mendicity Society's office a few days afterwards, and then I was informed that I had been imposed upon. John Horsford, one of the society's constables, knew the prisoner. He apprehended him that morning just as he came out of prison, where he had been confined for a similar offence. Remanded till Saturday.

"Your True Doctor". Well, I do it because I like it. It's a sort of sporting with your true doctor. He blazes away at a disease when he sees one, as he would at a bear or a lion; the very sight of it excites his organ of destructiveness. Don't you understand me? You hate sin, you know. Well, I hate disease. Moral evil is your devil, and physical evil is mine. I hate it, little or big. I hate to see a fellow sick. I hate to see a child rickety and pale. I hate to see a speck of dirt in the street. I hate to see a woman's gown torn; I hate to see her stockings down at heel. I hate to see anything wasted—manure wasted, land wasted, muscle wasted, pluck wasted, brains wasted. I hate neglect, incapacity, idleness, ignorance, and all the disease and misery which spring out of that. There's my devil; and I can't help, for the life of me, going at his throat whenever I meet him. (Kingsley's *Two Years Ago*.)

Food and Physic. The following very quaint paragraph appeared in the *Courier de l'Oise*. "The physicians of the town of Senlis, taking into consideration the progressive rise in all the necessaries of life, inform the public that, pursuant to a common agreement, they will raise their fees from and after January 1st, 1857."

An Economical Asylum at Last. The Committee of the Bristol Town Council have awarded the premiums for the three best plans, as follows:—First prize, £100, made to Mr. T. R. Lysaght, Bristol; second prize, £50, to Messrs. Medland and Maberly, London and Gloucester; third prize, £25, Mr. J. H. Hirst, Bristol. The cost of the erection of the approved plan is guaranteed at under £20,000. We believe that the estimate is £18,000. The cost of the land will be about £3000; and when the furnishing has been completed, the entire cost will probably be about £25,000. The payment will be spread over twenty years.

Female Physicians in America. There are not far from twenty of them—and several are in excellent business. They confine themselves generally to midwifery and the diseases of their own sex. Their success in the former branch tends to establish them firmly in families. The number will probably be gradually on the increase, since they are beginning to be employed in the neighbouring cities of Charlestown, Cambridge, Roxbury, and adjacent towns, much more than formerly. (*Boston* [U.S.] *Medical World.*)

POOR-LAW MEDICAL REFORM.

MEETING OF STUDENTS IN ST. MARTIN'S HALL.

On Thursday, March 12th, an aggregate meeting of the students of the metropolitan and provincial schools of medicine was holden in St. Martin's Hall, Long Acre, in support of the cause of Medical Reform. The chair was taken by A. H. Layard, Esq., M.P. There was a numerous assemblage of students, amounting to above five hundred; and the meeting was also attended by several practitioners of London and the neighbourhood, including Professor Quain, Dr. C. J. Hare, Mr. M'Whinnie, Mr. Holmes Coote, Dr. P. Fraser, Mr. Critchett, Dr. Semple, Mr. Spencer Smith, Dr. Wynter, Mr. C. F. J. Lord, Mr. G. E. Nicholas, Mr. Whiteman, Mr. J. F. Clarke, Dr. Henry, Dr. Gibb, Mr. J. S. Gamgee, etc.

The Chairman, on opening the proceedings, said he at first felt some diffidence in undertaking the advocacy of a movement with which, heretofore, he had been but little acquainted; but, after looking over the papers which had been placed in his hands, he found the question to be one very easily understood and mastered. What was the state of the case? There was a profession which ministered to the wants of the community, a profession, consequently, than which there was not a nobler, or more useful, or more deserving the gratitude and esteem of those among whom its duties were exercised. [*Hear, hear.*] In order to obtain the privilege of exercising that profession, young men were required to go through very severe studies, occupying a considerable portion of the most valuable part of their lives, and a large outlay of money. Having passed their examinations, and paid their fees, they were then thrown on the country to look after the health, and consequently the happiness, of the whole community. Very many of the members of the profession were engaged in administering to the poorer classes, the substratum on which all other classes of society must rest. In their work of usefulness, they had many privations to endure; they had to a great extent to sacrifice domestic enjoyment, and were called upon in all seasons and at all hours of the day and night to hurry to those who might be in need of their aid, giving up everything for the preservation of the health and lives of those poor persons intrusted to their care. They had also to provide themselves with instruments, frequently with costly drugs, and sometimes to do that which was often considered a sign of respectability—keep a horse and gig, being all the time at the beck and call of those under whose orders they were placed, from twelve o'clock one night to twelve o'clock the next. Of course, it would be at once naturally assumed that gentlemen thus occupied would receive adequate remuneration for their services; but, according to a return which he held in his hand, it appeared that on an average they did not receive more than three shillings a case. [*Cries of "Shame".*] It was extraordinary that such a state of things existed. It was a trite saying that the health of the community was the wealth of the community; the question, therefore, was not simply a professional, but an economical one, in which every member of society was interested. [*Cheers.*] It appeared that the average value of that which was supplied out of the pockets of the medical men in such cases was almost equal to the sum received by them for attendance; hence it was evident that a man must either neglect those who were committed to his care, or be out of pocket in the discharge of his duty; either of which alternatives was disgraceful to the community that suffered it. The matter had been investigated by a committee of the House of Commons; and, as was frequently the case when such things were what is technically called "sent up stairs", it appeared to have been unceremoniously kicked down stairs again. Much useful information was taken before the committee, to some of which public attention ought to be called. A clergyman, the Rev. Mr. Howman, who had ample opportunities of observation, stated that the present system worked badly for all parties; the guardians, the medical officers, and the poor, being alike discontented. The question, as he had said, was an economic one; because if, by the smallness of the pay, medical men were compelled to neglect those who were committed to their care, what was the result? That the lives of many poor men were endangered, and if they died their families became a burden on the parish, and an expense to the ratepayer. The statements that had been made on the subject would be perfectly incredible if they had not been well substantiated. A gentleman who had

taken great interest in the movement, and had conferred a great benefit upon the profession—Mr. Griffin [*cheers*]—had ably brought the matter before the public. He had given a summary of the duties performed by himself during the half-year ending Sept. 29th, from which it appeared that during that period he had 353 out-patients, paid 1,507 visits at patients' houses, received 481 persons in his surgery; distributed an amount of physic which to him (the Chairman) seemed almost enough to poison the entire population of the country [*laughter*]; viz.: 902 mixtures, 277 boxes of pills, 44 liniments, 110 lotions, 101 boxes of ointment, 91 packets of powders, 23 blisters, 7 draughts, 7 plasters; besides three confinements, one amputation, one removal of a large tumour, extracting teeth, and the like; for all of which drugs and attendances he received the munificent sum of £17 10*s*. [*Hisses.*] It was evident that Mr. Griffin must be a very unprincipled or a very honest man; and as they knew him to be the latter, he must have been a very considerable loser by his draughts, pills, and lotions. He had that day received a letter from a gentleman in a similar position, and who related his experience in a similar manner. The number of cases he had to attend had increased from 752 to 1325, and his salary had been reduced from £85 to £60. Mr. Griffin had been very much engaged in correspondence with the Circumlocution Office. First he wrote to the Board of Guardians, who told him that he must write to the Poor-law Board; the Poor-law Board referred him back to the Board of Guardians, and the Guardians sent him again to the Poor-law Board, and at last he had been informed that his case was "under consideration," which, of course, meant that it would never be considered at all. [*Laughter.*] Having worn out the soles of his boots in going backwards and forwards between the different Circumlocution Offices, he had addressed a pamphlet, containing a statement of the facts, to Lord Palmerston, who, of course, would never read it. The answer to all complaints had been, that where there was a demand there was a supply, and if one man would not do the work another could be obtained. This was often urged by those to whom the argument would better apply; and no doubt the gentlemen of the Poor-law Board would be greatly surprised if they were told that the business they did might be done a great deal cheaper by others, and (what could not, perhaps, be said of the medical men) a great deal better. But the argument was worthless. The question was, were the services rendered by the profession such as entitled them to a fair remuneration? and would anyone say that 3*s*. a case, each case extending on an average over twenty-eight or thirty days, and involving continual attendance and a considerable outlay, was in any way equal to the services which the public had a right to ask from those who were employed under the Poor-law Guardians? A very moderate scale (5*s*. for each case) had been proposed, and he had no doubt the public would see that it was adopted. For himself he should be happy to further the object, if he were in the new Parliament, being convinced that it was one in which the interests of the entire community were concerned. (The honourable gentleman resumed his seat amid loud cheering.)

Mr. Farr, one of the Honorary Secretaries, read a brief report detailing the efforts that have been made to procure redress of the grievance in question since the meeting of the profession in the Hanover Square Rooms in 1846.

Mr. M. Mackenzie (London Hospital) moved the first resolution: "That the existing system of Poor-law medical relief is fraught with evils which call for immediate reform." He congratulated the students on again assembling to give public expression to the calm though deep-seated indignation with which they had viewed the insults offerred to the medical profession. The enthusiasm with which, less than two years ago, they supported the cause of the naval assistant-surgeons, and the signal success that attended their strenuous efforts, had encouraged them in holding the present meeting. Would the students of Great Britain now look on with apathy, whilst the poor of their country were exposed to grievous wrongs, and many members of their profession were suffering from that oppression and injustice in which they themselves must shortly participate? The evils of the present obnoxious system were so great and so numerous, that he (the speaker) scarcely knew how to commence their category. Much of the mischief, however, of the present state of things, was due to the miserable meanness and petty tyranny with which Boards of Guardians were wont to requite the valuable services of able and useful officers. No sooner did a union surgeon, in the conscientious discharge of his duties, render himself unpopular to the guardians, whose office seems rather to guard their own purses than the interests of their parish, than charges as groundless as frivolous were at once transmitted to the Poor-law Board. As a matter of routine, an oracle emanated from the precincts of Whitehall supporting the Local Board in its iniquitous proceedings. Were not these evils calling for immediate reform? But, irrespective of the guardians, there were many evils demanding redress; for, under the existing system, the payment of medical officers was neither uniform nor equitable. In many districts the union surgeon, whose expensive education had cost him many valuable years and considerable pecuniary outlay, whose exposure to the most inclement weather and the most infectious diseases, whose mental anxiety and physical labour too frequently shorten his days, received, as generous remuneration, a miserable pittance that would be despised by his groom—a sum less, indeed, than was frequently paid to the superintendent of paupers employed in picking oakum. Nor could the Poor-law Board, in the plenitude of its dignity, plead the meagre argument, "that as they could for a mere title obtain the services of medical officers, they were justified in so doing." For it had been frequently and fairly urged that there were many lawyers who would be willing to accept office in the Poor-law Board at half, or even less than half, the salaries that were now paid. But this did not prove that the officers of the Poor-law Board ought to be underpaid as the union surgeons were now underpaid. Again, the present system injuriously affected the poor, who, even in the most urgent cases, were obliged to obtain an order from the relieving officer before they could get medical assistance. Much valuable time was thereby lost to the practitioner, and much irreparable damage was often the result to the patient. But the constant changing of the medical attendants of the poor was still more injurious to their welfare. A public appointment was looked upon as an introduction to private practice; and hence vacancies which occur were quickly filled up. But no sooner has the practitioner held the appointment for a year or two than he finds himself so great a loser by the contract, that he straightway resigns the appointment, or retains it at a great loss to himself, merely for the sake of keeping a rival out of the field. It had been incontestably proved that much of that pauperism which shackled the prosperity of the country was due to inefficient medical relief; and hence the short-sighted policy pursued by Boards of Guardians (who, as a general rule seemed to think that the greatest economy consisted in acting with uniform parsimony towards the medical officer) not only inflicted great injury on the unfortunate poor, but also put the country to great additional expense. The voice of philanthropy, of patriotism, demanded that these evils should be redressed. It had been said that Poor-law medical reform is not a matter for the interference of students. This he (the speaker) emphatically denied. Did the welfare of 3,000 medical practitioners, he asked, arouse the sympathy of the meeting? Many of those present would probably, in a short time, be holding Poor-law appointments: it therefore particularly behoved them to act with that public spirit which he trusted they would ever display in the actual practice of their profession. The influence of the students of medicine was a mighty power, never wielded in vain. Once, and once only, in the cause of justice and humanity had it been employed, and then with what gratifying success! Firmness, moderation, and unanimity would again accomplish splendid results, and secure a second time a great and glorious victory.

Mr. H. G. Skinner (Charing Cross) seconded the resolution, which was carried unanimously.

Mr. C. Drysdale (University College) moved the second resolution—

"That the present system grievously injures the efficiency of the relief afforded, by crippling the resources, limiting the powers and lowering the standard of skill among the administrators of that relief; and that the remuneration afforded is inadequate to the labours which are demanded of them, the skill which they should possess, and the expenses incidental to their position."

Having described the evils of the present system, he pointed out what he conceived to be the remedies. These remedies appeared to him to be twofold:—first, what government could do; and, secondly, what government could not do. Government had done much to encourage various branches of industry; but it had not been equally mindful of the claims of scientific men. He, therefore, proposed as the desideratum, so far as government was concerned, that a minimum salary should be fixed for Poor-law and other government medical officers, in order to raise a higher standard for applicants for

such posts. He could scarcely help remarking, as they were all aware, that their Chairman was the distinguished upholder of the principle of the right man in the right place—[*cheers*]—that the best men could only be obtained by open competition. It was not open competition, but over competition that they had to fear. This brought him to the second remedy—that which government could not do, but which the profession could do for themselves, by uniting in a determination not to accept a remuneration inadequate to the services they were called upon to perform.

Mr. E. Hart (St. Mary's) seconded the resolution in an able speech. The present rate of pay to medical men under the Poor-law entirely precluded a proper supply of medical comforts to the poor. It was true the profession might refuse to accept office at all, and there were many and valid reasons why they should do so, why, in fact, they should "strike." But there were many and more valid reasons why they should not. The profession of a medical man was not like a trade or any other profession. If a man took a brief to a barrister he could refuse it if he thought that the fee was not equal to his deserts. But a medical man could not act thus. It was not a customer that came to his door; it was pain and suffering, which he felt it was his duty to mitigate, although he knew that he should receive no remuneration for his care and attention. The profession dare not neglect their duty to alleviate human suffering, but they could and ought, while conscious of their rights, insist upon immediate redress. Public duties were public rights, and he maintained that those duties should be made worthy the acceptance of those who had to perform them. The medical students of the kingdom were deeply interested in the question of these public appointments, for they would one day be members of the profession; and such being the case, he called upon them to prepare themselves for an arduous struggle during the next Parliament, and there would be no fear of winning in the end. [*Cheers.*]

The resolution was carried unanimously.

Mr. J. G. Barford (St. Bartholomew) moved the third resolution—

"That the supervision of their labours, and the arbitration of all questions affecting their interests and their reputation, are most improperly referred to unprofessional persons, for the most part ill fitted for such functions."

He thought the profession had submitted to the yoke of oppression for several years, because they had not had the privilege to assert their rights; he therefore hoped that the present movement would be followed up, until Poor-law Medical officers were placed in the position which they were entitled to occupy. One thing seemed to him desirable, and that was, that a distinguished member of the profession should be connected with the Poor-law Board to superintend the department of medical relief.

Dr. Bakewell (Middlesex) said he was, to some extent, fitted to second the resolution, from having himself witnessed the bad effects of submitting professional questions to non-professional men. Until last Christmas, he had the misfortune to be a Poor-law Medical officer, for some time, under a country Board of Guardians. They were probably aware what country Boards of Guardians were; farmers, very large persons with very small heads [*laughter*]; exceedingly jolly fellows, who would treat you with unlimited cigars and brandy and water if you went to their houses, but horrid screws when they got upon Boards. He would give an instance of the way in which they acted. He was appointed medical officer to the workhouse for the paltry salary of £30 a year, for which he attended 112 patients, supplied them with medicines, and performed operations. The house diet consisted of ten ounces of bacon in the week, with soup, skilly, cheese, and bread, but no beer. After he had been there a fortnight, he was appealed to by several women with infants at the breast, who were suffering from hyperlactation in consequence of insufficient diet. In his simplicity he put them on a meat diet, and to one of them he actually had the audacity to give beer. In a few weeks he received a note from the chairman, asking whether he was not aware that one of the women was unmarried, and that her child was a bastard; and did he think he was doing right in encouraging immorality? [*Laughter.*] Some correspondence passed upon the subject, and, as he would not acknowledge the right of the Board to dictate to him, a complaint was made to the Poor-law Board. He was represented as an insubordinate officer, who was actually giving a premium to prostitution; and the end of it was, that he was requested to resign his appointment, because he gave women meat who were suffering from hyperlactation. [*Shame.*]

The resolution was carried unanimously.

Mr. A. E. Durham (Guy's) moved the fourth resolution:—

"That since the grievances set forth not only affect the character and privileges of a large class of professional men, but closely touch the medical care and wellbeing of the suffering poor throughout the kingdom, they call for immediate redress, and are well deserving the attention of Parliament."

Mr. Durham submitted that success depended not so much upon individual effort as upon a general movement of the profession. The proposal to appeal for redress to Parliament was a course which he approved, and on two grounds—on the ground, as stated in the resolution, that the present system of appointing Poor-law medical officers was inimical to the character and interests of the profession, and also on the ground that it affected the care and wellbeing of the poor.

Mr. T. Smith (Manchester) seconded the resolution; and assured the meeting that the students of the Manchester School of Medicine were ready to support the movement in every way.

The resolution was carried unanimously.

Mr. W. P. Swayne (King's College) moved the fifth resolution:—

"That the present Committee of Delegates, representing the students of England, be requested to continue to act in their names, with the view of obtaining petitions, collecting funds, and taking such further steps as may seem desirable."

The resolution was seconded by Mr. J. R. Hayward (Bristol). The students of the Bristol School would not be backward in giving their support.

Mr. W. M. Ord (St. Thomas's) moved the sixth resolution:—

"That petitions be signed by the students of every medical school in England, and arrangements made for their presentation in the most fitting time and manner."

Mr. Bingley (York) seconded the resolution, which was carried unanimously.

Mr. Roberts (St. George's) moved the seventh resolution:—

"That this meeting desires to express its high appreciation of the valuable services rendered by Richard Griffin, Esq., in initiating a great professional movement, and offers to him the assurance of its sympathy and the promise of its aid."

Mr. H. Soulby (Hull) seconded the resolution in an energetic speech, which was loudly applauded.

The resolution was carried amid great applause.

Mr. Griffin, jun., acknowledged the compliment on behalf of his father. He stated that upwards of 500 medical officers in the kingdom had enrolled themselves members of the Poor-Law Medical Reform Association; that in 1855, 290 medical officers threw up their appointments in disgust; and last year, although the offices were made permanent, 249 threw them up. This fact alone, he remarked, was evidence of the wide-spread dissatisfaction which existed, and of the necessity there was for a combined and determined effort to obtain redress. He called on those present to show to the world that they were determined to be unanimous. [*Cheers.*] Let them be like a bundle of sticks, and nothing could break them. The Poor-law Board took them at present, and snapped them one by one; whereas, if they were equal to the dignity of their profession, such a mode of dealing with them would be impossible. Let them throw away their petty jealousies, and not be so ready to take each other's appointments, and they would soon place themselves in a proper position. [*Cheers.*]

Mr. Lake (Westminster Hospital) moved a vote of thanks to the chairman. He said that the name of Layard throughout Europe was synonymous with perseverance, and they opened their first campaign under very able generalship. [*Loud cheers.*]

The resolution was seconded by Mr. Down (London Hospital); and, when put to the meeting, was carried amidst loud and prolonged cheering for several minutes.

Mr. Layard, in replying, expressed his most sincere thanks for the very gratifying manner in which his name had been received. He trusted that that meeting would not end idly, but that in the next Parliament they would be able to achieve success. Their cause was just, and they need not fear. He hoped to be ready to receive their petitions during the next session. [*Loud cheering.*]

Medical Society of London. At the meeting this evening (Saturday), Mr. Gamgee will demonstrate specimens of diseased meat publicly exposed and sold for human food in the London markets.

TO CORRESPONDENTS.

CHANGE OF ADDRESS OF THE EDITOR. From the 25th instant, letters and communications for the Journal should be sent to Dr. WYNTER, at Colehurne Court, Old Brompton, London, S.W.

TO CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

WE have received Dr. TILT'S note, and are obliged for his suggestion, which we shall bear in mind.

ARMY MEDICAL REFORM. In our leader of last week upon Army Medical Reform, the fourth line read thus: "The medical department of the army ahould be governed by a medical officer or field inspector, who should be always in advance with the commissary general." There are one or two unintentional errors in this sentence, it should have read thus: "The medical department of the army should be represented by a field inspector or medical officer of health, in the field, who should be always in advance with the Quarter-Master General."

Communications have been received from:—MR. STONE; MR. HOLMES COOTE; DR. MARKHAM; DR. HAYES JACKSON; DR. RADCLYFFE HALL; DR. TILT; MR. JOHN KITCHING; DR. J. C. HALL; MR. GAMGEE; DR. C. HANDFIELD JONES; DR. COCKLE; MR. T. HOLMES; MR MORELL MACKENZIE; MR. CHARLES COATES; DR. GARROD; SIR CHARLES HASTINGS; and MR. JOHN BURROWS.

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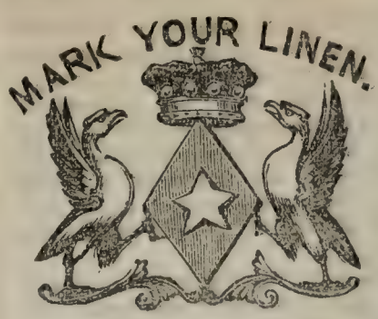
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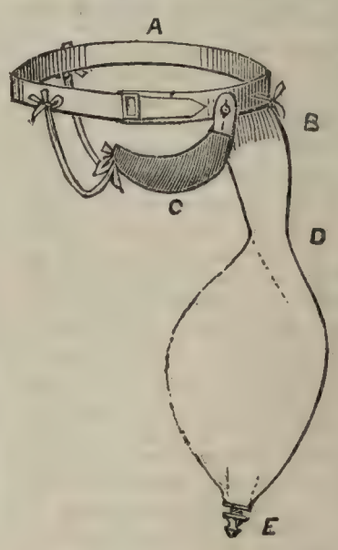
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BRITISH MEDICAL JOURNAL:

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EDITED BY ANDREW WYNTER, M.D.

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Diseases OF SPECIAL OCCUPATIONS.

No. I.

THE SHEFFIELD GRINDERS.

By JOHN CHARLES HALL, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

[*Continued from page* 236.]

My attention has been directed to the ages at which the grinders have died at the different wheels for some years past, so far as I could collect them. At the wheel of Messrs. J. Rodgers and Sons, which is a peculiar wheel in many respects, being very well constructed, the fan is in general use where the dry stone is employed. The men also are, as a rule, at work on the higher class of goods, and are not obliged to labour so hard as the men who work at the inferior branches of the trade. At this wheel, since the year 1836, the average age at which the grinders have died has been 42. This return, however, only includes razor grinders and spring knife grinders. The oldest was 57, the youngest 25. Two died at the age of 28. The Union and Soho wheels are both first class wheels, and the mortality at them may be considered below rather than above the usual mortality.

The average ages of the grinders at death, at some of the principal wheels, are given in the next table; and the great majority of the grinders (probably eight out of ten) work at about ten large wheels; the rest at small wheels.

TABLE IV.—*Average age at death of grinders at the following wheels.*

Name of wheel.	Return of deaths since the year	Average age at death.
Messrs. J. Rodgers and Sons	1836	42
Union Wheel	1850	40
Soho Wheel	1845	40
Old Park wheel.....	1844	41
Suffolk Works	1845	38½

In the deaths at the Union wheel, there is a return of the death of a grinder aged 70, who had not worked at his trade for some years. Excluding this man, the average age at death would of course be much less. In the deaths at the Soho wheel, I find returned a fork grinder aged 48. This man had not worked regularly at his trade; he had been the chapel keeper at one of the dissenting places of worship in Sheffield many years, and had not been much at the wheel. There is also the return of a fender grinder (wet) aged 64; he came from the country, and had not worked very hard at his trade. Excluding this man from the list of deaths at this wheel, the average age at death since 1845 has only been 38. At the Suffolk Works wheel, which is a well constructed one, and the property of Messrs. Turner and Co., the ages at death since 1845 have only averaged 38 years and 6 months: the ages at death were 25, 46, 47, 49, 27, 61, 35, 41, 27, 23, 48, 50, 41, 22, and 35 years. The man who died at the age of 61 was a table blade grinder (wet); he had worked at a water wheel in the country many years of his life, and had only been a very short time at the Suffolk Works wheel.

In taking into consideration the ages at which these men have died, it must be borne in mind that some of them have probably perished from other diseases, as well as from the one to which grinders are so liable. Still, on looking at these returns, at the low average age of the men at the time of death, in all these large wheels, the low average age of the men now working in some branches, fork grinders only 29, razor grinders only 31, scissor grinders only 32, as well as the large proportion of boys at work in many of the trades, the high rate of mortality appertaining to the calling of a grinder is certainly perfectly appalling! We observe, also, that the mortality varies with the nature of the trade; and that it is much more destructive of life in the dry branches than in the wet.

Men who work in the country are, as a rule, more healthy than those who grind at the wheels in the town. One of the most healthy branches is that of saw grinding. A number of saws are, it is true, ground in Sheffield, but many of the men work at the water wheels on the picturesque streams around our large manufacturing town; want of water often obliges them to discontinue their work; and as a general rule they have not to labour so many hours a day, as in many other branches. The trade is too heavy to admit of boys coming into it at a very early age, and as the man stands to his work, the lungs are not compressed as when, sitting on his horsing, with his elbows resting on his knees, and his face bent forwards, the grinder is employed on forks, razors, scissors, and pen-blades.

There is another feature, also, of some importance to be considered. Some branches, for example, pen and pocket-blade grinders, now employ the wet stone, who once worked at dry grinding; and, therefore, though at present not exposed to its injurious effects, they formerly were so, and many of them are suffering, more or less. When these men have passed away, and our observations are applied only to men who have worked all their lives on the wet stone, I anticipate that, in this branch, the average age of those employed will be much increased, and the mortality much diminished.

Without anticipating the remarks which belong to the third division of our subject, where I intend to enter into the pathology of the grinders' disease, and to give some drawings of the exact appearances presented by the lungs of several of those who have perished from it, I may say that, in dry grinding, very often before the age of twenty evidence is afforded of the existence of grinders' disease. The breathing is difficult, particularly when ascending a hill, or the steps leading to the hulls in which they work, and the shoulders even at this early age are often elevated in order to relieve the distress occasioned by shortness of breath.

The cause of this disease is, first, the irritation produced by the metallic and gritty particles inhaled in grinding, in "hanging", and in "racing" the grinding stone; and, next, the constrained position in which the men labour. To this must be added the working for many hours in a badly ventilated room, and the very unpleasant smell produced by the friction of the steel on the grinding stone. When at work, the grinder sits astride of what he calls his "horsing"; this is a low, narrow wooden bench; his elbows rest upon his knees, and his head, particularly when employed on very small articles, is bent over the stone. The position is a very injurious one, and when long continued, is calculated most unquestionably to induce pulmonary congestion.

Again: in many of the heavy branches, such, for example, as table-knife grinding, the men work in the coldest weather without either coat or waistcoat, with their handkerchiefs off, their shirts open, and their chests fully exposed; and this too, in a room every bit of the glass from the windows of which has been removed, that the light may not be obstructed by the splashing of the water rendered dirty by the grinding stone. The work is very laborious, the men perspire freely, and in this condition they will often leave the hull without putting their clothes on, and recklessly lounge about in the yard even in weather as bitterly cold as we have had it this winter. Inflammation of the lungs, pleurisy, rheumatic fever, and diseases of the heart, are consequently not unfrequent amongst them.

The workmen in other of the Sheffield trades suffer from inhaling dust as well as the grinders. Bone-scale cutters, ivory

cutters, and the girls employed in the hair-seating manufactures, especially when working with foreign hair, suffer more or less from the dust. A most singular affection is produced on the men who haft knives with cocoa wood and ebony; the dust from both of which woods causes in some instances constriction of the chest, running from the eyes and nose, and symptoms which resemble those present in hay asthma. It also produces, when the skin is at all tender, a peculiar kind of erythema on the hands, face, and other parts of the body.

Prevention of the Grinders' Disease. Can nothing be done to prevent, or at any rate to render less fatal, the occupation of a grinder? This is a question of national importance, and one well deserving our most serious attention. Formerly this disease was unknown, and for this reason; until the year 1786, when the first steam wheel was erected, grinding was not carried on as a distinct branch of trade. The grinding wheels were all built upon the banks of the rivers in the district around Sheffield, and water being the power employed to turn them, it will at once be obvious that the grinder would have many interruptions to his trade, and that to labour day by day as many hours as the grinders do at present, was altogether impossible. Nor was this all; by the old regulations of the Cutlers' Company, passed in the reign of Elizabeth, it was provided that "No person engaged in the said manufactures, either as a master, servant, or apprentice, shall perform any work appertaining to the said science or mystery of cutlers for eight and twenty days next ensuing the eighth day of August in each year; nor from Christmas to the twenty-third day of January, upon pain and forfeiture for every offence, found and presented by twelve men of the said fellowship, of the sum of twenty shillings. No person occupying any wheel for the grinding of knives to allow of any work being done during the holiday months: penalty as before."

When grinding became a separate branch of the Sheffield manufactures,—when the hours were no longer limited during which the men were employed, and when the fearful effects on the animal economy of the particles of steel and grit became apparent, attempts were made to remedy the evil.

The first plan suggested was that of a wooden flue, extending from the grinding-stone to the chimney, for the purpose of carrying off the dust; this, however, was only partially useful. The next was the invention of Mr. Abraham; it consisted of a magnet used as a mouthpiece, or, as the grinders term it, a "magnetic moustache"; it has fallen into general disuse. The next, and the best, was the fan on the principle of a winnowing machine; and with a flue properly constructed, leading from each of the different wheels in each hull, the dust may be most effectually driven out of it, and the pernicious effects, both of the particles of grit and metal which arise in grinding, and of the dust created in glazing and polishing, in a great measure prevented. In two hulls, one at the Union wheel, and one at the Soho wheel, and also in the hulls at the wheel of the firm of J. Rodgers and Sons, I saw the fan at work with the happiest effects. In the hull of G. Trickett, at the Union Wheel, the different operations were gone through in my presence without making any dust; and at the Soho wheel I saw that shaping razors and racing a stone, by adding a properly contrived box, could be rendered perfectly innocuous by the use of the fan; all the dust being driven off by the fan up the shaft on the outside of the building. The particles of dust and steel not carried away by the fan in racing a stone may be prevented from entering the air-passages by a very simple contrivance, consisting of a piece of wadding sufficiently large to cover the mouth and nose, enclosed between two pieces of silk, and secured by a band of elastic to the back of the head.

That the fans, or, as the grinders call them, "*fannies*," answer perfectly, I have convinced myself by actual experiment; and I have also received the unqualified testimony of all the most intelligent dry grinders who use them of the advantage to be derived from them. A razor grinder at the Suffolk Works wheel assured me that but for the fan he should not have now been living; and he said, "If I were to shape twelve razors without a fannie I could hardly breathe next day; with a fannie I can shape them and feel as well as ever I did in my life."

To those who are not as conversant with the economy of a grinding wheel as myself, the question naturally suggests itself, how comes it, that with a contrivance so admirable and so effectual for carrying off the dust from the steel and grinding stone, the mortality is so great? I am sorry to say that these fans are far from being in general use. In some wheels I did not find one; and I went into hull after hull in other wheels where the men were humping scissors, shaping razors, and grinding forks—the most destructive kinds of grinding, as we have seen—without finding one at work. In other hulls one man perhaps was at work with a fan, and the next was destroying himself and his fellow-workmen by grinding without it; in another the man at the end *trow* had put up a fan that would serve the whole hull, which he charged, perhaps, each man a penny a week for; the man next him paid for the fan, but not having been at the trouble to fix a box, it was useless to him. Others had the fan fixed, but not at work; "the noise was too great for them." And (I blush to write it, but such was the case) some dry grinders told me, that "the trade was bad enough as it was; and if the men lived longer it would be so *over full* there would be no such thing as getting a living." To such men I would say,—if ever there was a trade more poisonous than the fabled valley of the Upas—more slow in its effects, it is true, but equally deadly with the inhaling of the atmosphere of the famous Grotto del Cane—it is that of a fork-grinder who works without employing the effectual means for his preservation which the fan affords. And, over the door of the hull of every fork-grinder who day after day ventures to grind without the fan, ought to be written,

"All hope abandon, ye who labour here";

for the work in which you are engaged, without this protector, will most certainly destroy you. The cost of a good fan is from 30*s.* to £3.

Allusion has already been made to the age at which boys are taken to work at the wheel. To send a boy at eight or ten years of age to work at polishing forks, in a grinding hull, is an act of refined cruelty which the powerful arm of the law can alone restrain. The application of the Factory Act to the Sheffield grinding trades would, in my opinion, be most wise and salutary. These helpless children I would indeed commend to the protection of the state; and glad indeed shall I be if these remarks attract the eye of any member of the House of Commons and induce him to bring the question before parliament; or if the evils, moral and physical, under which these poor boys are suffering, lead the inhabitants of Sheffield to petition the legislature to throw around them that protection which they have not at present. The early age at which these boys are made to work, and the many hours during which, day by day, they labour, render it impossible to give that general instruction, and religious training, which we have a right to see extended to all classes in a Christian land. The immense competition that exists in many branches, the manufacture of articles to supply the "Cheap Johns" and others who frequent our markets and fairs—articles which are made for *sale* and not for *use*—has doubtless caused many more boys to be employed than would otherwise have been the case; the men remarking, with some degree of justice, that inferior goods are charged so low that they are obliged to make boys work with them or they could not get a living.

That the present high rate of mortality amongst the grinders in Sheffield may be diminished, I am certain, by—

1. Reducing the hours of labour.
2. Preventing boys from being apprenticed to the trade so young as at present.
3. Obliging all dry grinders to use a fan, and to keep it in active operation.
4. Preventing dry and wet grinders from working together in the same hull.

1. *Reducing the hours of labour.* It is a notion in Sheffield that a drunken grinder often lives the longest. This a very great mistake; for intemperance has hurried hundreds of these men to the grave. I have almost invariably remarked that so soon as the liver becomes affected, the chest symptoms are much increased; and that when the liver fails to discharge its functions a very slight amount of disease in the lungs of a grinder will cause far more distress and difficulty of breathing than much more extensive disease when this organ acts properly. The truth is, that the drunken grinder is much away from the wheel: he does not work so many hours at his trade as a steady man, and thus escapes the evils which arise from the dust, and the injury to his lungs which a long continuance of labour, day after day, in a constrained position must occasion. By limiting the hours of labour, time would be afforded for indulging in out-of-doors pursuits—in exercises which would bring the different muscles of the body into play, and have a tendency to prevent some of the effects resulting from bending over the wheel when at work. It must not be forgotten, that until grinding became a separate branch of trade, and steam-power enabled the labour to be constant, the dis-

ease which forms the subject of our present inquiries was hardly known.

II. *The prevention of children entering the wheel at an early age* would afford an opportunity for the body to develope itself on the one hand, and that needful education to be given on the other, which would remove the fearful ignorance at present existing, direct the mind to pursuits which are ennobling, and give to the Sheffield grinders, as a body, a position in the social scale to which they have never yet attained. With the removal of the present state of ignorance, the importance of those general hygienic principles so conducive to health and to longevity would be more generally adopted, and the wheel well ventilated, kept clean, and frequently white washed, and no longer regarded as a place "only to work in," and of no importance whether clean or dirty. At home efficient reforms could not fail to be effected; during the day every room in the house would have air freely admitted, and the sleeping apartment, no longer overcrowded, would be ventilated either by taking out a brick over the fireplace near the ceiling and placing a bit of silk over the hole to keep out the soot, or by substituting ribs of glass for one of the upper panes in the window. Personal cleanliness would not as now be neglected; for the occasional use of the bath, sponging with cold water daily, friction with a coarse cloth or a flesh brush afterwards, should never be omitted by these artisans. And, when the minds of these industrious workmen shall awaken to the importance of employing the three great sanitary agents, Light, Air, and Water,—agents which are all important for the preservation of health and the prevention of disease; when the folly of intemperance is admitted, improvident marriages avoided, and boys are allowed to remain at school instead of being forced at eight and ten years of age into the hull of the grinding wheel, then, and not till then, may we hope to see the high rate of mortality which at present exists diminished, and with a reasonable hope of lengthened days, the Sheffield grinders discharging faithfully the duties of that station of life unto which it has pleased their Creator to call them.

The pathology of The Sheffield Grinders' Disease will form the subject of my next paper.

Surrey House, Sheffield, March 19th, 1857.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

JAUNDICE: DISEASE OF THE LIVER, ATTENDED WITH EXTREME DILATATION OF THE BILE-DUCTS.

Under the care of F. Sibson, M.D.

[*From Notes by* E. A. Hart, Esq., *House-Surgeon.*]

Bartholomew C., aged 59, was admitted Feb. 9, under the care of Dr. Sibson, on account of an attack of jaundice, of two months duration. He had been under treatment as an out-patient, under Dr. Sieveking's care, without benefit. There was considerable pain in the region of the liver, and in the chest; the skin and conjunctivæ were deeply stained. The liver could be felt enlarged, and its edge strongly marked. The urine was acid, and contained a large quantity of bile. He was ordered to have mercurial liniment applied to the abdomen; and to take a draught, containing iodide of potassium with solution of bichloride of mercury and tincture of hyoscyamus.

On further examination, it was found that the right lung reached down to the sixth costal cartilage; and the edge of the liver could be seen through the walls of the abdomen, descending about half an inch with each inspiration. The superficial veins of the abdomen were full, but not much distended. The treatment during the next few days consisted in blisters to the hepatic region, and a fourth of a grain of elaterium every morning. Under this treatment, the yellow tint became less marked; and the size of the liver appeared to decrease, as its movement in respiration could not be seen through the abdominal parietes, though it could be very plainly felt. The appetite, however, remained very bad; the motions were white and clayey. The elaterium, having produced copious purging, was omitted; and the yellow tint of the skin soon began again to deepen. On Feb. 26th, he was ordered potassio-tartrate of iron, with cod-liver oil. Nitro-muriatic baths were also employed, but without benefit. About this time, the glands of the groin were observed to be enlarged. The tint of the skin was deepening into a bronzed colour; he was extremely weak, and was getting occasionally drowsy. On the 7th of March, it is noted that he was comatose; the urine very scanty, and slightly albuminous; the pulse scarcely perceptible. There had been bleeding from the gums occasionally, to a trifling extent. He continued in this condition till his death, on March 15th.

On *post mortem* examination, the tissues were found extensively stained of a bright yellow colour; and the body was much emaciated, the fat in the omentum, as well as in other parts, being consumed. The thoracic viscera were pretty healthy; the kidneys soft and friable, but not diseased as to structure. The suprarenal capsules were healthy. The liver weighed 4 lbs. 14½ oz.; it was of a leadenish black colour. There were two or three small nodules on its surface, which, when cut, gave exit to a viscid, transparent, albuminous fluid. On a further section, a considerable quantity (half a pint) of this escaped, exactly resembling the white of an egg; and large cystic looking cavities, or dilatations, were seen through the entire substance of the organ. In the left lobe, the bile-ducts were dilated from their smaller ramifications quite up to the hepatic duct. In the right lobe, this was not so universal amongst the smaller branches, but the larger ducts were universally expanded, so that a finger could readily be passed into them: they had compressed the parenchyma of the organ, so as to render it hard and dense. The branches of the hepatic artery and portal vein were displaced in consequence, so that they were found with difficulty; and their calibre much interfered with. A section of the organ was intensely green, and full of biliary matter. The right hepatic duct was at one point constricted, and would there only admit a probe.

Remarks. This case was a subject of much interest to those who had an opportunity of examining it during life, as opinions were somewhat divided with respect to the malignancy or non-malignancy of the disease to which the great enlargement of the liver was owing. The opinion of those who were inclined to attribute the enlargement to malignant disease, was favoured by the presence of the nodular swellings on the surface of the organ, noticed in the *post mortem* description, and which were felt through the abdominal parietes during life; and, as this phenomenon is justly regarded as strong evidence of the presence of cancerous deposit, it may be useful to remember this case as an instance proving that such a condition may coexist, however rarely, with simple inflammation.

The state of the liver disclosed by the dissection was a very peculiar one; inasmuch as enormous distension of the ducts, to such an extent as to seriously modify the secreting tissue of the organ, was found coexisting with a state of the excretory channels which did not oppose any efficient obstacle to the flow of bile into the duodenum. It appears most probable that the disease was an extreme form of that catarrhal inflammation of the ducts described by Dr. Budd (*Diseases of the Liver*, p. 177), in which the ducts become loaded by a viscid whitish secretion. In the present instance, this distension of the ducts had gone on to such an extent as to interfere materially with the circulation in the organ, and very probably with the integrity of its ultimate elements. A case is reported in the same work (p. 210), in which, coincident with distension of the ducts, the whole of the cellular tissue of the liver was destroyed.

Another interesting feature noticed in this case was the movement of the liver in respiration, which could be plainly seen through the thinned walls of the abdomen; and the distinct edge which could be felt around the whole of its circumference. This latter point is noted by Dr. Budd (*loc. cit.*), as being often observable where the liver is enlarged from simple retention of bile (to which the above case is analogous, at any rate, in its physical phenomena), in contradistinction to those cases in which the enlargement is due to strumous or fatty deposit. The precise history of the attack from its commencement was not attainable; but, if the patient was correct in dating it from so recent a period, the rapidity with which it reached its fatal termination is not the least remarkable feature in the case.

HOSPITAL FOR SICK CHILDREN.

I. FATTY TUMOUR IN THE INTERIOR OF THE SPINAL CANAL.

Under the care of Athol Johnson, Esq.

The little patient, whose case is reported at page 125 of this Journal, died a few days ago of a disease not connected in any manner with that which is there described, and thus an opportunity was afforded of dissecting the parts involved in the operation. The appearances so disclosed were so interesting and peculiar that we shall endeavour to describe them in detail. It may be premised that six weeks had elapsed since the operation, and that in the interval the wound had soundly healed, leaving a depressed cicatrix. All the symptoms referrible to irritation of the spinal cord (twitching of the limbs, etc.) had disappeared; the child was in perfect health, and had begun to move about. Three days before its death, it was seized with vomiting, slight convulsions, and other symptoms ascribed (but erroneously, as proved by *post mortem* examination) to irritation of the membranes. It was not seen by any of the officers of this hospital before its death, which appeared to have taken place rather suddenly. The cause of death, as revealed by *post mortem* examination, was peritonitis, not apparently depending on any strumous deposit. The brain and its membranes were perfectly healthy. The spinal column was opened in its whole extent. The bony canal and its contents were perfectly natural to within a short distance of the lower end, except that there seemed rather an unusual amount of fat at one part of the dorsal region. This, however, did not produce anything of the nature of a tumour. The coccyx, sacrum, and two last lumbar vertebræ were removed for examination. The latter were natural; the coccyx was very slightly ossified. The spinal cord reached down, enveloped by its membranes, to the end of the canal. There was found a large hole in the posterior wall of the sacral canal, at the level of the sacro-iliac synchondrosis. The cicatrix of the operation adhered to a small quantity of fat which was left here; and immediately below this, the membranes of the chord bulged out slightly through the opening. Situated below the membranes, and pressing upon the spinal cord, was a rounded mass of fat, apparently enclosed in a fine capsule. In consequence of the projection caused by this mass of fat, a large space was left between the cord and its membranes just above it, which had, of course, been filled during life by the subarachnoid fluid; to which circumstance the very distinct heaving pulsation observed at the operation was no doubt owing. The anterior part of the sacrum also showed a deficiency in ossification. The bodies of the two upper sacral vertebræ appeared to be normally developed, but below this the bone was deficient in its right half, while the opposite side was fully ossified. There did not appear to be any tendency to the unnatural deposition of fat in other parts of the body.

Thus it will be seen that the state of parts revealed by dissection was exactly that which had been diagnosed at the time of the operation; with this further peculiarity, that besides the deficiency in the posterior wall of the sacral canal, and the mass of fat which was lying in this situation in contact with the membranes externally (and which in the preparation was easily distinguishable from the ordinary subcutaneous adipose tissue), there was another collection of fat internal to the membranes, by which they were raised and made more prominent. Doubtless, if the child had survived, this tumour would have further increased, and it seemed likely that it would have occasioned pressure on the cord, as well as have protruded through the opening in the sacrum; and thus the spinal irritation, which was relieved by the operation, would have been renewed. It is worthy of remark that the cord in this case extended down, undivided, to a point much below that which is its usual termination at this period of life.

II. BELLADONNA IN INCONTINENCE OF URINE.

Under the care of Athol Johnson, Esq.

Lavinia B., aged 8 years, was admitted as an out-patient, under Mr. Johnson's care, in July last, on account of incontinence of urine. This infirmity had existed since birth, and she had frequently been under treatment for it, both in private and at St. Bartholomew's Hospital, without however deriving any material benefit. At the time of her admission, the urine was acid, and nothing particular was to be observed as to its composition. She used to pass it frequently in the day, and usually wetted her bed two or three times during the night. She was treated at first up to October 29th with purgatives, alkalies, and blisters to the sacrum, but without any improvement being thereby obtained. It may be observed that there were no worms. At the above date, she was ordered one-eighth of a grain of extract of belladonna night and morning. On November 22nd, it is noted that the child had been doing very well since the use of the belladonna, and that she only passed urine in bed about once in a week. After this, she did not attend regularly; and on February 11th, after an absence of more than a month, she again presented herself in much the same state as at first, the urine being again passed frequently. The belladonna was resumed, and the incontinence again materially checked, especially at night. On February 25th, the quantity of the drug was increased to one-sixth of a grain; and on March 18th, when last seen, she had not passed water in bed since the previous date.

Remarks. This case, though it cannot be said to be perfect, in consequence mainly of the inattention of those who had care of the child, illustrates forcibly the good effect which the use of belladonna unquestionably has in many cases on irritability of the bladder. The affection appears to have been congenital, all kinds of other remedies had been adopted without effect; and the improvement following on the administration of belladonna was as marked as the relapse which ensued on the omission of the treatment. It is offered, not as an instance of perfect cure, but as a well marked example of the power of the drug over this particular symptom. No other effect was observed to follow its administration.

ST. BARTHOLOMEW'S HOSPITAL.

I. CONTUSION OF THE LEG: RUPTURE OF THE POPLITEAL ARTERY AND VEIN: PRIMARY AMPUTATION OF THE THIGH.

Under the care of E. Stanley, Esq.

An unusual injury of the great bloodvessels of the leg, unattended with wound or fracture, was observed in this Hospital in the case of a little boy, who was admitted on March 20th under Mr. Stanley's care. As he was at play a shutter fell upon the back of his leg. When admitted, a large swelling was found in the popliteal space, unaccompanied by pulsation. This appeared to be due entirely to ecchymosis of blood. The skin was uninjured, and there was no fracture of the bones. The lower part of the limb was becoming cold, and a mottled state of the surface showed the commencement of gangrene of the part. Under these circumstances Mr. Stanley determined on the removal of the limb. On dissection, the artery and veins were found torn completely across near the flexure of the joint. The ends of the artery were widely separated from each other, and the upper end had been closed, at least partially, by a clot, which, however, had been partly displaced during the manipulation of the part. The lower end was firmly contracted, but no clot was observed in this part of the vessel. The ends of the vein were also separated, but not to so great an extent; they were quite patulous, and the bleeding appeared to have proceeded, principally, at any rate, from this trunk.

II. DISLOCATION OF THE SHOULDER.

Under the care of F. C. Skey, Esq.

A case of injury of the shoulder was operated on, on March 21st, which presented some features of interest, and gave rise to some difference of opinion among those who examined it. The accident had occurred three weeks before. There was more freedom of motion than is usual in dislocation; the head of the bone could be felt in the axilla, but less distinctly than is generally the case in such an injury in persons who (like Mr. Skey's patient) are not particularly fat. Besides these causes of doubt it was thought by some of those who saw the case that the crepitus of bone would be detected in the region of the neck of the scapula. There was one circumstance, however, which led Mr. Skey to the belief that the bone was dislocated, viz., that the length of the affected exceeded that of the sound arm by one inch and a half. This symptom, as Mr. Skey observed in his remarks on the case, is insisted on by Dupuytren and by the late Mr. Vincent as conclusive with regard to the existence of dislocation; and the event appeared to prove the justice of his diagnosis, as after a somewhat protracted extension under chloroform, by means of the pulleys, the natural length of the arm was restored, and the head of the bone, though still perceptible by deep pressure in the axilla, was evidently restored to its natural position in the glenoid cavity, passive motion being possible in any direction.

ST. GEORGE'S HOSPITAL.

CASE OF EXTENSIVE CLEFT PALATE CLOSED BY OPERATION.

Under the care of G. D. Pollock, Esq., Assistant-Surgeon to the Hospital.

The engraving (Fig. 1) is taken from a model of the mouth of a patient who was under the care of Mr. Pollock, in St. George's Hospital, and in whom there existed a cleft through the alveolar ridge, the hard palate, and the soft palate. It will be



Fig. 1.

observed in the engraving that there was complete fissure through the alveolar arch in front, on the left of the median line, which extended into the nostril; and there was a corresponding irregularity of the upper incisors. Fissured lip existed at birth, with this congenital defect of the bone. The lip was operated upon in early life; and from the appearance of the bone in front, it is probable that a small projecting portion of the latter was removed at the time of the operation on the lip. Above the fissure, through the maxillæ, was seen the septum nasi, bent upon itself; it is marked in the engraving by the darkened mass seen between the edges of the anterior portion of the fissure. In this case, then, the cavity of the mouth opened into the cavities of both nostrils. It only required that the cleft in the alveolar ridge should be double (*i. e.*, one on each side of the median line, with an intervening portion of bone supporting the incisor teeth) to render this case as extensive a deformity as is met with in these species of congenital defects of the mouth, and one of the most formidable for operative interference.

Articulation with such a deformity is always very indistinct and imperfect. In this case, it was so much so that, to a stranger, the patient could not make himself understood. This imperfection was increased in him partially from the loss of one of the incisors, and also from the irregular, short, and stunted state of the other incisors; for, in talking, his tongue was constantly thrust forward, with the endeavour to make good this deficiency. The soft tissues covering the bony palate were sufficiently plentiful to justify an attempt to close this portion of the fissure; and the soft palate was so pliant and abundant that there appeared no doubt of securing a good velum, if union followed the usual operation for uniting this portion of the cleft.

The first operation was confined to the anterior half of the hard palate. Without any difficulty or loss of much blood, the soft structures were dissected from the bones, from within outwards; and, when they were sufficiently liberated, and the edges touched in the middle line, three sutures were passed, in order to keep the edges in apposition. Though the posterior portion of the hard palate was not brought together by sutures, there was some portion of it separated from its bony attachments, in order to allow the anterior half to come together without any restriction posteriorly. If an attempt is made to unite the whole extent of a fissure, such as we have in this engraving, the extensive interference with the attachments of the soft tissues necessary to bring the edges readily together so greatly interrupts the supply of blood, and endangers the vitality of the separated portions, that there is considerable risk of union by first intention not taking place, or of the flaps themselves sloughing in several and extensive portions.

This first operation succeeded in closing about an inch and a half of the anterior portion of the fissure. A second operation was performed about three months after the first. The steps of the operation were similar to the former one, and the part operated on was the remaining portion of the hard palate, but not more than an additional half-inch was added to the new palate after union had occurred.

In a short time afterwards, Mr. Pollock decided to operate on the soft palate, and without any difficulty the edges of the fissured velum were brought together; the levator palati muscles being divided through the palate, in the manner described by him in a paper in the *Medico-Chirurgical Transactions*, vol. xxxix, p. 78. This operation succeeded most satisfactorily.

There now remained an opening in the palate, about half an inch in length, having behind it the newly formed entire soft palate; in front, that portion of palate which had resulted from the effects of the first two operations on the anterior portion of the fissure. This opening was closed by the fourth attempt, and the edges united satisfactorily by first intention, there remaining for a few weeks a very minute opening, through which the flat end of a probe could be passed; but this is closing, and does not allow the passage of fluids through it.

The engraving (fig. 2) shows the present and final state of the mouth after the fourth operation. The models from which the woodcuts have been taken were made for Mr. Pollock by Mr. Vasey, and are accurate representations of the former and of the present condition of the patient.

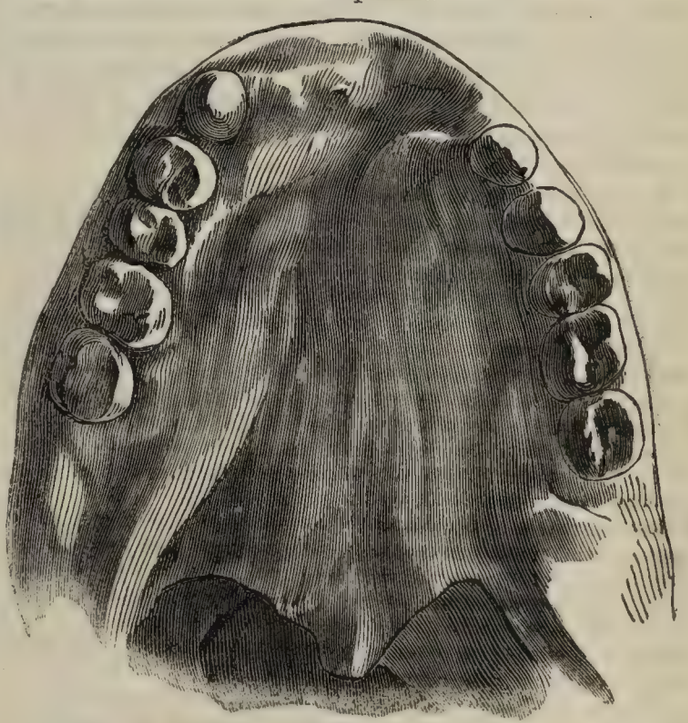


Fig. 2.

The defects of the deficiency of the teeth were attended to before the last operation; the stunted and twisted incisors were removed, and some artificial teeth upon a plate were adapted by Mr. Vasey to the gap which is represented in fig. 2; so that the appearance of the patient is very materially improved by these alterations. But in addition to this the patient has derived considerable advantages from the filling up of the gap in front, in being able to articulate much more distinctly.

Since the last operation, three or four months ago, he has materially improved in speaking, and can now pronounce many words clearly and easily which previously he could not articulate so as to be understood. The acquisition of distinct articulation is only a matter of learning, when once the patient has a palate supplied to him, if born without one. In this case it is most evident if he is watched in his efforts at pronunciation. Not having had a palate for many years, after endeavouring to articulate, he has acquired a habit of using his

tongue in a manner different to persons with natural palates, in his endeavours to overcome the congenital deficiency of structure; and now that the palate is supplied him he cannot at once adapt his tongue to the new position of structures: for instance, in endeavouring to articulate the letter T, he places his tongue in the position to pronounce E. Never having had a roof to his mouth, the tip of the tongue had nothing to rest against above in his efforts to articulate the T; and consequently it was always placed in the position for pronouncing the E, as being the letter nearest in sound to the T. Difficulties of this kind in articulation vary in proportion to the extent of the fissure; but the marked improvement in this case already, certainly encourages the surgeon to hope that, with care and great attention, the worst deformity giving rise to great defect in speech may be ultimately benefited by operation, even if the patient be not ultimately entirely able to overcome the defects in speech which he has acquired in his younger years.

A brother of this patient has a cleft of the soft palate, but is at present too young to be operated upon; and it is by no means uncommon to find more than one member of a family the subject of these congenital deficiencies of the mouth.

Original Communications.

ON ANÆSTHETICS.

By W. Michell Clarke, Esq., Lecturer on Forensic Medicine at the Bristol Medical School; and late House-Surgeon to the Bristol General Hospital.

[*Read before the Bath and Bristol Branch, February 19th*, 1857.]

Having had an excellent opportunity of testing the effects of amylene in two severe operations, I have thought the subject sufficiently interesting to bring before this meeting. It occurred to me that it would be very advantageous at the same time to examine into certain other matters connected with anæsthetics.

I therefore, in the first place, set myself to inquire why it was that chloroform so soon took the place of ether, notwithstanding that the latter agent was so lauded, and held to be so faultless, when it first came up. I soon came to the conclusion that it was owing to the greater power of chloroform. Ether was somewhat uncertain in its effects, and it was often difficult to produce anæsthesia with it; whilst chloroform was easy to administer, and very effectual to the end proposed. No great importance seems to have been attached to the question of comparative danger; neither does it seem that any one, after chloroform had ended fatally in many instances, troubled much to compare the two. It is generally admitted that ether was in no case the cause of death, notwithstanding that it was so indiscriminately, and in many cases so carelessly, administered. On the other hand, it is certain that chloroform has been in fifty cases the cause of death; and that in some of these the result has happened in spite of every precaution, in defiance of every care. Hence it is that we are still seeking a new anæsthetic, and that at the present time we are watching the trial of amylene with so great an anxiety.

The great disadvantage of chloroform is, no doubt, its danger, and the anxiety that must always attend its administration. I must, however, after a long and full experience of it, express my confidence in it, and say that it is a means to which we are fully justified in having recourse. But other disadvantages attending its employment have been alleged against it; and it appears to me that they are being made too much of at the present time. These are principally excitement during the operation, and sickness and exhaustion after it. With regard to these, I have considered it better to record my experience before relating the two cases in which amylene was given. The comparative merits of the two, in these respects, will then better appear. I will also narrate shortly, before reading the cases of amylene, two cases in which, chloroform having been administered, perfect consciousness was retained throughout the operation. I have seen no similar cases published, and have always looked upon them with great interest.

In a certain number of cases, when chloroform is being inhaled, there is excitement, chiefly showing itself by struggling. Out of sixty-eight cases, in which I have taken notes with regard to this point, it occurred twelve times, from which it may be seen that it is by no means an ordinary effect of chloroform. Moreover, in most of the cases in which there is struggling at first, the patient may be pushed on to a state of quietude. There are, however, a few in which the struggling being attended with other symptoms similar to those of epilepsy, it would be unsafe to quiet the patient by giving more chloroform, and in which the surgeon must be prepared to operate whilst the patient is held still by assistants. This production of struggling certainly lessens the value of chloroform in a few cases; but they are not very common.

Sickness, violent, obstinate, and prolonged, even over several days, is undoubtedly one of the most troublesome after-consequences of chloroform. This disadvantage is, I believe, admitted on all hands. All-important, however, as is this consequence, it is certainly not so frequent as is commonly supposed. With reference to this point, I have examined carefully the notes of thirty-four cases, of which I have recorded the details at considerable length. In twenty-nine of these, there was no sickness after the inhalation; and they were cases well calculated to test this matter. They included various kinds of operations; and the time during which the patients were kept under the influence of chloroform varied from a few minutes to upwards of an hour.

The following is a list of them. They all occurred in the practice of the Bristol General Hospital, where the inhalation of chloroform has been thoroughly used, and where also ether, and lastly amylene, met with an early trial.

Amputations	5
Herniotomy	3
Lithotomy	2
Chopart's operation	1
Dilatation and incision of the urethra in order to remove calculi from the female bladder	2
Making openings for the evacuation of pus	3
Extension of a fractured thigh	1
Straightening a rigid knee	1
Removal of necrosed bone	1
Passing a catheter in a case of ruptured urethra	1
Diagnosis of fracture	2
Taxis for hernia	2
Dressing a lacerated leg	1
Removal of a tumour	1
Operation for contracted elbow-joint	1
Reducing a fractured thigh	1
Reducing a dislocated elbow	1
	29

In five cases there was sickness, more or less troublesome after the operation.

In one of these, a young woman, amputation of the leg was performed on October 24th, 1850. She was very sick, and continued so until October 29th.

In the second case, a cyst was removed from near the eye. This patient was a child, six years old. She was sick once on the same evening, and once on the following morning. She had, moreover, been kept carefully from food on the day of the operation.

In the third case, the operation was an amputation of the arm, the patient being a middle-aged woman. She felt sick during the same evening; but the feeling had passed off by the next morning. She did not vomit at any time.

In the fourth case, the leg of a man was amputated for a very severe injury. He vomited once on the second evening after the inhalation; and as, two days after the operation, an erythematous blush had extended from the wound to above the knee, it is quite as probable that the sickness was due to the irritation set up by the operation as to the chloroform.

In the fifth case, an encysted tumour was removed from the right eyelid of a young girl. She was very sick through the following night, and continued very low for several days. She fainted several times. This patient was very hysterical. The sickness was probably caused by her having taken bread and butter for breakfast on the morning of the operation. This she vomited in an undigested state during the operation.

These cases will suffice to shew the proportion in which sickness will probably take place after chloroform—thirty-four in all, five of them had sickness; and in one of these, it did not come on until the second evening after the inhalation, and in another, it was caused by taking solid food on the morning of the operation.

In much that has been written lately, it seems to be assumed that an immunity from sickness is the exception rather than

the rule; and it is on this account that I have entered rather fully into this part of my subject. It has certainly been my experience that freedom from sickness is the rule—sickness, the exception.

In examining whether chloroform be liable to induce great exhaustion or not, we are at once met by a difficulty which it is not very easy to get over. We cannot well tell how much is to be attributed to the inhalation, how much to the operation itself. It will be remembered that many operations which were scarcely ever performed before the introduction of chloroform—operations involving considerable time and great shock to the system—are now performed frequently. It would be the tendency of such operations to cause great and protracted exhaustion; and I question much whether the exhaustion, which has been attributed to chloroform, would not often have been greater if the patient had been obliged to be conscious during all the time of a long and tedious operation. I have not seen any evil result from this cause, which could fairly be said to be the effect of chloroform.

It is interesting at this particular time to know that there are cases, albeit very rare, in which, with chloroform, the insensibility to pain being complete, the patient's consciousness remains throughout the operation. I have met with two such cases, of which the following are short notes.

A girl, aged 23, had a tumour removed from beneath the lower eyelid. She was under the full influence of chloroform for about ten minutes. I have recorded that, although quite insensible to pain, she retained the power of carrying on rational conversation throughout. When not roused to talk, she talked irrationally to herself. She firmly asserted that she never felt anything of the operation.

In a second case, in which the inhalation was continued for a much longer period, the operation being to dissect through a strictured urethra, the same remarkable condition was observed. The man asked me more than once how they were getting on; and yet declared that he felt no pain. This very peculiar condition seems to be common to several anæsthetics; but is rare with chloroform.

Amylene, both in its general properties and also in its physiological effects, appears to be more like ether than chloroform. It differs, however, from both. Than ether it appears to be more effectual, much less liable to produce excitement before begetting insensibility, less disposed to cause subsequent unpleasant effects. On the other hand, it is like ether, in having a very disagreeable odour, in being of low specific gravity and very volatile, in being difficult to administer to a full effect, and in having to be used in very large quantity.

From chloroform, it differs more. But principally in the same respects that ether differs from chloroform. In short, in its effects, it appears to occupy a middle position between the two. To be more effectual than ether. To be less dangerous than chloroform. It is said not to be attended with struggling; not to be followed by sickness; and in the larger number of cases in which it has been given, this has been proved. Dr. Snow has used it in sixty-two cases, and in only two was there any subsequent sickness. That perfect quietude will not be the invariable rule, is proved by a case that I am about to read. On account of the novelty of this subject, and, at the same time, because of its importance, I must trespass upon your patience whilst I give a short account of the two cases in which I have used the amylene. I do this the rather, because they were cases well adapted to test its effects.

Through the kindness of Mr. Godfrey, I had the opportunity of administering amylene in the following case, which occurred at the General Hospital.

The patient was a delicate, very anæmic looking girl, upon whom Chopart's operation was performed. After inhaling six and a half drachms of amylene in eight minutes, she was insensible, and the operation was commenced. She was kept insensible for twenty minutes. The state into which she was thrown was like that of deep sleep; she was unconscious, but the condition was not in any way like coma. All the time, although feeling no pain from the operation, she resisted the finger when an attempt was made to touch the eye. There was a little irregular movement of the arms, which, however, was easily restrained. The lower extremities were perfectly quiet all through the operation. The pupils showed no fixed condition, but always acted under the influence of light. The pulse and respiration were very quick before the inhalation commenced; but both became slower as she gradually came under its influence. The respirations kept at 28; but the pulse fluctuated considerably. Altogether, the quantity that was inhaled was sixteen and a half drachms.

As soon as the operation was over, and the inhaler removed, she very rapidly recovered, and felt no ill effects afterwards. Three or four days subsequently, however, she said that she could still taste the amylene, that it was very nasty, and that it had made her sick on the night before. It could also be smelt in her breath for two or three days. She said directly after the operation, that she had felt nothing of it, and she still asserts the same as strongly. Her opinion of its agreeableness is, however, not quite so favourable.

The second case in which I administered amylene was in the removal of a very large cartilaginous tumour from the gluteal region. In this case, the operation was performed by Mr. Coe; and, through his kindness, it gave me an excellent opportunity of trying the new anæsthetic. The operation was a very serious and difficult one; the tumour had grown up from the ilium, carrying the gluteus maximus muscle upon its surface. It dipped deep into the space between the tuber ischii and the trochanter major of the femur, pressing upon and involving the great sciatic nerve, besides other important structures belonging to this complicated region. The operation commenced at six minutes before 2, and endeed at sixteen minutes before 3 P.M. During this time, seven ounces and five drachms of amylene were inhaled. Three drachms were at first put into Snow's inhaler; but, as this did not answer very well, I substituted for it the ordinary one. She came under the influence of the amylene in four minutes. Throughout the operation, she did not complain of any pain, except by muscular expression, such as is common enough in administering chloroform. She was, however, remarkably conscious all through. As in the first case, she would not at any time allow the finger to be placed in contact with the conjunctiva. I believe that, at any time, I could have roused her to a rational answer; but this I did not attempt more than once or twice, on account of the importance of the operation. Several times, however, she knew me, and asked "how I was getting on". Another time, she told me very quietly that she was slipping off the table. These phenomena certainly strike me as being very wonderful, —that a person should be undergoing the most severe surgical operation, and yet take it as quietly as if unconcerned in the matter. It will be remembered, however, that I adduced two cases to show that the same state sometimes exists with chloroform. The peculiarity of amylene is, that a certain amount of consciousness has been retained in a large number of cases. When the operation was terminated, she said that she had felt some of the cutting at the beginning, but nothing to care about. She gives the same account still, and I believe it to be a correct one. Except the two cases in which chloroform was given, and consciousness retained, I have as yet seen nothing to encourage the hope that we shall be able to retain consciousness after sensation is abolished. They seem to subside under the influence of anæsthetics, *pari passu*; and I am afraid that, as a rule, where any amount of the one remains, some amount of the other will remain also.

In this second case, there was a good deal of struggling at intervals during the operation, which required some power to restrain it. From this we may learn that it will not in every case give the advantage of greater quietude than chloroform.

As in the first case, the pulse fluctuated remarkably during the operation, varying from 60 to 120. When the inhalation was discontinued, she almost immediately recovered. This, however, I look upon as a very doubtful advantage. After the more serious operations, it restores the patient all at once to a sense of suffering; whereas, with chloroform, there are often several hours of valuable comfort, and not uncommonly refreshing sleep. There were no troublesome after consequences, and no sickness. It will have been noticed that a very large quantity of amylene was used, more than a drachm in a minute. It seemed impossible to get too much into the system; and with this I have been greatly impressed: it is this fact that appears to me to promise an immunity from danger. Its low specific gravity and rapid evaporation hinder it from being retained long in the blood. Hence, no doubt, the extreme evanescence of its effects—the probable freedom from risk. This very condition, however, places it in something like the same position as ether with regard to the difficulty of administration. It certainly is much more difficult to keep the patient insensible with amylene than with chloroform. It requires to be given almost unintermittingly, and requires the same amount of attention to keep up its effects as chloroform does to keep the patient safe. The direction of the attention, however, is one less calculated to give anxiety. I believe that the best inhaler for it will be found to be one of large size, with a free expiratory and in-

spiratory valve, and capable, by yielding edges, of fitting the face closely.

At present, the expense is a serious drawback, and the smell is generally considered to be highly objectionable; but neither of these should prevent it from obtaining from the profession a fair and candid trial.

I think it very probable that we shall be placed in the same position with regard to anæsthetics as to many other medicines. We shall have, most probably, hereafter, to select the most appropriate in each particular case. Thus, as in prescribing mercury, we select the form best adapted to the case before us, so in the production of anæsthesia, it will be our wisdom to select the anæsthetic which will best suit the requirements of the case before us. Where the operation only involves the skin, we shall do well to employ Dr. Arnott's method, which is most assuredly deserving of more consideration, and of more extended use, than it has hitherto met with. When, on the other hand, the operation is more severe, and likely to be longer continued, we may choose amylene: and we shall be the more led to do this, if from any reason we suppose that our patient will not bear well the use of chloroform. But when we want to produce the most thorough unconsciousness, when we require to keep up the condition for a long time, and especially when, from any circumstance of the operation, we cannot apply the inhaler with sufficient assiduity for maintaining the effect of amylene, then we shall, I believe, still have recourse to chloroform, which, although it appears to be the most dangerous of the anæsthetics at present in use, yet has the great advantage of being by far the most effective.

CASE DEMONSTRATIVE OF THE POWER OF BELLADONNA IN ARRESTING THE SECRETION OF MILK.

By John Burrows, Esq., Liverpool.

Having had a large midwifery practice, I have witnessed much suffering and annoyance from inflammation and suppuration of the mammæ, which arose in many instances from a copious secretion of milk, that distended the breasts, pressed upon the nerves, and increased the action of the circulatory apparatus, and thus produced inflammation, with some of its painful and debilitating consequences. In numerous cases, I am persuaded, these painful effects would have been prevented if I had known of a remedy which would either have suspended the maternal function, or entirely arrested it. Such a remedy, I believe, we have in belladonna. The following case confirms this view of its therapeutic power.

Case. Mrs. R., aged 26 years, commenced the weaning of her second child on March 10th, 1857. On March 11th, I saw her. She complained of great pain of the left breast, which was inflamed, much distended, and very hard. She directed my attention particularly to a wide, callous, and painful prominence, that resembled a thick convex belt, which stretched from the mamma to the clavicle. I prescribed the diluted extract of belladonna, and directed it to be applied as in the former case. I saw her again on the following day. She said her breast continued distended and painful. I then had a momentary doubt of the efficacy of my remedy. No sooner had the thought crossed my mind than she said, "I washed off your salve, and put on sticking plaster, at the recommendation of a female friend of considerable experience." I spoke to her of the impropriety of calling in a medical man, if she would not follow his advice. She felt the remark, and replied, "I will take off the plaster, and apply your preparation." I urged her to do so without delay. Having lost some valuable time, I deemed it necessary to combine with the application of the extract the administration of the purgative mixture, with the wine of colchicum. Had there been no delay, I intended to test the antilactific power of the remedy alone, without the combined influence of any other. Time having been lost, I was afraid of trusting to it, lest suppuration should ensue.

On March 13th, I visited her. She met me with a smile, and exclaimed, "My breast is better; the pain is gone, and the fulness reduced." She continued the application till the following morning, when the breast was cool, pale, and flaccid, and the elevated hardened integument, that stretched from the breast to the clavicle, diminished in size, softer to the touch, and free from pain. The secretion of milk is arrested, there being no spontaneous dribbling from the nipple; nor can any milk be squeezed out of the breast.

Clinical Lecture

ON THE

EMPLOYMENT OF THE OPHTHALMOSCOPE IN THE INVESTIGATION OF DEEP-SEATED DISEASES OF THE EYE.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital; late Surgeon to the British Hospital at Renkioi, Dardanelles.

The difficulties so often experienced by the surgeon in determining the exact seat or nature of the different diseases affecting the structures of the eye posterior to the iris, render any discovery acceptable by which diagnosis may be facilitated; and hence the ophthalmoscope, which illuminates the interior of the globe and brings before the observer morbid changes in the choroid coat, or in the retina, heretofore unknown, is attracting at the present moment particular attention.

The merit of invention of this instrument, accorded by the French to a Greek physician, named Anagnostakis, and claimed by the Germans as their own, is in truth due to an Englishman, Mr. William Cumming, formerly house-surgeon to the London Hospital, who wrote in the twenty-ninth volume of the *Transactions* of the Royal Medical and Chirurgical Society, a paper, the object of which was to shew that the healthy human eye is equally or nearly equally luminous as the eye of the cat, dog, etc., when observed under favourable circumstances; and that the abnormal appearance or want of luminosity may be applied to the detection of changes in the retina and the posterior part of the eye.

The circumstances necessary for seeing the luminosity may be arranged as follows.

1. That the eye must be at some distance from the source of light—the distance being greater in proportion to the intensity.
2. That the rays of light diffused around the patient (and sometimes around the eye itself) should be excluded.
3. That the observer should occupy a position as near as possible to the direct line between the source of light and the eye examined.

Mr. Cumming supports his statements by the narration of several cases of amaurosis, which he witnessed at the Royal Ophthalmic Hospital, Moorfields. Had it been this gentleman's good fortune to have called German his mother-tongue, with what enthusiasm would this discovery have been welcomed in England! As it was, the paper was read, published, and forgotten, until lately, about ten years after it was written, when the impress of value to the observations has been accorded by the foreign schools.

In 1847, Mr. Cumming's experiments were repeated by Brücke at Vienna. The former threw light upon the face of a person ten to twelve feet from the candle, intercepting the side rays, and endeavouring to bring his own eye as near to the flame as possible. The latter also used a candle, but held between it and his face, as high as the summit of the flame, a screen, over which he looked into the illuminated organ.

In 1854, two other Englishmen were engaged in this subject, namely, Mr. Wharton Jones and Mr. Babbage. Indeed, the latter had constructed an instrument, consisting of a bit of plane glass mirror, with the silvering scraped off at two or three spots in the middle, fixed within a tube at such an angle that the rays of light falling on it through an opening in the side of the tube were reflected into the eye to be observed, and to which one end of the tube was directed.

It is unnecessary to repeat how Helmholz, E. Jäger, Coccius, Ruete, Graefe, and Anagnostakis, with others, have worked with laudable perseverance, until the instrument now in use has been constructed. It carries out very well the principles laid down by Mr. Cumming, and needs only a little practice to become manageable in the hands of any one.

Before proceeding to describe some of the cases in which important information is gained by the use of the ophthalmoscope, I may remark that the usual depreciatory cry of obstructive mediocrity has been already raised against this as against every other novel instrument, either in medicine or surgery. We are told that the employment of the light injures the eye; that it shews nothing; that what it does shew, cannot be rectified. I have often remarked to you that a precisely similar cry was uttered of the stethoscope, the early general employment of which is quite within my professional recollections. The same enlightened remarks will be made on the next discovery of a

similar class, but experience proves that they do not affect the ultimate success of that which is true.

I apprehend that one great advantage likely to result from a more accurate knowledge of the pathology of the deep-seated affections of the eye, will be to connect ophthalmic surgery more closely with general medicine; to render it less a speciality; and to establish far more scientific and well-grounded principles of constitutional treatment. Already have the consequences of scrofula, gout, rheumatism, syphilis, Bright's disease of the kidney, on the sight, been recognised; but we want the first step in the further inquiry—namely, the nature of the morbid changes in the affected organ.

Syphilitic iritis is a disease which is generally very easily controlled by proper treatment; namely, the abstraction of blood and the administration of mercury. Occasionally, though rarely, patients do not bear blood-letting. In other cases, mercury is inadmissible from the beginning; or, at some later period, when other medicines have to be substituted. But at the same time, let it be remembered, that iritis may run its course without treatment, and leave the patient very useful vision.

A case which, after the subsidence of the active disease, leaves the patient with vision impaired for a month or six weeks, but slowly progressing to complete recovery, affords useful matter for ophthalmoscopical investigation.

A young man was under my care in St. Bartholomew's Hospital, suffering from acute syphilitic iritis, in the month of September 1856, having neglected himself for a fortnight previously. His disease yielded to the usual treatment, but left him with a mist before his sight, which was unfit for any occupation requiring minuteness. I examined this patient with the ophthalmoscope early in January 1857, with the expectation of finding traces of inflammatory deposit in the choroid membrane. In this, however, I failed; but behind and to the side of the crystalline lens, and in the vitreous humour, there were opaque membraniform deposits, which prevented the ready transmission of light. Experience had taught me that ultimately the eyes would recover themselves; and I expressed myself to the effect in confident terms to the patient. He presented himself at the hospital on March 12th, when his vision was as perfect as ever. The morbid deposits had disappeared.

Dr. Heymann, of Dresden, remarks, that in iritis two forms of morbid deposit are noticed. 1. A sparing exudation from the iris, but with turbidity of the aqueous humour. 2. Frequently recurring hypopion. In the first form, the opacities in the vitreous humour were fine, filamentous, or membranous, and depended upon inflammation of the ciliary bodies, and perhaps of the anterior part of the choroid. In the second, it was seen that the vitreous humour was turbid, the choroid coat redder than usual, and studded with yellow inflammatory deposits. The veins of the retina were very dark and dilated. In this form of disease, the vitreous humour may be occupied by a network of lymph.

The influence of Bright's disease, or granular degeneration of the kidney upon the organs of vision, is becoming daily a subject of greater interest. The drawing which I here present was taken from an amaurotic patient of intemperate habits. The papilla of the optic nerve is swollen; the branches of the central vessels of the retina are less visible than natural; there are small and distinct deposits of lymph about the choroid membrane. Of the history and progress of this case, I unfortunately know nothing.

Landouzy is said to have first published an account of the connexion between Bright's disease and amaurosis. But Blodig found only three cases in illustration of this combination during the five years he studied in the ophthalmic clinic of Vienna.

At Dresden, Dr. Heymann found in an eye of a patient so diseased: 1. All the transparent structures normal; 2. The choroid of its usual vascularity; but the papilla of the optic nerve was twice its normal size.

In a second case, the vitreous humour was found to be turbid.

In a fatal case, the following *post mortem* appearances were observed. Upon division of the globe, the vitreous humour did not flow out, but clung to the anterior and the posterior sections. The anterior part of the choroid shewed deficiency of pigment in the choroid, corresponding to external blue discoloration during life. In the posterior segment, the macula lutea was abnormally marked. About one or two lines from the entrance of the optic nerve, which was natural, there was a ring of yellowish white deposits, about twenty in number. By the aid of a magnifying glass, other and smaller spots were seen in the neighbourhood. The microscope showed that these spots were instances of granular fatty degeneration of the retina, which separated more easily than natural from the choroid.

Seventeen years ago, long before the microscope was in general use or the ophthalmoscope invented, the following case came before my notice.

Thomas P., aged 22, a printer and compositor, a man of intemperate habits, was admitted into St. Bartholomew's Hospital, under Mr. Lawrence, with amaurosis, considerably advanced in both eyes. The sight had been gradually failing for the last four months, but without heat about the temples or pain in the head. There had been no dark spots or muscæ volitantes. The pupils moved sluggishly upon exposure to light, which however caused no pain.

Feb. 23rd, 1840. Five grains of blue pill were ordered to be taken thrice a day. He was cupped from the neck to ten ounces.

Feb. 24th. He stated to-day that he had of late suffered much pain from swelling of the legs, which he attributed to his constant habit of standing. He was suffering from bronchitis of both lungs.

March 1st. He died of the disease of the chest.

Examination of the Eyes after Death. The external appearance of the organs was natural. The optic nerve was unaltered in appearance, perhaps flatter than usual; the transparent structures were healthy, but near to the optic papilla in both eyes there was an extravasation of blood in the retina visible to the unassisted eye.

The bronchi were full of secretion; the lower part of the lungs was consolidated.

The abdominal viscera were not minutely examined.

I believe that this was a case of Bright's disease, and that in consequence, those granular changes occurred in the arteries of the retina, which Virchow has described as common under such circumstances in the capillaries of the brain.

Sufficient has here been said to show the importance of further investigations upon the subject.

Reviews and Notices.

On Rheumatism, Rheumatic Gout, and Sciatica; their Symptoms, Pathology, and Treatment. By Henry W. Fuller, M.D.Cantab., Assistant-Physician to St. George's Hospital, etc. pp. 464. London: Churchill. 1856.

The first edition of Dr. Fuller's excellent work on Rheumatism was carefully reviewed in the Association Medical Journal for February 25, 1853; it will not be necessary, therefore, to do more now than to point out briefly the additions which have been made in the second edition.

The work has been enlarged by about sixty pages; and the additions chiefly consist in remarks on various remedial measures to be used in rheumatic gout, in chronic rheumatism, and sciatica and other forms of neuralgic rheumatism. In the chapter on chronic rheumatism, Dr. Fuller thus brings under notice the merits of sassafras, diluents, sulphur, mezereon, arsenic, various sedatives, aconite, the hot iron, the frigorific mixture of Dr. J. Arnott, and oil of turpentine. Subjoined is a brief abstract of the remarks made on some of these remedies.

Sulphur, in doses of half-a-drachm, three or four times in the day, and aided by the sulphur vapour-bath, is regarded by the author as one of the most reliable remedies for the removal of chronic muscular pains. Its use, however, should be restricted to muscular and neuralgic rheumatism. This drug, Dr. Fuller observes, has doubtless contributed not a little to the reputation of the powder termed the "Chelsea Pensioner".

In his chapter on Sciatica, Dr. Fuller has some noteworthy remarks on the effects of sulphur applied externally.

"Nothing proves more generally efficacious than sulphur applied externally. Whatever its mode of operation, the fact remains that, employed in this manner, it often subdues pain which has persisted in spite of all other remedies. In many parts of England, the sulphur ointment of the *Pharmacopœia* is a favourite remedy amongst the poor for the cure of rheu-

matism, whether affecting the joints or other parts of the body; and brief notices of its virtue when thus employed are to be found sparsely scattered through our periodical literature. But in no recognised treatise, with which I am acquainted, do I find the slightest notice of the curative action of sulphur applied externally; and I am indebted to one of my hospital patients for directing my attention to the subject. He was a man, forty-three years of age, who had been afflicted with sciatica in a severe form above five months. He had undergone a long course of medical treatment before he applied at the hospital, but without obtaining the least mitigation of suffering; and I had already tried several remedies with little success, when a friend induced him to put sulphur in his boots, and otherwise apply the remedy externally. In four days he was much relieved, and in less than a fortnight had recovered perfectly. Since that time, I have used it in seventeen chronic non-inflammatory cases; and in six only did it fail in giving relief. In four cases, the relief was complete and permanent, and occurred within ten days after its application was commenced; in three others, considerable alleviation of pain was obtained, but a complete cure was not effected; and in the remaining four, the relief was only partial and transient. Several of these cases, however, occurred amongst my out-patients at St. George's Hospital, and it is questionable whether the remedy was tried fairly and perseveringly.

"The mode in which I usually employ it, is to sprinkle thickly with precipitated sulphur a piece of new flannel, in which the whole of the affected limb is to be encased, from the foot upwards. This should be kept in its place by a bandage; and when expense is not of importance, the whole limb so bandaged should be covered with oiled silk or gutta percha, which has the effect not only of increasing the warmth, and confining the vapour of the sulphur, but also of obviating the disagreeable odour consequent on the application of the remedy. This bandage should be kept applied day and night. Contrary to what might be expected *à priori*, absorption of the sulphur takes place rapidly, and the breath, the urine, the secretions from the bowels, and the cutaneous exhalation, unmistakeably attest its presence in the system. And this, probably, explains the mystery of its action in mitigating or subduing the pain of sciatica. For not only does the remedy find its way into the circulation as readily, if not more so, than when administered by the mouth, but it is applied to the affected part more directly, more constantly, and in larger quantities, than it can be under any other mode of administration. The only exception to this is when the skin is dry and inactive, in which case the sulphur does not disappear, the excretions give no token of its absorption into the system, and the remedy fails in affording relief, unless means are taken to stimulate cutaneous action.

"Whatever the precise influence it exerts in sciatica, there cannot be a doubt that its beneficial effects are most strikingly displayed in chronic cases unattended by any symptoms of inflammation—in cases in which the limb feels cold, and pain is felt only on exertion. If any symptoms of inflammation are present, and if the pain is excessive even when the limb is at rest, then, according to my observation, sulphur is seldom of any benefit, and in some instances may possibly aggravate the pain. And if its action be to stimulate the capillary circulation, as has been suggested by Sunderlin and others of the German school, it is not difficult to conceive how its influence may prove beneficial in certain instances, and no less prejudicial in others." (pp. 456-8.)

Arsenic is regarded by Dr. Fuller as "a faithful ally in many cases of rheumatic gout": viz., in instances marked by extreme inactivity of the skin, where the patients suffer greatly from cold, and rarely if ever perspire, however warmly they may be clad, however active the exercise they take, and however great the heat to which they may be subjected. Under the use of arsenic, "the languor and depression which characterise the disease pass off; the complexion improves; the skin loses its dryness and harshness; the excretions reassume their healthy character; the patient gains flesh; and the rheumatic or gouty symptoms subside." Dr. Fuller gives, if the urine be turbid, from eight to fifteen minims of liquor potassæ arsenitis with liquor potassæ or acetate of potash; if the urine be clear and of low specific gravity, he orders from ten to twenty drops of liquor arsenici chloridi, either alone or in combination with bark and (if mineral acids be indicated) hydrochloric acid. In cases of chronic rheumatism also, Dr. Fuller has found arsenic of great service. The *modus operandi* of this remedy, as well as that of sulphur, he professes himself unable to satisfactorily explain. However, of the fact he is certain—that arsenic, judiciously administered and carefully watched in its effects, is one of our most valuable remedies in the chronic forms of rheumatism.

The *hot iron* recommended by Sir A. Carlisle, Dr. Corrigan, and Professor Day, meets with qualified approbation in the hands of Dr. Fuller. He believes that it often fails in giving relief, and that it proves useful in exact proportion as the pain is truly neuralgic, and as symptoms of constitutional derangement are absent. In several of the truly neuralgic instances, he has found the hot iron to afford instant relief: he questions, however, whether "Dr. Day's little button" is preferable to a common laundress's iron.

Of the *frigorific plan* advocated by Dr. James Arnott, Dr. Fuller has had but little experience; but he concludes that "although this application may possibly be useful in purely painful affections of the nerve, in cases of congestion or commencing inflammation, and in those cases again which, whatever their cause, are aggravated by warmth and accompanied by a distressing sense of local heat, it must necessarily fail in every instance in which the pain arises from irritation in the alimentary canal or other distant part, or in which inflammation has gone on to effusion. . . . . The instances, however, cited by Dr. Arnott, seem to show that the powerful influence of this agent may be beneficially employed more frequently than might *à priori* be expected." (p. 455.)

Although, as we have pointed out, the chief additions to the book have been made in the therapeutical portions, the whole of the work has evidently undergone a careful revision by the author. The production of a careful observer, and sound practical physician, Dr. Fuller's volume must for some time be the standard work on rheumatism for the use of the British practitioner.

Royal College of Surgeons of Edinburgh. The President and Fellows of the Royal College of Surgeons held a *conversazione* on the evening of Friday, Feb. 20th, which was attended by a large number of gentlemen of various learned professions. Among those present were Lord Deas, the Rev. Dr. Muir, the Rev. Dr. R. Lee, Professors More, Kelland, Blackie, and Balfour; Councillors Forrester, Paul, Greville, Hill, Dick, Gorrie, Crichton, and Kay; M. De Candolle (grandson of the celebrated botanist), Dr. Hunter, Dr. Maclagan, Mr. John Steell, Mr. G. Harvey, Mr. Rhind, Mr. Christie, etc., etc. The lecture of the evening was delivered by Professor Allen Thomson, of Glasgow University, "On the Phenomena and Mechanism of the Adaptation of the Eye to Vision at Different Distances". He said that the power of the eye to change its focal adjustment to suit different distances was one which existed in most persons before middle age, and in the natural condition of the eye. It was greater in the young than in middle age, and after middle age appeared to be considerably lost. The seat of this power of adaptation had been a subject of much inquiry and investigation by those who had studied the phenomena of the eye. The result of his own inquiries, and that of other observers, led him to attribute that power of adaptation to the lens, although instances had, however, occurred in which the lens had been entirely lost, but in which the adapting power in some degree remained. The lecturer entered into a minute examination of the structure of the eye, illustrating the remarkable phenomena and powers of that organ by numerous diagrams. On the motion of Lord Deas, a vote of thanks was awarded to the learned professor. His lordship expressed his gratification with the opportunities these *conversazione* afforded to the members of different learned professions of meeting and mingling with each other. Dr. John Struthers seconded the motion; and the thanks of the meeting were conveyed to the lecturer by the President (Dr. Andrew Wood), who alluded, in complimentary terms, to the hereditary and personal connexion of Professor Thomson with this College. After the lecture, tea and coffee were served in the adjoining hall. (*Edinburgh Monthly Journal*, March.)

British Medical Journal.

SATURDAY, MARCH 28th, 1857.

THE MEDICAL OFFICER OF THE BANBURY POOR-LAW DISTRICT.

In this Journal of March 7th, we gave a brief account of some proceedings which had taken place in regard to Mr. Grimbly, the medical officer of the Banbury district. It will be remembered that the medical men resident in Banbury were stated to have pledged themselves not to compete for the office resigned by that gentleman, nor to hold intercourse with any one who should commit an act so derogatory to professional honour. But, since the date of our report, events have occurred which have injured the *esprit de corps* of our Banbury colleagues, and for the time endangered, as far as they are concerned, the good cause which they appeared to be unanimously supporting. A Dr. Caparn, partner of Mr. Chesterman—whose name, it will have been observed, was first among the signatures to the address to Mr. Grimbly—offered himself as a candidate for the vacant appointment. On being asked for an explanation of his conduct in the matter, Mr. Chesterman replied that he "did not feel himself implicated by the acts" of Dr. Caparn, which were "perfectly independent of his sanction;" and further stated that he was not prepared to disconnect himself from his partner in consequence of the proceedings of the latter. This reply called forth from a meeting, consisting of Messrs. Morris, Douglas, Rye, Smiles, Griffin, MacGreal, Wise, and Grimbly, practitioners in Banbury, the following resolution:—

"That a man who could so deliberately break a distinct pledge, was an unfit associate for the members of a profession in which honour and good faith ought to be paramount."

Mr. Chesterman, in reply to this resolution, denies having given the pledge. He alleges that the resolution containing it, stated to have been passed on February 19th, was not known to him until it was read to him on March 11th; that he "never could or would bind himself to such a mean and despotic resolution;" that there is "a spirit of persecution among *some* of the medical men in the town towards himself that is now incomprehensible." The other medical men, on the contrary, distinctly state, and even assert their willingness to prove by oath, that the resolution repudiated by Mr. Chesterman was passed during his occupancy of the chair at the meeting on February 19th. They also allege that, although Mr. Chesterman had stated Dr. Caparn's acts to be "perfectly independent of his sanction," he (Mr. Chesterman) had previously requested one of the guardians to propose his partner as a candidate for the vacant office. Mr. Chesterman answers by denying that he occupied the chair at the meeting in question, and by reiterating his denial of participation in the resolution.

Such is a brief history of the state of affairs between Mr. Chesterman on the one hand, and six or eight medical practitioners in Banbury on the other. In carefully weighing the evidence on both sides, it strikes us forcibly that Mr. Chesterman, in his last communication, has put prominently forward a comparatively trivial point on which to raise a question of veracity; namely, his occupancy or non-occupancy of the chair at the meeting held on February 19th. This, we think, does not at all affect the main question—Was he, or was he not, a consenting party to the resolution condemnatory of competition for Mr. Grimbly's office? On this point we must say, that the evidence preponderates greatly against the correctness of Mr. Chesterman's statements; for six respectable practitioners in Banbury distinctly affirm in writing the contrary.

We could comment severely on the conduct of Mr. Chesterman; but we are warned to be careful by an expression used by him in a letter to the Banbury Guardians, in which he "repudiates and disclaims being in any way a party to the scurrilous, offensive, and unjust attacks levelled against the Board of Guardians in the *Lancet*, *Medical Gazette*, and British Medical Journal." Scurrilous and unjust we would not intentionally be: offensive we must be if occasion demands it. And therefore, however offensive our decision may be to Mr. Chesterman, we must say that he appears to have utterly disregarded all intraprofessional good feeling in this matter; for our opinion must be much changed before we can believe that his medical brethren in Banbury would be so forgetful or so dishonest as to draw up and collectively sign a statement falsely impugning their colleague's conduct. Or, if the slightest doubt remained on this point, we would give Mr. Chesterman the full benefit of it, and at the same time leave his conduct in supporting a candidate for Mr. Grimbly's office to the treatment which it would richly deserve, not only from the medical practitioners of Banbury, but from all honourable members of our profession.

It is not without some regret that we have felt called on to animadvert on the conduct of Mr. Chesterman, especially as he is a member of the British Medical Association; but one of our duties is the maintenance of professional honour, and we must perform it.

In concluding our remarks, we are enabled to make a statement which will be gratifying to all of our associates who take an interest in this case, or in other Poor-law matters—viz., that Mr. Grimbly has been reelected, by a large majority, to the office which he had resigned. The dignified and honourable conduct of that gentleman and his friends has thus received a well merited meed of success; and the promoters of Poor-Law Medical Reform will gain courage to persevere even under difficulty and discouragements, wherever the events which have formed the subject of our comments on the present occasion shall become known.

THE WEEK.

A report on the organisation of the Russian Medical Department, drawn up by Dr. Mouat and Mr. Wyatt, was lately presented to the House of Commons. The document contains much interesting matter, arranged under the following heads: 1. General organisation of the medical department; 2. Surgery of the war; 3. Medical history and the sanitary condition of the hospitals and camps; 4. The prevailing diseases of the Russian army, both of the native population and of the Tartars. The medical department is supplied partly from students educated by the state, and partly from those who are educated at their own expense. Service for a certain period is compulsory on those belonging to the former class; but every medical officer may retire on half pay after twenty-five years service, and on full pay after thirty years service. Each regiment of

4,000 men has a surgeon-major and three surgeons of battalions. The annual pay varies from 250 silver roubles, or £32, with service and forage, for a surgeon of battalion or *ordinateur de l'hôpital*, to 725 silver roubles, or £92 : 16, with 300 roubles, or £38 : 8, as table-money, when the highest rank, that of major-general or general, has been attained. There is a provision for progressive increase of pay after every five years successive service, and for increase of army rank for any special merit displayed: and as there is no inducement for prolonged service, the old officers give place to younger and more vigorous successors. Every regiment is provided with a dispenser, having the rank of a non-commissioned officer; and every hospital has an apothecary and dressers. The hospital dietary is approved of; among its constituent parts are mentioned good white bread (although the sick often preferred the black), thick soup, and tea. All things requisite for hospital and regimental use are supplied by an officer of the Russian intendance, on the requisition of the colonel: and the means of removing the sick and wounded are amply provided by the state. The female nurses, styled "Sisters of Mercy," are generally widows of officers. In remarking on the surgery of the Russian army, the report states that pyæmia, erysipelas, and phlegmonous inflammation seem to have been the most common causes of mortality after capital operations. The large amount of sickness and mortality among the Russians is ascribed in part to intermittent and bilious remittent fevers, with a marked tendency to a low typhoid state, and diarrhœa, which occasionally degenerated into dysentery. Although the Russian soldiers are equal in height to the English, they are inferior in capacity of chest, and in muscular conformation: they appear unhealthy, and either prematurely old, or very young. Such is a brief outline of this interesting report: we shall return to the subject at greater length on a future occasion.

If there be any one who has flattered himself with the idea that the belief in witchcraft is altogether a thing of the past in this enlightened age and favoured country, his satisfaction will have been diminished on reading, in the *Times* of last Tuesday, the report of the trial of James Tunnicliff, for obtaining money from Thomas Charlesworth, under the pretence of relieving him from the spells of witchcraft. A brief account of the circumstances attending the case will be found in our news columns. The lamentable superstition and ignorance exhibited by a man who, from his station in life, might be expected to know somewhat better, even if he were not very clear headed, is a matter pregnant with reflection to all promoters of general education. And to the medical reformer the case is of interest. A man of Charlesworth's mental calibre would place faith in the representations of any charlatan whatever, and the more so in proportion to the extravagance of the pretensions. The simple minded farmer is but one of a large class who require legal protection against being imposed on in regard to their health and life, as well as to their property. Education must and will do its work in removing time-honoured superstitions and ignorance; but in the meantime—and the case to which we have alluded shows it distinctly, though perhaps indirectly, as far as regards medicine—stringent protective measures are demanded to protect simplicity from becoming the victim of imposition.

Association Intelligence.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

NOTICE TO MEMBERS IN ARREAR.

Notice is hereby given, that after the 18th day of April next, the British Medical Journal will be withheld, in accordance with the Laws, from all members whose subscriptions for last year shall remain unpaid.

Philip H. Williams, *General Secretary.*

Worcester, March 1857.

MEETING OF COMMITTEE OF COUNCIL.

Held in Birmingham on March 17th.

Present:—Sir C. Hastings (in the Chair); Dr. Drury; Mr. Hatton; Mr. Husband; Mr. Pemberton; Mr. Terry; Mr. Wickenden; Dr. Williams.

The Report of the Finances of the Association (from January 1st to December 31st, 1856) was read by the Treasurer, Sir C. Hastings.

It was resolved:

1. That the Financial Report, read by Sir C. Hastings, be adopted, and printed in the Journal. [The Finance Report will be published in the Journal of next week.]
2. That in the first week of each month the names of new members admitted during the preceding month be published in the Journal.
3. That in the opinion of this meeting it is neither expedient in the present state of the finances of the Association, nor necessary from the character of the labour involved in the office, to increase the present amount of remuneration given to the Secretary.
4. That Sir C. Hastings and Dr. Williams be requested to ascertain what date will be most convenient for holding the next Anniversary Meeting (in Nottingham).

Charles Hastings,
Philip H. Williams.

Worcester, March 1857.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, March 1856.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 24th, 1857.

Cæsar Hawkins, Esq., F.R.C.S., President, in the Chair.

ON DISARTICULATION OF THE SCAPULA FROM THE SHOULDER-JOINT. BY JAMES SYME, ESQ., F.R.S.E.

Janet S., nearly seventy years of age, was admitted into the Royal Infirmary of Edinburgh, on the 18th of September, 1856, on account of a large tumour involving the left scapula. In size and form it resembled a cocoa-nut. In some parts it was as hard as bone; in others, elastic but firm. It presented a distinct bruit, and communicated a strong pulsatory movement. The tumour was first noticed about six months before, when it was of the size of an orange. Considering, on the one hand, that the extension of the growth into the axilla rendered relief by a partial removal of the bone impossible—the unsatisfactory result of that operation in Mr. Liston's recorded case—the fearful mutilation which it would involve—and the small hope of a successful issue to so formidable a procedure at her advanced age; whilst, on the other hand, the chief obstacles to recovery seemed likely to be serious hæmorrhage (which it was thought might be prevented), or excessive drain upon the patient's strength in the subsequent suppuration—Mr. Syme determined to remove the entire bone. An incision was made from the acromion process transversely to the posterior edge of the bone, and another from the centre of the first directly downwards below the lower margin of the tumour. The flaps thus formed were then reflected. The scapular attachment of the deltoid, and the connexions of the acromial end of the clavicle, were next divided. With a view to prevent the most serious source of hæmorrhage, the subscapular artery was next cut across, and secured. The joint and circumference of the glenoid cavity were next divided; the finger being hooked under the coracoid process, greatly facilitated the division of its attachments, and enabled the operator to pull back the bone, and separate its remaining attachments with rapid strokes of the knife. The limb was supported and retained *in situ* by a bandage. The tumour, on examination, was found to consist of a nearly uniform expansion of the bone into a bag, partly membranous, partly osseous, containing a cerebriform growth, and extended to the margin of the glenoid cavity and spine of the bone. All seemed to promise well after the operation; the wound healed rapidly. At the end of a fortnight, the amount of discharge was scarcely sufficient to stain the bandage. The shoulder assumed a very natural appearance, and it seemed that by the support afforded by the clavicular portion of the deltoid, together with the action of the pectoralis and latissimus dorsi, the limb would be able to execute a fair degree of motion—indeed, the woman was with difficulty prevented using the limb too freely; but the patient's strength did not improve in a corresponding degree, and towards the end of November she suddenly sank, and died on the first day of December. The author concluded with the expression of a hope that this case would tend to encourage greater freedom in operating for diseases of the shoulder-joint as well as scapula, proving, as it did, that the scapula may be removed without serious loss of blood; that the resulting wound does not necessarily occasion excessive discharge, and that the arm becomes afterwards a serviceable limb.

Mr. Hale Thompson regarded the operation which had been detailed in the paper as most undesirable to be performed. Looking at the age of the patient, and other circumstances, a favourable result could not have been expected. He did not believe that the woman could use the arm on the side from which the scapula had been removed any better than she could the paralysed arm. He thought the operation unjustifiable.

The President said it was interesting to know that a patient might recover the use of the arm, to a certain extent, after such an operation. There were few cases, however, in which the operation could be practised, since there were few in which the tumours were circumscribed by bony coverings. The greater number of cases would be those of medullary disease; he had one such under his care at the present time—that of an enormous medullary tumour growing in every direction from the outside bone.

Mr. Curling thought the operation was a skilful and able attempt on the part of the surgeon to effect a good object. The patient was, no doubt, in an unfavourable position for the success of the operation; but the effort of the surgeon was for the prolongation of life. He had seen Mr. Luke remove the greater part of the scapula, leaving the glenoid cavity. He thought the operation of Mr. Syme was to be justified on every sound surgical principle.

Mr. Syme observed, that it appeared to him remarkable that after the removal of the scapula the arm should still be useful; and on this ground, that the case would be interesting to the society. It was still more surprising, that the removal of the clavicle should not produce any alteration in the position of the shoulder, or interfere with the motion of the arm; yet this was the fact in a case in which he had operated. There was, in truth, no difference between one arm and the other. Many things which appeared *à priori* impossible, were not really so. Other cases of tumour of the scapula were also fit for the operation he had performed. He mentioned one in particular, which had come under the care of the late Mr. Liston, who wished to amputate the scapula, but could not get any other surgeon to countenance the proceeding.

ON A NEW METHOD OF OPERATING FOR IMPERMEABLE URETHRA. BY JAMES SYME, ESQ., F.R.S.E.

In a former communication upon the remedy of stricture by external incision, the author endeavoured to show that impermeability was not consistent with the nature of stricture, and that whenever the urine could pass through the urethra an instrument might be made to do so; not perhaps at once and with ease, but always through time and proper management. Though thus certainly permeable while merely contracted, the canal was undoubtedly liable to complete obstruction in consequence of wounds, and also of sloughing, when it had been found to constitute a very troublesome subject of treatment by the operation hitherto employed—viz., cutting upon the point of a catheter passed down to the seat of obstruction, so as to clear a way for its introduction into the bladder—a process rendered difficult by the thickness and condensation of the textures concerned, and also dangerous as well as uncertain by the risk of not cutting exactly in the proper course of the urethra. Two cases of this kind—one from a provincial town in Scotland, and another from St. John's, New Brunswick, in both of which not a drop of urine passed through the urethra for many months, the urethra being completely obstructed to the introduction of instruments—having lately come under the author's care at the same time, led him to reconsider the subject, and devise the following plan instead of the one usually employed, which for the reasons just mentioned he was unwilling to adopt. An instrument like the common lithotomy staff, with a groove on its concave instead of the convex side, being introduced through the fistulous opening of the perinæum, and confided to an assistant, the guide director employed for the division of strictures by external incision might be passed down to the seat of obstruction, and while the staff was supported by pressure upon the perinæum to thrust through the opposing substance in the course which it ought to take if the canal were free, enter the groove, and so pass into the bladder, when the state of matters would be similar to that of a stricture requiring division after having the director passed through it, so that the operation might be completed in the same way as upon such an occasion. This procedure was executed in both of the cases, without any difficulty in one, and without more in the other than might have been expected from the extreme degree of injury which the patient had sustained by falling twenty feet, fracturing the pubis, having the bladder punctured, etc. The first patient was dismissed from the hospital perfectly well at the end of seven weeks after the operation; the second, passing urine in a full stream, but in general only by drops through the perinæum, appears also to have the prospect of complete recovery at no distant date. While quite aware that the formation of a new urethra is much less promising in its result than the enlargement of an old one, the author expressed his hope that the method which he had proposed would facilitate the procedure, and lessen the risk of its bad consequences.

Mr. Coulson thought there were many cases in which the plan proposed by Mr. Syme would not be applicable. There might be a great portion of the urethra obliterated anterior to the perineal opening, in which case the mode of propelling the small director would not apply; or the operator might not always be able to get the staff from the perineal opening into the bladder, on account of the tortuous course it would have to take.

Mr. Benjamin Travers referred to the fracture of the pubis, mentioned as occurring in the second case, and said it was a

very serious and often fatal complication. It co-existed with extensive laceration in the neck of the bladder. He suggested that the paralysis of the rectum was explained by the circumstance of the fracture. The difficulty connected with Mr. Syme's operation would, he conceived, in many cases, be to hit the posterior opening, and push any kind of instrument thence into the bladder.

Mr. Hutchinson had hoped, from the title of the paper, and the reputation of the author, to hear a description of some expeditious plan of getting through those strictures ordinarily termed impassable, and without any perineal fistula. When a perineal fistula existed, the operator had but to pass a catheter by the fistula into the bladder, retain it there as a guide in the subsequent part of the operation, and then to cut on the point of a full-sized instrument passed by the penis as far as the obliterated tract. The real difficulty occurred in cases in which no direct fistula from the perinæum existed, and the posterior tract of urethra could not be found. Then again, in cases of obliteration, one never knew the length of the obliterated tract, and often the induration was of extreme density. He thought there was some objection to the use of force with so small an instrument as the grooved director recommended by Mr. Syme, from its liability to bend, and to pass out of the proper direction; as he had once found it do in the course of his own experience.

The President asked Mr. Syme if he did not think that cases of lacerated urethra, with sloughing, did not do better, after operation, than where incision was made in cases of stricture.

Mr. S. Smith said Mr. Syme ought not to be made answerable for the London instruments bearing his name. The instrument which he himself had exhibited, ought never to be bent by any surgeon.

Mr. Syme explained more particularly the operation which he had proposed; and, in reply to Mr. Coulson's objection, that it would be rendered difficult by the tortuous direction of the fistula, stated that the passage was always perfectly direct, and also wide, unless perhaps just at the orifice, since the cause of true obliteration, for which alone the operation was intended, resulted from either sloughing or wounds, and not from the gradual extension of purulent matter, as in the ordinary cases of perineal fistula, which always admitted of remedy, either by dilating or dividing the stricture that gives rise to them. As to the opinion expressed by Mr. Hutchinson, that the operation in question would not be applicable to strictures so tight and tough as to bend metallic instruments employed for their dilatation, Mr. Syme again explained that the procedure which he had proposed was intended for the remedy, not of *stricture*, but of *obliteration*, and that he believed the former condition would never be found to require the old expedient of cutting upon the point of a catheter, if the introduction of bougies were perseveringly attempted with skill and care, and especially with such gentleness as must entirely preclude the risk of bending a metallic instrument.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, February 17th, 1857.

Thomas Watson, M.D., President, in the Chair.

Fibrous tumour of the ovary. By T. W. Nunn, Esq.: with report by J. S. Bristowe, M.D., and J. Hutchinson, Esq.

The specimen was exhibited by Mr. Nunn at the meeting on February 3rd.

A tumour, the size of a child's head, had been removed from the abdomen of an old woman, of whose disease there was no history. Externally it showed a layer of yellow-white calcified material, nearly an inch thick, and in parts bony; within, the structure was plainly fibrous, and had no cretaceous or osseous deposits. The tumour was attached to the uterus by a band about the length and thickness of a broad ligament; it possessed also bands of adhesion to the omentum and adjacent viscera. Attached to the uterus by a short pedicle, and growing from its opposite side, was a nodulated white fibrous tumour, of the ordinary kind, about the nature of which there was no doubt. Only one ovary was present. Mr. Nunn believed the larger tumour to represent the missing ovary, and to determine this point it had been referred to Dr. Bristowe and Mr. Hutchinson. Dr. Bristowe reported that after careful examination they had come to the opinion that it was not an ovarian but a pedunculated fibrous tumour of the uterus. This conclusion they based on the following facts: 1st. That the ovary present evidently belonged to the same side as the tumour, although it was not connected with it. 2nd. That the structure of the tumour showed under the microscope the unstriped muscular fibre of the uterus. 3rd. That the body of the uterus was almost wholly wanting, only the cervix being present, whilst its fundus was puckered and had evidently undergone great loss of substance. 4th. That the calcification of a peripheral layer, although acknowledged to be very rare in uterine tumours, did occur sometimes, as was proved by existing specimens. They thought it probable that the missing ovary had been accidentally cut away in the removal.

Mr. Hutchinson remarked on the general subject of pedunculated uterine tumours, that he thought that the peripheral calcification might possibly be explained as resulting from the disintegration of a layer of uterine tissue by which the tumour had been surrounded. At first, from this condition, he had been inclined to doubt the tumour being uterine; but on search, he had found in the Museum of St. Bartholomew's a parallel specimen. In the latter case, the tumour was also partially pedunculated. He had searched through the museums of the College of Surgeons, of St. Bartholomew's, and of Guy's Hospitals, but had been able to find but one example of this peripheral calcification, whilst the occurrence of scattered osseous and calcareous deposits was illustrated by a great number of specimens.

Mr. Nunn objected to the report. He still believed the tumour ovarian, and hoped a second committee might be appointed.

Dr. Bristowe and Mr. Hutchinson expressed their desire that the subject should be further investigated if Mr. Nunn wished, but stated that they did not feel any reasonable doubt. After some conversation, the President nominated Dr. West and Dr. Bristowe to make a second report.

Encephaloid cancer of the eyeball. By J. W. Hulke, Esq.

This patient was a child of about four years old. The development of the growth had been watched for several months. The history of the case presented nothing peculiar; there was the usual bright reflex from the bottom of the eye, and numerous blood-vessels were seen ramifying upon it. The eye had become inflamed, and had been removed by Mr. Bowman. The situation of the vitreous humour was filled with a soft, brain-like growth, which was abundantly vascular, and presented the minute structure of encephaloid cancer. The choroid and ciliary muscles were much thickened by inflammatory exudation.

Melanosis of eyeball. By J. W. Hulke, Esq.

The eye had been disorganised by violent inflammation twenty years before. Two months before his admission into King's College Hospital the conjunctiva became red, and two small tubercles appeared on the front of the globe: these burst, and bloody serum escaped. Soon afterwards a tumour shot out from the front of the eye, rapidly attained considerable size, and projected between the lids. Its colour was dark, and its surface, from which there was a constant sanious oozing, was irregular. The projecting mass moved readily in association with the movements of the other eye. After removal by Mr. Bowman, the growth was found to consist of two parts, a dark blackish, and a light grey portion. Excepting that the cells of the dark part contained pigment, the minute structures of both portions were similar. The shrunken globe was filled with the cancerous growth which had escaped in front, forming the external tumours, and the sclerotic had given way behind the insertion of the tendon of the inner rectus muscle, and also near the entrance of the optic nerve; and in these situations there were small nodules of the tumour outside the globe, continuous with the mass filling its interior. It is interesting to notice at how late a period in the history of the case melanosis has been developed. It appears also that the free mobility of the tumour was not a sure sign of the sclerotic coat being entire posteriorly.

Disease of the heart without valvular affection. By S. Wilks, M.D.

This specimen was from a woman who had been under Dr. Barlow's care in Guy's Hospital, for heart disease. She died with all the usual symptoms of cardiac derangement, as dropsy, etc. She was thirty years of age, and had not been well since an attack of acute rheumatism eighteen years before. The heart was remarkable, as exemplifying the effects of general carditis, independent of disease of the valves. The serous membrane, both without and within the heart, was much thickened, indicative of the inflammation which had once

existed, and at the same time the muscular structure itself was pervaded throughout by a number of white streaks, producing what is known as the fibrous degeneration. The endocarditis had been most intense towards the apex rather than the base of the ventricle, and thus probably the absence of valvular affection, and the existence of the present form of malady. The whole organ weighed twenty-four ounces. The left ventricle was much dilated.

SPECIMENS OF NEUROMA. BY S. W. SIBLEY, ESQ.

The first specimen was removed by Mr. Nunn from the arm of a female, aged 20, where it had been growing for twelve months, but had given rise to very little pain. The tumour grew from the musculo-spiral nerve, and a portion of this structure was removed along with the new growth. When first excised the tumour was about the size of a large walnut, and was enveloped in a dense fibrous capsule continuous with the sheath of the nerve. On removing the capsule the neuroma was found to involve only a portion of the whole nerve. Many nerve fibres were traced to a considerable distance within the tumour, others were observed coming from it. Under the microscope the structure was made up of connective tissue, principally of the white wavy fibres. A very abundant supply of capillary vessels was also noticed, arranged in a network throughout the tumour.

The second specimen had grown in connection with the fifth and sixth cervical nerves. It was removed some time since by Mr. Barber, of Stamford, from the neck of a female, aged 40. The tumour had caused extreme pain, and great cutaneous sensibility over the right side of the neck, which chloroform and other topical remedies failed to relieve. After excision the tumour was found to involve a considerable portion of the fifth and sixth cervical nerves; it was inclosed in a dense fibrous capsule. On section the interior of the growth was observed to be softened and broken down. The microscopical structure was similar to that of the first specimen.

VILLOUS GROWTH ON THE DURA-MATER. BY S. W. SIBLEY, ESQ.

This specimen was a growth the size of a small nut, which sprung from the dura-mater near the face. There was a depression on the surface of the brain opposite the tumour, but no disease of the substance of the brain. The patient from whom it was removed had died in the Middlesex Hospital, under the care of Mr. Shaw, with cancer of the uterus. There were no symptoms connected with the growth observed during life, nor was there any secondary cancerous growth noticed after death. In structure the growth was composed of a number of little villi. In addition to the epithelial cells usually found in these growths, there were several "laminated" and "brood" cells.

METASTASIS OF SUPPURATION. BY T. BALMAN, M.D.

The specimens were exhibited, in the absence of Dr. Balman, by Dr. Quain.

The subject of these specimens was a stout boy, three years old, who came under Dr. Balman's notice for an abscess situated in the neck, about one inch and a half from the angle of the left jaw, a little anterior to the sterno-mastoid muscle. Opened, it gave exit to a considerable quantity of healthy pus. A counter-opening was required on the third day. On the tenth day the child was well. On the day following he had some shortness of breathing, which continued for three or four days, the attacks being described by the friends as resembling asthma. He had also some difficulty in swallowing liquids, but not solids. In fact, he eat bread and butter for his breakfast a few hours before his death. This occurred so suddenly, that Dr. Balman, who had not seen the child during three days, on coming immediately that he was sent for, found him dead. A *post mortem* examination showed the sac of the abscess still existing, the lining being of a dirty-brownish aspect, but containing no matter, and having no communication with any organ. The œsophagus and the larynx were found perfectly healthy; when the trachea was laid open, a thick coating of puriform matter was seen extending downwards as far as the division of the bronchi, where there was rather a greater accumulation. The left bronchus, as far as it could be followed through its ramifications, was filled with the same creamy-looking matter. The right bronchus presented no such appearances, and the lung tissue appeared alike healthy on both sides, except the oozing of matter from the small bronchi of the left sides. There were no coagula in either the pulmonary arteries or veins. The heart was healthy, save that there were but two (still efficient) aortic valves. The interest of the case centred in the connection which manifestly existed between the healing of the abscess in the neck and the presence of a quantity of purulent matter in the air-tubes of the lungs. This matter, which appeared to be independent of true inflammatory action (and which, in reply to a question, was said not at all to resemble coagulable lymph), was manifestly the cause of the child's death, by producing suffocative spasm. Dr. Quain added, that Dr. Balman's details of the case were so full and satisfactory, that no doubt concerning them could exist.

EPIDEMIOLOGICAL SOCIETY.

Monday, March 2nd, 1857.

B. G. Babington, M.D, F.R.S., President, in the Chair.

PUERPERAL FEVER. BY EDWARD W. MURPHY, M.D.

Dr. Murphy alluded to a former paper on this subject, in which he had objected to the propriety of considering this disease as an inflammation of one or other of the tissues. Neither in the mode of attack, nor in the symptoms, *post mortem* appearances, or treatment, did puerperal fever agree accurately with peritonitis. A closer resemblance to phlebitis was admitted, because both it and puerperal fever were blood-diseases; but he denied that they were identical. He regarded the disease as the result of a poison, obeying strictly all the laws of morbid poisons. *Its action was definite and specific.* The seat of that action was the serous surfaces, especially the peritoneum and uterine veins, chiefly because of the rapidity of the absorption carried on by them. He denied that the action itself should be considered a *specific* inflammation, although he admitted that, in certain cases, inflammation might be excited. The term inflammation was used too extensively, to embrace actions perfectly opposed to each other. The design of inflammatory action is to preserve or repair organised structure, yet the term is given to actions that destroy it. Thus, cancerous inflammation, tubercular inflammation, are expressions sometimes used to mean that cancer and tubercle are only forms of inflammation. So also, in the infantile lung, *post mortem* appearances, caused by collapse of the lung, were described as lobar, lobular, vesicular pneumonia. The tendency of a poison is to destroy organisation; it is incorrect, therefore, to consider its action a *specific* form of inflammation, which, whenever it takes place, is only for the purpose of limiting the action of the poison; and, in this sense, just as the deposition of tubercle on the peritoneum is accompanied by peritonitis, so puerperal poison may excite peritonitis. The more powerful the poison, however, the less peritonitis, and the weaker its influence, the more distinctly are the evidences of inflammation observed.

The action of the puerperal poison is on the blood. The quantity of fibrine in the blood is increased; the quality deteriorated; a profuse exudation of morbid fibrine takes place, having none of the properties of healthy fibrine; it is not organisable; dissolves into a creamy substance, which melts into a fluid like pus, and, mixing with serum, forms the abundant lactescent fluid of authors. Exudations are not found in the veins, because they are not adhesive; but dissolved fibrine, like pus, is found abundantly. The puerperal poison seems a contrast to the typhus poison, which destroys fibrine; yet the typhus poison absorbed by a parturient patient will cause puerperal, not typhus fever. It is the same with erysipelas.

The action of the poison is modified by the dose, as well as by the temperament and constitution of the patient. Puerperal fever does not attack all indifferently, but selects its victims. The most important feature of this law is the manner in which the characters of the disease are modified by the quantity of the poison absorbed. When it is in excess, the patient may die without any other symptoms than a fluttering pulse and cold livid surface. On the other hand, the dose may be so small that true inflammation is set up to arrest it; and thus peritonitis, phlebitis, or arthritis, takes place. Hence have arisen the contradictions among authors; those who meet the latter class of cases calling the disease peritonitis, while those who witness the former stand aghast at symptoms which no theory of inflammation can explain.

The coexistence of hooping-cough, of measles, and of syphilis, with erysipelas, proves that two poisons may each set up its specific actions in the same person at the same time. Erysipelas and puerperal fever have occurred in the same patient; but the author generally found erysipelas to precede or follow puerperal fever, rather than accompany it. Erysipelas excited puerperal fever; but when the latter was at its height, the former disappeared. The author objected to the opinion that erysipelas and puerperal fever were identical, and did not con-

sider those cases described by Good, in which the peritoneum was pale and colourless, as puerperal fever at all. They might be instances of erysipelas, if this poison ever attack serous membranes.

Dr. Murphy considered the poison as a contagion, like the cadaveric poison, which seems similar to it. He briefly enumerated the symptoms of the disease, to explain the principle which should guide in the treatment. According to its strength, the constitution makes an effort to remove the poison, whether by vomiting or by purging, by the skin or by the kidneys. The observation of these efforts led Donat to use emetics, Boèz Kermes mineral, Denman tartar emetic, and Armstrong salts and senna. If the effort fail, the poisoned blood accumulates at the centres of the circulation, which are relieved by a prompt and bold depletion. For such a purpose, thirty, forty, even fifty ounces of blood, have been taken, with decided benefit; but depletion should instantly follow the rigor, because, if time is lost, the very same treatment may only hasten dissolution. Camphor and turpentine have been recommended in the treatment of this fever. These remedies are not only stimulant, but anæsthetic; and not only are useful in supporting the constitution against the attack, but, by diminishing the pain, they lessen nervous exhaustion. Reasoning on these facts, Dr. Murphy tried chloric ether with great advantage; and he recommended it strongly to the consideration of the profession. General rules cannot be laid down for treatment. If the dose of the poison be a maximum, nothing will save the patient; if in such quantity that the constitution can make some effort to get rid of it, much of our success will depend upon a close observation of the manner in which the effort is made. Prompt depletion has saved many a patient. The judicious use of emetics, purgatives, diaphoretics, and even diuretics, has arrested the attack by aiding a natural effort. If the dose of the poison be a minimum, then peritonitis or phlebitis become prominent, and must be treated as such. Thus, what we called the inflammatory and the atexic forms of this disease merely signify the degrees in the dose of this poison.

The author alluded to the importance of prophylactic agents, to *ventilation*, and the improvements lately introduced; to *chlorine*, as a means of destroying the poison; and to anæsthetic agents, as a means of blunting the sensibilities of the nervous system, and diminishing the activity of absorption. In this sense, he considered chloroform extremely valuable; and, far from fearing its influence in causing puerperal fever, he looked upon it as a preventative.

A discussion followed, in which Dr. Tripe, Dr. Babington, Dr. Chowne, Dr. Milroy, and Mr. Hunt, took part.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, March 20th.

SALE OF POISONS.

The Marquis of Westmeath wished to be informed whether it was the intention of the Government to introduce a Bill next Session for regulating the Sale of Poisons? The necessity for such a measure had been proved by a case which unfortunately came recently within his own knowledge. The child of one of his relations was poisoned last summer by medicine that was sent from a chemist's shop at Weymouth. The medicine was sold by a boy who was too young to be an apprentice; and the only other person in the shop at the time of the sale was a boy of fourteen years of age. The chemist had left his shop in charge of those two boys. Unfortunately, the mother herself administered the dreadful dose to her own child. A long investigation took place before a coroner's jury; and a verdict of manslaughter was returned against the two boys. Bills were sent before the grand jury against them, but those bills were ignored. He did not mean to throw any blame on the grand jury, or on the law officers of the Crown; but he thought there could be no doubt that the safety of the public positively required that some legislative measure should be passed on the subject. Since the bills were thrown out, the chemist in question had inserted an advertisement in the newspapers, to the effect that his establishment was excellently managed, and would continue to give every satisfaction to the public. He (the Marquis of Westmeath) was sure that his noble and learned friend on the woolsack would admit that an end ought to be put to the administration of medicine by incompetent and irresponsible persons.

The Lord Chancellor said, the subject had been under the consideration of the Government, but it was almost as difficult a one as could be dealt with. It must be admitted that frequent instances of the nature alluded to had occurred; but he was afraid that an enumeration of poisonous articles sold in chemists' shops, with the view of preventing their being improperly bought or administered, would rather arrest the attention of such persons as desired to administer deadly poisons than tend to the decrease of unfortunate cases, such as that at Weymouth. Difficult, however, as the subject was, the Government were engaged in considering it; and if it were possible, they would introduce a Bill with regard to it; but he could not give any pledge. It had been suggested that chemists should be compelled to take out licenses for the sale of drugs; but that would be a poor remedy, for, whatever directions might be given as to their sale, chemists would occasionally leave their shops in the management of persons incapable of attending completely to its business. It was impossible for the Legislature to provide against all cases of carelessness in the sale of drugs.

The Marquis of Clanricarde suggested the desirableness of adopting in this country the practice which prevailed in Russia as to the sale of poisons, and which was this—a chemist or private individual who had poison in his possession was subject to a heavy fine if it was not enveloped in a paper of a certain colour.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

MARRIAGES.

Bond—Harrison. Bond, J. C. K., Esq., Civil Surgeon H.E.I.C.S., to Julia, only surviving daughter of John J. Harrison, Esq., of Hill Street, Brompton, at Moulmein, Burmah, on December 29th, 1856.

Halford—Millar. Halford, George Brittan, M.D., to Louisa, eldest daughter of Thomas Millar, Esq., of Birkenhead, on March 16th.

Havelock—Waller. Havelock, William Henry, Esq., to Augusta Caroline, eldest daughter of Dr. Waller, Garrison Surgeon, at Belgaum, Bombay Presidency, on January 8th.

DEATHS.

Halahan. On March 20th, at Woolwich, Elizabeth, youngest daughter of Dr. Halahan, Deputy Inspector-General of Hospitals, Royal Artillery.

Marsh, Edwin Booker, Esq., Surgeon, at Shaftesbury Villas, Kensington, of scarlet fever, aged 29, on March 20th.

Verity, Richard, M.D., at Dean Lodge, Bedfordshire, aged 69, on March 18th.

*Vise. On March 19th, at Holbeach, Lincolnshire, Sarah, wife of Edward Blithe Vise, Esq., Surgeon.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, March 20th, 1857:—

Bateson, John Moses, Kirkby Lonsdale
Bell, John Henry, Bradford
Clapton, William, Stamford
Field, James, Bradford, Yorkshire
George, Charles Frederick, Kirton-in-Lindsey
Hayward, John Robert Samuel, Bristol
John, Walter, Penzance
Lys, Francis Daniell, Lymington
Oppenheim, Lewis, Army
Parr, James, Merion, co. Dublin
Stilwell, Henry, Uxbridge
Tibbits, Walter Hugh, Warwick
Woodhouse, Thomas James, Hackney Road

Wednesday, March 25th:—

Biddle, Henry Cooper, Edmonton

Caird, William Edward, Exeter
Evans, Abel, Llandyssil, Cardiganshire
James, John Davies, Bedwellty, Monmouthshire
Pughe, Hugh Richard, Bala, North Wales
Radley, William Hepworth, Doncaster
Russell, John, Durham
Smith, William Josiah, Gibson Square, Islington
Thomas, John, Cardigan
Wood, William, Liddington, Gloucestershire

Apothecaries' Hall. Members admitted on Thursday, March 19th, 1857:—

Bailey, John Henry Trollope, Coleshill
Bell, John Henry, Bradford
I'anson, William Andrew, Newcastle-on-Tyne
Laver, Henry, Paglesham, Essex
Morgan, George Blacker, Dublin
Murphy, William Ponsonby, Harrington
Roberts, David Watkin, 56, Manchester Street
Sibbald, John, Edinburgh
Thorburn, John, Manchester
Williams, Joseph, Westerleigh, near Bristol

HEALTH OF LONDON:—WEEK ENDING MARCH 21st, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London, which in the previous week was 1156, was in the week that ended last Saturday 1195, of which 627 were deaths of males, and 568 those of females. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1198, which almost entirely agrees with the number now returned; but as last week's deaths occurred in an increased population, the average must be raised, for the purpose of comparison, proportionally to the increase; in which case it will become 1318. Hence it appears that 123 persons survived last week, whose names would have been inscribed on the registers, if the average rate of mortality had prevailed.

As has been shown in recent returns, the diseases classed under the general term "zymotic", and the most important of of which, with the exception of typhus, are fatal principally to children, exhibit in the aggregate a considerably reduced rate of mortality. The deaths referred to this class are in the present return 197; the corrected average of corresponding weeks is 254. The decrease appears under small-pox and typhus (or common fever); the former was fatal in four cases, the average being 15; the latter in 24 cases, the average being 51. Scarlatina, which carried off 27 children, and hooping-cough, which carried off 58, both make a close approximation to their averages. Twenty-six children died of measles, a number which very slightly exceeds the average. Seventeen persons died of diarrhœa. On reference to the Table of Epidemics, it will be seen that the deaths from the six diseases which have just been specified, occurred in proportions not very dissimilar throughout the different parts of the metropolis; but that the four sub-districts which compose East and West London, contributed only four out of the 157, and the City none, which is in part to be explained by the fact that this portion of the metropolis is in a less degree than others occupied by the younger members of families. The deaths from bronchitis rose last week to 164.

Eight nonagenarians died in the week; the oldest were a nurse, who died in Walworth at the age of 94 years; a gentleman, who died at the same age, in Upper Charlotte Street, Tottenham Court Road; and a widow, in the German Jews' Hospital at Mile End, who had reached the age of 99 years.

A man died in the sub-district of Finsbury St. Luke from privation; a horse-hair drawer from glanders; a person from intemperance; and four persons from carbuncle.

Last week the births of 939 boys and 916 girls, in all 1855 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1603.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·719 in. The highest reading in the week was 29·90 in., on Saturday. The mean temperature of the week was 45·1°, which is 3·3° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average till Saturday, when it was 6·2° below it. The air was warmest on Wednesday, on which day the highest temperature of the week occurred, and was 66·2°, and the mean temperature was 53·2°, which is 11·4° above the average. The lowest temperature of the week occurred on Tuesday and Saturday (the latter a bitterly cold day), and was 33·0°; and the entire range of temperature in the week was therefore 33·2°. The mean dew-point temperature was 39·7°, and the difference between this and the mean temperature of the air was 5·4°. The wind blew first from the south-west, afterwards from the south-east, then from the east, and on Saturday afternoon changed to north-east. Rain fell to the amount of 0·33 in., nearly all of which was melted hail that fell on Sunday (the 15th), on which day the horizontal movement of the air was 310 miles. On Thursday, the motion of the air was only 5 miles.

Proposed Testimonial to W. Sands Cox, Esq. A meeting of the Committee for promoting the testimonial to Mr. Sands Cox was held on Monday afternoon, at the Queen's College, Birmingham; the Mayor (John Ratcliff, Esq.) in the chair. The Mayor said that all then present were doubtless aware how Mr. Cox had spent five-and-thirty of the best years of his life in carrying on works which had become an ornament and an honour to the town. The noble building in which they were met, and also the Queen's Hospital, originated in lectures which Mr. Cox delivered in the back parlour of his father's house; and not only had he been the founder of these institutions, but he had been their chief supporter from the time of their establishment until now. Birmingham had in more ways than one reaped the benefit of Mr. Cox's exertions. He had established in it a School of Medicine, which had become famous and respected throughout the country; but, not content with this, he had made all the skill and talent thus brought together available for the service of his poorest townsmen. This he had not done without a large amount of self-sacrifice. The ability of Mr. Cox as a surgeon was not known in Birmingham alone, but throughout the length and breadth of the land; and there could be no doubt that, if he had confined himself to his professional duties, he would have amassed a large fortune long ere now. This fortune, therefore, he might be considered as having given away for the benefit of the town. He (the Mayor) thought the time had arrived when Birmingham and the district around should mark its sense of the recognition which such continuous work for the public welfare merited. He hoped that, ere they separated, they would make arrangements for thoroughly canvassing the town, as he felt sure the public would readily respond to such an appeal. Mr. Suckling, the Honorary Secretary, stated that subscriptions had already been received to the amount of nearly £900. Mr. Wilmot moved the first resolution, to the effect that those present would cordially cooperate for the carrying out of the object of the meeting. He felt much pleasure in being present to bear testimony to the talents and disinterestedness of Mr. Cox, who had devoted so much of his life to the establishment of two such noble institutions as the Queen's College and the Queen's Hospital. That his exertions had been crowned with success, was a subject of great congratulation, as hospitals especially were really among the noblest and best institutions of the country, and less liable to abuse than other public charitable trusts, for they were open to all classes of persons, irrespective of their religious or political opinions: and persons would not break their limbs or feign sickness for the sake of a hospital ticket; and he believed charitably disposed persons could not do better, if disposed, in settling their affairs, to do good, than leave some portion of their property to such institutions. Mr. S. Haines seconded the resolution in a brief speech, in which he referred to his long connexion with Mr. Cox, who, he said, had not only devoted his days, but also many of his nights, to the promotion of the success of his undertaking. He perfectly agreed with Mr. Wilmot in every word he had said respecting the benefits of such institutions. The motion was put, and carried unanimously. Resolutions in favour of a canvass of the midland districts, and other measures for carrying out the object of the Committee, were moved and seconded by Mr. Busby, Councillor Upfill, Mr. G. B. Knowles, Mr. Suckling, Mr. Boucher, and Mr. J. W. Walsh, and adopted. The meeting was then adjourned till the 20th of April.

Testimonial to David Johnson, Esq. On March 9th, the students of the General Hospital, Birmingham, presented Mr. David Johnson, late house-surgeon to that institution, with a silver cup and snuff-box, as a testimonial of their esteem and regard, and of their appreciation of the ability shown by him in the execution of the duties of his office, which he has held during the last four years.

St. Bartholomew's Hospital. The students of this hospital lately invited Mr. Holden, one of the teachers of the school attached to the hospital, to an elegant entertainment at Anderton's Hotel; Mr. Callender, F.R.C.S., in the chair. After the usual loyal toasts, the chairman, in a neat and appropriate speech, deservedly eulogistic of Mr. Holden, presented that gentleman, on the part of the students, with a handsome silver dinner service, and an address in the following terms:—"To Luther Holden, F.R.C.S. Sir,—We, the undersigned students of St. Bartholomew's Hospital, appreciating the able and willing assistance you have rendered us as a teacher, and the kindness and cheerfulness with which you have aided our studies as a friend, beg your acceptance of this memorial, together with the accompanying testimonial. We desire also to express our deep sense of the obligation we are under for the many valuable anatomical preparations and diagrams you have contributed to the museum and dissecting rooms, and the able literary productions by means of which you have so simplified our professional studies." The service of plate has engraved on it the crest of the recipient, and the simple inscription, "To Luther Holden, from the students of St. Bartholomew's Hospital, 1857." Among the teachers present were Drs. Baly and Kirkes, and Mr. Paget.

Witchcraft in the Nineteenth Century. A trial took place on March 20th, at the Spring Assizes in Stafford, before Mr. Justice Willes, which curiously illustrates the amount of superstition still prevalent in the nineteenth century. A young and apparently respectable farmer, named Thomas Charlesworth, resides on a small farm near Rugeley. Some sixteen months ago he married a young woman in his own station of life, but the marriage displeased his widowed mother, who had been living with him; and she left, cautioning him before her departure not to attempt to make cheese, as it would be sure to tumble to pieces. Cheese-making was prosecuted, but with little or no success, the milk refusing to turn, or, if a cheese perchance were made, it was certain to fall to pieces. The farmer and his wife and the dairymaid also were ill, without any ostensible cause. The farmer came to the conclusion that he was "bewitched"; and, by the advice of a neighbour, consulted a "wise man," named James Tunnicliff. This man proffered his services to remove the dire calamity, and next morning he made his appearance on the farm. Without seeing the cows he pronounced them bewitched, and the cheese-kettle he declared to have fallen under the same curse. He could remove the enchantment, but money would be necessary, and forthwith the simple farmer paid him about £7 for removing the spell. Things, however, did not mend at the farm; on the contrary, the wife was occasionally seized with sickness, the husband suffered from unaccountable aches and pains, especially after Tunnicliff had been on the farm, and at night there were mysterious noises, accompanied by the shaking of the house, bellowing of the cattle, howling of dogs, etc. Tunnicliff represented the state of the farmer and his wife, and the extraordinary noises, to have arisen from the "widow's curse," and the enchantment put upon them through her instrumentality by wizards. More money was required; and Charlesworth freely parted with his money to the amount of £22, but the farmer and his wife derived no benefit. Tunnicliff at length resided with the farmer and his wife several months, during which period he was engaged at intervals in making crosses on all the doors with witch hazel, and in burning blue and other lights. Things went on in this way from April, last year, until February last, when at length the suspicion arose that Tunnicliff was contributing to their illness by drugging them, and that the extraordinary noises about the premises were occasioned by him. Ultimately Tunnicliff was sent about his business, and in the end, having been brought before the magistrates on the charge of obtaining money under false pretences, he was committed for trial. He has been found guilty, and sentenced to twelve months imprisonment with hard labour. (*Times.*)

A Substitute for Silkworms. Happily, there would seem now to be little need of the *eria*, or the Chinese silkworm, or of the cocoon of commerce, for the production of silk will ere long, in all probability be derived, not from the worm, but the leaf on which it has hitherto existed. It is now not the breeding of the insect, but of the mulberry tree—that species which was its only food, and which from that circumstance gave the *savant* the cue that led to his making the intimated discovery. His name has not yet been announced, although we should imagine it was none other than Signor Lotteri, who, in the course of last year, fully ascertained that a silky substance could be procured from the bark of the mulberry tree, and that by maceration good silk, and paper also, could be easily prepared therefrom. The *savant* in question, ruminating, it is said, on the circumstance of the silkworm living on one description of food, came to the conclusion that "the silky substance must lie not in the animal, but the vegetable matter" which supported it. He therefore "analyzed the composition of the mulberry-leaf, and, by boiling it to a thick paste, produced every description of silk in immense quantities." Such a substance being obtained from that species of leaf, it is not at all unlikely that from the Chinese oak and the castor-oil plant a somewhat similar result might be obtained. Be that as it may, and the truth of the other being shortly corroborated, neither Moreton-bay need sigh for the introduction of the cotton-plant, nor the northern and southern States of America shed their blood for the suppression or in the defence of slavery, nor England much longer play the hypocrite by condemning that accursed "institution" with one breath, and with another admitting the expediency of, at all hazards, strenuously upholding it. This is the land—every land within the temperate zone is, more or less—favourable to the rearing of the vine, the mulberry, and the olive. Every one, therefore, the possessor or occupier of a small spot of ground therein, may rear the great substitute for cotton, and, in so doing, weaken more and more this lamentable and apparently indispensable adhesion to slavery. He may "put money in his purse"; and, clothing his family and himself in "silk attire"—such as Imperial Cæsar had not dared to wear—drawn from the branches that give him shade and refreshing sustenance by day, and by night afford him the sleep of contentment, he may well thank Heaven that he is permitted to reap the fruits, though he have shared not the labours, of the thoughtful and perhaps ill-recompensed analyser of the enigmatical phases of nature. He may cheerfully and confidingly believe thenceforth that in the varied productions that she surrounds him with lie hid the main causes of the world's progress, and the renewing sources of peace and goodwill to men. (*Sydney Empire.*)

Negro Hospital at Charleston. Drs. Cain and Chisolm have opened a hospital, at No. 4 Wilson Street, Charleston, for treatment of the diseases of an important class of our population. Negroes, labouring under any form of disease, medical and surgical, except those that are contagious, are received into its wards. The establishment of such an institution has long been a desideratum; the necessity for its existence being so obvious as to need no argument to enforce the fact. To residents of the country, especially those by whom the city is easily accessible, does it particularly commend itself. The building is warm, plastered; has commodious rooms, and is in every respect comfortable; due regard being had, at the same time, to proper ventilation. The charges for attendance are the same as in private practice. (*Charleston Medical Journal*, January 1857.)

Medical Protective Society of Cork. This Association held its half-yearly meeting on the 12th March, Dr. Harvey in the chair. Dr. Armstrong read a report recapitulating the objects of the body and its proceedings since its formation; reminding the members that it is an extension of the Cork Medical Committee which commenced operations ten years ago by agitating against the five-shilling measure of the Board of Health then in the ascendant. The report proceeds to record that it was by the exertions of this Committee fair remuneration and respectful treatment was secured for the medical officers during the outbreak of cholera in 1849; and that to it also is due the assertion of an important principle which led to the cancelling of an appointment made by the Master-General of the Ordnance of an unqualified person to fill a medical situation. The Committee also takes credit for successfully resisting the appointment of an apothecary to take charge of the Military Hospital at Queenstown and causing his removal, as well as for the reversal of the decree which enjoined the dismissal of a dispensary physician, with many other public acts equally beneficial to the profession which our limits do not permit us to enumerate this day, but which we propose to do more in detail in our next number. Dr. Corbett alluded to the somewhat mysterious affair of a personation which took place in a dispensary in this county, never properly exposed or punished, but which may, by the exertions of the Committee, be used for the purpose of exposing such doings which are perhaps more frequent than people think. (*Dublin Medical Press.*)

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

AMPUTATION AT THE HIP-JOINT.

Under the care of E. STANLEY, Esq.

CASES of amputation at the hip-joint have been comparatively both frequent and, on the whole, successful, in the London hospitals of late; at least they have been so far favourable that the two last cases which we can call to mind, that by Mr. Curling, at the London Hospital, and Mr. Tatum, at St. George's, recovered from the operation, and survived some months. Both, however, died in about half a year, from the recurrence of malignant disease in the lungs. The case operated on last Saturday by Mr. Stanley was a more than usually formidable one, in consequence of the proximity of the tumour to the upper end of the bone, and the consequent impossibility of removing the limb by the common flap operation. This rendered the present operation a much less brilliant proceeding than it appears when the whole limb is removed in a minute, or less, by a few strokes of the amputating knife, but allowed, perhaps, quite as much, if not more, opportunity for the exercise of the best qualities of an operating surgeon. The patient, a man aged 52, of not very robust frame, had fractured his thigh about three years before, when he was an inmate of St. Bartholomew's Hospital. The tumour had commenced at or near the seat of the old fracture, nine months before the date of his admission, and had gradually increased up to the present time. It was of large size, and extended up from the middle of the thigh to the upper end of the femur. There appeared to be just sufficient room to remove the limb from the articulation, leaving enough soft parts to form the stump. This, however, could only be effected by cutting the flaps from the skin downwards, by such incisions as seemed advisable in each part, and securing the large vessels in one part before going to the next. Accordingly a small flap was cut from the front portion (Mr. Paget having command of the artery), and then the femoral and other large vessels were secured in this flap. A portion of soft parts was then obtained from the inside, where the disease seemed to encroach least, and the joint having been opened from the outside, the limb was removed. Little of the flap could be made from behind, and the stump in this part consisted, as it seemed to us, principally of skin. The bleeding, considering the necessarily protracted nature of the operation (which took twelve minutes from the time of the first incision till the final removal of the thigh), was not very formidable, and the soft parts, when put together, formed a very good covering for the bone. The acetabulum appeared quite natural, and the muscles in the flap looked healthy. The disease proved to be cancer, of the medullary variety. The result of this case will be given as soon as circumstances permit.

ST. MARY'S HOSPITAL.

OPERATION FOR RECTO-VAGINAL FISTULA AND PROLAPSE OF THE WOMB.

Under the care of I. B. BROWN, Esq.

AN interesting example of complicated deformity following parturition is now under Mr. Brown's care. The patient was confined about a year ago: the labour was difficult, and the perinæum was ruptured at the time; but the rent did not appear to have involved the sphincter, and had healed up, apparently without any symptoms. There was a hole through the recto-vaginal septum just beyond the internal sphincter, large enough to admit the end of the finger, through which the motions flowed continually into the vagina. Besides this there was complete prolapsus of the uterus, so that when she stood up the whole body of the organ protruded from the vagina; and even as she was brought into the theatre in the recumbent position it was found that the os and cervix were outside of the vulva.

The operation which Mr. Brown performed on March 25th had for its object to remedy both these conditions. With this view, the mucous membrane was extensively pared away from the lower and back part of the vagina, and thus a raw surface was obtained extending around and beyond the cleft. The sphincter ani was next divided freely in the middle line posteriorly, and then the parts were united over this line of incision. Thus the calibre of the vagina was much contracted, and so an obstacle opposed to the descent of the uterus, as in the ordinary operation for that affection, while the communication between the rectum and vagina was also obliterated. The parts were brought together by the same suture as Mr. Brown employs for ruptured perinæum, viz., the quilled suture passed deeply from side to side, and the interrupted suture to the edges. On examination after the stitches were tied, the fissure was found completely closed.

WESTMINSTER HOSPITAL.

I. BELLADONNA IN INCONTINENCE OF URINE.

Under the care of C. BROOKE, Esq.

[*From notes by* G. NAYLER, Esq., *House-Surgeon.*]

FREDERICK T., aged 17, an intelligent lad, was sent up from the country to be placed under Mr. Brooke's care for incontinence of urine. From his own statement it appeared that he rarely passed a night without wetting the bed. He had been under treatment for two months previous to his admission, but without benefit. On his admission (March 18th) he was ordered to take the sixth of a grain of extract of belladonna three times a day. A daily record of his case was kept; but with the exception of the first night, when he passed water once, he was not troubled in this respect again. In a fortnight from the time of his admission (March 31st) he was considered sufficiently recovered to be sent home again.

REMARKS. This case exhibited an even more speedy improvement under the action of belladonna than the one previously reported from the same Hospital. It was indeed in consequence of the report of that case which appeared in this JOURNAL that the gentleman under whose care the lad then was advised his removal to the Westminster Hospital; and in consequence of the animadversions of Dr. Cowdell upon that case, particular attention was paid to this lad, and daily notes kept of his progress. The amendment which followed the use of belladonna was too striking to be overlooked. The lad's own account of his previous symptoms (viz., that he had been troubled with this distressing malady as long as he could recollect, and hardly ever passed a night without involuntary discharge of urine) was corroborated by a letter received from those who had charge of his case. Yet after the commencement of the belladonna treatment the symptoms subsided so rapidly and so entirely, that it was not thought justifiable to keep him longer in Hospital; and, in default of a better expression, it was necessary to report him "cured." We shall hope to hear again of this patient in order to know whether the disease recurs on the cessation of the remedy, or whether the cure is really permanent.

II. BELLADONNA IN THREATENED LACTEAL ABSCESS.

Under the care of B. HOLT, Esq.

While on the subject of the curative action of belladonna, it may be useful to record another instance of benefit derived from its use in a case similar to some previously reported in this JOURNAL.

Sarah W., aged 23, a healthy young woman, was admitted under the care of Mr. Holt, March 19th, on account of an abscess of the left breast which had been opened three days before her admission. Seven days after her admission she complained of pain in the right breast, which was much enlarged and tender to the touch; and on manipulation a hard lump could be felt deep in the gland. She had been suckling a child till a few days before her admission into the house, since which time the milk had been removed by a breast-pump. The pain and swelling were evidently referrible to the confinement of the milk secreted; and in consequence of reports of cases in this Journal in which this secretion had been stopped by the use of belladonna, it was resolved to give it a trial. The following ointment was therefore applied daily, spread on lint: One drachm of belladonna to an ounce of spermaceti ointment. Much relief immediately followed, the pain and swelling soon subsided, and on March 31st she was well enough to be discharged. The only treatment besides the application of belladonna consisted in the use of local support and of tonics, both of which she had been using previously.

HOSPITAL FOR SICK CHILDREN.

NECROSIS OF THE LOWER END OF THE SHAFT OF A LONG BONE IN CHILDHOOD.

Under the care of A. Johnson, Esq.

An operation which was performed at the above Hospital on March 27th, affords another illustration of the fact pointed out in a recent number of this Journal, viz., that necrosis of a limited portion of the shaft of a long bone near its articular end is much more frequent in children than is usually supposed. The patient in this instance was a little boy, who had suffered for several months from symptoms of disease of the ankle. There was much thickening of the lower end of the tibia from the deposition of new bone, but the articulation itself seemed quite free from disease. A sinus at the posterior border of the tibia, a short distance above its malleolar extremity, led into a cavity in the substance of the bone in which dead bone was easily felt with the probe; and on this opening being enlarged with the trephine two portions of loose bone were easily found and extracted. When put together, they were found to be about as large as a hazel-nut. All the parts in the neighbourhood seemed healthy.

ST. GEORGE'S HOSPITAL.

LIGATURE OF THE FEMORAL ARTERY FOR ANEURISM, AFTER THE UNSUCCESSFUL EMPLOYMENT OF PRESSURE.

Under the care of T. Tatum, Esq.

An instance of the failure of the treatment by compression was witnessed here on March 16. The patient, an apparently healthy man, had been admitted previously with a small popliteal aneurism. The case seemed a simple one, and well adapted for the treatment by compression; as the sac was small, there was no implication of the knee-joint, nor any pressure on the venous or nervous trunks, and the man was in good health. Accordingly pressure was employed in the usual manner, and at first with good results. The pulsation diminished in power; solids began to be deposited in the sac. He bore the treatment well, and appeared well disposed to second the wishes of his attendants in regulating and directing the pressure. Still it was noticed that the size of the tumour did not much diminish. After three weeks use of the pressure it was omitted, as the pulsation had entirely disappeared. Nevertheless, the swelling did not subside; and after a few days it became obvious that it was, on the contrary, increasing, though no pulsation could be felt. The pressure was, therefore, resumed, and, as before, was borne perfectly well, but did not appear to produce any benefit, as the swelling continued slowly to enlarge, and an indistinct pulsation was thought to be perceptible in it. A consultation was now held as to the propriety of tying the artery; but as it was thought that the symptoms were not very urgent, and as it was possible that some error might have been made in the direction or application of the force, it was resolved to continue the pressure for a few days more, and even increased attention was given to the latter point. On the day before the operation, however, it was noticed that the tumour had nevertheless increased, and in the course of that day, after a severe attack of pain, the size of the swelling suddenly increased, and the diffused character of the semi-solid tumour left no doubt as to the rupture of the sac. The operation had now become imperative, and was accordingly performed in the usual manner, by taking up the artery in Scarpa's triangle. Notwithstanding the lengthened employment of pressure, the cellular tissue did not appear in any respect unhealthy, and the artery was found as readily as is ever the case in persons who, like this patient, are of large and stout build.

Remarks. In commenting on this case Mr. Tatum remarked, that the temperature of the foot had appeared, to those who were standing round the patient, to have fallen somewhat immediately on the ligature of the vessel, on which account the limb was swathed in cotton-wool before the man was removed from the theatre. He dwelt also on the unfavourable influence which the pressure of so large a mass in the ham, obstructing as it did the return of the venous blood from the foot, might have on the progress of the case. Otherwise the circumstances were tolerably favourable, as the man's health did not seem to have suffered, and no other disease was known to exist.

Original Communications.

CONTRIBUTIONS TO THE PATHOLOGY OF CARDIAC DISEASES.

By W. O. Markham, M.D., Fellow of the Royal College of Physicians, Assistant-Physician to St. Mary's Hospital.

OPEN FORAMEN OVALE: LOUD SYSTOLIC BRUIT: TUBERCULOSIS OF THE LUNGS: CAN AN OPEN FORAMEN OVALE PRODUCE A BRUIT?

C. S., aged 4, had always been considered a delicate child. A year ago, she was, for some cause, under the care of my friend Dr. Sieveking, but had since then enjoyed good health up to the period of my seeing her. On Feb. 7th, 1857, the child was brought to the hospital by the mother, who informed me that she had been ill about three weeks, that she was falling away, had become thin and pale, had lost her appetite, and was occasionally sick; that she was also fretful and irritable, and had an occasional slight cough. On examining the chest, I found a rough loud systolic bruit, which was audible all along the base of the heart, and in the whole of the left subclavicular region; it was indistinctly heard below the nipple, and was scarcely audible at the heart's apex; its point of greatest intensity was to the left of the upper part of the sternum; it was not audible up the right edge of the sternum, along the course of the aorta. I found nothing abnormal in the sounds of the lungs, excepting only that I believed the subclavicular region of the left side was slightly duller, on percussion, than that of the right side. Taking into consideration the general condition of the child, the peculiar situation of the bruit, the absence of all symptoms of cardiac disease, and the possible presence of a left clavicular dull percussion-sound, I formed the diagnosis that the child was suffering from tubercular disease of the lungs; though at the same time, on account of the absence of other signs and symptoms of pulmonary disease, I placed a query by the side of the diagnosis entered on the paper.

During the following ten days, under the use of cod-liver oil and steel, the child appeared to improve in health. On the 18th, however, about twelve days after I had first seen her, she was brought to me, greatly altered in appearance. The mother informed me that, on the preceding evening, the child (who, up to this moment, seemed still improving) had been suddenly seized with violent convulsions and great difficulty of breathing, and that she had been struggling and fighting for life the whole of the night, the mother expecting that every moment would have been her last.

It was evident now that some serious mischief had fallen on the brain. Instead of being, as hitherto, restless and irritable, and hard to manage, she lay in her mother's arms, sleepy and drowsy, stupid, difficult to rouse, and partially senseless. There were also convulsive twitchings and jumpings of the right shoulder, but no paralysis. The face was flushed, the pulse rapid, and the skin hot and dry. There was no cough, nor was the respiration particularly affected: she breathed freely, in fact. On examining the chest, I found the heart's action violent; the bruit mentioned above was still present, but it was

now louder, rougher, and more prolonged; it was distinctly audible over the whole præcordial region, also over the upper part of the sternum, and along its right border. It was also heard remarkably loud in the whole of the upper half of the interscapular space—equally loud on either side of the spine. The lungs were carefully examined, but nothing abnormal could be detected in any portion of them. A note was made at the moment, that the respiratory murmur was every where loud and clear, and the percussion-sound good. Not the slightest râle was anywhere audible.

I may here observe, that the child was not altogether free from symptoms of cyanosis. It is true they were so little marked, that I should not have noticed them, had not the mother called my attention to the circumstance, that the child's feet were generally cold, and often of a blueish red colour; and that the small veins immediately around the nails of the hand were swollen and dark coloured. The serious condition of the child at the moment entirely distracted my attention from this particular fact.

Taking into calculation the signs and symptoms here recorded, I came to the conclusion that the child was now suffering from cardiac inflammation. I founded this opinion on the violence of the febrile action, the intensity and now wider distribution of the cardiac bruit, and the absence of signs and symptoms of pulmonary disease. The choreic twitchings of the arms, the strong beatings of the heart, and the cerebral symptoms, confirmed the opinion, that there was cardiac inflammation, and that the disease had secondarily involved the brain.

The child died about seventeen hours after I had seen her, and had made the above examination.

Necropsy of the body revealed the following condition of the heart and lungs. The *Heart* presented, neither externally nor internally, the slighest trace of inflammation; nor was there, as far as the eye could judge, any deviation from their normal condition observable in any of the valves or of the orifices of the organ. There was neither constriction of the orifices, nor of the roots of the great vessels, nor any defect in the valvular apparatus. In all respects, the heart appeared healthy and normal, excepting one, and this was in an open condition of the foramen ovale. The foramen ovale, though largely open, so as to permit the point of a finger to pass from the right into the left auricle, was partially closed, on the left side of the septum, by a peculiar adjustment of the membranous valve. This membrane, about one-third of an inch wide, was attached at the upper and lower parts of the opening, but at its intermediate parts was free and unattached; in consequence of which, it would permit a stream of fluid to pass readily from the right into the left auricle; but, should the current tend to pass in an opposite direction—from the left to the right auricle—then the membrane, falling back on the opening, and acting as a valve, would prevent the flow of the fluid, excepting through two narrow semilunar slits which still remained unclosed, one on either side of the membranous valve.

The *Lungs* were dark coloured, and did not contract much when the thorax was opened. On incising them, I found that there was not a single portion of any lobe of either lung which was not studded with miliary tubercles. These tubercles, about the size of mustard-seeds, were equably distributed through all parts of the lungs, and were evidently deposited at a similar moment, for they all presented exactly similar appearances: they were placed at intervals of about half an inch apart. The lung-tissue intervening was perfectly healthy and crepitant, and readily distensible by inflation. Very little bloody serum escaped from the cut surfaces of the lungs, nor was any observed in the larger bronchial tubes.

Remarks. Such was the history of the physical signs and symptoms carefully taken during life, and such the condition of the heart and lungs found after death, in this very interesting case. One or two points of considerable importance, affecting the diagnosis of the diseases of the heart and lungs, appear naturally to suggest themselves for consideration in connexion with the history.

What was the cause of the cardiac bruit? and how came it, that, with such a large and extensive deposition of tubercles in the lungs, no physical signs of disease of the pulmonary organs were present, when the chest was examined only seventeen hours before death, and that the respiratory murmur was then loud and clear, the percussion very good, and no râle anywhere audible?

When I first saw the child, I imagined that the bruit was in some way connected with, and in fact indicated, tubercular disease of the upper lobe of the left lung; for, as is well known, we occasionally meet with a bruit in such case at the left of the sternum, taking the direction of, and therefore supposed to have some connexion with, the pulmonary artery; the hypothesis being, that the artery or its branches are at some point compressed by the swollen mass of the tubercular lung. The history and cause of such bruit, however, I may observe, are very obscure; and, whether the condition mentioned be the true one or not, it is very clear, from the nature of the bruit heard in the present case, its extent, its loudness, and the position where it was heard most intensely, that it is not to the tubercular condition of the lungs that we must look for its explanation.

It seems, then, not unnatural—as the valves and orifices of the heart itself were normal, and as no change of structure could be found in the aorta, or in any of the parts around the great vessels at the root of the lungs—to suggest, that the bruit had its origin in the open foramen ovale. On any other supposition, the bruit seems inexplicable. But here we are met with the difficulty, that, in all cases of open foramen ovale hitherto met with in which bruits have been heard during life, there have been found (where examinations have been made after death), in addition to the open foramen ovale, abnormal conditions in other parts of the heart, or of the great vessels, such as of themselves might be considered sufficient to produce the unnatural sound.* And then, again, it is asserted, *à priori*, that, from the very nature of the parts implicated, it is scarcely possible a bruit could be produced from an open foramen ovale. Let us consider shortly the value of these two objections.

I may, in the first place, safely conclude that, in this heart, there really did exist no abnormal condition beyond that of an open foramen ovale; for the organ was submitted, at the Pathological Society, to the inspection of some of our most distinguished cardiac pathologists, and they could discover none other.

If we consider the question, we shall find, that the fact of some other abnormal state of the heart having been always found present, coincidently with an open foramen, in cases where the bruit had been heard during life, does not militate against the idea, that an open foramen ovale may of itself, under certain conditions, give rise to a murmur. For is it not very possible that such murmur may have been present in many cases simply of open foramen ovale, but was not discovered during life, because the disturbances to the circulation, produced by the simple lesion, were not of themselves of a nature marked enough to excite attention? In cases, and these are the most ordinary kind, where the pulmonary artery is at the same time constricted, it is evident that disorders in the heart's action must ensue, such as would inevitably demand notice. Cases where the foramen ovale must have been partially open during life, and yet where no symptoms to mark the fact had been observed, are frequently met with; and assuredly, in the majority of these cases, it would be a complete begging of the question to affirm, that no murmurs really existed during life. It is more correct to say that, in the very great majority of cases of simple open foramen ovale, disturbances in the circulation do not occur, and therefore no examination of the heart is made during life. Practically speaking, how many cases are there on record, where simple open foramen ovale has been found after death, in which the observer can affirm that no murmur existed during life? I suspect, very few; and if so, then it follows, that there is no evidence positively demonstrative of the non-existence of such a murmur; and that the objections to it are purely hypothetical.

In the next place, why should we judge such a bruit to be improbable, on account of the nature of the conditions under which it must be produced? Let us shortly consider what these conditions are. It must be remembered that the bruit was heard during the time of the systole of the heart's ventricles, and must have therefore been *coincident with the diastole of the auricles*. A bruit arising at an open foramen, coincidently with the systole of the auricles of the heart, appears to be an impossible occurrence, for the reason that (the foramen being open, and consequently the blood in the two auricles freely communicating) the pressure on the blood during the auricular systole would be equal in both auricles, and consequently there would be no tendency of currents of

* Dr. Walshe, who must be as well acquainted as any one with the real position of the case, states in his work on the *Heart and Lungs*, p. 711:—"I do not know that we are in a position to assert positively, that patency of the foramen ovale will in itself cause murmur; for in all the records that I have met of the coexistence of the two things, either constriction of the pulmonary orifice is actually stated to have existed, or it may have existed."

blood to pass from one auricle to the other. But a very different condition of things obtains during the diastole of the auricles; then, the blood, rushing from the venæ cavæ and the pulmonary veins into the relaxed auricles, might readily find its way through an open foramen ovale, and, under certain conditions, conceivably produce such vibrations as would be represented by murmurs to the ear of the auscultator. How, indeed, can it be asserted with confidence, that, in those cases of open foramen ovale associated with other defective conditions of the heart, in which murmurs were heard during life,—how can it be asserted, that none of the murmurs ever arose at the open foramen? Why is it assumed that they always take their origin in those other defective conditions, whatever they be, of the heart?

In the present case, the anatomical condition of the aperture of the foramen was plainly most favourable for the production of vibrations, viz., a thin membranous band stretched across the opening, and attached only at its two extremities. A current of blood rushing through such an aperture, from the right to the left auricle (and we have seen that the current could not pass from left to right) would hardly fail to throw the membrane into a vibratile state. Any impediment to the passage of the blood through the lungs, and consequently through the right side of the heart, would naturally tend to increase the flow of blood through the foramen ovale, by obstructing its ready exit from the right auricle into the right ventricle. In this case, we must suppose that the tubercular condition of the lung impeded the circulation, and so might have increased the intensity of the bruit, as it was last heard during the life of the patient.

Again, it has been objected that the force of the blood flowing into the auricle from the venæ cavæ is not sufficient to give rise under such circumstances to a bruit. To this I will answer, that great force in a current is not always necessary to produce a bruit, and that under a favourable combination of things a weak current may occasion a very loud murmur. Let me call to mind: a prolonged loud and thrilling diastolic mitral murmur; the roaring bruit, which is so often heard in the necks of anæmic girls, produced by the least pressure of the stethoscope on the cervical veins. Even over the radial artery of anæmic persons I have on two occasions heard a bruit which, if heard over the cardiac region, would have been called a loud blowing murmur. If such currents of blood give occasion to such murmurs, why not one resulting from the rush of blood from the venæ cavæ—the venous trunks of the body—into the right auricle, and then through the open foramen ovale.

For such reasons, I think the objections to the probability of the bruit being in this case formed at the foramen ovale untenable. One argument in favour of the view I hold I have not yet mentioned, though I think it a very powerful one; it is this: If the bruit was *not* formed at the foramen ovale, what produced it? I certainly think it much more rational to believe, that a long and loud bruit, such as this, heard on several separate occasions (and most carefully observed) at a peculiar part of the thorax in front, and loudly also in the interscapular region, arose at the open foramen, than to acquiesce in the proposition that some inexplicable mystery involves the subject. I have given, I think, fair reasons why, *à priori*, there is nothing improbable in the existence of such a murmur; and the facts, as here related, appear to me to justify the conclusion, that a murmur so produced really did exist in the present case.

Another fact of considerable interest was observed in connection with the lungs. I have stated that, seventeen hours before death, a careful examination detected no alteration whatever from the healthy state at any part of the chest, either in the percussion or auscultation sounds of the lungs; and that, nevertheless, there was found, after death, no portion of either lungs in which were not thickly strewn miliary tubercles. The fact that tubercular matter may be deposited, under certain conditions, in the pulmonary tissues, and yet produce no alterations in the physical signs, such at least as our senses can detect, has long been admitted by our best auscultators; but it is one which we have not frequently an opportunity of positively demonstrating, and I venture to think has been of late somewhat overlooked. There are writers, for example, who speak of a pretubercular stage of phthisis; but how do they prove the non-existence of tubercle in the lungs in such cases? Evidently they can only do so by forming their judgment on the absence of those physical signs, which indicate the presence of foreign matters in the pulmonary tissue. How fallacious such a mode of judging is, seems proved by this case. The absence of morbid physical signs is no *proof* of the absence of tubercle in the lungs; and therefore to speak of a pre-tubercular stage of phthisis (or indeed of pulmonary phthisis at all, apart from the presence of a tangible materies morbi in the lungs) appears an abuse of language, unwarranted by true observation or by fair hypothesis. Let me put the case in another form. Would the warmest supporters of pre-tubercular stages of phthisis venture to call *that* a case of tubercular disease of the lungs, in which, however strongly marked during life had been the signs of their (so-called) pre-tubercular condition, no tubercle could be found after death? In this respect, and as demonstrating the difficulties which beset the auscultator, I venture to think this case well worthy of record.

The reasons why physical signs of disease are absent in cases of this nature are, I think, plain. Skoda says: "There are no distinct signs by which we can with certainty diagnose the existence of acute miliary tubercles; we can only surmise their existence. Solitary tubercles do not of themselves produce the slightest change in the percussion-sound of the lungs, even though they be scattered through these organs in very considerable quantity." In this case healthy air-containing tissue intervened between the tubercles; and so no alteration occurred in the percussion-sound. The respiratory murmur was clear and loud; because the air entered freely into all parts of the lungs. There were no râles; because there was no inflammatory exudation; indeed, the tissues when cut across, were, comparatively speaking, remarkably dry.

The pathological specimens on which the above remarks are founded, excited some discussion at the Pathological Society, and I have therefore detailed the case at length. It appears to illustrate a new fact in relation to the origin of cardiac bruits; and to demonstrate a point of great practical significance in the diagnosis of pulmonary disease. In another respect the case is instructive, and exemplifies a well-repeated apopthegm—(too rarely illustrated practically) viz., that our errors are sometimes full of instruction. I know not whether some exceedingly cunning observer might not have escaped the complete error of diagnosis into which I fell; but of this I am sure, that the majority of us would have infallibly agreed with me at the moment in the false diagnosis, had they seen and heard the symptoms and signs as I saw and heard them. At all events, if the views I have taken regarding the origin of the cardiac bruit be correct—and I do not see on what grounds they can be disputed—it is certain that there is established by this case the existence of a source and mode of origin of a cardiac bruit, as yet neither recognised nor admitted in the history of the physical diagnosis of the abnormal sounds of the heart.

ON THE LOCAL ENCOURAGEMENT OF SCIENCE BY THE STATE.

By Henry W. Rumsey, Esq., Cheltenham.

An important question has been mooted at the two last anniversaries of the British Association for the Advancement of Science, namely, "Whether any measures could be adopted by the Government or Parliament that would improve the position of science and its cultivators?"

Before offering any suggestions of my own, I wish to express my unqualified assent to the principal propositions which have been already made by eminent persons, and which are embodied in the printed reports of that association; such as—the institution and liberal endowment of professorships of physical science, where these do not exist in sufficient number and variety, at our universities; the encouragement of the study of physical science by the foundation of scholarships, fellowships, and other similar rewards for proficiency therein; the localization and accommodation of various learned and scientific societies at the cost of the nation, in an appropriate building in the metropolis; and the constitution of a central board of science, composed partly of persons holding offices under the Crown, and partly of men of the highest distinction in science, to whom the Government might refer for aid and advice in the application of national funds, and in the public execution of projects for the promotion of science.

But the object of the following suggestions is to endeavour to show that the Government and Parliament might, with equal reason, be called upon to establish and maintain, in every district of the kingdom, an organised system of scientific investigation and statistical record in the various departments of

natural science,—those especially which bear obviously and practically upon the moral and physical welfare of the masses of society.

At the last meeting of the British Association, Lord Stanley, in his excellent address to the section of Economic Science and Statistics, clearly laid down the principle, that the collection of statistics in all departments is essentially an affair of Government. In this opinion, I most fully concur. Private labourers in the field of statistical research, however earnest, influential, and intelligent, are generally deterred from a continuous prosecution of their investigations, partly by the great expense attending upon casual and isolated efforts, and partly by impediments and objections frequently raised against what has been called "the meddling of unauthorised individuals".

I have elsewhere remarked upon certain defects in our national records of *vital* statistics, owing to—1, the want of accurate verification of original facts; 2, the want of properly-defined spheres for their collection and compilation; and 3, the neglect or omission of numerous particulars, which could be ascertained only by means of a national system of inquiry.

Our *social* statistics, for analogous reasons, are strikingly defective. Here the information obtained is still more dependent upon the particular views of local observers and reporters, and is therefore less reliable.

The collection of *agricultural* statistics also remains an unsolved problem; and will, probably, never be properly or satisfactorily performed, unless under scientific direction, connected with other objects of public utility, and divested of its merely fiscal aspect.

Thus, in the first place, a thorough physiological knowledge of the fauna and flora of any district would be an essential qualification for a Superintending Local Reporter, who ought to be competent to inquire into the occurrence of unusual or morbid conditions of any tribes or species of the vegetable kingdom; to note occasional developments, in air and water, of peculiar forms of insect or animalcular life; to investigate the nature of these phenomena, their connexions, and their influence upon vital or functional changes in the higher order of animals, and in man himself. The same officer would naturally be the chief registrar and compiler of *meteorological* and cosmical phenomena—a field of inquiry which is vastly increasing in extent and interest as regards the practical concerns of life, yet (if we except what is so well done at the Royal Observatory, and by the Meteorological Department of the Board of Trade) cultivated only in localities favoured by the casual residence of philosophical amateurs.

Some such local officer should also be competent to direct *geological* researches, with reference to social objects; as agriculture, drainage, water supply, building, etc.

Again, in the application of *chemistry* to local purposes, whether educational or practical, great necessity exists for highly scientific agents in official position. To determine the composition and qualities of different soils and waters in changing seasons and circumstances; to analyse manures and crops; to indicate the comparative advantages, test the purity, and detect the falsifications of articles sold or used for food and beverage; to ascertain the genuineness of medicines, and to reveal the presence of any poisonous or deleterious agents which may exist in manufactured articles or organic structures;—all these are indispensable duties for a highly qualified *public analyst and histologist*, who should be responsible, not so much to the inhabitants of the locality—*i. e.*, to its producers, manufacturers, and retail dealers—as to the nation in its collective capacity.

Here, then, Government may fairly step in to the aid of science on grounds of *public safety*. It would be easy to show how such an officer would be the most available and competent referee in those forensic inquiries which affect human life, health, and liberty, and which, as they are now prosecuted in this country, serve little more than to bring physical science into contempt, and its adepts into disrepute.

An independent public officer, of high scientific attainments, could alone be relied upon for accurate and trustworthy reports on the effects of various industrial occupations and commercial processes which are suspected to be injurious to the community, or to persons employed in them, especially in crowded populations. The same officer would naturally be the scientific adviser and assessor of local executive boards;* as the *Kreis-physicus* (a physicist rather than a physician) of the German States is to their provincial and district magistrates. An officer of this kind might also act as instructor of the people in matters which connect science with daily life and labour. The public chemical laboratory, with philosophical apparatus and mechanical or industrial models—for there should be such an institute in every district—should be open, under his superintendence, not only for the gratuitous instruction of the people, but for their personal protection, by affording them, also gratuitously, the means of detecting adulteration or decay in articles of daily use and consumption.

The regular statistical reports—which, as I have suggested, might be compiled by some such scientific officer—exhibiting the fluctuations of vital force in man, animals, and plants, under varying physical or climatic conditions, and in connexion with local customs, habits, and arrangements, should be printed and circulated for municipal and popular information in every district. All this could be done without fear, favour, or prejudice, *only* in so far as the required scientific agents be made independent of disturbing local influences. They should be "emancipated from all such interference as is calculated to obstruct the zealous performance of their duties" (See *Glasgow Report, supra cit.*, p. lxii, 1855).

The size and extent of the district in which such a professor or officer might act with advantage to the public, is a correlative question, which I have already discussed both in my *Essays on State Medicine*, and in my paper *On the Territorial Distribution of the Population*, read before Section F of the British Association, at its last meeting.

I do not say that in every district, of the extent suggested in that paper, one such scientific person would suffice as the *sole* authority; that is, as teacher, referee, inquirer, and reporter. On the contrary, I think it probable that the functions of the professor might often be advantageously separated from those of the investigator; and therefore that, in some places, *two* specially qualified person might be very judiciously appointed. It is also probable that certain technical inquiries might sometimes require a further, though perhaps temporary, division of labour. The civil engineer and the analytical chemist are of equal importance in public undertakings.

Moreover, a sufficient knowledge of physiology, as regards living forms generally,—of pathology, in the same wide signification,—of chemistry, theoretical and practical,—of geology,—of meteorology,—and of statistical processes and results,—might not always coexist in the same officer. But a general acquaintance with the natural sciences, official aptitude, power to call in technical aid, or to refer any disputed point to a metropolitan board, and liberty to accept the local co-operation of philanthropic persons more profoundly versed in specialities, are conditions which would render *one* scientific appointment (beside that of a local professor) more beneficial to the public than the creation, in the same place, of several scientific posts, which, from the very circumstance of their number, would of necessity be inadequately endowed.

The scientific offices should be "placed on a level, in respect to salary, with such other civil appointments as are an object of ambition to highly educated men." (See *Glasgow Report, loc. cit.*) By a national provision of this kind, inducements would be held out to students to acquire a knowledge of scientific truths; "and, after the period of pupilage has expired, to extend it, and turn it to useful account;" while "the whole body of competent men of science" would exert "a due influence over the determination of practical questions, dependent for their correct solution on an accurate knowledge of scientific principles." (*Ibid.*, p. xlviii.)

With regard to the power of appointment, we may be sure that extremely few local executive boards, as at present constituted, would be likely to select scientific agents of the highest qualifications; nor could such a right be fairly claimed by district authorities, if the cost were borne by the nation. No existing board would be so capable of determining these appointments as the "Board of Science", suggested in the *Glasgow Report of the Parliamentary Committee of the British Association;* although the recommendations of those local residents who are competent to form an opinion would of course have their due weight.

It is difficult to conceive a limit to the benefits which science, thus established and supported, might confer on the people. It would be difficult, I think, to point out any direction in which the state, by legislative sanction, could more materially aid the cultivation of science, than by connecting it with the improved administration of what we call "local self-government", and by enlisting it in the cause of a correct compilation of national and local statistics.

* "As assessors or advisers to executive boards, the services of scientific men would be highly valuable." (Glasgow Report of British Association, Parliamentary Committee, p. lvi, 1855.)

INFLAMMATORY ACTIONS, AND THEIR TREATMENT.

By C. Handfield Jones, M.B., F.R.S., Assistant-Physician to St. Mary's Hospital.

[*Concluded from page* 233.]

Quitting now the remedies for sthenic inflammation, let us turn to those which are appropriate to asthenic. The contrast between the two groups is full of instruction.

The influence of *nitric acid* in toning the vessels of the bronchial membrane when relaxed, as in asthenic catarrhal affections is very clear and positive. Râles with cough and expectoration that will not yield to antimony or ipecacuan, or which return when these medicines have been too long continued, disappear under its use. We cannot imagine it to act otherwise than by an impression on the nerves; taken into the blood, it must combine with a base, soda probably, and its action as a salt would surely be very different from that which we have just noticed. Its nervine influence is further attested by its remarkable efficacy in arresting the paroxysms of pertussis, as has been well shown by Dr. Gibbs.

That *quinine*, *strychnine*, and *arsenic*, are nerve toners, cannot, I think, be any matter of question. If malarious poison acts paralysingly and depressingly on the whole nervous system, if the fevers and congestions which it produces can be explained by our knowledge of the laws of action of the sympathetic nerves, then surely quinine, and in a less degree arsenic, which counteracts so powerfully this wide spread poison, must act also on the same system. It is matter of everyday experience that asthenic inflammatory processes, and fluxes proceeding from them, can be checked and arrested by the three above-named agents. The change effected by the skilful administration of arsenic in cases of skin disease appropriate for its use, is very striking and instructive. The abnormally increased heat, the hyperæmia, the serous exudation (taking a case of eczema or pemphigus), cease, and except some lingering congestion of the capillaries, the part returns to its healthy state. How very like this is to the effect of galvanising the upper end of the divided sympathetic nerve in the neck of an animal, as described by Bernard! It is clear that arsenic does not cure a skin eruption in virtue of some special relation it has for cutaneous tissue, because it will act very similarly on the intestinal mucous membrane, checking or arresting chronic diarrhœa or dysentery; as also on the uterus, restraining menorrhagia and leucorrhœa, according to Mr. Hunt and Dr. Locock. The great point necessary to be borne in mind in the use of these and all nerve tonics, is that they act also, or are liable to act, as tissue irritants; so that it may require much care and management to obtain the first action without the second. If, therefore, there exist any amount of sthenic inflammation (a point not by any means always easy to determine), these agents are quite inappropriate. Carbonate of ammonia seems to be the remedy of this class which has the least tendency to cause irritation of tissue. At least this is true in the case of the pulmonary organs.

Quinine and arsenic evince particularly their power as nerve tonics from their known good effects in all neuralgiæ; they seem to operate more on the sensory than on the motor nerves. The reverse is the case with strychnine; it serves us in paralysis of voluntary muscles, not depending on a central lesion, and in torpor of the intestinal muscular coats, as also, according to Dr. Vernon, in uterine inertia. I will presently allude to several other drugs which possess a like nerve toning influence more or less decidedly, but those now mentioned are the best exemplars.

A consideration of their action, and of their relation to the nervous system, strongly confirms the opinion that typical asthenic inflammation is chiefly dependent on palsy or weakening of the vaso-motor nerves of the part. This does not, of course, exclude the influence of a poison received into the blood as in some cases the cause of the paralysis; but while fully admitting this, it brings to our minds the very important fact, that the degree of power and tone of the nervous system very materially determines whether the poison produces its effects or not. On this it seems impossible to lay too much stress. How striking is the fact, that eight grains of quinine daily will enable a man to undergo exposure with impunity to the malaria of the west coast of Africa, which acts with such deadly effect on the unprotected. Yet, of necessity, the same poison must enter by respiration into the circulation of each. If two persons are exposed to the miasm of typhoid or typhus fever, there is considerably more likelihood of the one who is weakly and depressed being affected by it than the other who is in full tone and vigour. Yet both inhale the poison into their blood alike; only the one succumbs to it, the other resists it. In the case of malarious disorder, where the system has often suffered and retains the morbid impregnation, so that a slight cause reproduces the phenomena, what else avails to keep them in abeyance but raising and maintaining the tone and vigour of the system? The poison is there always, but it makes all the difference whether the resisting power be weak or strong. In the case of syphilitic disease, as already remarked, we find the same law holds true. Quite to the same effect are the instances of disease affecting a defeated army far more than a victorious one, and of the remarkable influence of *ennui* and disappointment in engendering disease, as of excitement and exhilaration in preventing it. (*Vide* p. 120, 121, of Mr. Martin's work.) Surely the conclusion from all this must be, that in the great majority of cases of disease, we are much rather to think of stilling perverted and excited action, and of imparting healthy tone where this is wanting, than of eliminating a poison from the system. According to the prevailing theory, we *ought* to cure an eczema, with its serous flux, by eliminating the (supposed) morbid element from the blood. In practice, we *do cure* it by toning the relaxed vessels; and well satisfied are we, as well as our patient, when we have done so. With a bronchial, gastric, intestinal, uterine flux, we deal in a like way; and there seems no reason to question the propriety of the practice. Certainly an eliminant treatment would have a very different result. Yet in many of these cases the existence of some *materies morbi* might be reasonably supposed. Influenza surely depends on the action of a poison on the system, yet it would not be very wise to treat a case by attempting to eliminate the morbid agent. The plan of treating cholera by castor oil professes to be based on the view of eliminating the morbid poison. Believing that it may be useful in certain cases, I think the mode of its operation is altogether different. It probably sets up a different kind of action in the gastro-intestinal mucous surface which supersedes that of cholera. This would be analogous to the treatment of purulent ophthalmia by nitrate of silver in substance applied to the inflamed conjunctiva, or that of gonorrhœa by injection of a strong solution of the same agent (gr. xv ad ℥i). The remedial action in these instances is by no means that of a mere astringent; it modifies the vitality of the affected tissue, to borrow an expression of Dr. Bennett's.

The following remarks respecting the action of some of our ordinary remedies may properly conclude this paper.

Opium may be regarded as a tissue sedative in general, not one of the nerve tissue only. As it "locks up the secretions" by staying the active function of their gland-cells, so it calms the excited state of an inflamed membrane, *e.g.*, in peritonitis, and stops the morbid attraction of blood thither. To do this effectually, however, it is essential that the force of the heart's contraction should be diminished by venesection, or otherwise. In an experiment I performed, thirty-three drops of liquor opii sedativus being taken in twenty-four hours, the result was that the whole quantity of urine was increased by four ounces, the acidity raised from 65 to 85, the urea diminished by 25·514 grains, and the uric acid by 4·6 grains. The specific gravity fell from 1028 to 1020. The stools were clayey. Opium thus evidently checks waste, and does so by calming an over-excited state of the nervous and other tissues. Under its influence fatigue of body or mind can be better endured, because the tissues have more stability, and disintegrate less readily.

Belladonna, unquestionably a nerve sedative, may perhaps be regarded as a sedative to other tissues also. In its dilating the iris, and diminishing the contraction of other sphincters, in its calming an excited action of the heart, and arresting the secretion of the mammary gland, we have instances of its power as a local application, which are scarcely to be referred to its influence upon the nerves. (Ludwig's opinion, quoted by Dr. Harley in the *Edinburgh Monthly Medical Journal*, February 1857.)

Digitalis appears to act as a tonic or stimulant to vaso-motor nerves. It stills the action of the heart, probably by a stimulating operation on the pneumogastric, or the medulla oblongata, as in Weber's experiment of passing a galvanic current through the latter centre. If this be carried too far, the heart's action is arrested altogether. Like other nerve tonics, it acts best in states of debility, and "seldom succeeds in men of great natural strength, of tense fibre, of warm skin, of florid complexion, or those with a tight and cordy pulse." It also acts as a vessel toner in the arrest of menorrhagia and

some other hæmorrhages. Its diuretic action must be referred to a stimulant operation upon the kidney, in which it resembles the following.

Oleum Terebinthinæ is known to be effectual in gastric and renal hæmorrhage. It has been found very useful in checking the black vomit of yellow fever. I have seen it arrest the hæmorrhagic renal flux, called chylous urine, after gallic acid and tincture of sesquichloride of iron had failed. It is of efficacy also in asthenic iritis, and in some bronchial fluxes. Its operation on the nervous system is attested by the unquestionable benefit which has resulted from its use in sciatica and other neuralgias, in chronic rheumatism, and in epilepsy. (Watson's *Practice of Medicine*, vol. i, p. 636.) These I do not view as isolated facts, but consider oil of turpentine as a nervine stimulant, operating both on the cerebro-spinal and sympathetic systems. Like many other remedies of the same class, it is a tissue-irritant; and it is necessary to manage well to obtain the first action without the second.

Balsam of Copaiba may be mentioned as a remedy of very similar nature. In vesical catarrh "it robs the urine of its mucus," and in gastric hæmorrhage it has been found to act as an efficient styptic; Dr. Churchill has derived benefit from it in cases of uterine catarrh. I would say once for all that I should never expect from this or any other nervine remedy constant results. It seems impossible to ascertain accurately the conditions of success; in the greater number of cases by far the nerves we wish to influence are quite removed from all observation; and if we had them directly under our eyes we have no means of estimating the state of the nerve force, or the special idiosyncrasy of the individual. It may be easy to see what *kind* of remedy is wanted in a given case, but it may be very difficult to find that which is exactly appropriate.

Ergot seems to possess a decided influence over organic muscular fibre. It powerfully contracts the walls of the developed uterus; it is recorded to have arrested epistaxes and other hæmorrhages (Dr. Walshe praises it in epistaxis); leucorrhœal discharges are controlled by it; and when taken for a length of time, as in the case of peasants feeding on diseased rye, it causes such contraction of the arteries that the limbs pass into the state of dry gangrene. This influence may certainly be a direct one upon the muscular tissue, to which it is conveyed by the blood; it is, however, worth observing that ergot does produce marked effects on the nervous system. When taken in the food in quantity it very commonly causes a kind of intoxication, said not to be disagreeable; and as a remedial agent it is reported to have cured paraplegia and paralysis of the bladder.

Iron is ranked by Trousseau (and justly) as an analeptic, like oleum morrhuæ, ministering to the repair of blood and tissue. But it is also eminently a nerve tonic, a powerful means of combating neuralgiæ and neuroses of the cerebro-spinal system, as well as of restoring the power of the sympathetic. It is needless to cite any instances of its beneficial action on the cerebro-spinal nerves; but some of its influence on the sympathetic are necessary for my purpose. Liquor ferri pernitratis is highly spoken of by Dr. Graves as of much avail in chronic diarrhœa. Tincture of sesquichloride of iron has proved very beneficial in cases of erysipelas, and of bloody and albuminous urine connected with scarlatina. Cruveilhier regards iron as a specific for engorged conditions of the spleen; and the experience of Indian physicians is also in favour of its decided efficacy. Renal hæmorrhage and vesical have been arrested by the use of tincture of sesquichloride of iron. Preparations of iron are found to check bronchial fluxes, uterine leucorrhœa, and passive menorrhagia. These instances show the influence of iron over the vascular system; and when they are viewed with reference to its positive effects on the cerebro-spinal nerves, scarce any doubt can exist that it is by its energising the sympathetic plexuses that the contractility of the arterial walls is again brought into play.

The *modus operandi* of *astringents* requires some notice, as they approach in their effects very nearly to the *tonics*. It cannot, I think, be affirmed so decidedly of them that they act through the nervous system; yet neither can I agree with those who regard them as affecting living in the same way almost as dead tissue. I will briefly refer to the known effects of some of this class.

Sulphuric acid is of positive efficacy in the following conditions. It checks profuse sweats; it relieves itching and tingling of the skin in papular eruptions; it arrests profuse serous diarrhœa. In the two first of these cases it surely does not act by a mere physical influence, and in the latter it seems quite open to suppose the same. Considering its relation to nitric acid (so unquestionably a nerve tonic), and its irritant local action, I incline to think it must also be ranked as a nerve tonic.

Alum, besides acting as a local astringent, has a positive efficacy in lead colic, and in various hæmorrhages and fluxes. Its action in colic, and intestinal neuralgia, approximates it certainly to iron and other nerve tonics.

Acetate of lead is well known as of efficacy in various hæmorrhages and fluxes, the bronchial perhaps more especially. The positive irritant influence of lead on the abdominal nerves in colic inclines me to think that it is by toning the vaso-motor that it checks hæmorrhagic and other exudations. It would not form a valid objection to this view that its more prolonged operation was palsying to certain cerebro-spinal nerves; in fact, even on the brain it sometimes acts as an irritant, producing convulsions. The great recommendation of lead seems to be, that while it tones vaso-motor nerves, it exerts a sedative action on inflamed tissues, and might well have been noticed among that group of remedies. In this it differs from all the stronger nerve tonics.

Tannin, and *Gallic acid*. Although Dr. Bayes states that an overdose of the latter causes the pulse to become small and wiry, the face to grow pale, and a whizzing sound in the ears (symptoms which appear to indicate an affection of the brain and vaso-motor nerves), yet, as I am not aware of any positive proof that the above agents act on the nervous system in any special and direct manner, I do not include them in the list of nerve tonics. Their action is probably on the homogeneous wall of the capillaries, rendering it less permeable to the liquor sanguinis. Simple and structureless as this wall appears on the most careful examination, it must yet be possessed of some remarkable qualities. In most situations it allows (in health) a certain amount of albuminous plasma to transude its texture, just what is needed for the nutrition of the muscle or other tissue to which it belongs. In the Malpighian capsules it allows a large quantity of watery fluid to drain off absolutely deprived of albumen, but probably containing some saline matter. In the air-cells of the lungs it merely allows a little moisture to exude, which is soon converted into vapour. This peculiar filtering power is, however, easily disturbed; an increased strain upon the delicate structure causes the effusion of albuminous and fibrinous fluid, it may be in large quantity. The escape of blood globules in greater or less amount is usually thought to imply rupture, and it seems scarce possible it should be otherwise. Yet perhaps the established fact of copious hæmorrhage occurring without detectable breach of surface may justify us in concluding that the capillary wall must be capable of undergoing such alteration in its composition as to allow shaped corpuscles to pass through it. There is a good deal of resemblance between the capillary membrane and fibrinous films; and it is very much in states where fibrine is deficient or imperfectly formed that hæmorrhages are apt to take place. In such conditions, I think it by no means improbable that the homogeneous capillary membrane loses its due consistence, and becomes semi-liquid, like soft jelly; so that, without actually tearing, it yet opposes small let or hindrance to the escape of the blood within the tube. Less degrees of the same condition would probably allow the escape of albuminous and fibrinous fluid. To such, which are almost always associated with deficient contractility of the arterial coats, I should think tannin and gallic acid especially appropriate. It is, moreover, easily comprehensible on this view how these remedies should often fail in arresting hæmorrhage; for if the small arteries are gaping wide, and flushing the part copiously with blood, it would be impossible for the weak walls of the capillaries to gather strength to withstand the strain. It is, therefore, highly rational practice to conjoin strychnia or quinine with gallic or tannic acid, so as to accomplish both objects. On the other hand it might be useless to tone the small arteries, if the capillaries remained very lax and weak.

In the foregoing observations I have merely attempted to gather up the general bearing of a number of well-known facts, without advancing anything new. Evidence of this kind, though less pretending to exactness than the determinations of the microscope and balance, has yet a value of its own, and is more available for the exigencies of practice. I will only add one remark in conclusion. Our remedies act on the vital qualities of the tissues; and if these are greatly enfeebled and depressed, but little is to be expected from them. Rest, fresh air, good food, are the best restorers of natural endowments; after these, if need be, let drugs be employed. Is this as much thought of as it should be?

CASE OF BRONZED SKIN, ASSOCIATED WITH DISEASE OF THE SUPRARENAL CAPSULES.

By John Kent Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

[*Read before the Bath and Bristol Branch, February 19th*, 1857.]

On the evening of the 3rd of October, 1856, I was called to visit a female, aged 21, unmarried. I found her in bed, apparently very ill; and inquiry of her relatives elicited the following history of her complaint.

For nearly a year she had experienced an increasing sense of debility, which began without any obvious cause. There was nothing in her occupation which accounted for it; and her habits of life were regular and industrious. Menstruation had always been normal, and there was no record of leucorrhœa or of diarrhœa. Progressive emaciation had accompanied the weakness, and a corresponding loss of animal heat; so that, although originally of good development, she had become exceedingly thin, and had felt very cold even during the excessive heat of last summer. There had been great lassitude, and hardly any appetite for food. Within the last three months, both herself and her friends had noticed a muddiness of skin on the face and hands; and, on the dorsal aspect of the latter, this muddiness had increased to such an extent that it might have been imagined that she had exchanged limbs with a negress. The tint of the face was of a much less decided character. There was no history of any pulmonary or cardiac disease; and the surviving members of her family were in good health.

The first interview I had with my patient was by candlelight, and her appearance indicated nothing beyond aggravated spanæmia. It is not surprising that I should have overlooked, under such circumstances, the peculiar colour of the face; and the hands I did not particularly look at. The only thing which struck me was the extent and the deep hue of the areola round the eyes. I made a careful physical examination of the thoracic organs, but failed to discover anything abnormal beyond the usual anæmic murmurs. An examination of the abdomen led to only a negative result. No pain was complained of, but much nausea whenever she raised herself in bed; and, in the same posture, she described herself as experiencing a weight in the right hypochondriac region. The bowels were costive; but this fact was explicable by the small amount of nourishment taken. The urine was natural; the pulse was 80; the respirations 19.

My patient had previously been under medical treatment, and, as far as I could learn, of a judicious kind. I was puzzled why she should have derived no permanent benefit from it, but I really could not see anything to interfere with a diagnosis of simple aggravated anæmia; and I offered rather an unguarded prognosis that she would probably be quite well in two or three weeks time. I prescribed a mixture of tincture of sesquichloride of iron with tincture of hyoscyamus, a dose after each meal; and directed that food should be given in small quantities at frequent intervals.

October 4th. I visited my patient by daylight, and I could not help noticing the dark earthy tint of her face and hands. No other portion of the surface was affected in the same way: the skin every where else was perfectly clear, and free from abnormal stain of any kind. However, the real nature of the case did not then occur to me. The medicine had caused a relaxation of the bowels, and therefore the citrate of iron was substituted for the sesquichloride; and an opiate pill ordered to be given at bedtime.

A decided improvement became manifest during the next few days, so that she was able to leave her bed and come down stairs, still preserving the recumbent posture on a sofa. On the 10th of October, the feeling of weight in the right hypochondriac region increased to absolute pain. I made another physical examination of the abdomen, and the result was, that deep percussion elicited a dull note over the seat of pain, and palpation imparted the sense of a soft solid, deep in the abdominal cavity. Although the strength had increased, the emaciation progressively continued; and, with a view to remedy this, I recommended the administration of the cod-liver oil. To this, however, great objection was offered, the bare thought of taking an oily substance appearing to create nausea.

October 13th. A retrograde step had already commenced. The citrate of iron mixture could no longer be retained; the bowels had become confined; the indescribable sense of powerlessness had completely returned; and my patient went back to her bed, from which she never rose again.

During the preceding week, I had been perusing Dr. Addison's celebrated monograph on *Diseases of the Suprarenal Capsules*, as well as a review of that work in the then current number of the *British and Foreign Medico-Chirurgical Review*. I now began to suspect the real nature of the malady; and I at once communicated the possibilities and probabilities of the case to the patient's friends. They were astonished at the altered tone of my prognosis, and did not at all appreciate the reasons I gave for it. It was agreed, however, that further advice should be obtained.

October 15th. Mr. Norman met me in consultation. It was clear that we had to deal with the results of a special dyscrasia, those results being manifested in a serious lesion of the nutritive processes. The data on which we had to form an opinion were principally subjective: these were the extreme lassitude and debility, the constant nausea and anorexia, the pain and the weight in the right hypochondrium, the depression of spirits, and the loss of memory. The great objective phenomena were two in number—the emaciation, and the bronzed colour of the face and hands. Our diagnosis appeared to be limited to the alternative of scrofulous degeneration of the intestinal glands, or disease of the suprarenal capsules, attended by its well known cutaneous discolorment. If the case had come under our notice some years ago, probably the former of these contingencies would have been the only one to present itself; but, for obvious reasons, our opinion now decidedly inclined to the latter.

Mr. Norman strongly urged the administration of cod-liver oil, to which the patient reluctantly assented. Mr. Norman also suggested that a couple of grains of blue pill should be taken once or twice a week, not only with the view of maintaining a regular action of the bowels, but also to assist the functions of the liver; for the possibility of biliary toxæmia had occurred to our minds as tending to confuse the other elements of diagnosis; although such an hypothesis would not account for the emaciation, and was almost certainly negatived by the clear pearly hue of the conjunctiva.

Under the plan of treatment above laid down, and for some time faithfully carried out, the tendency to emaciation was certainly arrested, and the strength appeared to be somewhat improved. A blister was subsequently applied to the right hypochondrium, in order to relieve the local pain.

Things remained very much *in statu quo* until the middle of November. Disgust of the cod-liver oil was now experienced, and consequently its use was abandoned; and so complete was the repugnance to every kind of food, that beef-tea, in very limited quantities, was the only article of diet which we could persuade her to accept. The sense of hunger was altogether suspended, and the withdrawal of the demand for nourishment was apparently the proximate cause of that wasting process which now continued uninterruptedly until death. And yet the secretions generally were properly carried on; there was no cough, and no symptom referrible to the pulmonary organs; the sounds of the heart were sharp and clear; and, with the exception of the faculty of memory, the intellectual powers were unimpaired.

For a short time, I gave her quinine, with a slight improvement of the appetite; but, at the beginning of December, she firmly refused to take medicine of any kind. A week afterwards, she would see nobody beyond her own family; and on Friday, December 19th, she quietly died away, as if she had only fallen asleep.

Post Mortem Examination, December 21st, fifty-fours after death. The body was greatly wasted; the breasts very much atrophied; there was very little adipose tissue anywhere; and the muscular structures were flabby and attenuated. The skin of the face was nearly as brown as a mulatto: the exact hue it would be difficult to describe, but it was duller and less intense than bronze, and resembled more than anything else the tint of the lighter portions of a photographic impression. The colour was very marked when contrasted with the integument of the thorax and abdomen, or with any linen article of clothing. The skin of the dorsal aspect of the hand was exceedingly dark, the knuckles being particularly so; here the word "bronze" most fitly conveys the real tint, because it really possessed the shining properties of that alloy. The popular term "brown jaundice" is sometimes a very appropriate one in these cases.

The cranium was not examined. The viscera of the thorax were anatomically healthy, but very bloodless: the heart was exceedingly small, and contained several fibrinous coagula. The stomach was distended with gas: it contained a thin

yellowish fluid, but its coats were in all respects free from disease. Nothing abnormal could be detected in the large and small intestines; the spleen and the liver were of the natural size. When the liver was being removed, I found that the right kidney was dragged out with it; the fact being that an adhesion had taken place between the contiguous peritoneal layers of the posterior lobe of the liver and of the suprarenal capsule. This circumstance may adequately account for the constant pain in the right hypochondriac region during life; and the sense of weight also complained of was evidently caused by the entire mass unduly stretching the ligaments by which the liver is attached to the diaphragm. A slow process of adhesive inflammatory action had probably been going on for some time: the connection between the two organs was of the most intimate kind, and the knife was required to separate them. The right suprarenal capsule was very large: the left scarcely exceeded the normal size, and was unadherent to adjacent viscera. Purulent matter exuded from both glands when a section was made through them: and a number of little miliary bodies was visible to the naked eye. My friend, Dr. Martyn, of Bristol, has been kind enough to make a careful examination of the diseased organs. His report is as follows:—"*Left suprarenal capsule.* Preservation good, colour reddish-yellow, surface uneven: weight 75 grains. Tears readily, showing rough yellowish-white surfaces, covered with creamy fluid. Consists of a thickened tunic, within which are fibrous septa, forming meshes in which cheesy masses lie loosely surrounded by creamy fluid. *Microscopic appearance.* (*a*) Irregularly roundish nuclear corpuscles, containing fatty granules (often to half the entire cell-contents). (*b*) Parent-cells containing (*a*). (*c*) Proteine granules. (*d*) Large free granules of fat. (*e*) Fusiform cells, also containing fat. These are derived from the septa. The right suprarenal body exhibited a similar condition. *Kidney* pale. From the appearances above-mentioned, and from the action of glycerine, acetic acid, and ether, I conclude that the specimen is one of yellow tubercle in an advanced stage of degenerative softening."

The specimen has been deposited in the museum attached to the Bristol Medical School.

Remarks. On looking through a valuable series of cases in the *Medical Times and Gazette*, illustrative of disease of the suprarenal capsules, I find that there are three symptoms more commonly present than any others. These are debility, bronzed skin, and emaciation. I have enumerated them in the order of frequency. The *debility* appears to exist always. It indicates the development of a special dyscrasia, characterised by a grave error in the blood forming process, and consequent prostration of the vital powers. The dyscrasia is one which probably has some affinity with idiopathic anæmia, with chlorosis, or with that constitutional state which precedes the local deposit of tubercle. It is impossible in all cases to define its cause: but it is certain that some mental derangement or shock has had a great deal to do with many of the cases of this disease which have been published. Solidists and humoralists may here find a capital debating ground: for the inquiry is naturally suggested, is the disease of the blood the cause of the neurosis, or the neurosis the cause of the blood-disease?

Next let me advert to the *bronzed skin*. I find two apparently authentic cases on record in which bronzing of the skin was unaccompanied by any noticeable changes in the suprarenal capsules. But these are only two cases out of a considerable number in which the disease of the glands has been successfully diagnosed during life from the cutaneous discoloration. Partial disease of the capsules has been detected in several instances without any corresponding bronzing; but I believe that not a single case has been published in which total destruction of the capsules has existed, without manifest discoloration of the integuments also. Hence, as the *British and Foreign Reviewer* remarks, the cutaneous bronzing may be dependent upon the capsular affection, but the converse of this proposition cannot for a moment be entertained. But while I agree with the Reviewer in thinking that the condition of the integument is almost absolutely diagnostic of disease of the capsules, I think he too hastily concludes that the latter is the *cause* of the former. We must know a great deal more than we do now about the physiology of the ductless glands, before we venture to pronounce so decisively on the phenomena of their pathology.

Emaciation is a symptom not so frequently observed, and in many cases has been entirely absent. It is easily explained, whenever it exists, by the depraved condition of the blood, and by the altered nerve-tone resulting therefrom. Nutrition must be gravely interfered with by such primary elements of disease.

The case which I have related affords a marked illustration of the three great symptoms. The debility and emaciation existed in an extreme degree; but the bronzing was strictly limited to those portions of the skin habitually exposed to the light, and therefore looked like an aggravated form of sunburntness.

Dr. Addison's opinion as to the hopelessness of the prognosis appears to be confirmed by every fresh case which is published. The treatment is unsatisfactory in every sense of the word: nerve-tonics and blood-tonics are equally useless; and perhaps we shall have to await the discovery of a new specific before being able to announce our ability to control the progress of this singular disease.

An account of the structural anatomy of the suprarenal capsules, by Kölliker, is to be found in the *Medical Times and Gazette*, vol. ii, for 1855. M. Brown-Séquard's investigations in their physiology show that these bodies have a very important part to play in the animal economy—a part which, if omitted, must lead to fatal results. (*Arch. Générales de Med.*, Oct. and Nov. 1856, quoted in Ranking's *Abstract*, Jan. 1857.) The substance of M. B.-Séquard's observations is, that (*a*) the capsules are very sensitive. (*b*) As age advances, the capsules are found to gain considerably both in weight and in volume; and hence it appears that these organs are not exclusively related to embryonic life. (*c*) Extirpation of both capsules destroys life with as much certainty, and with greater rapidity than extirpation of the kidneys. The extirpation of a single organ was invariably fatal. After removal of both capsules, the following phenomena were noticed: feebleness, gradually passing to extreme prostration; a respiration first quickened, then retarded, and lastly irregular and spasmodic; a quick and weakened pulse; gradual diminution of animal heat; and lastly, vertigo, convulsions in various forms, and occasionally coma. It would thus appear that the suprarenal capsules are essential to life, and that their removal or disorganisation may lead partly to some injurious alteration in the blood, and partly to some injurious operation on the nervous system.

CASE OF WOUND OF KIDNEY: RECOVERY.

By J. Johnston, M.B.Lond.

[*Read before the Birmingham and Midland Counties Branch, February 12th, 1857.*]

On December 24th, 1855, at 10 P.M., I was hastily summoned to attend William Hyde, aged 32, who had been stabbed in a quarrel. When I arrived at the public house at which he lay, I found him in a state of collapse from the great loss of blood; the pulse hardly perceptible; vomiting was continuous, with hiccup. He complained of severe but spasmodic pain in the groin, where, he said, he had been stabbed with a carving knife. I therefore examined the groin: there was no wound, but a spasmodic retraction of the testicle. Having turned him on to his side, I found an incised wound, one inch and a half in length, on the right side of the spinal column, and about two and a half inches above the posterior crest of the ilium. Considerable hæmorrhage was still taking place, and he said that the knife had broken in his back. Having sent the policeman to find the broken knife, during his absence I assiduously applied cold water to the lumbar region, and gave the patient some brandy and cold water, with forty drops of tincture of opium. The policeman not being able to recover the knife, I thought it advisable to pass my finger into the wound, to probe for any broken piece. My finger passed upwards and inwards, touching the transverse process of the third lumbar vertebra, and about an inch above this entered the peritoneal cavity. The knife was afterwards found, unbroken, but bent about three-fourths of an inch from the point: it was eight and a half inches in length, and had been driven in up to the haft. I continued the cold application. A magistrate having arrived, the patient's deposition was taken, as I did not think that he could rally. Warmth was applied to the feet. Gallic acid in five-grain doses, with a fourth of a grain of opium, were given every twenty minutes, for three doses, and afterwards repeated every hour, with occasional doses of cold brandy and water. He chiefly complained of retraction and pain in the testicle; this was relieved by an embrocation of olive oil and tincture of opium in equal parts. About half an hour after my arrival, he expressed a desire to pass his urine, and then passed by the

urethra about a pint of blood. This was repeated three or four times during the night, my assistant remaining with him.

December 25th. He had slightly rallied. The treatment was continued.

December 26th. Hiccup continued; this was relieved by bits of ice. He still complained of pain in the groin. Gallic acid, with hydrargyrum cum cretâ, were given three times a day.

December 27th. He continues very much the same. I ordered beef-tea and brandy to be continued. The urine was albuminous.

December 28th. The bowels not having been opened, I ordered half an ounce of castor oil, and this to be repeated in three hours. As he complained of a general pain all over the abdomen, and tympanitis, a linseed poultice was applied, and increased doses of the hydrargyrum cum cretâ with opium. The gallic acid was omitted. Ice was continually given; this relieved the hiccup and vomiting, which had reappeared. By these means, the pain over the abdomen was relieved; and, without any other severe symptoms, the wound gradually healed; and, on the 14th of January, he was able to be removed to his own home—a distance of nearly half a mile. I still continued to visit and watch the case daily.

January 21st. I perceived, for the first time, a slight fulness over the wounded part, at about the situation of the internal opening of the wound; this gradually enlarged, without much pain. I thought that, in all probability, it was a collection of pus, the deep parts not having united so soon as the external parts. No pain was complained of, only the fulness; and, as Nature had done so much for my patient, I thought that I would leave the abscess to her care also, unless urgent symptoms should arise.

January 25th. On examining his urine under the microscope, pus-globules were found, with exudation cells. I therefore thought that it would be advisable to open the abscess, for fear of mischief by pressure upon the kidney.

January 26th. I made a valvular opening into the tumour, which had now reached the size of a small child's head. About a pint of urine immediately escaped, loaded with phosphate and a little pus. I carefully closed the opening, before the tumour was quite empty, with a compress and bandage; and, as he was very faint, and vomiting came on, I gave him an opiate, with a full dose of castor oil.

January 27th. I again opened the valve, and allowed a quantity of clear urine to escape; and, as there was great tenderness over the whole of the abdomen, I diminished his food, gave small doses of calomel and opium, and applied linseed poultices over the bowels. By these means, the thirst and sickness were relieved; and, on the next morning (Jan. 28th), I allowed the sac to empty itself thoroughly; its contents, as before, being clear urine, of strong smell, and with a little pus settling to the bottom of the cup. The external opening very soon healed, and I had to reopen it and pass a small female catheter up a passage extending upwards and inwards for about three inches, where there seemed to be a small sac. This I repeated night and morning for nine or ten days, when, as the secretions had gradually diminished, I merely applied a bandage with small pledgets of lint. The man has had no relapse since then. He enjoys life, and can eat and drink heartily of ale and spirits, without any unpleasant after consequences in the kidney. He has decidedly grown much fatter since the accident than ever he was prior to it.

LIQUOR SODÆ CHLORINATÆ AS A LOCAL APPLICATION IN SMALL-POX.

By John Gabb, Esq., Bewdley.

I have found a weak solution of the liquor sodæ chlorinatæ so beneficial in the affection of the mouth and throat, in cases of small pox, that its efficiency cannot be too widely known. It may have been used by others; but, if so, I have not seen any account of it. In each case in which I have employed it, the effect has been extraordinary: one washing of the mouth and gargling of the throat has restored the patient to comfort, and ability to speak or swallow without difficulty. The strength I have used has been a drachm to half a pint of water. Applied to the skin, it has had the effect of allaying the troublesome itching; and I think it not unlikely that a much stronger solution, applied in the earlier stage of the eruption, might be as efficient in preventing pitting as some other remedies which have been recommended, whilst at the same time it could be more easily used.

Finding the solution so useful in allaying the itching of small-pox, I gave an old woman, aged 86, who had been for more than twelve months tormented with pruritus, and had tried various remedies without effect, the same to use as a lotion. In a few days she came for more, and said she had never used anything that gave her so much relief.

Gulstonian Lectures:

on

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

Delivered at the Royal College of Physicians, February 25th, 27th, and March 4th, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture I.

Mr. President and Gentlemen,—Honoured by being selected by the College to deliver the Gulstonian Lectures of the present year, I was at first a little perplexed to find a subject with which I could presume to occupy the time of such an audience, or upon which I could hope to throw any additional light. On further consideration, however, finding that I had met with many cases of disease accompanied by saccharine urine, some presenting all the phenomena which attend true diabetes, others exhibiting symptoms but little marked, and such as might be readily overlooked, it occurred to me that I might possibly be able in these lectures to lay before you, in a small compass, the present state of our knowledge on this important subject, and endeavour to show what advances have been made of late in our progress towards unraveling the mystery which has so long enveloped this most obscure affection. It might naturally have been expected that the discoveries of modern science, and especially the rapid strides of organic chemistry, would ere this have been enabled to solve at least some of the difficulties. Chemistry has indeed shown the *nature* of the morbid product in this disease, its properties, composition, and the changes it undergoes; how it may be imitated, and so forth; but we have signally failed, by the aid of this science, in obtaining a clue to the real nature of the alterations which constitute the essence of this disease.

Although I fear we shall have to confess that our knowledge is still very imperfect, yet at the same time there are, I think, grounds for encouragement; for, if we do not know at present what diabetes really *is*, we have of late been able to affirm more confidently what it is *not;* and this alone indicates considerable progress. Besides this, recent investigations upon the so called glycogenesis, or sugar-forming function in the animal economy, appear to throw glimpses of light which may probably one day remove much of the obscurity which has hitherto prevailed. In the present lectures, it is my intention to limit the term diabetes to that form of disease in which the secretion of urine is not only excessive in quantity, but in which also its quality is altered from the presence of sugar—a principle which is absent in the healthy secretion. Other forms of disease, in which the urine is excessive, but where no saccharine matter exists, I should be disposed to follow the custom of many high authorities, and class under the head of excessive diuresis. Some difficulties, however, have occasionally arisen from the confusing together of many very different diseases under the general head of diabetes.

Saccharine diabetes has received many synonyms; sometimes it is called diabetes mellitus, to distinguish it from simple excessive diuresis, often named diabetes insipidus; it has been called also paruria mellita and melituria; and recently, on account of the supposed identity of diabetic sugar and glucose or starch sugar, it has been named by French physicians glucosuria—a term now often employed in this country.

The ancients were totally unacquainted with the morbid condition of the urine which is pathognomonic of this disease, and hence grouped together indifferently all affections in which a great flow of urine was the prominent symptom. It was only in 1684 that Willis first called attention to the curious and im-

portant fact, that the urine in many cases of diabetes appeared to contain a saccharine principle. For a long time, little notice was taken of this discovery; and any progress which has been made in the investigation of the symptoms, nature, and treatment of this affection, date from within the last half-century.

The present lecture I shall devote chiefly to the examination of the various symptoms exhibited by patients labouring under a saccharine condition of the urine. In the remaining lectures, I shall discuss the various theories advanced as to the nature of the disease, and speak more fully of its progress and causes; and point out what value may be placed upon the different remedies and plans of treatment which have been proposed for its mitigation or cure.

From an investigation into the history of many cases of this affection, it appears to me that diabetes frequently commences as an acute disease, and may within a very short time, even a few days, assume all its intensity. In my note-books there are records of several cases, more or less to the following effect. A person in good health, without having had any increased desire to pass water, any thirst or dryness of skin, becomes exposed to severe and prolonged cold, sometimes after having indulged rather freely in alcoholic liquors; in a day or so, perhaps even the next day, he experiences a peculiar dryness of the mouth, a want of the usual perspiration, and notices likewise that the amount of his urine is very much augmented; and from that time he becomes a confirmed diabetic subject. Such forms of the disease may be properly termed *acute diabetes*. There are, on the other hand, many who, from their history, would appear to have been suffering from a saccharine condition of the urine for several years before the increase of the renal secretion attracted attention, or the nature of the disease became correctly ascertained. As an example of this form, I may mention that of a gentleman under my care at the present time, who had symptoms evidently most closely connected with a saccharine condition of the urine for more than eight years before the character of the affection was known, and in whom the diuresis was never sufficiently developed to lead him to suspect himself a diabetic subject. When the disease assumes this form, it may be classed under the head of *chronic diabetes*, as may also other cases of saccharine urine where the augmented secretion never becomes a prominent symptom: I say *prominent* symptom, because, in all instances in which I have been able to ascertain the total amount of urine in the twenty-four hours, a somewhat abnormal quantity has been eliminated. By the aid of properly directed dietetic and medicinal treatment, the acute affection not unfrequently merges into a chronic condition, with symptoms closely resembling those to which I have just alluded.

I shall at first point out the most important symptoms which occur in these different forms of diabetes, comparing the results obtained from my own observation with those arrived at by others, and endeavour to show what are the essential phenomena, and such as are merely accidental, depending on complications having no necessary connexion with the disease under consideration.

As the increased flow of urine, and the alteration in the character of that secretion, are among the most constant and important changes in this disease—alterations from which, indeed, its name is derived—I shall at once direct your attention to this point.

The urine in diabetes may, as far as appearance is concerned, exactly resemble the healthy secretion: it may, however, and generally does, differ considerably from it. When the quantity is large, it is very pale, sometimes almost devoid of colour, transparent, free from deposits; with an odour which has been compared by Dr. Prout to that of hay or milk; by Dr. Watson to that of an apple-chamber. To me the odour appears more like that of whey; but, as such urine soon undergoes changes from fermentation, the smell varies much with the time which has elapsed since its elimination. Any peculiarity of odour which diabetic urine may possess is confined to such as contain but little of the ordinary urinary constituents. In the acute affections, when, by appropriate treatment, etc., the amount has been brought down to within 100 fluid ounces per diem, also in the chronic forms of the disease, although the urine may be very rich in sugar, I have not been able to appreciate any peculiarity of odour. The flavour of diabetic urine is distinctly sweet. This, again, is best observed when there is much deficiency of those constituents on which the ordinary taste depends.

The quantity of the urine passed by diabetic patients is very variable. Enormous amounts have been mentioned, as much as 200 pints per diem, on the authority of an Italian named Fonseca; but this is somewhat doubtful. Trustworthy observations have established the fact that as much as 30 and 40 pints have occasionally been voided. I have myself known as many as 19 imperial pints passed during one night; but, as far as my experience goes, these excessive quantities are not common when patients are in favourable conditions as to temperature, and when some slight restriction is placed on the nature of the liquids taken. It is only when the patients have been exposed to the inclemencies of the weather, and drinking enormously of malt or other alcoholic liquors, that I have observed such excessive diuresis. In the hospital, where the temperature of the wards has been nearly uniform, and water or toast and water the beverage allowed, the quantity of urine passed in twenty-four hours by patients under my care has seldom exceeded 20 pints, or 400 fluid ounces; generally it has been much under this quantity, as from 10 to 12 pints; and this before any dietetic or medicinal treatment has been enjoined, with the exception of the restraint in alcoholic liquors. The following table gives the results obtained from eight cases before the commencement of treatment, the patients being allowed the ordinary full or extra full diet of the hospital, with an occasional addition to the food when the appetite was ravenous.

	Quantity.	Specific gravity.
E. H., a young woman . .	120 to 132 fluid oz.	1040 to 1042
H. W., a young man . . .	232 to 268 „	1037 to 1040
E. H., a middle age . . .	179 to 212 „	1030 to 1036
P. C., a middle age man . .	168 to 390 „	1032 to 1041
H. B., a middle age woman .	180 to 256 „	1032 to 1040
C. H., a youth	168 to 234 „	1037 to 1044
J. S., a young man . . .	162 to 296 „	1047 to 1057
R. B., a young man . . .	148 to 280 „	1040 to 1044
C. M., a girl	210 to 300 „	1046 to 1050

Sometimes the quantity of fluid thrown out in a given time exceeds in weight the total quantity of the ingesta. This has been observed by Mr. McGregor, and Drs. Bardsley and Christison. The excess must then be made up by cutaneous absorption, as proved by Dr. Watson to have occurred in a boy suffering from excessive diuresis, or the so called diabetes insipidus. In health, we may fairly assume that the twenty-four hours average in this country is about 45 fluid ounces. Diabetic or saccharine urine is almost always heavier, or has an increased density over that of the same fluid in health, taking the average specific gravity during the twenty-four hours at 1020 (distilled water being 1000); the urine in diabetes is generally found to range from 1030 to 1050, as the above table shows. Many exceptions, however, are found; sometimes the density is as high as 1060; I have once known it to be a little above this. On the other hand, saccharine urine has been found by Dr. Prout as low as 1015; by Dr. Christison, 1021. About a month since, the urine of one of my diabetic patients had the specific gravity 1017, and yet contained a very notable quantity of sugar. These differences are not difficult to account for, considering that there are many circumstances, especially the intervention of other diseases, which for a time may much diminish the amount of the sugar eliminated. As a rule, I have found that, in cases of diabetes, the density of the urine increases with its quantity; that is, the solid portion of the diet remaining the same, any increase in the quantity of the urine passed in the twenty-four hours, produced by augmented thirst, and the consequent imbibition of a larger amount of fluid, is accompanied by a higher density. This is a fact of some importance, to which we shall have occasion to recur.

With regard to the chemical composition of diabetic urine, I may state that its great peculiarity consists in containing sugar; and, as far as analysis has yet shown, I believe this is the only constant abnormal ingredient. This sugar, which is named diabetic sugar, resembles very closely that found in most fruits, such as can also be readily produced artificially from starch, and named grape-sugar or glucose. I say that diabetic sugar is *allied* to glucose, for it appears not to be absolutely identical with it, as usually supposed.

The varieties of sugar found in the animal and vegetable kingdoms may be conveniently grouped in two distinct classes, from the peculiar reactions they exhibit.

The first class, including cane-sugar and that from beet root, is thus distinguished. When boiled with a solution of potash, soda, lime, or any other fixed alkali or alkaline earth, it is not decomposed; the solution turns the plane of polarisation of a ray of light to the right, and, by the action of dilute acids, it is converted into sugar of the second class. When in contact with yeast, it also undergoes transformation into the second form, prior to the occurrence of vinous fermentation.

The sugars in the second group, as glucose, diabetic sugar, sugar from the liver, etc., are readily broken up when boiled with alkalies, with the formation of brown coloured acids, as melassic and sacchulmic acids; their solutions turn the plane of polarisation to the left; they readily ferment with yeast, and also reduce the salts of copper. It appears, however, that there are slight differences in these different sugars, as that obtained from the liver, and also diabetic sugar, more readily undergo fermentation than the glucose from starch.

From a knowledge of these properties, it is not difficult to discover the presence of diabetic sugar in urine, at least when it exists in any quantity, and more especially when this fluid exhibits the characters commonly met with in cases of confirmed diabetes. Perhaps the most simple test is that named Moore's test, which consists in heating the urine in a test tube with about an equal bulk of liquor potassæ of the Pharmacopœia strength; just before the fluid arrives at the boiling point, decomposition ensues, and a fine yellow or orange colour is produced; this gradually deepens, and, if the sugar is large in quantity, becomes orange brown and even dark brown; at the same time, a distinct odour of caramel or burnt sugar is evolved. By a little manipulation, this test can be rendered exceedingly delicate; for, if we first add a drop or two of the potash solution, to ensure slight alkalinity, and then some good bone black or animal charcoal, and throw on a paper filter, we obtain a fluid quite colourless, and which, on the further addition of the liquor potassæ, gives rise to no precipitate of earth phosphates, and when heated, the yellow or orange colour can be much more readily observed than in the urine before preparation; again, the delicacy can be still further increased by using only a *few drops* of a concentrated solution of potash in lieu of an equal bulk of that of the Pharmacopœia strength, as the volume is then scarcely increased. Some objections to this test have been made, and do perhaps exist; Dr. Owen Rees has stated that if the potash solution contains lead, it may cause a brownish colouration from some sulphur compound in the urine, especially if albumen be present; with a discolourised urine this could be easily distinguished. There are doubtless other solutions besides sugar which may change colour when heated with potash; but I believe these seldom exist in the urine, or are likely to lead to any serious error, when due precautions are taken in the employment of this reaction.

Moore's method is an exceedingly valuable one, for if *it* is not quite conclusive as a *positive* test of the presence of sugar, it is at least as a *negative* one; and in a prepared decolourised urine, should no change of colour occur on boiling with potash, we may safely conclude that no sugar exists, or, at any rate, such traces as may be safely disregarded. I have by means of this test recognised sugar in the urine of an apparently healthy person, about four or five hours after a full meal, no trace being discoverable in the fluid passed at a period most remote from the influence of food. I believe it will detect a small fraction of a grain in a fluid ounce of urine.

The next tests are those depending on the reducing power of sugar upon the salts of copper, and of these, several modifications have been proposed. One, named *Trommer's* test, is thus performed. The fluid to be examined is treated with caustic potash, and if there is much precipitate of earthy phosphate, it should be afterwards filtered, or the urine may advantageously be decolorised in the way I described when speaking of Moore's test; an excess of potash is of no consequence, and the alkali should always be present in quantities more than sufficient to decompose the sulphate of copper which is subsequently added; this latter should be in a dilute state, and added drop by drop; a precipitate of the blue oxide of copper at first falls, which is dissolved if sugar exists, with the production of a beautiful azure blue colour; the amount of the oxide dissolved being usually in proportion to the sugar present. When no further oxide is taken up, the liquid should be heated to the boiling point, the azure blue coloured is changed to a yellow or orange yellow, at the same time that turbidity is induced by the suboxide of copper becoming precipitated. Some precautions are necessary in making use of this test; and we must remember that albumen and ammonia salts have the power of dissolving the oxide, and producing the blue solution; and that very prolonged boiling may cause other substances which may be in the urine, beside sugar, to give rise to the precipitation of some suboxide of copper. These other substances are uric acid, creatine, and creatinine.

Another method of applying the copper test is to prepare a solution of the blue oxide of copper, in the way prepared by Barreswil, Fehling, Poggiale, and others. Barreswil's solution is thus prepared. Take 96 grains of cream of tartar, 96 grains of carbonate of soda (crystallised), 32 grs. of sulphate of copper, and 64 grains of caustic potash; dissolve in two fluidounces of distilled water, and filter. We have then a beautiful azure blue liquid, which, when added to urine or any fluid containing sugar, and the mixture brought to the boiling point, changes colour in the way before described, and becomes turbid from the precipitation of the red suboxide of copper. This test is subject to the same objections as Trommer's; and it is important to take care that it is either freshly prepared, or at least that there is an excess of caustic alkali, otherwise it may deposit the oxide even when no sugar is present. Both these tests, I believe, are sufficient, with proper precautions, to determine the presence or absence of sugar.

The test by fermentation with yeast, is one which has always been regarded with satisfaction, and it is also a method very readily performed. If we fill a tube, closed at one end, with the urine, to which a little yeast has been added, invert it into a saucer filled with the same, and place the apparatus in a warm room, or at a temperature of about 80° Fahr., should sugar be present, fermentation will speedily ensue, and carbonic acid being generated, the urine will be depressed in the tube. We may readily ascertain the nature of the gas which is formed, and may also obtain the spirit from the urine so fermented, and thus be enabled to assert positively that the fermentation has been vinous in character.

Many other qualitative tests have been from time to time proposed, such as the formation of *torulæ* in diabetic urine, the crystallisation of the sugar when a little of the fluid has been allowed to evaporate upon a piece of glass or in a dish; and patients themselves have not unfrequently been led to the discovery of the affection under which they have laboured, by observing that their linen became stiff from the sugar contained in the urine; but when such phenomena are observed, the medical man should have no difficulty in diagnosing the case from even a superficial examination. It is only in cases in which the sugar exists in mere traces, that there can be any *real* difficulty; and I believe that when the potash, copper, and fermentation tests fail to demonstrate the existence of this principle in the urine, its presence is of little, if any, pathological importance.

It is sometimes of interest, and, in investigations as to the progress which the disease is making, and on the effects of treatment, of considerable value, to ascertain the *amount* of sugar which a patient passes; modifications of the fermentation test are often employed for this purpose; for example, if we ferment a given weight of urine, and allow the carbonic acid only to escape, which can readily be effected in a Fresenius's apparatus, the difference of weight of the apparatus before and after the process, will indicate the loss of carbonic acid, and from this we may deduce the amount of the sugar; this, however, requires a balance, and is often difficult in clinical investigations.

Another simpler process consists in almost filling a long graduated tube with mercury, then putting in an accurately measured quantity of urine with a portion of yeast, and inverting the tube into mercury in a cup or trough, the carbonic acid generated can be thus measured in the tube, allowance being made for pressure of mercury, and also for temperature; a grain of sugar evolves nearly a cubic inch of carbonic acid gas, about forty-five forty-sevenths. A convenient apparatus for this purpose is described by Dr. Pavey, in his paper in the Guy's Hospital Reports. These two methods I have very frequently employed in arriving at the numbers to which I shall have to allude when treating of the therapeutics of diabetes. The copper solutions may also be used for the quantitative determination of sugar; for example, if we have the solution of a given strength, we can make a volumetrical measurement, by finding how much of the urine is required to completely reduce a given quantity of the solution; or how much of the solution, a measured amount of the urine. This method is often used by continental chemists.

Lastly, I may mention a plan which has been proposed for determining sugar, both quantitatively and qualitatively; a method depending on the property which diabetic sugar possesses, of turning the plane of polarisation of a beam of polarised light. A description of the apparatus and of the method of using it would, however, take too much time for me to venture upon it in these lectures. A convenient instrument for the purpose is made by M. Dubosque of Paris.

Having laid before you a sketch of the principal methods of ascertaining the presence and amount of sugar in the urine, it may be well to state what quantities are at times eliminated by

different patients; for it is a point upon which I believe there is much misapprehension. In October 1853, the following were the quantities of urine, with the amounts of sugar voided during five days, by a diabetic patient, under my care; and the analyses were made for me by my friend Dr. Buchannan, then physician's assistant at the hospital, who continued the daily examinations for a period of many months.

Date.	Quantity.	Sp. gr.	Sugar per ℥i in grains.	Sugar per diem. Avoirdupois.
Oct. 8	336 fl. oz.	1033	35·56	1 lb. 11 oz. 135·6 gr.
— 9	310 —	1034·4	31·1	1 — 8 — 381
— 10	350 —	1032	33·075	1 — 10 — 201
— 11	390 —	1031·1	32·06	1 — 12 — 253·4
— 12	385 —	1032	33·4	1 — 13 — 171·5

The patient at the time when these quantities were passed had been but a few days in the hospital, was taking the ordinary extra-full diet with a pint of porter, and, on account of the appetite being ravenous, probably some additional food procured from other inmates; no medicine was administered. You will observe that this patient, although having the disease in a confirmed state, was passing under 400 fluid ounces or 20 pints of urine, and that the specific gravity was not very high, varying from 1031 to 1034·4; many diabetic patients, therefore, probably pass daily a much larger quantity of saccharine matter. I have, in analysing the urine in several cases of this disease before the commencement of dietetic treatment, found the daily quantity of sugar to vary from about ½ lb. to 1¾ lb. In some cases of saccharine urine without marked diuresis, the quantities have varied from about three or four ounces per diem to a drachm or so; sometimes little more than a trace has existed. If we fractionise the urine of the twenty-four hours, especially in cases where the total amount of sugar is small, a marked difference is found at different times of the day; the quantity is largest about three or four hours after a full meal, and smallest, when the secretion takes place at the time most remote from the influence of food; and I believe this holds good even when the diet is exclusively animal, containing therefore no sugar or amylaceous matters; this point, if fully established, would be of considerable importance in studying the pathology of this disease, as we shall find in our next lecture.

[*To be continued.*]

Reviews and Notices.

The Functions and Disorders of the Reproductive Organs. By William Acton. Churchill: 1857. 8vo, pp. 106.

Physical incontinence has been grappled with and denounced by many lawgivers. The thunder of the Leviticus still reverberates. We read in history of the uncompromising enactments of the Puritans; and certain impracticable statutes yet remain in the law of this country. Vice is now to find a fresh antagonist in the cold unromantic arguments of the physiologist. It seems as though the instinct of license were doomed to be pursued remorselessly by a counter instinct of restriction.

The relations of sexuality, in respect of the organism alone, are so complicated that we may here disregard, and with advantage eliminate, its moral bearings. These are, however, by no means to be put out of sight and forgotten, but as gems to be laid aside, while the suitable mountings are being perfected. Physiology and pathology must analyse and explain the sexual phenomena, as chemistry has unravelled the phenomena of galvanic action. This must be accomplished before we can be provided with data upon which to proceed.

The correct interpretation of the sexual phenomena is a labour beset with many and peculiar difficulties. Mr. Acton in the work under notice, has initiated the assault of these difficulties, and has opposed to them a firm and consistent courage. To the results of his own observations, Mr. Acton adds the testimony of Lallemand, Parise, and Roubaud. The organisations and instincts of some of the lower animals have been noted by him, to strengthen his deductions by the facts of comparative physiology; and in this he has been aided by several high authorities. It is but fair to acknowledge the comprehensiveness of the idea with which Mr. Acton set himself to his task, however much we may differ from him in details. One is quite justified in saying that, hitherto, we have prudishly held aloof from any avowed and comprehensive consideration of the sexual relations. This puerile mock modesty is akin to that curious prejudice which so long consigned the physician-accoucheur to an inferior grade. It is time that timidity be cast aside, and that it be displaced by calm and philosophic inquiry. It would be ridiculous to urge the self-evident importance of correct and complete knowledge of the sexual relations of the organism. The systematic ignoring of the sexual difficulties by the profession at large has been the cause of an extraordinary evil which is only just beginning to be recognised. There exists a widely extended and thoroughly organised society of pretenders to medical knowledge, who first convert an unfortunate being into a hypochondriac, and then deprive him of everything he may possess. The machinery employed by these persons, their ramifications of espionage, and their atrocities, the astounding magnitude of the depredations effected by them, must soon see the light of day. The pitiable agonies of their numberless victims who can tell? The profession is, as we have just suggested, now only beginning to be awakened to a sense of its dereliction of function, and yet stands appalled at the monster which its supineness has allowed to be created.

It is not to be wondered at that the sufferers from functional disorders of the reproductive organs are to be found, for the most part, among the members of the more highly educated section of the community—those in whom the nervous system has reached a greater development, and whose sensitiveness practically magnifies any physical irritation into an insupportable goad. How early the seeds of manhood-suffering are strewn, we may perhaps learn from the following observations of Mr. Acton, who believes that much mischief originates in the too strong meat afforded to the young imagination in the writing of classical antiquity.

"When I see the sons of highly intellectual imaginative parents in possession of such books" (Lemprière's *Dictionary*, for example), "left to find out what the gratifications mean which they read of in the classics, I tremble for the consequences, feeling assured that, with childlike imitative powers, they will sooner or later wish to realise those sensations. The same fond parent, who relates with such delight the mocking powers or the imitative talent of his boy, little dreams, somewhat later, this precocious youth will probably be led by a similar impulse to test the truth of what he has read in books which have been allowed to stimulate his imagination. I speak advisedly, and at the suggestion of a large number of sufferers, who have confessed with regret that it was some such feeling as this, in entire ignorance of the consequences, that impelled them onwards in early life to commit the faults they subsequently blushed to acknowledge; and they have often expressed a wish that they could spare others the misery which they themselves had undergone."

In the management of the young, great caution and close observation are very necessary; but all to whom that duty may fall should combine with caution a thorough knowledge of the spring from whence the dangers originate which they strive to avert.

As, in the young, that, in ignorance, may be set down as a vicious tendency, which is in reality but a symptom of abnormal irritability, so in the elderly, uncontrollable amorousness, while it subjects the sufferer to the risk of having a stigma attached to his name, and perhaps may lead him into the grasp of the law, should be judged of rather at a medical than at a legal bar.

There is no class of cases more difficult to deal with than such as disorders of the reproductive functions present, and the position of the conscientious medical adviser is most trying. Temper and firmness are as essential to success as technical skill and knowledge. The psychical element of suc-

cess must be intuitive. The technical measures for the cure and relief of these disorders have been much advanced of late. Direct application to the seat of peripheral irritation, and attention to the general health, have replaced the nostrums of druggists.

To conclude: we have before suggested, that although, on some non essential details, we differ from Mr. Acton, we nevertheless advisedly say that his work deserves the attentive consideration of the profession.

British Medical Journal.

SATURDAY, APRIL 4th, 1857.

REFORM IN THE MEDICAL DEPARTMENT OF THE ARMY.

Is there such a thing as Sanitary Science in our army? We confess that we have in vain sought a satisfactory reply to this very important question. The British troops in the pay of Her Majesty amount to nearly one hundred and thirty thousand fighting men; these are distributed over every region of the globe; the roll-call is heard in forty different colonies, and our regiments are exposed to every vicissitude of climate, "from Nova Zemla to the torrid zone." Under such circumstances it will very naturally be asked, What are the sanitary precautions taken to preserve health under so very different and adverse conditions? Where is the Manual of Health issued by the Director General, in order to instruct the young medical officer in the precautions necessary to be taken to preserve the health of the large bodies of men under his charge? To these most important questions no answer can be returned. There is absolutely no such thing as a sanitary system for our army, notwithstanding that they are exposed to more frightful disasters from the climate than any other army in existence, and notwithstanding the ease with which such a code could be drawn up by any three properly qualified men in the kingdom.

We publish this week, in our news columns, an abstract of the speech made by Lord Grey in the House of Lords in 1851, in order to show what the British soldier had to go through, not many years since, in spite of the Medical Department of the army, and the host of Inspectors with their Reports, which form to the present day the abortive machinery of the Director-General's Department. "In the colony of Jamaica alone," says his lordship, "there perished in the twenty years ending 1837, six thousand seven hundred soldiers—the annual deaths being one hundred and thirty per thousand!" This frightful mortality—one-third greater than that which took place at Waterloo, was the direct consequence of causes over which man had direct control. For five days out of the week the soldiers were fed upon salt pork, mouldy biscuit, and rum grog! Our brave fellows were in this manner deliberately poisoned by the food sent from home, at the same moment that the convicts on the island were receiving *fresh meat* five days in the week, and were consequently in perfect health. In addition to these enormities of diet (for which our Medical Department, unless it was a mere sham, was directly responsible), the troops were crowded in barracks out of which yellow fever never departed. It is needless to remark that these six thousand seven hundred men were as much slain by being subjected to these two potent causes of disease, as though they had been driven out in the barrack square and shot. All the while this horrible slaughter was going on, reports were in the usual form being transmitted home to the Director-General, and routine would have allowed this mortality of one hundred and thirty in a thousand to proceed *in a regular manner* to this day, had not Lord Metcalfe interfered, and by sending the troops to the mountain stations, and by putting them on fresh meat rations five days in the week, laid the foundation for the present improved state of things, by which the annual mortality is reduced to thirty-four in a thousand. Red tape will probably reply that this is all very sad, but you are speaking of the past. We reply that at the present day the condition of our barracks abroad is a disgrace to us as a nation, and forms many monuments to the impotency of the Medical Department of the army.

Dr. Milroy, speaking of the barracks in Kingston, Jamaica, in 1850-51, says: "It is difficult to exaggerate their abominable condition at Kingston, Spanish Town, and Up Park camp. One of the principal thoroughfares in Spanish Town *is purposely* avoided, *in consequence of the horrible pollution of the atmosphere from this cause.*" But we need not go back even as far as 1851 to find scenes of hospital and barrack life which prove that sanitary science, although it has found its way into our workhouses, prisons, and hulks, is yet guiltless of affording its protection to the British soldier. The condition of the Crimean hospitals and camping grounds speaks trumpet-tongued to the whole world, as to the neglect with which the soldier is treated by the department which should watch over his health and strength. Without going out of the metropolis, we may, by inspecting the Portman Street and other barracks, under the very eye of the Director-General, ascertain for ourselves what is thought good enough for Her Majesty's Guards. How is it, we ask, that, whilst the mortality amongst the civil population is for the age between twenty and forty about 8 per 1000, it is about 17 per 1000 in Her Majesty's three crack regiments, selected men of the mean age of twenty six?

Thus at home and abroad the soldier is sacrificed, and allowed to perish in a much higher ratio than any other part of the population. Nay, whilst the convict is being pampered with thoroughly warmed apartments and the most scientifically assorted diet, he is put out, even when diseased, as at Fort Pitt at Chatham, in damp and mildewed casemates, and fed, when under circumstances of the utmost privation, such as occurred in the Crimea, on a diet which, if purposely constructed, could not have better ensured dysentery, scurvy, and cholera. If the British soldier is thus allowed to rot under every condition, what, we ask, must be the use of the present medical organisation of the army? of what avail are the reports sent in at regular intervals by the various inspectors? of what avail is the superintendence of the Director-General?

In order that the light of modern science shall penetrate to the distant hill stations of our troops, as it does now to every convict settlement, an entire remodelling of the Army Medical Department must take place. The Government must construct a board out of the best men it can find in the country, and they must draw up such a system as shall at least place our brave army under sanitary conditions as favourable as those which now avail the convicted felon in any penal esta-

blishment or prison in Her Majesty's dominions. This surely is not asking too much. It is absolutely impossible that the medical supervision of 130,000 men can any longer be entrusted to the charge of any one man; the burthen, were he an Atlas, would be beyond his strength; and it is also certain that the new board must be endowed with sufficient authority to initiate reforms, and to see its recommendations are thoroughly carried out. The commission that is about to inquire into this most important subject must see that an authority which can only communicate with the Government through a clerk of the War Department, cannot insure that respect, and cannot maintain that dignity, which the important nature of its duties, and the welfare of the British soldier, demand that it should possess.

THE WEEK.

We rejoice exceedingly to state, that the electors of Bodmin have rejected Dr. Michell, the gentleman who so misrepresented the medical profession in the last Parliament. It was always a matter of astonishment to us that any British constituency should have sent to Parliament a man who never opened his mouth in the senate without talking the most egregious nonsense, or without attempting to throw ridicule upon the most distinguished discovery in medicine. Whilst chronicling with unfeigned satisfaction the casting forth of this unworthy member of our own profession from the House, we cannot help regretting the casualty that has occurred to Mr. Layard at Aylesbury. The energy and fire of this gentleman would indeed have been of immense advantage to the Poor-law Medical Officers, whose cause he so lately espoused at St. Martin's Hall; but we have no doubt that his absence from the House is only temporary, and that before long he will be again "the right man in the right place," combating for an ill-used section of the profession. Mr. Headlam is again returned for Newcastle; we may hope, therefore, to see the Medical Reform Bill speedily re-introduced, as we trust that the evident reforming tendency of the New House will lead it to pass a measure, during the present session, which shall settle, for twenty years at least, this important question.

We perceive that the expedition which left Bushire and gained such a brilliant victory over the Persian horse, were totally unprovided with tents or baggage of any kind. We do not know whether this omission to take the *impedimenta* was intentional or otherwise, but it seems strange that all protection from the weather should have been neglected on this occasion after our experience of a like omission in the Crimea. As it was, the troops were exposed to the most terrific weather, and no doubt the seed of much disease was sown in the few days our troops were without cover. We record with much pleasure that honourable mention was made by the Commander-in-Chief of the services of the medical department in this expedition.

In accordance with the usual course of events in such cases, the trial of Alfred Matcham for the manslaughter of Mary Ann Jeckells, at Lowestoft, has terminated in a verdict of "Not Guilty." The accused was treated by his lordship, the Chief Baron, as a legally qualified practitioner, although the only evidence on this point was a statement made by Matcham himself, that "he had received a diploma from the college of New York, and had studied under a physician of that city." Indeed, both in the opening charge of the judge, and in his summing up, there was a strong feeling to extend to the prisoner the same consideration and leniency that every medical man would hope to receive in the investigation of an unfortunate case. In his charge to the grand jury, his lordship observes:—

"I do not purpose absolutely to lay it down that it is impossible for a medical man to expose himself to a criminal charge. I might err very much if I were to go to that length; but I am sure I am not wrong in saying, that every person who is legally practising medicine, in any form, ought to receive the largest indulgence when his conduct is inquired into, and every presumption ought to be made in his favour. I think that protection is not only due to the members of an honourable and learned profession; but, in my personal judgment, as a man, I think it is essential to the free and unfettered exercise of the judgment of a medical man, that he should not enter the sick chamber, or go to the bedside of a patient, as it were, with a halter round his neck. I think he ought to be assured that if he takes there the calm mind, the honest intention, the best skill that he can exercise, and all the knowledge that he possesses, he is not responsible—and I think that the public has a deeper interest even than he has—he is not responsible for an error in judgment."

A brief report of the trial will be found in our news columns; and to this we invite attention.

An able Report on the Health of the London Postmen in 1856, drawn up by Dr. Waller Lewis, forms, by permission of the Postmaster-General, one of the contributions to the *Sanitary Review and Journal of Public Health* for the present month. From the report, we learn that the general health of the officials of the Post-Office has on the whole been most satisfactory; and this result is evidently attributable to the improved sanitary arrangements of the building, and to the care which is taken to meet disease at the outset so as to prevent it, if possible, from assuming a serious character. But there is still too great a prevalence of rheumatism, sore throat, and other diseases attributable to various preventible causes. One of the most prominent causes of complaint is the gas employed in the larger offices, which is alleged to produce bad effects on the general health or on the eyesight of the sorters and letter-carriers. In the inland office there are 155 gas-lamps; while the number of men employed at one time on morning duty is about 467; on evening duty, 378: in the newspaper office, the gas-burners are 145 in number; and the number of men employed is 646 in the morning, and 287 in the evening. The lamps are only eight feet from the floor. To remedy the evils arising from this arrangement, Dr. Lewis makes the following suggestions:—

"1. The sources of the light should be as few in number as possible, consistently with the light being sufficiently powerful and equally diffused.

"2. The lights should be as elevated as the ceiling will allow.

"3. They should be so contrived, that nearly all the heat, as well as the whole products of combustion, should be carried off directly, without admixture with the lower strata of air, and be made subservient to an efficient system of ventilation.

"4. I am of opinion that the reflective power of metal or other substances might, with economy, be more scientifically employed than is now generally done.

"If these principles were carried out in lighting the offices of this department, I believe that very great benefit to the health of a large number of the officers would rapidly result."

In the ventilation of the basement offices and other apartments, much improvement has been effected, to the great com-

fort of the bag-room officers, who have by letter expressed their satisfaction to Dr. Lewis at the success which has attended the endeavours to promote their health. At the same time that he points out the improvements which have been made, Dr. Lewis does not fail to recognise the fact that much more requires to be done to improve the sanitary condition of the Post-office, especially of those parts of it which have come into use under the pressure of greatly increased business. This is a matter which may be well left in the hands of Dr. Lewis and the Post-office authorities, the latter of whom appear to be most ready in carrying out the suggestions of their medical officer.

Mr. Gamgee has published a letter, addressed by him to the Right Honourable the Secretary of State for the Home Department, on the subject of the Cattle Plague and diseased meat, in their relations with the public health, and with the interests of agriculture. In the letter he has ably given the evidence of the existing evil; and, after commenting on the inefficiency of existing laws, and pointing out the impending danger, he has laid down the principles on which the legislation required to meet the exigencies of the case should be based. In concluding, he says:—

"If I have succeeded in demonstrating the existence of great public evils, and the inefficiency of existing laws to provide against them; if, additionally, I have made clear that we are in peril of one of the greatest calamities that can befall a nation—a cattle plague, I feel confident Her Majesty's government will take the facts here embodied into its most serious consideration, and provide for them in a measure, and with a readiness commensurate with the gigantic interests at stake,—the public health and the interests of agriculture. The former is most injuriously affected by the vast amount of diseased meat sold and consumed for human food; and though the latter—the interests of agriculture—have not yet suffered the calamity which has befallen some nations of continental Europe, yet the danger is real and enormous, as far as it concerns a pestilence, against which the only hope rests in provident and energetic preventive measures."

We trust that Mr. Gamgee's representations will attract the attention of the Ministry, and lead to the adoption of some practical measure. Even if the evil were not so great as is represented, prevention would still be wise when danger is threatened.

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, March 1856.

NEW MEMBERS ADMITTED DURING 1857.

Appleton, John G., Esq., Luton, Bedfordshire
Atkinson, J., Esq., West Hartlepool, Durham
Blower, William, Esq., Bedford
Boult, Edmund, Esq., Surgeon to the Eye Infirmary, Bath
Boulton, William W., Esq., Surgeon to the Dispensary, Beverley
Brinton, William, M.D., Physician to the Royal Free Hospital, Brook Street, London
Brookes, Andrew G., Esq., Cressage, near Shrewsbury
Bryden, William A., Esq., Mayfield, Sussex
Cadge, William, Esq., Assistant-Surgeon to the Norfolk and Norwich Hospital, Norwich
Carlyle, W. Johnston, M.D., Langholm, Dumfriesshire
Carnes, J., Esq., Coxhoe, Ferry Hill, Durham
Carnley, Henry, Esq., Hull
Charles, Thomas, Esq., Hertford Street, May Fair, London
Clare, W., Esq., Mossley, near Ashton under Lyne
Coates, Charles, M.D., Bath
Coldstream, John, M.D., Edinburgh
Coventry, Alexander, Esq., Rochdale
Croston, James, Esq., Atherton, Manchester
Dale, Thomas, Esq., Liverpool
Dalrymple, Donald, Esq., Norwich
Dawson, Thomas, Esq., Liverpool
Downes, William, Esq., Birmingham
Ellis, Robert, Esq., Bristol
Farrar, Charles, M.D., Chatteris, Cambridgeshire
Fernie, Andrew, Esq., Wellingborough, Northamptonshire
Fraser, —, M.D., 10th Hussars, Birmingham
Gabb, John, Esq., Bewdley, Worcestershire
Gibson, J. H., Esq., Lecturer on Surgery in the School of Medicine, Hull
Godfrey, Joseph J., Esq., Great Barford, Bedfordshire
Goulston, John G., M.D., Knighton, Radnorshire
Greig, David, M.D., Dundee
Harper, Robert, Esq., Holbeach, Lincolnshire
Henry, Mitchell, Esq., Assistant-Surgeon to the Middlesex Hospital, Harley Street, London
Hewitt, T. S., M.D., Grantham
Hicks, George D., Esq., Toddington, Bedfordshire
Hill, John, Esq., South Cave, Yorkshire
Hillier, Thomas, M.D., Medical Officer of Health to the St. Pancras District, Gower Street, London
Hodgson, George F., Esq., Brighton
Hodson, Frederick, Esq., Hornsea, Hull
Holmes, Timothy, Esq., Curzon Street, London
Irving, George Bell, Esq., Lamberhurst
Jackson, Thomas, Esq., Welton, South Cave, Yorkshire
Jackson, Thomas Hayes, M.D., Darlington, Durham
King, Kelburne, M.D., Demonstrator of Anatomy in the School of Medicine, Hull
Land, J. Samuel, Esq., Patrington, Hull
Landor, Henry, Esq., Heigham Retreat, Norwich
Lawford, Edward, M.D., Leighton-Buzzard, Bedfordshire
McLoskey, Patrick, Esq.. Rothwell, Northamptonshire
McManus, T., Esq., Hull
Manifold, William Hargraves, Esq., Liverpool
Marriott, John Esq., Colston Bassett, Nottinghamshire
Mault, Samuel, M.D., Fenny Stratford, Buckinghamshire
Moore, George, M.D., Brighton
Nimmo, Matthew, Esq., Dundee
Paley, William, M.D., Physician to the Infirmary, Peterborough
Prince, Frederick, Esq., Sawston, Cambridgeshire
Shaw, George, Esq., Battersea
Slinn, William S., Esq., Ampthill, Bedfordshire
Spurgin, B., Esq., Thrapstone, Northamptonshire
Stevens, Charles P., Esq., Biggleswade, Bedfordshire
Stone, Joseph, M.D., Manchester
Tarzewell, James, Esq., Sturminster Newton, near Blandford
Thompson, Charles Robert, Esq., Westerham, Kent
Thomson, Thomas, M.D , Inverury, Aberdeenshire
Thurnall, William, Esq., Surgeon to the Infirmary, Bedford
Traill, John R., M.D., Monymusk, Aberdeenshire
Walker, Henry, M.D., Brierly Hill, Staffordshire
Watson, Edward, Esq., Somercoats, Louth
Weir, A., Esq., Great Malvern
Williams, J. F., Esq., Cranfield
Williamson, J., Esq., Wotton, Bedfordshire
Wood, Richard, M.D., Driffield, Yorkshire.

Worcester, April 1. P. H. WILLIAMS, General Secretary.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

NOTICE TO MEMBERS IN ARREAR.

Notice is hereby given, that after the 18th day of April next, the British Medical Journal will be withheld, in accordance with the Laws, from all members whose subscriptions for last year shall remain unpaid.

Philip H. Williams, *General Secretary.*

Worcester, March 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen & Chickens Hotel, New Street, Birmingham.	Thursday, April 9th, 6 P.M.

FINANCIAL REPORT.

PRESENTED BY THE COMMITTEE OF COUNCIL.

The Laws of the British Medical Association provide that during the first three months of each year the Committee of Council shall, after the accounts have been audited, make a Report, through the Journal, as to the pecuniary position of the Society. In accordance with this rule, your Committee proceed to detail to the members, as nearly as possible, the present condition of the finances.

In the report made by the Committee last year, it was stated that about £1300 remained due by the Association at the end of 1855. It was decided, by the special meeting held in Birmingham in November 1855, that no part of this sum should be paid out of the subscriptions that would fall due in 1856; but that it should be defrayed by a special call of ten shillings on each member,* by the arrears of subscriptions due on December 31st, 1855, and by the sum received for advertisements in the Journal. Accordingly, this arrangement has been carried out; and the following is a statement of the sums received and paid on account of the debt due December 31st, 1855.

Debt.	£.	s.	d.
Due to Treasurer	692	11	8
Paid to Richards (Printer); to Deighton; and Commission	623	17	11
	1316	9	7

Receipts by Treasurer.	£.	s.	d.
For arrears due December 31st, 1855	195	12	6
Produce of Call Fund	492	0	9
Advertisements	625	4	3
	1312	17	6
Thus leaving a balance due to Treasurer	£3	12	1

Your Committee beg to state that since the accounts were audited, the Treasurer has received further sums from members for the ten shilling call; so that the debt due at the end of 1855 is now liquidated by the means appointed for that purpose. So far the result is favourable.

Your Committee now proceed to show what has been received by the Treasurer from the 1st of January 1856, to the 31st of December in the same year; also, what has been paid by the Treasurer for claims arising during the year 1856; and the liabilities of the Association on the 31st of December last.

The amount received by the Treasurer for subscriptions due in 1856, is £1565:1:6.

The payments are as follows:—	£.	s.	d.
To Richards (Printer)	1292	18	0
Salaries.—Dr. Wynter £250; „ Dr. Williams 155; „ Dr. Henry 85; „ Clerk 12	502	0	0
Reform Committee	50	0	0
Davidson (for Commission)	96	0	0
Petty expenses (of Dr. Williams and Mr. Richards)	56	9	11
Sending Circulars for Special Meeting	12	0	0
Reporters, Auditors, Stamped Envelopes, Branch Expenses, and Sundries	31	5	2
	2040	13	1
Receipts	1565	1	6
Due to Treasurer	475	11	7

The other liabilities (December 31st, 1856) are:—	£.	s.	d.
Richards (Publishing)	66	16	0
Richards (Printing)	416	19	6
Dr. Thudichum	8	5	2
Petty Cash	35	19	2
	527	19	10
Due to Treasurer	475	11	7
Total owing by the Association at the commencement of 1857	1003	11	5

To meet these liabilities, there are the arrears of subscriptions due on December 31st, 1856, and the amount due for advertisements. They may be stated as follows:—

	£.	s.	d.
Subscriptions, about	650	0	0
Advertisements, about	350	0	0
Total Assets	1000	0	0

The Association, therefore, at the end of the year 1856, may be considered to be clear of debt, and to have the income for 1857 to meet the expenditure.

The following is a summary of the entire receipts and payments for the year 1856.

Income.	£.	s.	d.
Subscriptions for 1856	1565	1	6
Previous arrears	195	12	6
Call Fund of 10s.	492	0	9
Advertisements	625	4	3
	2877	19	0

Expenditure.	£.	s.	d.
Old debt	1312	17	6
Payments in 1856	2040	13	1
	3353	10	7
	2877	19	0
	475	11	7

Thus it will be seen that the debt due on the 31st December 1855, has been reduced from £1312:17:6 to £475:11:7, which is the actual deficiency on the 31st December 1856.

Your Committee cannot avoid remarking on the fact that so large a sum should be due from members for subscriptions at the end of the year 1856. This ought not so to be; and your Committee cannot help expressing their regret that so many members should be forgetful of the debt they owe to the Association.

Charles Hastings, *Treasurer.*

Worcester, March 1857.

* The Treasurer will still be glad to receive contributions to the Call Fund from those members who have not yet responded to the resolution passed by the Special Meeting.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 10th, 1857.

Charles Locock, M.D., President, in the Chair.

ON THE PATHOLOGY OF THE ARTICULAR CARTILAGES. BY THOMAS BRYANT, ESQ., F.R.C.S.

[*Communicated by* Mr. Birkett.]

The author commenced by briefly describing the method by which cartilages are nourished, and laid stress upon the point of their dependence upon the integrity of other structures for their supply of blood; the consequence of this dependence being well shown in the fact that the nutrition of the cartilages is necessarily arrested or perverted upon any disturbance to the nutrition of the part upon the integrity of which they depend for their nourishment. The diseases to which the cartilages are liable were described as hypertrophy, atrophy, and granular, fatty, and fibrous degeneration. That *hypertrophy* might exist under the same circumstances that induce it in other tissues could not be denied, although the author knew of no genuine case. The cases described as such were associated with other disease of the joint; and it was questioned whether such a thickening was not the result of softening, or mere swelling of the tissue, or of some other pathological change. *Atrophy* of cartilage occurred either in old or in young people, where any of the requirements for healthy nutrition were defective. Under the head of *granular degeneration* was included the majority of the cases of what is called ulceration of cartilage. The author's researches had tended to convince him of the truth of Professor Redfern's conclusions. Degeneration might primarily commence either in the cartilage itself, or upon its synovial or bony surfaces; in the latter cases, the degeneration was secondary in the order of events, some diseased or perverted nutritive change in the bony lamella, or synovial membrane, being antecedent to the degeneration of the cartilage. A case was then given illustrative of the dependence of the cartilages for their integrity upon the integrity of those tissues to which they were connected. A small patch of the synovial surface of a cartilage, exactly corresponding to a patch of inflamed synovial membrane, had become degenerate, the other portions of the cartilage being quite healthy. If this membrane had been ruptured, an ulcer, *so-called*, would have been visible. Degeneration of cartilage as depending upon disease of the bony lamella or heads of the bones was then mentioned, and the different appearances of the cartilage in the different stages of the disease were described. *Fatty degeneration* was described as being constantly found in joints which had been deprived of their natural function by any cause whatever. The general and microscopical appearances were given, and a case illustrative of the subject was read. It was due to this form of degeneration that the rapid disorganisation of a joint follows upon an accidental attack of inflammation in chronic diseased joints. *Fibrous degeneration* was next described, and the different appearances to the eye and the microscope in its different stages. The connection between this form of degeneration and the calcareous degeneration of the osseous lamella was mentioned, and also the connection between the fibrous and granular degenerations, the former appearing to be a more chronic change of a somewhat similar character. Other changes were then alluded to not included in the preceding divisions, such as the deposition of gouty materials in and upon the cartilages of joints, and the absorption of cartilage, leaving the porcellanous or dense bony surface of the osseous lamella. A case was read illustrating the connection between the bony lamella and the cartilage, and demonstrating that the degeneration of the latter and the calcareous degeneration of the former were produced by similar causes.

Mr. Ure had on several occasions seen the granular disease. A case of a striking character had occurred to him last September, after amputation of a boy's limb for pulpy degeneration of the synovial membrane. Another peculiar disease, called the pilous, also existed, in which the surface of the cartilage had the appearance of the pile of Utrecht velvet. The author would probably include this under the head of fibrous disease. The author's views were entertained very extensively on the continent, but particularly in Paris.

Mr. Quain had expected a different kind of paper. The title had led him to believe that "pathology" of the cartilage meant the cause, symptoms, diagnosis, and also the morbid anatomy, of the diseases. He should have been interested if the author had connected the morbid anatomy and the morbid changes with the symptoms and appearances exhibited during life. He had been much struck with a case mentioned in the paper of the child who had died with hydrocephalus twenty-eight days after the disease of the hip had commenced. The dissection of such a case was interesting, as surgeons seldom had the opportunity of observing the disease until it was in a very advanced condition. The description given by the author of inflammation of synovial membrane and the ligamentum teres was clear, and he had probably correctly ascribed the disease of the cartilage to the disease previously existing in the synovial membrane, but he added that the cartilage on the head of the bone was softened, and the synovial membrane over it inflamed. He ascribed the change in the cartilage to the change in the synovial membrane. Was it certain, however, that there was a synovial membrane over the head of the bone? He believed the existence of such a membrane in these cartilages was denied by histologists.

Mr. Spencer Smith exhibited a preparation from the museum of St. Mary's Hospital. It had reference to the question as to whether a synovial membrane existed over the head of the bone. Histologists, he said, admitted that there was such a membrane in the fœtus, but many denied its presence in after life. The membrane, however, could be distinctly seen in the preparation, and was raised from the surface of the cartilage; the cartilage beneath being hollowed out like a cup. The museum at St. Mary's Hospital contained a splendid preparation in which three or four such destructions of cartilage had taken place at the lower end of the femur. The joint had been rapidly destroyed by acute inflammation; and, on making an opening into it, three or four little puffs on the synovial membrane—some of the size of peas, and some as large as horse-beans—were observed. The synovial membrane projected forward; and on slitting it open, a soft fluid escaped, and the cartilage was found to have undergone a destructive process. In the specimen he had exhibited, there was not the slightest appearance of the membrane being a false one.

Mr. Birkett had examined many subjects very carefully to ascertain if such membranes existed. He had never, however, in the adult subject, met with anything approaching it. He had discovered, near the circumference of the head of the femur, in infancy and very early life, a small development of such tissue as might be called epithelium, but nothing approaching, in his idea, to the character of a membrane. Mr. Toynbee had some years since brought before the Microscopical Society specimens to illustrate the existence of the synovial membrane; but he (Mr. Birkett) did not deem them satisfactory. In Mr. Smith's specimen he regarded the membrane as something adventitious. The synovial membrane was an extremely delicate tissue; but the membrane in the specimen was as thick as a piece of paper. Such membranes he regarded as the result of some inflammatory action pouring out a tissue which became organised on the surface of the cartilage.

Dr. Mayo concurred in the remark of Mr. Quain that morbid anatomical investigations should always be combined with strictly dynamical, physiological, and practical considerations, having reference to the actions and conditions of life.

Mr. Spencer Smith remarked, that in his specimen the thickness of the membrane most probably depended on the fact, that prior to amputation of the limb disease had been going on in the articulation for nearly eighteen months.

Mr. Bryant said that if he had extended his communication so as to meet the requirements of Mr. Quain, his paper would have been one upon diseased joints, and would have extended far wider than he intended it should do. Whether or no the membrane over the articular cartilage was synovial he could not determine. It was, however, certainly a membrane, being composed of a structure differing completely in character from that of the cartilage.

ON A READY METHOD OF DETERMINING THE PRESENCE, POSITION, DEPTH, AND LENGTH OF A NEEDLE BROKEN INTO THE FOOT.

[*Communicated by* H. Bence Jones, M.D., F.R.S.]

The deductions drawn may be thus briefly stated:—1. The presence of an imbedded needle may most surely be determined by making it into a magnet by induction, and then testing for it by a minute suspended magnet. 2. The direction of an imbedded needle may be determined by marking the direction in which the inducing magnet makes the strongest magnet.

When the length of the needle lies in the line joining the poles of the inducing magnet, it becomes the strongest magnet. 3. The depth of the imbedded needle may be determined by the intensity of the action near the surface of the skin. 4. The length of the needle may be guessed when the direction is known, and the amount of magnetic action at the part of the surface opposite to the spot where the needle entered is observed. 5. The motion of the needle may be determined by carefully noting from time to time the changes that require to be made in the position of the inducing magnet, in order to give to the hidden needle the strongest possible magnetism.

Mr. Quain had successfully adopted the plan recommended by Mr. Smee in several cases. He thought that the plan of magnetising the needle in the flesh, as proposed in the paper, was a great improvement. Unless, however, the portion of needle employed in the experiment was very small, it would not be acted upon by the needle which was imbedded. On one occasion he was enabled by this plan to detect a small fragment of iron which was imbedded in the ulnar nerve.

Mr. Brooke remarked that every surgeon might not possess a powerful magnet to magnetise the imbedded needle; but this effect would be as well produced by a ring of copper wire, containing about 100 coils, similar to that manufactured for galvanometers, the two ends of the wire being connected with a galvanic battery. The greatest amount of magnetism would be induced in the imbedded needle when its direction was perpendicular to the plane of the coil; but if the plane of the coil were coincident with the plane of the needle, scarcely any amount of magnetism would be induced.

Dr. Copland inquired whether any surgeons had extracted needles which had been introduced in the manner described?

Mr. Quain had taken away two fragments. The experiment, however, required to be conducted with great caution, as the needle might be acted upon by the atmosphere.

Dr. Copland recollected a lady who was lame for a considerable time in consequence of a needle having become deeply imbedded in her foot. Sir Benjamin Brodie had advised that nothing should be done in this case. The pain, after some weeks, disappeared; the lady was able to walk, and experienced no after-inconvenience. The needle was never discovered.

HARVEIAN SOCIETY.

Thursday, February 19th, 1857.

W. Camps, M.D., Vice-President, in the Chair.

THE CONSTITUTIONAL ORIGIN AND TREATMENT OF CANCER.

BY T. WEEDON COOKE, ESQ.

It was necessary, in order to arrive at a means of overcoming cancer, to go back to the times of Hippocrates and Celsus, and to learn from them that no operation, whether by knife or caustic, will eradicate the disease. The whole constitution must be attacked, and not only the local manifestation of the malady. The author had begun the treatment of this disease at the Cancer Hospital on the principle of local eradication by operation; but the observation of upwards of a thousand cases had gradually convinced him that the whole system must be the main point of attack, the local disease being comparatively easy of management. After referring to the literature of the subject, the author stated his belief in the existence of a specific cancer-cell, which could be created of and from the blood alone. The systemic origin of the disease is further proved by the following facts: 1. The disease almost invariably returns at an earlier or later period after extirpation. 2. An hereditary disposition is shown in a certain number of patients. 3. The evolution of the disease occurs at a time when important changes are occurring in the circulatory system. 4. Depressing moral agents have an undoubted effect in originating the malady. 5. Further evidence is afforded by the numerous deposits of cancerous matter in many parts of the body. One hundred and twenty eight persons had presented themselves at the Cancer Hospital who had been operated on, and the average duration of their freedom from any external sign of the disease was eighteen months. Mayo operated on 100 cases, and considered that 5 only had been permanently benefited. Boyer admits 4 cures only in the same number; and Macfarlane, who had operated on 118 persons could not point to a single radical cure. The hereditary taint must, if proved, go far to establish the constitutional origin. Velpeau says one in three have this predisposition; at the Cancer Hospital it has only been noted in one in six, and by Sebert in one in twelve cases. Cancer in its various forms is seen at the commencement and at the end of life; but in the great bulk of cases from forty-five to fifty is the usual period of its development. According to a calculation made by Mr. Cooke in upwards of one thousand cases the average age is forty-three and a quarter years. This period of life is obnoxious to the most remarkable changes in both sexes. But while the male is not exempted from alterations of structure and impairments of function at this time, the female especially suffers from the cessation of the menstrual flow. This additional cause of deterioration of the vital fluid accounts for the wide difference in the number of the two sexes afflicted with cancer. At the Cancer Hospital the female patients are as six to one male. If the disease was local, why should it so constantly select this particular period of life for its manifestation? Some believing in the constitutional origin insist upon a local existing cause to set up the action; but this even is scarcely supported by facts, inasmuch as one in seven only of the thousand patients referred to knew of or suspected any direct violence to the part affected. The effect of depressing moral agents has been noted by most authors, but rejected by some. Under these circumstances, atrophy of the red corpuscles, and increase of the colourless globules, are observed; thus the blood is deteriorated, and the tissues formed from it show the defective organisation of cancer. Whether the defect be a process of exudation or of impaired nutrition is difficult of solution; but Mr. Cooke leant to the idea of deranged nutrition or degeneration of the tissues analogous to fatty degeneration. The distribution of the disease through the various structures of the body, together with the impossibility of conveying cancer by inoculation, would seem to prove further the systemic origin of cancer.

The constitutional origin of cancer being established, it becomes necessary to apply the test of practical experience, founded on the observation of the course which nature pursues when left to herself, and of the course and termination of the disease when art endeavours to relieve it; and to prove the necessity for providing that the tissues of the body shall be azotised, built up, and invigorated by physical and perhaps scarcely less by moral agencies. The whole being thus cared for, the local manifestation of the disease may be usefully attacked. There are cases in which hæmorrhage or excessive purulent discharges are so weakening the patient that it becomes necessary, either by the knife or caustic—but better by the former, under the influence of chloroform—to remove this source of decay. In a very large number of cases there is a period when the cancerous tumour ceases to increase, begins to diminish, and gradually to waste away. If, then, nature is sufficient, even in a few cases, to check the disease, success might also be fairly expected from the use of some of the abundant means of encouraging a healthy condition of the solids and fluids of the body. All medicines or dietaries of a lowering description are to be repudiated; and even the iodide of potassium the author had little inclination to employ, unless in combination with iron or some other tonic. Soporifics only add to the dyscrasia; and when, from the entreaties of patients, it becomes necessary to have recourse to them, all hope of remedy must be put aside. Arsenic has formed the basis of most of the secret remedies used for cancer; but, according to the author's experience, it is inferior, either internally or externally used, to other more certain and less dangerous tonics and escharotics. Of all medicaments, iron in its various forms is capable of effecting the largest amount of benefit. In order to obtain this good in various constitutions, it is necessary to vary the form of its administration, and to alternate the tonic with others. The mineral acids are most valuable either alone or in combination with other drugs. Lemon-juice and sarsaparilla in delicate people is a most excellent appetiser. Compound tincture of cinchona is largely used with the greatest benefit at the Cancer Hospital; and cod liver oil, as an adjuvant to the other remedies, is serviceable. Diet and moral management are of the utmost moment. It would be impossible to lay down absolute dietetic rules; but the system requires to be well nourished and somewhat stimulated. Good meat, good beer, and a fair supply of good vegetables, putting aside soups and fish, are the grand indications. Wine may be taken according to advice. The treatment of the mind is not less important; and if the idea of the incurability of cancer could be eradicated, hope would greatly assist our efforts at restoration. The diversion of the mind from the contemplation of the malady by the influence of genial society, by the cultivation of literature and science, and by change of scene in travel, have tended to the cure of the disease.

It appears from the statistics of the Cancer Hospital that 128 persons have presented themselves who had been operated on previously; and that the average lapse of time before the return of the disease in these cases was eighteen months. There are some cases in which removal of the local malady is desirable. One is that of advanced hæmorrhage, already been referred to. The other condition is where epithelial cancers attack any exposed part, such as the lips, face, or extremities. The method of removal in either of these cases should be by the knife under the influence of chloroform. *The knife can do without pain in as many minutes all that the caustic can do with pain of no ordinary character in as many days.* These two agents, however, in the local treatment of cancer, are of infinitely less importance than those which assist in the induction of that atrophy of the tumour which is brought about by nature in many cases. Of all the detergent remedies, lead, in its various pharmacopœial forms, is the most efficacious. Among special applications for particular parts are chlorate of potash and hydrochloric acid lotion, and carrot poultice to the ulcerated or sloughing breast; borax lotion, and the application of the nitric acid or sulphate of copper to the tongue, etc. But it must be at all times kept in view, that local treatment in cancer, whether by the knife or caustic, or detergent applications, is second in importance to the general upholding and revivifying of the constitutional powers.

In the discussion which ensued, Dr. Theophilus Thompson, Mr. Burford Norman, Dr. Vernon, Dr. Hutchinson Powell, Dr. John Gray, and Dr. Camps, took part.

Editor's Letter Box.

MEDICAL REFORM.

Sir,—Many years an associate, I have little encroached on your columns, and now had been silent, but that silence, under some circumstances, takes the form of self-reproach. Unlike chess or whist, lookers on at the game of Medical Reform are not forbidden to drop a hint, and a gleaner, in the wake of more active spirits, might shake, perhaps, a trifle of grain from his bundle of chaff.

Now, does the phrase "Medical Reform" fully express that regeneration, reorganisation, and determination to assume a proper status of the Medical Profession which it is intended to convey? Is the phrase not too hackneyed, and occasionally prostituted in political service? I simply propose the question. Is it not hateful, even in this day, to some ears which would joyfully hail the triumph of physic; and does it explain the claim there is upon society and the public, whose battle it is, as much or more than that of the profession? Does it not rather imply a reformation of the members of the profession, than its grievances? Again, is the profession not a little too prudish and exclusive in its intercourse with society? The hydropath quacks, etc., "communicate freely", and make their game; but about the Regulars there is still a something savouring of the prestige of the gold-headed cane, nods and winks, etc., and little effort made to enlist the sympathies of the public in a common cause against a common enemy. "Familiarity begets contempt," it is true; but it is a shallow mortal indeed who fancies himself a doctor because he has had a little converse with one; and there does exist here and there an economist who would try to introduce Union remuneration to private establishments, but such are exceptions; "*Hic niger est, hunc tu Romane caveto.*" Generally greater freedom of intercourse would lead to an acknowledgment of the superiority of the profession, and its claims upon society in all that relates to health, as witness the success of the quack over those who

"Do good by stealth, and blush to find it fame."

It would not be necessary to proclaim individual merits, but scientific success and superiority as a body; and why should the profession seem to monopolise grievances which it only "enjoys" in common with the public as sleeping or sleepy partners; but "when ignorance is bliss, 'tis folly to be wise," so of course they don't wish to open their eyes to it themselves; we must, therefore, awake them.

By cutting down the doctors to the lowest figure, the public, through Boards of Guardians, are cutting their own throats, under the delusion of "Economy, and keeping down the rates". The suicidal hand must be arrested, and a moral lesson read to them. Economy, indeed! Don't they pay for their whistle, that's all? When an independent labourer is sacrificed to the parsimony of the medical regulations of a Union, and, dying, leaves a wife and family to the parish, where is the economy? Prompt and efficient medical aid, even up to a consultation, might have shown a different result and true economy. Why, then, should these questions be confined exclusively to the Medical Journals? To the successful issue of Medical Reform, it is necessary the public and profession should fraternise. General Medical Reform, and Poor-law Medical Reform, are, in a measure, distinct: the first relates to the public, who can help themselves; the latter to the poor, who cannot help themselves.

To take the last first. "The Poor-law Amendment Act," what is it? A hydra-headed monster, with uglier features even than those in its medical aspect: to deal with it entire were a herculean task. Can its origin be traced and its root sapped? whence came it? Some deem it a hybrid progeny—by Local Self-Government out of Misrule—to which a pet metropolitan parish stood sponsor,—sweet innocent! and how like god-papa, who claims to be and continue its "model!" In anatomising the "subject," then, for a public demonstration, suppose we begin with "a model," and what do we find? "Horrible outrage!" why the words quite startle one; yet they head an obscure paragraph in some public journals, describing how the mortality of a metropolitan parish having greatly increased, some workhouse nurses, returning from "high mass" and their devotions at the temple of Bacchus, diagnose a "cause of death," which must have astonished the Registrar-General; they accuse their chief, the arch-nurse, of purloining the children's food, and starving them; the hiding-place is indicated, searched, and the stolen goods—ribs of beef, mutton-chops, milk, etc.—found ready to be conveyed away. Newspapers sometimes exaggerate: so the ribs of beef might be taken, "*cum grano salis*;" flanks and veiny pieces are tit-bits in workhouses, unless the term is used anatomically—ribs (*i. e.* bones) without the beef, for crushing purposes, perhaps.

Four infants died in one week! who is to blame? who is to blame? That's just the question that was proposed in the Crimea, and a whole commission was required to answer to it. But the matter, we are told, is under investigation; true, it is in more quarters than one: the reduction of the rates will be a poor set-off to this mortality. To what class of society did these children belong? Not the aristocracy; not professional life; not commercial; but to (we don't like the term, lower orders) the people! the people! whose sweet voices are this week being assiduously solicited, by rival candidates, for the distinction of representing them in Parliament, and becoming the champions of their rights—the people's rights: "*O fortunatos nimium sua si bona norint.*" But who seeks to represent the medical profession? who seeks its suffrage? who advocates the rights of the "Union Doctor?" He is without a champion; and although he would scorn to filch even a leaf of the laurels too scantily wreathed around the brow of a military hero, and more scantily still around that of the soldier-doctor, yet he thinks within himself that he, too, has done the "state some service," not by fits and starts, but calmly wrestling hand to hand with disease, with death, from the beginning to the end of his career,—a service of danger it would be considered in other than civil life.

One metropolitan member who has evinced a lukewarmness towards local self-government is threatened with (not ribs of beef; no, no;) the cold shoulder; that will suit him. Strange to say, the members are sent back to their constituents "wanting a cry." Poor-law and medical relief are not touched upon in most of the addresses to electors. Possibly the two pair of spectacles alluded to as occurring within one week might open the eyes of the people, and lead even the aristocracy to consider whether they might not find an outlet for their superabundant zeal and cash this side of Timbuctoo, and find a liberal return, too, in the shape of protection, from the thorough cleansing of some of those Augean stables existing in many of the wealthiest parishes, which first centralise and then vomit back the fomites of disease and death; for there is little faith to be placed in the "local self-government patent pedomotor parish doctor," who professes to defy or cure both, on the principle of an agricultural machine, clearing up all the work as he goes (of physician, surgeon, apothecary, and dispenser) with just two packetsful of pills (cathartic and cough) hurled indiscriminately, or it may be alternately. No! let "medical supremacy" be the cry, as opposed to Poor-law and parochial patriotism in matters of health, at least; and the erection of certain forthcoming hustings will sound to some ears like as that of the scaffold to a malefactor; for with pestilence on one

hand, and starvation on the other, the poor, the people, and the profession will see their interest is one and the same, and then, *tria juncta in uno*, they will meet the hydra-headed monster of Poor-law injustice on equal terms, and the three P's pull together as one body in the struggle for dear life, and establish the supremacy of the *vox Dei* as the guide and ruler of the

Vox Populi.

March, 1857.

P.S. How long the increased mortality had been going on at four-a-week, the papers say not.

THE MEDICAL OFFICER OF THE BANBURY POOR-LAW DISTRICT.

Letter from Shearman Chesterman, Esq.

Sir,—The severe criticism made in your last number on my conduct, in reference to the late vacancy of surgeon to the Banbury district, is founded on an *ipse dixit* statement.

I now forward you a full and correct epitome of facts (a copy of a letter addressed to Messrs. Rye, Grimbly, Griffin, Wise, Douglas, and Smiles, my accusers).

I willingly leave it to your sense of justice, to make such reparation that you may deem necessary, and to which you consider I am entitled, for the injury my character has sustained, by the unjust comments in your impression of the 28th inst.

I am, etc., Shearman Chesterman.

Banbury, March 31st, 1857.

[Copy.]

"*To Messrs. Rye, Grimbly, Griffin, Wise, Douglas, and Smiles.*

"Gentlemen,—You have taken considerable pains to disseminate, through the columns of the *Banbury Guardian* (*as well as by private circulars*), false and calumnious charges against myself; I will, for your information, as well as for the public, *whom you evidently wish to mislead*, detail a simple and truthful narration of facts, which I challenge you to disprove.

"On the evening of the day (Feb. 19th) that Mr. Grimbly resigned the office of Surgeon to the Banbury District, he called the medical men together at his house, to state the reception he had that day met with at the Board of Guardians; after speaking very fully and warmly of the insults he had received, he concluded in graphic language, peculiar to himself, with these words: '*Their conduct was just like a lot of parson and squire justices who had pounced upon an unfortunate poacher; they attacked me all of a heap; and when I left the room, not a single member of the Board took the slightest notice of me.*' He then proceeded to hint that an address of sympathy to him would be acceptable, which was at once prepared, and signed by all present. Some days subsequently, I heard from an influential member of the Board, that the above account was entirely incorrect.

"It appears that they (the Board) were desirous of dealing kindly towards him; that it was his manner which was so offensive and turbulent; and the question for their decision was a charge merely of neglect (not a serious one), viz., not attending properly to a female pauper, named Watts; upon one of the Guardians observing it would be better to send the case to the Poor-Law Board, Mr. Grimbly immediately replied, 'I will resign.' He has since represented in one of our local papers, and several medical periodicals, that it was a charge trumped up to urge him to resign, in consequence of his having previously applied for an increase of salary. The entire members of the Board then present, declared the question of salary had nothing whatever to do with his resignation.

"I remarked to him, on the evening in question, that he should not have resigned, but have courted an inquiry. He said, 'No; the conduct of the Board was so gross towards him, he had no alternative.'

"He afterwards mentioned to several persons that he would not again accept the appointment, unless they increased his salary, for he was tired of acting as their officer, the pay so inadequate.

"Upon Dr. Caparn learning distinctly from reliable information the avowal made by Mr. Grimbly, he (Dr. Caparn) considered himself freely justified in applying for the vacant office.

"This being done, a deputation, said to represent yourselves, waited upon me (in a manner bordering on insult), and inquired if I were aware Dr. Caparn had taken this step, and also wished to be informed if the act received my sanction; at the same time charging me, to my great astonishment, with having pledged myself, at the meeting held on the 19th, to oppose any person tendering for the vacancy.

"To this I replied, 'that no resolution of the kind was made during the short time I was in the room; and, until this moment, I was entirely ignorant that such a resolution had been passed, or it would have been opposed by me as illiberal and selfish, and contrary to my usual conduct.'

"I felt considerable surprise, after Mr. Grimbly so freely abusing the Board, together with subsequent declarations from him, that he and all of you should make an earnest and active canvass to secure his *re-election*. If he desired (*and it is now clear that he did*) to retain the appointment, notwithstanding the hard and unjust things he had said, why did he not have the manliness to declare his desire? and then, I venture to assert, Dr. Caparn would not have been a candidate.

"To add to your unjust proceedings, you have not hesitated to send printed circulars, to be publicly exposed on the table at the library of Guy's Hospital, in which Dr. Caparn and myself were shamefully misrepresented, and only made acquainted by mere accident of the fact.

"I am very generally and confidently informed, that the combination with the view to injure me is not the result of this misunderstanding, but the remnant of an old and rancorous feeling of jealousy that you could no longer conceal, and of which, until very recently, I was in utter ignorance.

"I remain, gentlemen, your obedient servant,

"Shearman Chesterman.

"Banbury, March 31st, 1857."

THE MEDICAL OFFICER OF THE BANBURY POOR-LAW DISTRICT.

Letter from John Caparn, M.D.

Sir,—In your Journal of the 28th inst. there is a leading article respecting the appointment of Medical Officer to the Banbury district, in which censure is passed upon my conduct for becoming one of the candidates. As this has arisen from an *ex parte* statement, and not from a true knowledge of facts, I beg to lay before you the accurate circumstances of the case.

Mr. Grimbly, some time before his resignation, addressed a letter to the Board of Guardians requesting an increase of salary, stating the amount he then received was unremunerative. To this application a courteous reply, by letter, was returned, with a promise that it should be considered at the proper time, *i. e.*, the termination of the quarter. That this was the case I am given to understand by the clerk of the Board. At a subsequent meeting, a charge of neglect against Mr. Grimbly was brought forward by one of the Guardians, which charge he (Mr. Grimbly) indignantly, and in the most intemperate language, denied; and from the evidence of two gentlemen present, of the highest respectability and standing in society, it would appear that, so far from his being treated in the rude and arbitrary way he had represented, he was met with a kindly and courteous manner. But a suggestion having arisen, that the charge had better be referred for discussion to the Poor-law Board, he at once exclaimed, "I'll resign."

After he had resigned, he was desirous that it should appear to his friends and the profession that he had been induced to throw up the appointment on the question of salary, notwithstanding assurance had previously been given him, officially, that that point should be duly considered, and which question, at that meeting, was not even under discussion. After this, an inaccurate statement is supposed to have been given to your Journal; which statement drew forth these stringent remarks on the conduct of the Guardians, and which also, by the misrepresentation, was the means of obtaining the signature to a vote of sympathy given by the medical men of this town.

In reference to the meeting at which I was present (so particularly alluded to in the *Lancet* medical journal), permit me to state, that it was not convened for the purpose of discussing the subject of the "resignation," but was simply a periodical (monthly) meeting of the members of the North Oxfordshire Medical and Chirurgical Society, a paper was then read by Mr. Chesterman, entitled, "Practical Observations on Croup." The business part of the meeting having terminated, and whilst the members were enjoying the hospitality of the gentlemen at whose house they were assembled, Mr. Grimbly, somewhat unwisely, started (to the surprise of several persons present) the subject of his misunderstanding with the Board. The observations which then fell from him were calculated to impress me with a belief that he did not, under any circumstances, again intend accepting the office which he had thrown up; I

may also add, that the general opinion of his medical bretheren who were present (so far as I could judge), was to the effect, that he ought not to have resigned, but should have made an appeal to the Poor-law Board for an investigation; and from a letter which was then read, purporting to be from Mr. Griffin of Weymouth, it was too evident that no assistance could be rendered, as he had voluntarily resigned. At this time I had not the slightest intention of becoming a candidate; but learning subsequently that another person had been requested to come forward, who was unconnected with the town, and that the Poor-law Board had expressed their willingness to send down a medical gentleman, if necessary, I deemed myself fully justified and at perfect liberty to apply. But, before I did so, it was arranged with Mr. Chesterman that he should have an interview with Mr. Grimbly, and learn if he (Mr. Grimbly) intended again making an application for the vacant appointment; and I also communicated with Mr. Chesterman from London, stating, that if such was the case, I should most positively decline coming forward, being anxious to avoid doing anything that could, by a possibility, be misconstrued into unprofessional conduct towards Mr. Grimbly, or be considered in opposition to the wishes or feelings of the medical practitioners of the town (a copy of this letter can be forwarded). Mr. Grimbly at that interview most emphatically declared he did not, and that he would not, accept the office, even were it offered to him. Not only did he state this to Mr. Chesterman, but to others; nor until the morning of the election, when it was too late to retire, was I aware of his having done so. At that meeting, a letter from Mr. Grimbly was read by the chairman, endeavouring to explain away the offensive assertions he had made previously against the Board, which letter was a decided apology, and an appeal to the members present that he should be re-elected. After making such an apology, they, taking into consideration his eighteen years services, thought him to be entitled to be again appointed, the Guardians having no ill-feeling towards him, but that which was caused by his own intemperate conduct; still, it was not with the large majority stated, but with one of five out of twenty-three Guardians present.

This is a simple unvarnished statement of the truth, "and I leave it to the profession to judge if the conduct of that gentleman who could make such misrepresentations, with a view, perhaps, either to injure my private character or create an unfavourable impression in the minds of the residents of the town in which I am now located as a perfect stranger," and yet afterwards beg to be reinstated in that office he had so positively declared he would not accept.

Though I may regret commencing practice, having to contend with an erroneous prejudice of my medical brethren (one, as they well know, of their own creating), yet the onus must remain with those who, instead of holding out the hand of fellowship, would rather sanction the disguise of truth to gratify a feeling of discreditable jealousy against a new comer in the town.

I am, etc.,

John Caparn.

Banbury, March 31st, 1857.

P.S. I will only allude to an anonymous paper sent to my medical school, casting reflections on my character, when it was well known from absence I should have no means of justifying myself: a proceeding alike contemptible and unprofessional. Papers also intended to have the same injurious effect, have even been distributed to the private friends and patients of Mr. Chesterman, pointing out that there is a far deeper feeling in agitation than a mere parochial medical contest would excite; an appointment of itself nearly valueless but for the gratification of assisting and alleviating the distress of those who have not only sickness but poverty to contend with. The signature to these should be *anguis in herbâ*.

MEDICAL ETHICS IN POOR-LAW APPOINTMENTS.

Letter from L. O. Fox, Esq.

Sir,—In recalling the attention of the profession to the conduct of Mr. Francis Taylor of Romsey, in accepting an office in that Union vacated by me, on account of insufficient salary (recorded in the British Medical Journal of the 17th of January), permit me to thank the numerous gentlemen in different parts of England, who have kindly tendered me their sympathy and support. To you, sir, also, are my thanks due, for the expression of your opinion on the matter, and for the insertion of my former letter. I deeply regret it should be necessary to trespass again on your columns; but a regard for my own character, and respect for the great question of Poor-Law Medical Reform, compel me to lay the case of Fox *versus* Taylor once more before the profession, that they, as the superior court, may amend the verdict of an inferior court, just pronounced.

When this case was first reported in the journals, it was suggested to me to bring it before the Southampton Medical Society, which took cognizance of medical ethics, and of which body Taylor and I were members.

I applied to the Society for a hearing of the case, and the following is an abstract of what took place.

The secretaries fixed a day, and informed Taylor and Fox thereof. Taylor replied, "Too busy to attend." The secretaries then wrote, asking Taylor to fix a day. Reply: "Can't fix; don't want any controversy." Fox wonders at the delay, and urges the secretaries to proceed; at length *they* fix a day, give Taylor notice, and request him, if not able to attend, *to write* in defence or explanation.

Meeting 24th Feb., Dr. Oke in the chair. Taylor absent. Letter received from him and read: "That he can justify every step he has taken, and has no objection to communicate *privately* with the president or secretaries.

The following is an abstract of the case heard.

Fox and Taylor, Medical Officers of the Romsey Union. Fox's district, 5,000 acres; population, 1,500; salary, 13*s.* 10*d.* per week. Fox applies for an increase of salary on Monday, Dec. 20th, 1856, the Board day. Board of Guardians refuse by letter, dated Monday, 29th Dec.

Fox resigns in consequence; date of letter, Wednesday, 31st Dec.; to be laid before Board on Monday, 5th Jan. 1857.

No appointment made that day, but Mr. Taylor and Mr. Sainsbury (another medical officer), were offered the district; at all events, were written to on the subject.

Jan. 3rd, *before Fox's resignation could be known by the Board* (their meeting being on the 5th), Fox informs Taylor thereof, with his reasons, and asks for Taylor's sympathy and support. Taylor replies to Fox on Jan. 10th, stating that he has taken the district on the old terms, "because it came in with his work," etc. (*vide* Journal, Jan. 17th), and apologises for having so long delayed answering Fox's letter of Jan. 3rd.

Meeting at Southampton adjourned, to give Taylor another opportunity of explanation. Fox lives seventeen, Taylor eight miles from Southampton. Next meeting: Society unanimous in condemning Taylor's conduct: passed a resolution so strong as to be considered libellous, and therefore withdrawn. Committee appointed to hear Taylor privately. President and secretaries to be a sub-committee for an interview. Meeting adjourned.

March 27. Meeting of society: Dr. Oke chairman. Sub-committee retired to adjoining room to communicate to committee result of private conference with Taylor. On their return, the president communicated such information to the meeting as Mr. Taylor *allowed to be made public*, in his defence, which was,

1st. That he had accepted the office before he received Fox's letter, and therefore was not acquainted with the circumstances attending his resignation; and,

2nd. That the Rev. C. Kingsley had said "the salary was an average one."

It came out accidentally, that the reason Mr. Taylor could not attend the general meeting was a predisposition to palpitation of the heart, and Dr. Elliotson had recommended "the avoidance of all excitement." Fox having been called in, and Taylor's defence read to him, it was suggested, that Taylor might have had the office offered to him before the meeting of this Board on the 5th of January. To this it was replied, that no one could have been authorised to offer it, but admitting that Taylor had plenty of time, after knowing the circumstances, to rectify his mistake, had it been a mistake only.

The society proceeded to return a verdict, and, after some discussion, the following was handed to Fox:—

"The Medical Society having maturely considered the circumstances connected with the resignation by Mr. Fox of the appointment of medical officer of the Motherport district, and the acceptance of the office by Mr. Taylor, cannot but express their regret that Mr. Taylor did not communicate with Mr. Fox prior to accepting the office, and would urge on both gentlemen, that it will be the wisest and kindest course to take no further proceedings in a matter which may lead to much unpleasant controversy, and very painful results."

I call upon my medical brethren throughout the kingdom to say if I have been treated fairly in this matter by the Southampton Medical Society. I ask them to say if any private matter

should have been introduced or allowed to operate in deciding on a public question.

Emerson says (in his *Traits*), "The English game is fair play and open field, without trick or dodging; they hate craft and subtlety. They neither poison, nor waylay, nor assassinate." Let me have English treatment, and I fear nothing.

Some slander must have operated to induce a body of men one day to pass the strongest possible resolution, and the next, such an one as that just quoted, on the same subject. How far this is just I leave my brethren to say.

I now call upon Dr. Oke (as I did at Southampton), regardless of consequences to myself, to declare the grounds on which the Society changed their tone in reference to Mr. Taylor's conduct. As I am only desirous that truth should prevail, I make this proposition to Dr. Oke:—That, if Mr. Taylor can justify his breach of professional etiquette, by any circumstance or matter of a private or public nature whatever, in relation to myself, to be decided by any impartial professional man, I hereby promise to pay £10 to the Treasurer of the Southampton Infirmary; and that, should Mr. Taylor fail to do so, he shall be expelled the Southampton Medical Society.

Why does not Mr. Taylor go the meetings of the Society? A score of professional neighbours need not make his heart palpitate; it need not do so, more than a cross-examination at the Old Bailey in Palmer's case, or attendance at the noisy meetings of the Cemetery Board at Romsey, or than at his own election as mayor and alderman of that town.

I call upon the excellent and honourable men belonging to the Southampton Society to arouse themselves, and, for the reputation of their body, to assemble at the next meeting, on Tuesday the 14th of April, and prove themselves capable of judging of a case impartially and on its merits.

I am, etc., L. Owen Fox.

P.S. There may be some trifling inaccuracies as to the order of the foregoing proceedings, but the account is substantially true.

I omitted to mention that, upwards of a year ago, I informed Mr. Taylor that I should resign if I did not get my salary increased.

Broughton, Stockland, March 31, 1857.

OBSTRUCTION OF THE PULMONARY ARTERY.

Letter from Henry Lee, Esq.

Sir,—In the *Dublin Quarterly Journal of Medical Science* for November last (p. 377), Dr. Kidd states that, "Though dissection has, in numerous instances, proved that obstruction to the pulmonary artery was the cause of death, in no case has the true nature of the disease been recognised during life."

In the Association Medical Journal for 1855, are published at length the notes of a "case of supposed obstruction of the right pulmonary artery." These notes, with the above heading, were taken during the years 1851-52, and the case was related to the Medical Society of London in 1853. The correctness of the diagnosis was verified on the 4th of October 1854; and the preparation of the obstructed pulmonary artery is preserved.

I am, etc. Henry Lee.

13, Dover Street, Piccadilly, March 30th, 1857.

EFFECT OF LIGATURE OF THE FEMORAL ARTERY ON HÆMORRHAGE FROM THE FEMORAL VEIN.

Letter from G. B. Halford, M.D.

Sir,—Having once seen the femoral vein wounded during an operation for tying the accompanying artery, and witnessing the hæmorrhage cease immediately on ligaturing the artery, I was led to reflect whether in all such accidents the completion of the operation be sufficient, and need alone engage the surgeon's attention. A reference to one or two works on Practical Surgery, furnished me with cases very similar to that which I had witnessed.

For my own satisfaction, I tried the same thing on rabbits. Having exposed the femoral vessels, I passed a ligature between the vein and artery loosely surrounding the latter; I then opened the vein, when the hæmorrhage was great; the ligature round the artery was tightened, and the bleeding from the vein ceased. This was repeated ten times on different animals, and with the same result.

Should you think these remarks interesting to the operating surgeon, perhaps you will give them a place in your valuable Journal.

I am, etc.,

George B. Halford.

17, Victoria Square, Grosvenor Place, March 1857.

DISEASES OF SPECIAL OCCUPATIONS.

Letter from Thomas Hayes Jackson, M.D.

Sir,—I remember reading many years ago that a gentleman had invented a mask, on the principle of the magnet, which, when worn by the needle-grinders, attracted the particles of steel, and thus protected the lungs. Several masks were presented to the grinders.

The needle-grinders met in a body, consulted, and came to the conclusion, if they permitted the mask to be worn, many more would enter the trade, and wages would decrease; they therefore agreed to destroy the masks, determined to realise high wages, a short life, and a merry one.

Will you, or any of my associates, inform me if the above suicidal transaction is authentic?

I am, etc., Thos. Hayes Jackson.

Darlington, March 26th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Haviland. On March 24th, at Cambridge, the wife of H. J. Haviland, M.D., of a son.

Menzies. On March 26th, at Tilbury Fort, Essex, the wife of Staff-Surgeon Edward Menzies, of a son, prematurely.

*Pemberton. On March 27th, at Temple Row, Birmingham, the wife of Oliver Pemberton, Esq., Surgeon, of a daughter.

Smith. On March 29th, at 14, Caroline Street, Bedford Square, the wife of Henry Smith, Esq., F.R.C.S., of a daughter.

MARRIAGES.

Finlay—Mais. Finlay, David Lake, Esq., Surgeon, Royal Mail Steam-Packet Company's Ship *Parana*, to Amelia Ann, daughter of the late Hon. John Mais, at St. Andrew's, Jamaica, on February 24th.

Hankin—Travers. Hankin, Frederick G., Esq., 15th Regiment Madras Native Infantry, to Lucy Adeline, youngest daughter of Benjamin Travers, Esq., Surgeon, of Green Street, Grosvenor Square, at St. George's, Hanover Square, on March 24th.

Marlow—Man. Marlow, B. W., M.D., 28th Regiment, to Jane Mary, youngest daughter of the late Henry Man, Esq., of Hamilton Terrace, St. John's Wood, at Newcastle-on-Tyne, on March 21st.

Mounsey—May. Mounsey, John, Esq., of Sunderland, to Caroline, third daughter of Edward Curtis May, Esq., Surgeon, of Tottenham, at the Friends' Meeting House, Tottenham, on March 26th.

DEATHS.

Cooke, William, M.D., F.R.C.S., formerly of Durham, at Oaklands, East Tytherley, Hants, aged 80, on March 21st.

De Morgan. On March 24th, Francis Augustus Campbell, the infant son of Campbell De Morgan, Esq., of Upper Seymour Street.

Goddard. On March 16th, at Eastbourne, Sussex, Sarah Mears, wife of Henry Goddard, M.D., of Brighton and Eastbourne.

Kelly, Thomas Knox, Esq., Surgeon, of 19, Addington Place, Camberwell, on March 26th.

APPOINTMENTS.

*Fuller, Henry William, M.D., appointed Physician to St. George's Hospital.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, March 27th, 1857:—

Beer, James John, Deal
Blackall, John George, Exeter
Croome, William, Army

Goodall, Ralph, Leabridge, Newcastle, Staffordshire
Jones, Thomas, Pencoyd, Herefordshire
Knaggs, Henry, Huddersfield
Rees, Hugh, Carnarvon
Sprakeling, Robert John, Canterbury
Tatham, John, Burton-in-Lonsdale, Yorkshire
Wallis, George, Cambridge
Whitefield, Arthur, Barnstaple, Devon

Monday, March 30th :—

Ardagh, Arthur, Barrie, Canada West
Baker, William Langworthy, Newton Abbot, Devon
Barnes, James Hindmarsh, Westminster Ophthalmic Hospital
Blucke, Robert Daniel, Brighton
Bullmore, William King, Falmouth
Hetherington, Joseph, Lamplugh Hall, Cumberland
Littlewood, Joseph, Hampole, Doncaster
Ward, Isaac Dunlin, Clifton, near York

Apothecaries' Hall. Members admitted on Thursday, March 26th, 1857 :—

Barnes, Herbert Sedgwick, Chelsea
Blandford, George Fielding, Fifield, Wiltshire
Blackmore, Humphrey Purnell, Salisbury
Bridger, John, Newick, Sussex
Caird, William Edward, Exeter
Carr, William Thomas, Newcastle-on-Tyne
Casanova, John Narbert, London
Devonshire, Charles James, Hampton, Middlesex
Dresser, William, Coventry
Leever, Robert, Army
Patrick, Jarman, Kent
Pool, William Brooks, Canterbury, Kent
Prall, Samuel, Rochester
Skinner, David Shorter, Headcorn, Kent
Tatham, John, Burton-in-Lonsdale, Yorkshire

HEALTH OF LONDON:—WEEK ENDING MARCH 28TH, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London in the week that ended on Saturday, was 1248. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1318. But the deaths of last week occurred in an increased population; and to admit of comparison, the average just given should be raised in proportion to the increase; and in this case it will become 1450. The number now returned is less by 202 than the corrected average.

The births registered last week exceed the deaths by 689.

The increase, not very great, in the return of deaths registered last week over those of some previous weeks, is not due to a higher rate of mortality, but to more than the just weekly proportion of deaths returned by Coroners being placed on the registers, which is a usual occurrence at the end of a quarter.

Fatal cases of the disease which form the zymotic class exhibit a decrease from 197 in the preceding week to 187 last week. The corrected average for corresponding weeks is 251. Hooping-cough, as usually happens at this period of the year, is the most fatal of this description of diseases, and numbers 60, the average being 63. Measles, to which 20 cases are referred, is also about the average; whilst scarlatina, which caused 20 deaths, typhus and common fever, which caused 34, and small-pox, which was only fatal to three children, are all decidedly below the average. No deaths from small-pox occurred in the western, eastern, or southern districts. Taking all the five zymotic diseases which have now been specified together, only four deaths from them occurred in East and West London and the City; none in the Strand district or in St. George-in-the-East; only one in St. Saviour, Southwark; none in St. Olave; two in Wandsworth; one in Lewisham. It does not appear, however, that the weather has lately been very favourable to persons subject to bronchial affections: 164 persons died in the previous week from bronchitis, and 160 last week, the average being 125. The mean weekly temperature, which in the second week of March fell to 37·2°, and rose in the subsequent week to 45·1°, fell again last week to 39·6°. On the 18th, the mean temperature was 11° above the average; on the 22nd, it was 9° below it.

Three persons who had attained the age of 90 years or upwards, are recorded in this return. The oldest is a gentleman, who died at Bow, at the age of 95 years.

Last week the births of 990 boys and 947 girls, in all 1937 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1700.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·325 in. The highest reading in the week occurred on Friday, and was 29·90 in. The mean temperature of the week was 39·6°, which is 2·6° below the average of the same week in 43 years. The mean daily temperature was below the average on the seven days from the 21st to the 27th inclusive. The highest temperature occurred on Saturday, and was 54°; the lowest occurred on Sunday (the 22nd), and was 27·7°. The range of the week was therefore 26·3°. The thermometer fell on four nights below freezing point. The mean dew-point temperature was 34·3°, and the difference between this and the mean temperature of the air was 5·3°. On Sunday, the wind was in the north-west; afterwards, its direction was for the most part south-west and south-east. The air was latterly calm. There was hardly any rain. Some snow fell on the first two days.

TRIAL FOR MANSLAUGHTER.

Crown Court. Before the Chief Baron.

Alfred Matcham, aged 30, was indicted for the manslaughter of Mary Ann Jeckells, at Lowestoft, on the 29th of September last.

Mr. Dasent conducted the case for the prosecution; Mr. Power and Mr. Bulmer were counsel for the defence.

The prisoner is a medical man having a large practice, and especially in midwifery cases, at Lowestoft, where he has resided some five or six years last past. In September last he was engaged to attend the deceased, who had borne four children before, in her approaching confinement, she being then only seven months gone. On the 19th she was taken ill, and from that time to the 22nd the prisoner was unremitting in his attendance. On that day she appeared to the women about her and to the prisoner to be sinking from a very protracted labour, and the prisoner determined to resort to the use of instruments; and after three attempts the child was brought into the world. During the first and second attempt the patient suffered much, and was violently convulsed, so much so that the instruments slipped, though she was held down by the women present. After the birth of the child the patient expressed her thanks to the prisoner, and she seemed to be going on well for a few days, but after that she grew faint and sick, and, though her husband became greatly alarmed, and wished for further advice, the prisoner assured him his wife was going on well, and that there was no need for any other advice. On the 28th, however, the husband called in another gentleman, Mr. Worthington, who pronounced the patient to be in a dying condition, and on the 29th she died. Mr. Worthington then made a communication to the churchwarden, who spoke to the husband, and the result was a coroner's inquest. The prisoner was not present, nor was he consulted on the subject; but the coroner and jury expressed a wish for a *post mortem* examination, and at their request Dr. Webb, a gentleman occasionally resident in the town, superintended that operation, which was performed by Mr. Worthington, assisted by Mr. Cleveland, a former pupil, but then also practising, and who had attended the deceased in her preceding confinement. The prisoner was not present at, nor was he called upon to attend this examination; and on the following day the three gentlemen above named reported to the coroner that they had discovered extensive injuries in the person of the deceased, which, in their opinion, accounted for death; but they did not extend their examination beyond the parts of generation. When examined to-day, they stated that under the circumstances of the case the use of instruments was unadvisable, and that in their opinion the prisoner had used them in a grossly unskilful way, or he never could have produced the injuries in question.

On the part of the prisoner it was contended that this charge had originated in professional jealousy, created by his having absorbed almost all the practice of the vicinity; that he had, as was admitted by the friends of the deceased, been tender and attentive in his treatment of her; that there were great difficulties in the confinement, which rendered the use of the instruments an absolute necessity; and that the injuries spoken to, if they existed to the extent detailed by the prejudiced witnesses, were attributable to accident, for which the prisoner ought not to be held responsible. Much stress was also laid on the fact that the examination was not extended to the whole body, and that the prisoner had not been called upon to

be present in person or by a friend at the *post mortem* examination, so as to explain the case to the witnesses; and the jury were called upon to infer that he had discharged his duty to the deceased with great skill and care from the fact that he had attended upwards of two hundred women in their confinement during his residence at Lowestoft and elsewhere, and had never before met with one fatal case. The learned counsel proposed to prove the latter fact by calling many of his client's patients, but

The Chief Baron refused to allow such evidence to be gone into under the head of "witnesses to character," and the case then went to the jury on the evidence adduced for the prosecution. In the course of his observations the learned judge stated that, though the prisoner was not qualified by any English diploma, he appeared to have had a considerable practice, and, according to his own statement, possessed a diploma from New York; but whether that were so or not he was entitled to be present at the examination of the body, and he conceived that it was the duty of the gentlemen who conducted it to give him the opportunity of witnessing that operation, on which so much depended. In his opinion, great injury would ensue both to the public and to the medical profession if, when a medical man entered a sick room and met with a difficult case, he was to exercise his art under the apprehension of a charge of manslaughter if the case should take a fatal turn. However, the law was clear that no man, whether qualified or no, ought to undertake the responsible task of a medical practitioner without bringing to its discharge competent skill and ability; and if he displayed gross ignorance, or exercised his profession with gross want of skill, and death ensued from such, he would be liable to the charge of manslaughter. The question, therefore, was whether the jury thought the prisoner had so unskilfully conducted himself as to cause the injury to the extent deposed to by the medical witnesses; and, if so, whether that injury had produced the death of the deceased? If so, then they ought to find him guilty; but if they doubted the partial observations made under the circumstances and the opinions founded on them, or thought that the injuries might be attributable to accident, or had not, however caused, produced death, the prisoner was entitled to an acquittal.

The jury, after a brief deliberation, returned a verdict of *Not Guilty*, which was received with evident satisfaction by a crowded court, the inquiry having created a great sensation in the county. (*Times.*)

The Atlantic Telegraph. Orders have been received at the Navy-yard in Brooklyn from the Secretary of the Navy to fit out at once the United States steamers *Niagara* and *Mississippi* to proceed to England to assist in laying down the submarine telegraph cable between Newfoundland and Ireland. The *Niagara* is the largest steam-vessel of war in the world. She is a propeller. The *Mississippi* is the most powerful paddle-wheel steamer in our navy. The English government will also furnish two large ships of the same character. The *Niagara* will receive on board at London or Liverpool one-half of the cable, and the other half will be put on board the English naval propeller. The four ships will then proceed together to the middle of the Atlantic, where the ends of the cable will be joined, and the propellers will then start in opposite directions—the one for Newfoundland and the other for Ireland—each attended by a paddle-wheel steamer, so that in case of accident the propellers may be taken in tow and proceed on the voyage. We are glad to see that Secretary Dobbin has taken such deep interest in the success of this great enterprise as to order at once the finest ships in the American navy for the purpose. We doubt not that the new secretary of the navy will see that the ships are fitted out in a manner most creditable to the United States government. No doubt there will be a generous feeling of rivalry between the officers of the British and American ships to see which shall lay its part of the cable in the most perfect manner. It is a sign of advancing civilisation when the ships of war of these two great nations thus meet in mid-ocean, not for a naval battle, but in a peaceful effort to join the two hemispheres. (*New York Herald.*)

Militia Medical Society. A meeting of this society was held at Birmingham, on Saturday, March 28th, which was numerously attended; although many members were prevented by the general elections.

The annual meeting will take place at Oxford in July next, of which due notice will be given to the members.

LORD GREY ON THE CONDITION OF THE BRITISH SOLDIER.

The following abstract of an address delivered by Lord Grey to the House of Lords, on April 8, 1854, is *apropos* on the present occasion, when Army Reform is occupying much attention. His Lordship, after stating that he was embarrassed by the superabundance of materials, observed:

1. When Secretary for War and the Colonies, Lord Grey "caused a careful examination to be made of the Reports of the Medical Officers and of the Medical Statistics of the Army." His lordship "ventures to say, that the results of that examination were of the most frightful description;—so frightful, indeed, that it has always been to him a matter of surprise, that while the attention of Parliament is easily attracted to what appears to him far less important matters, that the shocking details contained in these Reports should have obtained so little of the notice of the legislature.

2. "Taking the one single station of Jamaica, it was found that one-seventh of the whole force was annually cut off by disease, in addition to those who were invalided.

3. "Taking the whole mortality of the twenty years ending 1837, there perished of the British force in Jamaica no less than 6,700 men.

4. "The average force employed in that island was 2,578, and the annual deaths among them 350, or nearly 130 per thousand."

5. That comparing the loss which took place in the battle of Waterloo, with that of one year's service in Jamaica, it was more deadly by nearly one-third than "the great battle of modern times." At Waterloo, it was as 100 per 1000 "of those who stood the whole brunt of the engagement"; as stated, the annual deaths per thousand in Jamaica were 130.

6. This frightful sacrifice of life was not the inevitable result of climate; but, on the contrary, that "in a very few years, the mortality was reduced from 130 to 53 in a thousand", and that "within the last ten years, instead of the deaths being 130 per thousand, the average number was only 34. This saving of life was the result of Lord Metcalfe's removal of the soldiers to the mountain stations.

7. "The lives of nearly 5,000 British soldiers have been thrown away in Jamaica through neglect", all which could have been easily saved by "practicable precautions during the twenty years succeeding the peace.

8. "That they have been as much sacrificed through want of management as if they had been drawn out in front of their barracks and shot upon the spot."

9. Throughout the entire West India command "nearly one-half the lives that used to be sacrificed, were sacrificed through neglect"; but "this mortality might have been prevented by the most ordinary precautions."

10. "When the investigations were commenced into the state of the health of the troops in 1835, medical officer after medical officer had reported for a long series of years, that it was most injurious to the health of the troops to feed them upon salt provisions. Every medical officer that went to the West Indies had been giving this description of evidence, and yet what was done? Absolutely nothing."

11. At the time here spoken of, "your soldiers were every week receiving salt provisions for five days, and it was only on the two remaining days that they were allowed fresh meat."

12. Lord Grey now, though "it was no part of his duty as Secretary of War, regarded the loss of men as a public calamity"; and he "at once, without considering whether it was his business to interfere or not, commenced a correspondence on the subject."

13. "Nearly two years after the subject was first broached", Lord Grey succeeded in procuring fresh food for the soldiers in the West Indies.

14. "While the soldiers who were unstained by crime were condemned to five days salt provisions weekly, the convicts were allowed five days fresh meat"; and that "while the troops were suffering, the convicts were in good health."

15. All this time "fresh meat was cheaper than the salt; so that there was actually a saving to the nation by giving our troops wholesome instead of unwholesome food."

16. That a like saving of the public money might have been effected of "rather more than half the cost of the bread supplied to the troops at Gibraltar, had it been obtained from Malta." In place of so natural an arrangement, flour made from "Black Sea corn", imported into this country, was then "taken across the Atlantic to America, and finally sent thence to Gibralter for the consumption of our troops. The cost of

bread was £7,800, and of that a saving of about £3,500 could have been effected.

17. "During the whole time that the Emperor Napoleon was confined at St. Helena, our soldiers had not a day's fresh provisions issued to them, except on Christmas Day, and other festivals; and the consequence was that there was a very heavy rate of mortality among them.

18. "During the whole time when the frightful mortality prevailed among our troops in Jamaica and the West Indies, they were only allowed eighteen inches of sleeping room, and in 1837 they were so crowded that in barracks they were obliged to sleep in hammocks. This mismanagement existed long previous to the year referred to.

19. "In Trinidad, the mortality was great because the men at Orange Grove were obliged to reside in barrack rooms constantly wet, owing to the rain coming in, and that, were the lowest class of negroes in the island so badly lodged, the proprietor of slaves would consider it his duty to prosecute the proprietor of the estate to which they belonged." Such was reported by Drs. Lamont and Blair.

20. The said barracks and hospitals were again reported by Drs. Hacket and Hartle to be in a "most disgraceful state"; but "for eleven whole years", and notwithstanding the repeated reports of the medical officers, "you kept the British soldiers in the town where the medical officers reported the mortality was great because the men could not be kept in their barracks."

21. "In the hospital of St. Vincent the accommodation was utterly inadequate for the requirements of the troops. The hospital was not finished for nine years after its erection had been ordered, and for some time after the foundations of it had been laid. Even then the accommodation it afforded was greatly inadequate.

22. "In the same manner at Antigua there were the greatest complaints of the inadequacy of the accommodation." The medical officers complained of the abolition and sale of the Detachment Hospital, "sold in lots by a positive order of the Board of Ordnance for not £300, although above £5,000 was the sum originally expended.

23. "In 1825 between 700 and 800 European soldiers were sent to Sierra Leone." Though barracks were during five years reported to be wanting, none were ready when the troops arrived. "The scene which ensued baffles all description. The unfortunate men crowded into rooms as fast as they could be covered in, even though the plaster was still wet. Fever of the very worst description was soon generated in such a situation; and before many days had elapsed almost every one was attacked by it. The officers sought refuge in huts which even the natives had abandoned; the sick, the dead, and the dying were crowded together; and before the end of the year two-thirds of the force were in their graves."

24. "To relieve" these unhappy men "200, for whom no accommodation whatever could be found, were sent to Gambia. The barracks there were as bad as at Sierra Leone, and could not hold, however crowded, more than 108 out of the 200 who had been sent. The rest were kept afloat till room could be found for them. They had not long to wait; for in three months 87 out of the 108 first landed died, and the others were immediately disembarked."

Royal College of Surgeons. The first part of the annual course of lectures delivered in this institution has just been concluded by Professor Busk, F.R.S., who has proved himself the able successor of Mr. Owen by delivering twelve lectures on the Anatomy, Physiology, and Classification of the Invertebrate Animals, in a highly creditable manner. Professor Quekett will commence his course on Tuesday, April 7th, the subject being "The Structure of the Skeleton of Plants and Invertebrate Animals".

Singular Disease in Washington. The Washington Board of Health is investigating the cause of the recent singular disease that attacked all the guests of the National Hotel in that city. Two or three persons have died of it, and many are still suffering, among them Mr. Buchanan, who was attacked during his stay there previous to his inauguration. A ridiculous story has been circulated of a wholesale poisoning from malice; another, that the water tanks were impregnated with arsenic used to poison rats. The real cause is supposed to be a choked public sewer that runs under the house. The hotel has been nearly ruined by the incident, as it was deserted, even during the late demand for lodgings. Besides this particular visitation, the whole city has been unhealthy ever since the sudden thaw.

Inquest. An inquest was held before J. Alexander, Esq., coroner for the county, at the Adam and Eve, at Greenham, on Thursday, the 12th inst., on the body of Sarah May, wife of Thomas May, aged 59 years, who was found dead in bed the day previous by her son, who said, that as she did not get up at her usual time on Wednesday, he asked her to allow him to fetch Dr. Carter; she said there was no occasion, as she had got medicine from Mr. F. Davis. He went into her room again two hours afterwards, and found her dead. Mrs. Wickens was with him then. The husband was examined at some length. He stated that his wife had not been in good health for a long time, but was about till the evening before she died. For a fortnight or so she had been suffering from a bad cold or cough, and had medicine from Mr. F. Davis. Was at his house the night before she died, and brought home a bottle of mixture; some of which she took on going to bed, and some the next morning, a few hours before she died. He left her at eight o'clock, when she said she was much as usual, and would lie in bed a little longer. Had then had some tea and toast. Mr. F. Davis, who had been summoned by the coroner, was then sworn. He admitted having prescribed for deceased a fortnight before, and on the Tuesday evening had furnished her with a bottle of mixture. (An account of the medicines composing the mixture was handed in, and examined by the coroner.) After some further remarks, the coroner said, that it was quite clear the medicine prescribed by Mr. F. Davis could have nothing to do with the death of Mrs. May. He said he believed it to be a common practice for chemists to prescribe, nevertheless it was illegal, and parties so acting exposed themselves to heavy penalties. It was most dangerous, and practically illustrated in the present instance, as shown in the conversation of the son, George May, with his mother. Had this poor woman gone to the Dispensary, or to some medical man, there might have been discovered some serious disease that required energetic and prompt treatment, and her life spared perhaps. The result might have been the same, but the chance was lost. Under such circumstances, frequently, loss of time was loss of life. He thought the jury could return no other verdict but that of natural causes. Verdict accordingly.

Medical Society of London. On this (Saturday) evening, April 4th, a paper will be read by Dr. Willshire, "On some points connected with the Propagation and Treatment of Tænia."

Epidemiological Society. On Monday, April 6th, a paper, "On Fever and Scurvy in the Turkish Fleet", will be read by J. N. Radcliffe, Esq., late of the Ottoman Medical Staff.

TO CORRESPONDENTS.

Diseases of Special Occupations. Dr. J. C. Hall's third paper on the Sheffield Grinders is unavoidably postponed till next week.

Reviews of Dr. Swayne's "Obstetric Aphorisms", Dr. Montgomery's work on "Pregnancy", Dr. Tilt on the "Change of Life", and of several other volumes, have been unavoidably postponed, but shall shortly appear.

Dr. O'Connor's letter shall be inserted next week.

The New Parliament. The following Resolution has been forwarded to us. "At a numerous meeting of the County and City of Cork Medical Protection Association, specially convened and held on Saturday, 21st March, at the Royal Cork Institution, Dr. Harvey, President in the Chair,

"It was proposed by Dr. Corbett, seconded by Dr. Hare, and unanimously resolved:—

"That in the approaching Election our brethren be earnestly called upon to lend no support to any Candidate who will not pledge himself to watch over the interests of the Medical Profession in Parliament. Hitherto in almost every legislative enactment the rights and privileges of a body of men inferior to none in their professional and social position, which in this age of progress ought to have been protected, have been either altogether neglected or ignored, and in many instances burdens have been thereby imposed on practitioners in public employments which would never have been ventured upon with regard to the other professions. Therefore we deem it a duty on the part of the Association to warn all medical Medical men in County and City to exercise their franchise, irrespective of party bias, only in behalf of the Candidates who will scrutinize such measures as may be proposed affecting the Profession, and see that justice be done as well to private practitioners as to public officers. (Signed),

"J. R. Harvey, M.D., Chairman.

"March 21st, 1857. "Chas. Armstrong, M.D., Hon. Sec."

Communications have been received from:—Dr. P. H. Williams; Mr. John Gibb; Mr. T. Nunn; Mr. Haynes Walton; Mr. H. W. Rumsey; Mr. John Kent Spender; Dr. Markham; Mr. J. F. Nicholson; Mr. Stone; Dr. J. Johnston; Dr. C. Handfield Jones; Dr. A. B. Garrod; Mr. T. Holmes; A Member of the British Medical Association; Mr. Pepper; An Associate; Mr. Hansard: Mr. Henry Lee: Mr. John Kitching (with enclosure); Dr. G. B. Halford; Dr. J. Milner Barry; Dr. Hayes Jackson; Mr. Browning (with enclosure); Dr. J. C. Hall; Mr. W. J. Cooper; Dr. Thomas Williams (with enclosures); Mr. J. V. Solomon; Mr. G. B. Masfen; Dr. Bucknill; Mr. MacDermot; Mr. Owen Fox; Dr. O'Connor; Dr. F. G. Robert; Dr. Caparn; and Mr. Chesterman.

BRITISH MEDICAL JOURNAL:

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EDITED BY ANDREW WYNTER, M.D.

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Diseases OF SPECIAL OCCUPATIONS.

No. I.

THE SHEFFIELD GRINDERS.

By JOHN CHARLES HALL, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

[*Continued from page 251.*]

C. THE SHEFFIELD GRINDERS' DISEASE.

THERE is no necessary connexion between the Sheffield grinders' disease and thoracic consumption, although both affections may be present in the same individual, as in the cases described by Sir Arnold Knight, in the *North of England Medical and Surgical Journal*, vol. i, p. 86.

Many years ago, Mr. Thackrah pointed out the effects of arts, trades, and professions, on life and longevity. Stone-masons, quarry-men, cotton-batters, miners, leather-dressers, needle-pointers, machine-filers, and, in Sheffield, the grinders, all suffer more or less from inhaling, during their labours, an atmosphere which is loaded with irritating particles.

In Sheffield, the fork-grinders suffer the most severely, being what are termed dry grinders. The mortality ranges next in degree amongst razor grinders and scissor grinders, and those who work partly on dry and partly on wet stones; and the statistics I have collected, go to shew that it is much less amongst the men who work altogether on a wet stone. It should, also, be added, that the mortality is greater amongst the workmen who are obliged to labour in the town than amongst those carrying on the same trades in the villages around Sheffield. In all these cases of chronic bronchial disease, there is, in addition to the question of pulmonary irritation, the fact that many of these men are exposed to influences tending to induce the tuberculous cachexia. They pass many hours every day in a confined and deteriorated atmosphere; and the position in which they are obliged to work is unfavourable to the free action of the respiratory organs; and many of them are very intemperate. Much of the evil arising from the inhalation of metallic and gritty particles, I have already shewn could be avoided by working in hulls, where fans are provided to prevent the inhalation of grit, dust, and steel; but, singular to relate, these men are so indifferent as frequently not to make use of the means at their disposal for rendering their calling at any rate less injurious. Dr. Alison has stated that "there is hardly an instance of a stone-mason in Edinburgh free from an affection of the lungs at the age of 50" (*Trans. Med. Chir. Soc. of Edinburgh*, vol. i); and Dr. Forbes, "that an immense proportion of the miners in Cornwall are destroyed by chronic bronchitis." (*Trans. Provincial Med. and Surg. Association*, vol. ii.)

A chronic affection of the lungs is very common amongst bricklayers, and the poor Irish generally in the metropolis and the larger manufacturing towns. Exposed to every inclemency of the weather, scantily clothed and badly fed, one attack of catarrh, bronchitis, pleurisy, or inflammation of the lungs, is quickly succeeded by another, until at length the whole of the lungs, having their pleura more or less adherent over their whole extent, presents a mass of disease, partly tuberculous, and partly the result of chronic inflammation. Some difference of opinion has been expressed as to the real nature of the apparent tuberculous infiltration, from the resemblance it bears to chronic pneumonic consolidation. Dr. Walshe regards them as identical. It is possible, however, that, in a person whose blood is affected to a great degree with the tuberculous dyscrasia, inflammatory hyperæmia may lead to the exudation of a material having a close resemblance to the tuberculous, but not so inclined to soften and break down.

Wepfer (*Observ. de Capitis Affect.*) had observed, even in his day, the destruction of the miners employed in cutting mill-stones from the mines of Waldschut, on the Rhine, where all the men are said to have become consumptive. The pernicious effects of the inhalation of silex, in a minute state of division, is described by Benoiston de Chateauneuf and M. Clozier (Le Blanc, *Œuvres Chirurgicales*, vol. i, p. 585); and, many years ago, Dr. Johnson, of Worcester, described (*Memoirs of the Medical Society of London*) the injurious effects to the respiratory organs from the inhalation of metallic particles, as exemplified in needle-grinding.

(*a*) The *symptoms* of the Sheffield grinders' disease during life, (*b*) the *post mortem* appearances presented by the lungs of those who have died from it, and (*c*) its *treatment*, invite our attention. The means of prevention were considered in the last section.

(*a*) *The symptoms of the Sheffield grinders' disease during life.* The symptoms vary, of course, in each individual case, the length of time the disease has existed, and the extent of lung involved. After working some years at dry grinding, without the protection of the fan, the disease creeps by slow degrees upon them, and often, before the age of twenty-one, has made some progress; the digestive functions become impaired; the breathing is short and difficult, even after very slight exertion; the face has a dirty white aspect; the countenance is indicative of distress; and they complain of a sense of constriction across the chest, and a dry sensation at the back of the throat. To these symptoms succeeds a cough, at first dry; after a time, this cough is attended by expectoration; the sputa is at first frothy, and indicative of irritation. Sometimes the expectoration contains a little dark coloured matter, which, in a large manufacturing town like Sheffield, is thought by many to owe its origin entirely to the carbonaceous matter floating in the atmosphere; but, on the addition of nitric acid, the colour fades, and we must, therefore, conclude that some of this dark colour is derived from the pigment-cells, where I know it to increase even under very slight attacks of bronchial irritation. Figs. 1 and 2 present the appearances observed on looking at the sputa of the wet and dry grinders with the microscope. The objects in each circle are magnified 250 diameters.



Fig. 1 contains the sputa of a table blade and file grinder. (*a*) cells containing pigment; (*b*) sarcina ventriculi; (*c*) curled elastic fibre; (*d*, *e*, *f*) pus and mucus cells; some very transparent, shewing a distinct nucleus; others (*f*) with pigment.

The sputum at the bottom of the circle, *a* and *c*, was from a file-grinder. The admirable drawings whence this wood-cut by Mr. Orrin Smith has been taken, were made for me by Mr. Tuffen West, from two slides that I prepared for him. The other objects were from a table-blade grinder, who, having suffered for some months from grinders' disease, gave up his employment; at this time, the disease may be said to have been arrested. The sar-

cina was discovered in the expectoration of this man; it was coughed up in my presence, and at once put up in a glass cell, and forwarded to Mr. Tuffen West. I discovered sarcina several times in the sputa of this man—the only instance in which I have seen it in the expectoration; and, so far as I know, until it was figured in my recent work on consumption ("*Hints on the Pathology, Diagnosis, Prevention, and Treatment of Thoracic Consumption*", by J. C. Hall, M.D., with twelve microscopic illustrations), no one had mentioned the discovery of it in the expectoration.

The sarcina ventriculi was discovered by Professor Goodsir, in 1842, in some matters vomited by a patient. It has been found in the urine by Haller, Dr. Mackay, Dr. Johnson, and Dr. Lionel Beale; in the fæces, by Dr. Bennett and Dr. Hasse; by Dr. Jenner, in the fluid of the ventricles of the brain; and by Virchow, in an abscess of the lung. M. Robin has arranged it under the genus merismopædia, and has given it the name of merismopædia ventriculi.

As already stated, the other objects in the circle are from the sputa of a file-grinder.

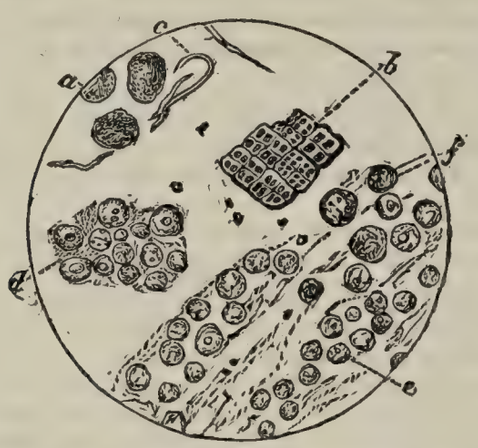


Fig. 2. Sputa of a fork grinder (dry). (*a*) epithelium from the mouth; (*b*) epithelium from the fauces; (*c*) silicious particles; (*d*) metallic particles; (*e*) blood-corpuscles; (*f*) pus and mucus cells.

It should be added, that the expectoration from which this drawing was made was coughed up soon after leaving the wheel at which the man had been at work. The quantity of the particles of steel and stone observed in the expectoration is of course much greater in a grinder who has just come from a wheel where he has been working without the fan.

Sometimes, as the disease advances, and a cavity is formed in the pulmonary tissue, the softened and broken up matters find their way into the larger bronchi, and the sputum, when placed under the microscope, is found to consist of pus, mucus, melanotic, oily, and granular matter, interspersed with epithelium, and the curled elastic tissue surrounding the pulmonary vesicles. It is at the period of the formation of these excavations in the lung, that I have most frequently observed in the sputum, the elastic tissue forming the areolæ of the air-vesicles.

If asked to present a brief *résumé* of the physical signs of the Sheffield grinders' disease, I would say, those of bronchitis and dilated bronchi in some cases; in others, of emphysema, or of consolidation; and, lastly, of excavation: but, in many cases, the general symptoms are not in proportion to the extent of the disease in the lungs. In Sheffield, a knowledge of the occupation of the patient must always, however, ensure, with ordinary care, a correct diagnosis.

There has been for many years past no little difficulty in investigating this disease in Sheffield, from the great repugnance of this class of men and their friends to permit a *post mortem* examination; and, although this foolish prejudice is not so great as formerly, there is still frequent objection made to the examination of the body after death. Accounts of *post mortem* examinations have been published by Mr. Gregory, Mr. Porter, Mr. Gillott, and by the late Dr. Charles Fox Favell, whose premature death deprived Sheffield of an accomplished physician, and the profession of the completion of investigations with respect to the grinders' disease that could not have failed to be as interesting as important.

The symptoms present in those labouring under the Sheffield grinders' disease will perhaps best be exhibited by transcribing an abstract of the notes of a few out of the scores of cases that are, and have been, under my care in private practice and at the Sheffield Public Dispensary.

CASES OF THE SHEFFIELD GRINDERS' DISEASE.

Case I. Adriel Shaw, pen and pocket blade grinder, was admitted under my care at the Sheffield Public Dispensary, February 26th, 1857. He complains of great difficulty of breathing, cough and expectoration. He has always ground on the wet stone, but states that "razor grinders have worked in the same hull with him", and added, "*there is no fannie in my room*, nor about our wheel"; he went to the trade at the age of fourteen; before that he worked as a cabinet-maker. He came from the country to Sheffield. His father is a gardener; he is living, aged 40; his mother died of thoracic consumption. He had slight hæmoptysis three years ago, but took no notice of it; it has frequently recurred, and he is always attacked with it after "racing" a stone. He began to feel very short of breath six months ago: he now feels very weak, and can take hardly any exercise. He is thin; the chest measures thirty inches, and expands only to thirty and a quarter inches; there is considerable dulness under each clavicle; a loud blowing sound is heard under the right nipple, and a peculiar creaking sound under the left. The expectoration, under the microscope, exhibited pus and mucus-cells, enveloped blood-corpuscles, cells containing pigment, and particles of grit dust.

Case II. John Gosney, aged 31, scissor-grinder (dry), was admitted March 12th, 1857. He first went into the wheel when nine years old. He has had attacks of shortness of breath, at intervals, for years, but got on very fairly till about a year ago, when he was seized with profuse hæmoptysis, and he has never been well since. He complains of cough, great shortness of breath, and states that he feels "as if a wire had been drawn round his chest." The chest measures thirty-three inches, and does not reach thirty-three and a half inches when he attempts to take a deep inspiration. The chest is generally flat; there is considerable depression under each clavicle; beneath the right clavicle the respiratory murmur cannot be heard; on the left side a few moist clicks may be heard very distinctly about two inches below the clavicle. The sputa under the microscope appeared to be pus and mucus cells; one or two bits of bronchial columnar epithelium could be seen, and several pieces of the elastic tissue forming the areolæ of the air-vesicles were distinctly visible; also some particles of grit and steel.

Case III. John Stephenson, aged 44, file-grinder (wet), admitted March 12th, 1857. He began to grind at the age of fourteen, and was never ill till he was thirty: he then began to have a dry cough, and to feel short of breath and fatigued after very slight exertion. He has lost weight. He has several times had hæmoptysis. The chest is flat, and the right side does not rise so well on taking a deep inspiration as the left. The expiratory murmur is prolonged on both sides; percussion elicits on both sides a dull sound immediately under the clavicle, and over a square of about two inches on the right side the respiration is jerking: above and below the nipple, on the left side, a blowing sound can be heard. Posteriorly the respiration in both lungs is feeble. The expectoration is considerable; under the microscope I found that it consisted of pus and mucus; some shrivelled cells with irregular edges, groups of cells with pigment, coming, in all probability, from the bronchial glands; blood corpuscles surrounded with a delicate envelope, silicious and metallic particles, etc. With the exception of the little bits of stone and steel dust, there was nothing to distinguish the expectoration in this case from what is observed in the flocculent sputa of an ordinary case of phthisis.

Case IV. Henry Longdon, aged 53, razor-grinder (dry), admitted December 29th, 1856; has worked at Marsden's wheel: has used a fan part of his time; worked hard when he was able, but has laboured under grinders' disease many years; he is about 5 feet 4 inches; countenance very sallow; hair iron grey; he stoops a good deal; he complains of the greatest possible difficulty in breathing; has had a cough a great many years, and suffered two or three times from hæmoptysis. The chest measures thirty-two inches, and expands to thirty-two and three quarter inches; the mobility is greater on the right than on the left side; there is considerable dulness on both sides of the chest, more particularly on the left, and the surface is a good deal depressed; the movements of the chest, more especially the costal ones, are impaired; the antero-posterior, and the superficial width of the chest is diminished, and there is marked parietal resistance. The percussion sound in some parts is tubular, and the respiration weak, and unequal in quality—harsh and bronchial; in two or three places a diffused blowing sound can be heard. The cough

was constant; there was not much expectoration at this time; there was thirst and anorexia: the night perspirations were insignificant, but the loss of flesh was considerable. He was seen by me at intervals, till he died on the 4th of March, 1857. No *post mortem* examination was allowed, as is too often the case in grinders.

Case v. Henry Wollen, aged 28, pen-blade grinder (wet), was admitted June 29th, 1854. He complains of shortness of breath, cough, night-sweats, and loss of flesh. He has frequently had hæmoptysis. There is depression of the infraclavicular region on the left side, and the respiration on both sides is rough and jerking; the jerking respiration, I should add, was *partial*, and confined to the upper portion of the right lung. The expiratory murmur was prolonged.

Case vi. Frederick Clark, aged 19, a razor grinder (dry), was admitted September 18th, 1854. The disease had made considerable progress; he had been in the wheel from an early age. He has had cough and great difficulty of breathing for several years: he states that "he has occasionally spit blood;" his dyspnœa is aggravated on the slightest exertion; there is œdema of the feet and ankles; the clavicles are prominent, and there is a deep hollow between them and the upper ribs; the respiration is feeble on the left side, and a series of clicking crepitations may be heard during both the respiratory movements: there is a cavity of considerable size at the upper part of the right lung. He died on the first of November. No *post mortem* examination was permitted.

Case vii. James Hodgkinson, aged 21, a table-blade grinder (for the most part wet), consulted me, April 4th, 1857. He has a pale pasty-looking face; he stands 5 feet 3½ inches, and weighs 8 stone 7 lbs. His mother is living, aged 55; his father, a table-blade grinder, died of the grinders' disease at 39, and his grandfathers, on both sides, died of the grinders' complaint. "Does not think consumption was ever in his family." He went to the wheel at the age of thirteen, and has been in it ever since. He has felt a dryness in his throat for a long time, and has been "a bit out of wind when going up hill, but nothing to mean anything;" he has got worse the last few weeks, and "the dry cough begins to trouble him very much." He works mostly wet; the bolsters of the table-knives are ground dry. "He suffers very much from dust when they 'race' the stones, which fills the hull with dust." He has never spit blood. His chest measures thirty-four inches, expands to thirty-five inches; fairly formed; movements better on the left than on the right side: slight dulness under each clavicle; the respiration is harsh; the expiratory murmur is prolonged on the right side; and, three inches under the clavicle, a slight blowing sound can be heard.

I give this case as illustrative of the earliest symptoms of the Sheffield grinders' disease. By abstaining from work a few weeks, under appropriate treatment, this man will recover; at any rate, for a time.

Case viii. Ellen Kennedy, aged 21, admitted November the 6th, 1856. This girl is employed in a hair-seating manufactory; she has been engaged in working foreign hair; there is much dust in the room in which she works, and the hair has a very unpleasant smell. She has had a dry troublesome cough for some months, with considerable difficulty of breathing; she is much thinner. The pulse is 86 when sitting, and 96 when standing. The chest is well formed; the body tolerably well nourished. There is slight dulness under each clavicle; the respiratory murmurs are harsh, and especially on the right side of that diffused blowing type, to which reference has already been made. Both her parents are dead: the mother died of phthisis. She was advised to discontinue her employment; the croton oil liniment was applied to her chest, and some expectorant medicine administered, with a few grains of the compound ipecacuanha pill each night. She was ordered a milk diet, and after a week or two, meat once a day and a glass of bitter beer. The counter irritation was kept up at intervals for about three months, and she took, during the same period, cod liver oil. Under this treatment the cough left her, she gained flesh, and, when she was discharged, expressed herself as quite well.

The above have been selected from my notes of a great number of cases that have been entered in the books of the Sheffield Public Dispensary, and they are placed before the profession as presenting a correct description of the symptoms generally present in the unfortunate men who have the misfortune to be suffering from the Sheffield grinders' disease. The case of the girl from the hair-seating manufactory is recorded, because I have found many of the symptoms present in grinders' disease in those who labour in rooms filled with dust.

The *post mortem* appearances present in the lungs of those who have died from the Sheffield grinders' disease, and the treatment which I have found the most efficacious, will be described in my next paper.

[*To be continued.*]

Surrey House, Sheffield, April 6th, 1857.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

STONE IN THE BLADDER: LITHOTOMY.

Under the care of T. Tatum, Esq.

[*From notes by* F. Winter, Esq., *Surgical Registrar.*]

John L., aged 66, was admitted September 17, 1856, under the care of Mr. Tatum, on account of symptoms of stone in the bladder. He had suffered from these symptoms (viz. pain in the back, frequent desire to pass urine, and pain in doing so) for the last two years, and stated that five years ago a small piece of stone was passed by the urethra. The urine was generally of a pale colour, and thick (probably from ropy mucus). His health was said to have been good up to the time of his admission. If so, however, it rapidly declined after this time, the principal symptom being continually recurring attacks of obstinate diarrhœa, which left him so reduced in strength, that Mr. Tatum was unwilling to undertake any operative procedure. The treatment, therefore, for some time consisted simply in endeavouring to restore the tone of the system by nourishment, opiates, and astringents when necessary; and under this he sufficiently recovered his strength to allow of some prospect of benefit from surgical interference in the month of February. At that time he had recovered his general health, but was pale and weak; he suffered much from the irritation of the stone, and from sleeplessness, the result of constant desire to pass urine during the night. The urine was turbid, and contained a little pus, but no other morbid matter.

On Feb. 28th, it was decided to attempt to ascertain by means of a lithotrite the size of the stone and its probable density, and then to act according to circumstances. This having been done, it was found that the stone was both very large and very hard; at least, one or two turns of the screw made no impression on it. The idea of lithotrity was therefore abandoned; and, on March 6th, lithotomy was performed. The stone was easily grasped; but, from its great size, it was not so easy to extract it. It measured two and one-eighth inches in length, one and a half inch in breadth, and one and a quarter inch in thickness, and consisted of lithic acid; the weight was 1040 grains. There was considerable hæmorrhage at the time of the operation, which, however, was easily commanded by plugging the wound. He passed a pretty good night, but next day shewed some symptoms of threatened peritonitis, which yielded, however, readily to treatment, and he has had no bad symptoms since. He is very much improved in general health; and, except that the wound is not quite closed, and a little water still occasionally escapes, may be reported perfectly well. He goes about the ward, and will shortly be discharged.

Remarks. This case is quoted in contrast to two of lithotrity, where the stone was large, which ended fatally, recorded in this Journal for March 14th. The patient whose case is reported here, seems to have been in a worse state of general health than either of the former; and the stone was probably quite as large as that in the first case, where, after six months of active treatment, a larger quantity was still left in the bladder than had been procured from the urine. It is probable, therefore, that in this case also many months (we might say, judging from the case quoted, about a year) of very annoying and even painful treatment, would have been required, before the stone could have been removed, even in the most favourable circumstances. Meanwhile, the patient is suffering from

the disease all the time, and is, besides, exposed to all the risks which attend each of the numerous operations required. How real those risks are, is shewn by the result of the second case of lithotrity above referred to, where the patient, previously in good health, died of pyæmia a week after the performance of lithotrity for the first time. The contrast of cases like these shews the great advantages which the old operation has in cases of large and hard stone, when the kidneys are healthy.

ST. BARTHOLOMEW'S HOSPITAL.

I. THREE CASES OF CARCINOMA MAMMÆ, TREATED BY THE APPLICATION OF A SOLUTION OF CHLORIDE OF ZINC.

Under the care of E. Stanley, Esq.

[*Reported by* Edgar Barker, Esq., *House-Surgeon.*]

Case I. Mrs. A. F., aged 69, an ill-nourished and feeble old woman, of anxious, careworn expression, out of general good health, was admitted into Sitwell Ward, Nov. 13, 1856. Her history was as follows. She had always lived in the country, in the enjoyment of good health, till fifteen months ago, when she first perceived a small hard swelling, about the size of a nut, in her left breast; this gradually increased in size, accompanied by occasional severe attacks of pain. About four months ago, the skin near the nipple ulcerated; the nipple has entirely disappeared; the centre of the gland is occupied by a tumour of about two inches and a half in diameter, of stony hardness and considerable weight; the ulcerated surface is about an inch in diameter, its edges are raised and everted, the discharge is sanious and very fœtid, the glands in the axilla are large and indurated. The chloride of zinc lotion was applied, and the patient put on a nutritious diet. On the 22nd November, one part of Sir W. Burnett's solution of chloride of zinc with six parts distilled water, in which small pieces of lint were soaked, was adjusted to the size of the ulcer; the application was renewed every two hours; it, however, caused much pain, and was therefore further diluted with two more parts of distilled water.

Dec. 1st. The application of the lotion has formed a greyish slough, over the whole of the ulcerating surface, which is dry and unaccompanied by fœtor; the patient's general health remains good; the lotion was applied six or eight times in the course of the day and caused but slight pain.

This treatment was continued till the 29th December. A large mass of the slough, nearly two inches in diameter, was removed and the exposed surface was covered by healthy florid granulations; the upper margin still remaining indurated, the lotion was directed to be applied to that border only.

January 2nd. As the lotion caused some considerable irritation, it was discontinued for some days, and was then resumed for four days.

Jan. 30th. The cavity is half its former size; the upper border remains hard, but to a smaller extent; the granulations are numerous, small, and florid, especially at the lower border; her health still continues good; small portions of slough occasionally come away from the upper border.

Feb. 11th. The solution is still applied to the upper border six times a day; there is decidedly less induration on the upper margin, and the glands in the axilla remain in the same condition as before.

March 14th. The solution has been steadily applied since the above note; the hardened mass seems to have nearly all come away; cicatrisation has gone on uninterruptedly, and the ulcerated surface is now about the size of a sixpenny piece.

March 19th. She was discharged; her health still continuing good, and the ulcerated surface rapidly contracting.

Case II. Mary Burton, aged 68, was admitted into Lucas's ward, February 18th, 1857, on account of carcinoma of the breast, of five years duration. She states, that when she first noticed the swelling, it was very small, but at times painful; it remained much in the same state for six months; it then began again to increase, which it has done slowly up to the time of admission. She is a tolerably well-nourished woman, of anxious expression, but of general good health. She does not remember any other case of cancer to have occurred in her family. She has also an enlarged indurated gland, of the size of a pea, in the axilla. She was put upon a nutritious diet, with a pint of porter, and, on the 23rd of February, after the skin had been rendered insensible by the application of ice and salt, a circular incision was made, and the skin over the diseased gland removed. The application of the solution of the chloride of zinc, in the proportion of one part of Sir W. Burnett's disinfecting fluid to eight of distilled water, was commenced the next day. The application caused some pain, but of a trifling nature. The lotion was applied three times a day for seven days; the nutritious diet was continued, and the patient's general health remained good. A greyish eschar formed, of one-eighth of an inch in thickness, extremely tough on removal, and presented the appearance of moist wash-leather.

March 3rd. The lotion was discontinued; wetted lint was applied, and the casting off of the slough was soon accomplished. After its removal, the breast appeared as if a portion of its gland had been scooped out; it looked healthy; had a cicatrising edge; granulations were abundant and florid; some considerable induration remained around the edges.

March 16th. The solution was again applied, in the proportion of one part to nine of water, which has been continued up to the present time, small portions of slough being removed daily. The induration is gradually becoming less. The patient still remains under treatment.

Case III. Mary Poyner, aged 44, a delicate, anæmic, though tolerably well-nourished woman, was admitted into Sitwell ward, with a tumour of the left breast, of a cancerous nature, about the size of a walnut. On examination, a swelling was felt, as it were, imbedded in the mammary gland, immediately below and around the nipple, of carcinomatous hardness; the skin over the tumour was puckered; the nipple retracted. She has also an enlarged, though not indurated gland in the axilla. She complains of sharp darting pain in the breast; she is also often troubled with menorrhagia. She is a single woman, and states she first noticed the lump in her breast fifteen months ago; it gradually increased till six months ago; since that time it has been stationary, but the pain has been more acute. She was put upon a nutritious diet, with a pint of porter and four ounces of wine daily; and on the 18th March, after local anæsthesia had been produced by the freezing mixture, the skin having been removed to the extent of an inch in diameter, including the nipple, cold was applied for some time, on account of slight hæmorrhage, and on the day following the lotion, in proportion of one part of the solution to eight parts of distilled water, was applied to the wound: it was repeated two or three times during the course of the day, the application causing slight pain. It was afterwards continued in the proportion of one to nine for seven days, when it was entirely left off, and, on the eighth day, the entire slough was thrown off: no induration remained around; the granulations looked healthy, though pallid. A warm poultice was applied, and the wound has now considerably contracted, and the patient will be discharged in a day or two. The gland in the axilla is scarcely to be detected, and the patient's general health has considerably improved since she has been under a course of cinchona with sulphate of iron.

II. MALIGNANT DISEASE OF THE FEMUR: AMPUTATION AT THE HIP-JOINT.

Under the care of E. Stanley, Esq.

[*Reported by* Edgar Barker, Esq., *House-Surgeon.*]

M. G., aged 52, was admitted into Darker's ward on March 7th. He was an ill nourished man, short in stature, of sallow complexion. He stated that, about three years ago, he fractured his right femur, for which he was admitted into St. Bartholomew's Hospital, under the care of Mr. Lawrence. The limb united, with slight shortening; and he was discharged cured, although unable to bear much weight upon the limb. About nine months ago, he noticed a swelling near the seat of the old fracture, which has gradually increased up to the present time. His health began to fail; and, when he was admitted into the hospital, the limb presented the following appearance. The upper third of the right femur was occupied by a large swelling, of somewhat oval shape, which extended some distance upwards in front and behind. He complained merely of its size, and not on account of any pain that it caused him. A consultation was held. The disease was thought by all to be of a malignant nature; and, as his health had been somewhat improved by rest and nutritious diet, and as all the internal organs were reported sound, it was thought that amputation at the hip-joint was justifiable.

Last Saturday week, the patient was removed to the theatre, and chloroform was administered by Dr. Martin. As the disease had extended so near the articulation, Mr. Stanley determined on making an anterior and a posterior flap. Accordingly, a small flap was made from the front, commencing about two inches below the anterior superior spine of the ilium, and carried across the vessels to the edge of the gracilis. Hæmorrhage was controlled by pressure on the main vessels beneath the

crural arch. As the disease extended very high up the femur, great caution was necessary in freeing the head of the bone from its capsule. After disarticulating the head of the bone, the posterior flap was cut, and the limb removed. The femoral artery was secured before the head of the bone was disarticulated, and altogether the patient did not lose more than eight ounces of blood. All the bleeding vessels were secured. The wound, which was of moderate size, was closed with a suture and broad straps of plaster. Just before the limb was removed, the patient became very faint, and remained so till the close of the operation; and from this time chloroform was discontinued, and strong spirits of ammonia applied to the nostrils. He was removed to bed, and very shortly rallied, and his pulse regained moderate strength. Small quantities of brandy were from time to time administered, at the discretion of the house-surgeon, who remained at the bedside. A motion was passed under him in the bed, apparently involuntarily.

Nothing worthy of note occurred, except that, from time to time, he suffered from slight paroxysmal cough, until the house-surgeon, observing his face suddenly blanch and his pulse rapidly decline, opened the stump, and, removing a handful of clot, discovered in the anterior flap a vessel, apparently as large as the radial, bleeding in a full stream. This was without loss of time secured, and the hæmorrhage completely arrested. From this time to the time of his death, he never thoroughly rallied, though stimulants were freely administered; and he died two hours and a half after the operation.

Examination of the Limb. On section, the growth presented the ordinary characters of a firm medullary cancer, springing from the interior of the bone, from the old seat of fracture, and extending in both directions as far as the head of the bone above, and four or five inches below the fracture. The cartilage was easily stripped off the head of the bone, showing its cancellous texture infiltrated with cancerous deposit. Under the microscope, the ordinary appearances of medullary cancer were recognised.

ST. MARY'S HOSPITAL.

EXCISION OF THE HEAD OF THE FEMUR.

Under the care of A. Ure, Esq.

[*From Notes by* E. A. Hart, Esq., *House-Surgeon.*]

William S., aged 8, admitted Jan. 1st, 1857, under the care of Mr. Ure. This child, weak and sickly by nature, had been further exhausted by three years of suffering (nearly two of which were passed at intervals in the hospital) consequent upon abscesses and sinuses which had formed in connexion with caries of the head and neck of the femur. On first admission, he was the subject of abscess of the bursa over the tuber ischii, which was rough and exposed. After admission, fresh abscesses formed on the anterior and upper aspect of the thigh, communicating with sinuses leading down to the head of the femur, which was dislocated on the dorsum ilii.

After his health had been improved by the administration of occasional alteratives and a course of cod-liver oil, with attention to diet and regimen, it was determined to excise the head of the bone, and this operation was performed on Feb. 11th (see Journal for Feb. 21st).

Since the operation, the case has progressed without any unfavourable symptom; the openings on the anterior and posterior aspect of the thigh have gradually contracted and are nearly healed, the patient has gained weight, and looks healthier and happier. His diet has been of the most nutritious character; the secretions have been carefully attended to, and regulated by occasional alterative doses of grey powder, ipecacuan and soda. At the end of six weeks from the operation, during which he had never complained of pain, he was able to sit up for some time, to walk with the help of crutches, and to move his thigh gently away from the hip, both in flexion and abduction.

The wound has not yet perfectly healed; two small openings remain, from which a slight discharge issues, and from one of which, four weeks after the operation, a small portion of bone (apparently cancellous tissue) escaped.

The boy is now much improved in general health. The shortening of the affected limb is not perceptibly greater than before the operation, and is not too great to allow of the foot being planted on the ground. This he can do, and has some weight upon it. He always proceeds cautiously, placing the toe first on the ground, and then bringing the heel down gradually.

This interesting and hitherto very successful case has been before mentioned, but as it seemed to deserve more than a passing notice, it is now again referred to. The improvement, both local and constitutional, which has followed the operation, is very gratifying.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

SYMPATHETIC INFLAMMATION OF THE EYEBALL: IMPORTANT FACT GATHERED FROM THE VETERINARY ART: APPLICATION OF IT TO MAN, WITH ILLUSTRATIVE CASE: MR. WALTON'S METHOD OF OPERATING, ACCORDING TO CIRCUMSTANCES: IMPORTANCE OF CERTAIN DETAILS IN OPERATING: SOURCE OF BLEEDING IN DISORGANISED EYES: EFFECT OF THE PRACTICE ADVOCATED.

Under the care of Haynes Walton, Esq.

We suspect that the instances are very few in which the practice of surgery has received any advancement, from the exercise of the curative art in brutes; and, of all, we should expect less to be gathered from diseases of the eye, because but few are recognised, and because, for the most part, of the rude and unscientific and often barbarous treatment. But strange to tell, the horse-doctor has been in advance of the accomlished ophthalmologist, as we shall show. The modern student, whose reading, we fear, is too much confined to the hard, condensed manuals of the present day, is not aware that Mr. Wardrop, yet among the living, contributed a very great deal to the improvement of the art and science of surgery, and not less to the ophthalmic department. So long ago as 1819, he told the profession, in his valuable work *On the Morbid Anatomy of the Human Eye* (a wonderful production in its time), that in a certain ophthalmic disease of the horse, farriers were in the habit of destroying the eye by suppuration, knowing well that the other eye, which is in great peril, could be saved by this means; they having been led to the adoption of the method from observing, that if the eye primarily attacked suppurated naturally, the other was spared invasion of the disease, or, if suffering, was yet rescued. More than this, that he had many times saved the second eye by adopting this practice, not as the professors of the veterinary art, by putting quicklime into the eye, or thrusting a nail in it, but by the more artistic method of cutting across the cornea and evacuating the humours. Then follows this sentence; "In some diseases of the human eye, where the disease makes a similar progress, first affecting one eye, and then the other, with complete blindness, the practice so successful in animals might, by judicious discrimination, be beneficially adopted." We do not intend to go into this subject in detail; we merely desire to show how the practice is applicable in man, in certain cases of chronic inflammation of the eye, with greater or lesser destruction of its textures, whereby the other eye is sympathetically affected and would inevitably be lost, unless this principle were carried out. The case we give is not chosen because of being a more marked example than is generally met with at this hospital, where so much attention has, within the last few years, been paid to the subject by Mr. Walton, but because we were able to watch the patient for a longer period than usual.

M. C., an Irish girl, aged 18, had acute ophthalmia in the left eye, of what nature cannot now be ascertained, which continued with severity for three months or more, without treatment, and almost destroyed sight. The eye has never been, for several months together, free from paroxysm of pain and inflammation. About three years after the primary attack, that is, a year ago, and during much suffering, the right eye became painful, then, after the interval of a few months, the sight got misty, and redness appeared. She sought relief at an hospital, and underwent the usual routine of leeching, blistering, and purging, without any beneficial effect; but she continued her visits from time to time till the end of the year 1856, when seen by Mr. Walton, the eyes being in the following condition:—

Left eye (that first attacked). The lower two-thirds of the cornea were lost, and the place was occupied by a dense cicatrix, prominent and vascular, to which the iris was adherent. The sclerotic coat was discoloured, and traversed with large tortuous vessels: withal the eyeball was rather reduced in size. The state of the lens and of the interior of the organ could not be ascertained, as the pupil was closed. The pain, which was constant, was described as of a cutting, shooting kind.

Right eye. There were slight opacity of the upper half of the cornea, and general congestion of the eyeball. The pupil was

motionless. There was also great intolerance of light, and continued pain in the eyeball.

Mr. Walton said that, with his experience in these distressing cases, he was fully assured that the chronic irritation of the left eye was the cause of the disturbance of the right. Another fact on which he had fully satisfied himself, was the inutility of drugs, topically or internally, to arrest the destruction of the recently affected eye, there being nothing effectual, so far as he knew, but the adoption of the farriers' theory. The correctness of these views are now fully recognised by many who have witnessed his practice. He finds that the reduction of the eye, by which we mean the excision of a part and the loss of more or less of the vitreous humour, is sufficient to cause cessation of the chronic inflammation, and thereby to effect all that is requisite. In cases of staphyloma, where the irritation set up is due to mere mechanical action of the eyelids, or the distended eyeball, it is not essential, he teaches, to remove more of the ocular tunics than will effect the reduction to the desired size; and where the cornea only has been lost, and a staphyloma corneæ the result, he removes merely the diseased part, and endeavours to retain the vitreous humour, should it be healthy, the surface of which quickly cicatrices over, his theory being, that the less the eyeball is diminished, the less the deformity, and the better the stump for an artificial eye, should a person desire to wear one. When there is staphyloma scleroticæ, the removal of just enough of the distended sclerotic coat, to ensure evacuation of the disorganised vitreous humour, is all that is required. In the present case, he determined to cut off about the anterior fourth of the globe of the eye. The eyelids were retracted, with the little spring retractor that he almost always uses for this and other operations, the part to be removed transfixed and held securely by a common cataract needle, and the operation completed with a small scalpel. There was not any trace of the lens or its capsule. The vitreous humour was changed in consistence, perhaps also in some manner not recognisable, the greater part of which therefore escaped. A compress was at once applied, and no blood was lost. Without this necessary caution there may be much bleeding, especially when a staphylomatous eye is reduced, but with it there need not be any. A pledget of cotton wool makes the best compress, and is most readily retained with a bandage. It may happen that the collapsed tunics fill with blood; but this really matters nothing, as the clot is partly absorbed, and breaks down and passes away in discharge. But the pouring out of blood, even within the tunics, may almost always be prevented by the timely application of the compress.

We have often heard it asked, whence comes the bleeding? The usual answer is, from the central artery of the retina; but Mr. Walton thinks differently. He supposes it to arise from the diseased and distended vessels of the choroid, which give way directly that the pressure to which their coats are accustomed is removed. Such bleeding, he says, never takes place when a healthy eye is operated on, that is, when there is no disease beyond cataract; but it will frequently ensue when the eyeball exhibits evidence of disorganisation, and always when distended. Moreover, in the latter cases it is not requisite to cut away any portions of the sclerotica or of the cornea to cause it; simple evacuation of the liquefied vitreous body by a puncture may be followed by copious hæmorrhage. We have heard him allude, in support of his theory, to severe bleeding after the extraction of cataracts from eyes that plainly showed, from the discoloration and vascularity of the sclerotica, that there was general disease of the eyeball, cases in which the operation for extraction was inadmissible. An opiate was given, and the patient sent to bed. Not any constitutional effect followed, and the girl took her meals as usual. On the third day, the compress was removed, and the strips of plaster changed, and she returned home. At her next visit, that day week on which the operation was done, the plasters were taken off and the eye left free. Already the cut surface was covered with a greyish-white film. She was very closely questioned, and declared that there was no longer pain in the right eye, and that the intolerance of light was less. The next note taken dates fourteen days later. She had commenced some employment, but the sight was somewhat weak; the eye was still preternaturally vascular. Two months after this there was not any trace of the late disease, except in remains of slight opacity of the upper part of the cornea, but less than there had been. The pupil acted fairly well. The stump of the left was much reduced.

Original Communications.

CANCEROUS UTERINE TUMOUR: SUCCESSFUL REMOVAL BY THE ECRASEUR.

By John F. Nicholson, F.R.C.S., Stratford Green.

A healthy married woman, of spare habit and sallow complexion, aged 46, the mother of six living children, the youngest nine years old, applied to me for relief from repeated floodings, which had blanched her system, and reduced her to a state of extreme prostration. The catamenia had appeared regularly up to the last three months, since which time she had flooded at least once a fortnight, and been drenched in each interim with a copious discharge of blood and mucus, which was horribly offensive. She was not aware of any uterine disease, and had allowed connexion with her husband up to within a fortnight of my first visit. Defæcation was attended with some difficulty, but not so micturition. She suffered severe dragging and bearing down pains in the back and pelvis, which she compared to labour pains. Her family were all healthy, and there was no apparent constitutional taint.

On examination *per vaginam*, I found, within an inch of the vulva, a large warty irregular growth filling this passage: numerous smaller granular portions were hanging from it, giving it a sort of cauliflower conformation. It was firm and fleshy, but not so dense as a fibrous polypus. The os uteri could not be made out, and was supposed to be incorporated in the tumour. The most delicate examination was attended with profuse bleeding, and followed by severe expulsive bearing down pains and faintness. The inguinal glands were not enlarged; the abdomen was flat and flaccid; and the uterus could not be felt enlarged above the pelvis.

On March 14th, 1857, I removed this tumour by the *écraseur*, whilst the patient was under the influence of chloroform. Messrs. Coote and Anderson kindly assisted me. The patient was laid upon her back, as for lithotomy; the legs held back by an assistant. The tumour was turned out of the vagina by the fingers, which was accomplished with some difficulty. The os uteri could not be found; but a pink healthy tissue was exposed immediately above the base of the growth, which, being narrower at this point, conveyed the impression, on a first glance, that it was the pedicle of the tumour, but, on a more careful examination, was believed to be the cervix uteri. The chain of the *écraseur* was applied directly below this healthy looking structure, where the morbid growth apparently took its rise. As soon as the chain was tightened, all bleeding ceased, which had continued pretty freely during the necessary manipulation. Thirty seconds were allowed between each turn of the screw; and the tumour fell into my hand perfectly separated. The line of division measured four inches by two and a half; it was drawn in or puckered, owing to the tissues being squeezed together.

The tumour was evidently cancerous, being made up of nucleated cells, arranged in irregularly formed and loosely connected fibres, with numerous granules and capillary vessels. Its surface was ragged, warty, and much disorganised. Its growth had been very rapid, having given no indication of its presence save alarming hæmorrhage, until it had attained the size of the female fist. On examining the divided surface of the tumour, the os uteri was seen in its centre: fully two-thirds of it had been included in the grasp of the *écraseur*, and separated as part of the mass. Near its posterior edge, a smooth shining concave membranous surface was observed, which was first mistaken for the cavity of a cyst, but, on closer inspection, turned out to be a portion of the peritoneum. This had been drawn down when the tumour was everted and encircled by the chain. It was not seen at first, as its edges were squeezed together and confounded with the other tissues. When these were spread out with the forceps, it was brought fully into view, being above an inch in diameter, and was found, by the naked eye as well as by the microscope, to be peritoneal membrane, corresponding to that portion which descends from the under surface of the uterus on to the vagina.

A slight oozing of pale coloured blood continued when she was removed to bed, but nothing to occasion any anxiety. Vomiting and faintness, with a decided rigor, occurred about six hours after the operation, which brandy and water relieved. Opiates and salines were given, and a liberal diet, avoiding wine and stimulants. She has not had an unfavourable symp-

tom since. The bowels were well cleared out by an enema on the morning of the operation, and they have acted without aperients since. A scalded bran poultice, with a little turpentine, was applied over the abdomen, which completely removed the soreness and tenderness which she complained of the day following the operation. No other external applications were used. An abundant muco-purulent bloody discharge, very fœtid, flowed for the first fortnight; but there is now very little, chiefly muco-purulent. She has used an injection of chloride of soda during the last week, with marked advantage.

On March 15th, whilst passing urine, a broad shreddy piece of disorganised tissue escaped: this was preceded by a good deal of pain. It had a well defined ring near its thinnest margin, and corresponded to the surface of the tumour, being doubtless the slough separated from the wound of the *écraseur*, and the ring answering to the severed peritoneal membrane. The recumbent posture was rigidly enforced till the 23rd, when she was moved on to a couch, but she could not sit up without a dragging pain in the pelvis. Her appetite is good, and her general health has been wonderfully improved by quinine and sulphate of iron.

Remarks. This case proves the value of the *écraseur* in the removal of uterine tumours, or even a part of the uterus itself. Had the old plan of ligature been adopted, the morbid mass could not have separated without the risk of pyæmia; and the chance of a successful result must have been most visionary, when the great base of the tumour is taken into consideration, with the fact that the os uteri, as well as a portion of the peritoneum, would have been included in a ligature, however skilfully applied. There is a preparation in the museum of St. Bartholomew's Hospital, where a polypus, growing from the os uteri and completely embodying the latter in its pedicle, was tied by a ligature. The patient died before the ligature separated. The pedicle of this polypus has a narrow base, not exceeding an inch and a half in diameter, while the one removed by the *écraseur* had a basement of four by two and a half inches. The danger of hæmorrhage from such an extensively divided surface, had excision by scalpel or scissors been practised, must have been considerable, as the tumour bled freely on the least handling, and the divided surface was seen well supplied with blood-vessels.

The *écraseur*, therefore, seems to have met all the exigencies of this case, combining as it does the advantages of ligature and excision, while it does not occasion the dangers of pyæmia, which are referrible to, and almost invariably attendant upon, ligature. At the same time, it obviates the risk of hæmorrhage by the peculiarity of its slow action bruising the vessels, and thus inducing their occlusion by coagula. Most important structures were in the present case freely divided, and without those ill consequences which so often baffle our most cautious efforts in the removal of morbid growths. I would strongly recommend this valuable instrument to those unacquainted with its use, as being perfectly safe and easy of application, when used with caution and slowness. I am aware that a fatal case has been candidly reported in the Association Journal, Nov. 15th, 1856, where hæmorrhage followed its application; but, in that instance, the patient was most unfavourable for any operation, being of a hæmorrhagic disposition; and, even if the fatal issue can be charged to the *écraseur*, it only proves the exception to the rule, as I know of no other recorded case. Even with chloroform and other remedies, in the most skilful hands, loss of life occasionally ensues, without raising an insuperable objection to their use. Every improvement in the principles of surgery, and the application of surgical instruments, has been met by the strongest prejudices. It is to be lamented that the most distinguished contributors to science have had the mortification of seeing the principles they have advocated, and the means and arts by which they have been practically carried out, too often treated with indifference, neglect, and evasion. That obstinate adherence to an established routine of practice, that medical conservatism of what has been sanctioned by habit, too often lapses into superstition, and views the improvements of a rising generation with all the prejudices and hostility of a bigot.

Fearing that a valuable mechanical contrivance may be lost to suffering humanity, and not fairly appreciated, I have been induced to bring this successful case before the profession, in the hope that it may be fairly tested by practical experience. I trust that records of the cases to which the *écraseur* is specially adapted, and the results of its application, will be laid before us, till its merits or demerits, if it possess any, be established to the conviction of all inquiring minds.

CASE OF SECONDARY MALIGNANT DISEASE AFFECTING THE ILEO-CÆCAL VALVE, AND OBSTRUCTING THE INTESTINE.

By Charles Browning, Esq.

[*Read before the Harveian Society, March 19th*, 1857.]

Mrs. R., aged 82 when she died, was born at Coopersail, near Epping, and was healthy during childhood, with the exception of occasional attacks of ague. At the age of 14, she was struck on the right breast, which soon became enlarged, painful, and hard. These conditions increased, and in the course of six years—viz., at 20—she was deemed the subject of confirmed cancer, and admitted into the Middlesex Hospital, where the mamma was removed, and she eventually recovered.

Her restoration, however, was not permanent; for it seems that, although she married in the course of two years, and became the mother of seven children, she was not exempt from the subsequent invasion of internal malignant disease, which was attended by a train of suffering for sixty years, seldom perhaps surpassed. Her offspring were sickly, and for the most part died young. Three survive, two of whom are subject to scrofulous affections.

In the year 1846, she came under my care, and has since been seldom long without requiring medical attendance. Always ailing, and much debilitated by the persistent disease, she frequently had most severe paroxysms of abdominal tenderness, a burning sensation along the alimentary canal, compared to a heated iron thrust through the bowels, with lancinating pains, shooting especially from the umbilicus to the anus, and feeling as if something were alive within, probably from irregular movements of the canal.

Usually dyspeptic, all her symptoms were aggravated by solid food, and reached their climax in about four hours, or shortly after tea, when she would throw herself back in her chair in the greatest agony, gasp for breath, and declare that she was dying. This state generally continued as many hours longer, yielding at length more or less to remedial measures. At intervals, the appetite was craving, and the bowels habitually constipated.

During an earlier period, it appears that local depletion, counterirritation, etc., were adopted with only temporary relief; nor perhaps could more be effected by our art; for it became afterwards apparent that the malady which had affected the breast had located itself in some part of the intestinal canal, and was now amenable neither to the scalpel nor to the influence of medicines. These latter, however, were valuable as palliatives; and benefit was derived at times from chalk mixture with tincture of opium; the endermic application of laudanum, by means of flannel saturated with it, and placed upon the abdomen, and by small doses of castor oil, followed by warm soothing enemata. Seldom could any other than spoon diet be taken with impunity.

On the 16th February 1857, she was attacked by bronchitis, in a subacute form, and it was accompanied by the old abdominal pains; under the combined influence of which, exhausted nature quickly succumbed.

On opening the body, the only parts worthy of particular notice were the small intestines and the ileo-cæcal valve. The jejunum and ileum were here and there inflamed, and their mucous surfaces presented patches of ulceration. But the chief seat of disease was in the valve, which had lost its normal structure, and with that its proper action; that portion of the intestine from which the folds constituting the valve proceed was thickened and indurated, and the calibre of the bowel was so far diminished as necessarily to have permitted with difficulty the fæces to pass. The valve itself presented a cribriform condition; and the adhesion which had taken place between its free edges left four apertures, each about the size of a large quill.

Remarks. In reference to the early age at which the primary disease appeared, the question arises, whether it was a genuine case of scirrhus? I would reply, with respect to the mamma, that the fact of the patient having been received into a metropolitan hospital, operated upon, and the disease reported as cancer, may in after time be regarded as probable evidence of its malignant character at least. Nor does the age of the patient render such a conclusion irrational, since from the hereditary and blood nature of cancer (which I use as a generic term only), it is surely not assuming too much to suppose that the mamma, so prone to be the nidus of its specific cancer-cells, should, under the exciting influence of a blow, become the seat

of their development in a form somewhat different perhaps from that subsequently and very tardily manifested at the ileo-cæcal valve. I can have no doubt that the disease by which it was invested was essentially malignant, and it corroborates the view of the surgeon who excised the breast. One can scarcely arrive at any other conclusion, when we consider the history, the progress, and the termination of the case; added to which, the abnormal growth, as revealed by the autopsy, was hard and fibrous in its texture.

Could surgery have given that relief in the secondary disease which was denied to medicine? I think not: because the site of the obstruction was not clearly defined during life, and the impediment itself not so complete as to justify the operation for artificial anus; to say nothing of the advanced age of the subject, which would have been most unfavourable to its success.

The case is interesting in a threefold aspect. It tends to the belief that cancerous or scirrhoid disease sometimes exists at an early age; the issue as regards the breast encourages timely surgical aid, for the affection of that organ might have advanced more quickly than that of the intestinal canal; and, lastly, it forcibly shows the tenacity of life under the cumulative sufferings of nearly seventy years. At whatever portion of that period the successive deposition may have invaded the intestinal valve, it is not possible to determine with precision from the abdominal symptoms the time at which functional disturbance of the canal was either followed or caused by the malignant obstruction; although, from the tardy character of malignancy attending the growth of that part, there is reason to believe it occurred comparatively early, a view which is corroborated by the testimony of the patient's daughter, who states that her mother's sufferings were of the same character even when she was bearing children. By careful attention to appropriate food, and to the relief of the canal, life was maintained so long; and it was not until the association of bronchial inflammation ensued, to which both her great age and the season strongly disposed her, that it was thus rapidly terminated.

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture I (*concluded*).

Much discrepancy of opinion exists as to the amounts of the ordinary or normal constituents of the urine, in cases of diabetes, especially with reference to the *urea*. Certain observations, as those of Bostock and Cruickshank, appearing to show that this principle is very deficient in quantity, if not altogether absent; by other observers it has been thought to be in excess. I have endeavoured to put this subject to the test of experiment, and believe that the conflicting statements may be easily reconciled. Assuming that the amount of urea eliminated in the twenty-four hours be normal, say 350 grains, and the quantity of urine about 50 fluid ounces, each ounce would contain seven grains, very readily ascertained and estimated; but when this 350 grains of urea is diffused through 400 fluid ounces, as often happens in diabetes, and, at the same time, becomes mixed with a very large quantity of sugar, perhaps forty or fifty times its own weight, some difficulty might have been experienced in detecting even a much larger quantity, by the process employed, at the time when doubt was cast upon its presence. I believe that the daily amount of urea thrown out by diabetic patients is at least as much as, and for the most part greater than, in health; but that, in cases of the disease where the diuresis is excessive, the relative quantity is much diminished. In a well marked case, under my care about eighteen months since, the following determinations were made. The patient was a man, J. S., aged 28, weight 8 stone 4 lbs., living on a diet, consisting of meat 1½ lb., milk 2 pints, beef tea 1 pint, captains' biscuits 4 ounces, and greens 4 ounces.

Date.	Quantity of urine.	Sp. gr.	Urea.	Sugar.
Nov. 22	117 fl. oz.	1046	999 grs.	2923 grs.
— 23	123 —	1046	1085 —	3500 —
— 24	129 —	1046	856 —	2533 —
— 25	131 —	1045	879 —	3718 —
— 26	124 —	1045	709 —	2860 —
— 27	134 —	1045	755 —	2488 —
— 29	124 —	1040	843 —	2313 —

The same patient, in the following January, was much improved in health, and passed—

Jan. 20	76 fl. oz.	1044	601 grs.	..
— 22	89 —	1048	650 —	1893 —

The urea determinations were made with Liebig's test, by a gentleman (Mr. Footman), who had previously had much experience in such analyses, and on whose accuracy I can fully rely. In other cases, of patients passing daily about 70 or 80 ounces of urine, I also found the amount of urea considerably above the healthy standard, although by no means so high as in the case just alluded to.

This view of the existence of an excessive elimination of urea in diabetes, accords with the results obtained by Mr. M'Gregor and Dr. Christison; the former finding 512, 810, 945, and 1013 grains; the latter, 630 and 884 grains, as the daily amount of this principle voided by certain patients suffering from this disease. Part of the large excess found in some cases, must be attributed to the quantity and character of the food. The nitrogenised matters in the form of meat and eggs, in the hospital case I have alluded to, were very large indeed; and it was found that a non-diabetic patient, who for a few days was induced to take the same diet, also voided a very large amount of urea. When from any cause the appetite fails, I have reason to believe that urea becomes considerably lessened.

The influence of diet upon the daily formation of urea is well shewn in the following table, the result of a series of examinations of Dr. Frank of Wurzburg:—

	Grammes.
Twenty-four examinations on a mixed diet gave ..	37·98
Five „ „ animal diet	62·63
Ten „ „ vegetable diet	28·80
Two „ „ non-azotised.....	16·66

And during forty hours of complete abstinence, the quantity of urea, etc., was only 19·35 grammes.

The increased excretion of urea, which is certainly often present in diabetes, I should consider to arise from two causes; partly from the large amount of azotised food, partly from the increased consumption of nitrogenised tissues.

With regard to the *uric acid* in the urine in diabetes, there has also been much discrepancy of opinion; by most observers, it has been supposed to be deficient, and the reason is obvious. Dr. Prout has observed, and every one who had studied this disease must have also noticed, that on the occurrence of diabetic symptoms, the urine, before probably turbid, becomes suddenly clear and transparent; not unfrequently it has been remarked to me, on asking about the state of the secretion, that nothing could be wrong in this respect, as the water had lately assumed a much more healthy appearance. This apparent deficiency, however, need not indicate that the total elimination of the uric acid is lessened; for the large increase of the watery secretion, from its power of holding the urates in solution, would at once prevent the cloudy state of this fluid. Without being able to bring forward figures derived from quantitative analyses, I may state that, in almost all cases of diabetes, where the urinary secretion is excessive, the *relative* amount of uric acid is diminished, as likewise the urea, colouring matters, etc., but that the total quantity is not decreased; that, when from treatment or other causes the secretion becomes much diminished in quantity, the uric acid is often deposited, either in the cloudy state of urate of ammonia and soda, or in the crystalline form of uric acid. In the latter condition, it is not unfrequently seen, even when the secretion is rather abundant, caused by this insoluble acid being reduced to a free state by the over-acidity of the urine. If we take eight grains to represent the average daily amount of uric acid thrown out in health, and supposed it diffused over 400 fluid ounces of urine, even on the addition of some foreign acid, it would not be deposited, as this quantity of fluid is then more than sufficient to hold it in solution.

Dr. Prout has observed, that "the appearance of lithic (uric) acid, either in its amorphous or crystallised form", is among the favourable symptoms of this disease; and, from what I have just stated, the reason will be obvious. I hope soon to be able to lay before the profession some more positive and accurate

knowledge on this point; but at present I question whether the appearance of this acid in diabetic urine implies any more than that a diminution of the renal secretion has occurred, of itself of considerable importance. Some observers, as Lehmann, have noticed an increase of *hippuric acid* in diabetic urine. This augmentation does not appear to be at all constant; I have not found it, in cases in which I have sought for this body.

As to the amounts of the other normal ingredients of the urine, little that can be relied upon is known. The earthy phosphates are often found in large quantities, especially when the patients are partaking plentifully of a meat diet.

Albumen has been asserted by some to occur frequently in diabetic urine; but, from my own observation, I cannot think that it is at all a common occurrence, and, when present, I imagine depends on the coexistence of some independent disease of the kidneys. I have not found it in more than 10 per cent. of my hospital cases, and in private practice have seldom met with it. Considering the great frequency of albuminuria, unattended with saccharine impregnation, it can scarcely be considered as being necessarily connected with this affection. By some it has been thought that albuminuria occasionally passes into diabetes; no proof, however, in support of this opinion can be brought forward. Others have supposed that the secretion of a large excess of *urea* often precedes saccharine diabetes. I believe this assertion to be equally destitute of proof. If any tendency to granular or other form of kidney disease preexist, the increased work which these organs are called upon to perform would tend to bring it forward; as would likewise the impaired general health which diabetes engenders.

As the urine is so much altered, both in quantity and character, we might anticipate finding many symptoms in connexion with the urinary organs; yet these are by no means frequently or strongly marked.

Many diabetic patients have occasion to pass water at short intervals, but this simply arises from the large quantity secreted, and the necessity of relieving the bladder; sometimes, indeed, there is a frequent desire to micturate, when the amount of urine is not great. In two cases which have fallen under my observation, the symptom has been well marked; in one, the total quantity passed was not much more than in health, but the specific gravity was very high, above 1040. In the second case, the daily average was under five pints, specific gravity 1035. At times the end of the urethra of a diabetic patient becomes red and swollen, arising apparently from the altered and irritating quality of the secretion; in the female, this often proves a very distressing symptom.

There are many important and characteristic symptoms presented by the confirmed diabetic subject, besides those referrible to the urinary organs, which have been already enumerated. Some of these appear to be directly dependent upon the great loss of fluid from the kidneys; others, probably, on the altered condition of the blood which will be shewn to be constantly present. As a rule, diabetic patients, at least those who have been long suffering from the disease, are thin, often emaciated. Instances are, however, related by Dr. Prout, of their being unusually fat. One of his patients weighed twenty-three stone when labouring under well marked symptoms; before that time, he weighed twenty-seven stone. The second individual weighed seventeen stone. During the progress of the affection, emaciation generally takes place, accompanied by increasing debility, and great irritability of the muscles. The increase in weight of a diabetic patient may, I believe, be taken as good evidence of the amelioration of the disease. It has been remarked, that diabetes usually runs a more lengthened course in fat people than in those originally of a spare habit of body. My own experience fully accords with this.

Excessive thirst is another prominent symptom in diabetes; and it is not uncommon to hear of patients drinking many gallons of liquids during the day, when no restraint is put upon them. That this depends upon the loss of fluid from the system, and has little or no relation to the saccharine condition of the blood, is made evident by the fact, that the thirst is usually in proportion to the quantity of urine voided; and, likewise, that it exists to an equal degree in other cases of excessive diuresis, where there is no sugary impregnation of the renal secretion.

An excessive, often inordinate appetite, is another of the symptoms common to diabetic patients, depending in some measure on the great drain of solids from the system, and the consequent exhaustion; but partly, I should suspect, upon an irritated condition of the mucous membrane of the stomach, induced by the altered secretion constantly poured into it. That such is the true explanation, is made probable by the presence of pain and tenderness of the epigastrium, of which these patients often complain. Notwithstanding that large quantities of food are taken, the bowels are usually constipated, the fæces hardened, devoid of biliary matter, and scybalous; characters due to the deficient secretion or excretion of bile, and the excessive liquid drain from the kidneys. The tongue of the diabetic subject is often very characteristic, for the most part unusually red, beefy looking, at times much fissured, sometimes partially covered with a whitish fur, and almost constantly with a very glutinous or tenacious mucus, which is adhesive, and forms bands when the mouth is opened.

The gums are usually inclined to be spongy in character, red in appearance, and apt to bleed from slight causes. The skin is commonly dry and harsh, especially when the urinary secretion is large; in some patients, however, this symptom is not observed. I have records of cases of well marked diabetes, in which, throughout the whole course of the disease, it has been absent, and visible perspiration could readily be induced by exercise or diaphoretics; Dr. Prout, also, has noticed this fact. Even when the skin has been dry during the progress of the disease, I have known the occurrence of night sweats, induced by the phthisis, under which the patients were labouring, becoming active in character. A dry and harsh skin may, however, be regarded as a symptom generally present in confirmed diabetes. I believe it is but little connected with the saccharine condition of the blood, and not commonly present in cases of glycosuria unless diuresis is well developed.

Nothing very remarkable is exhibited by diabetic patients in regard to the vascular system, the heart's action is generally weak, and rather hurried, and the pulse consequently small and quick. I believe that in almost all cases the pulse is *above* the average of health. The presence of diabetes, especially when accompanied by great diuresis produces a distinct alteration of the condition of the mind, and induces great irritability, peevishness, want of energy and power of application. In many of my hospital patients, a disposition to deceive, especially with regard to the subject of food, has displayed itself. I believe this has been observed by others.

Other functions have often been stated as peculiarly affected during the progress of this disease, especially those of the eye and of the generative organs.

Dimness of vision appears to be laid great stress on by certain French physicians, and supposed to be due to some opacity of the humours of this organ. I cannot say that my own experience would lead me to rely much upon the symptom, as scarcely any of my patients have complained of it; and, on inquiry, I have seldom been able to discover more than the usual imperfection of vision which so frequently accompanies impaired nutrition of the body.

With regard to the loss of virile power, I am inclined to regard it as more connected with the excessive diuresis and general debility, than with the altered state of the blood. In some of my cases, the loss was stated to be complete; others had not noticed much diminution.

The symptoms just enumerated are particularly characteristic of those forms of the disease where diuresis is very prominent, and in which many of the phenomena are secondary to the great loss of fluid from the urinary organs; but, as I have before observed, there are forms of saccharine disease either unaccompanied by an increased secretion of urine, or at least in which the diuresis is not well marked—nay, even unnoticed by the patient. Such cases, I believe, are very numerous: at the same time, most important to diagnose correctly. From my own observation, it appears that these instances more frequently occur in private practice than in the wards of the hospital; and hence perhaps the cause of their having been less perfectly understood, and less accurately examined.

Are there any symptoms, saving the saccharine state of the urine, which can be regarded as pathognomonic? I know of none upon which I should venture to rely. Certain phenomena, however, very generally exist; and these I will now briefly notice.

Perhaps one of the most constant is a certain amount of œdema of the legs, which, in some instances, may be so slight as readily to escape detection, unless specially sought for. Since my attention was first directed to its frequent occurrence, I believe I have seen no patient, in whom the urine has been distinctly saccharine, where it was absent: in some cases, the amount is so slight that it appears to be little more than a loss of elasticity of the integuments over the tibia, but still it has been distinctly marked. In real diabetes, it often becomes very decided, and in the later stages considerable œdema

and swelling of the legs not uncommonly ensue. The occurrence of slight œdema in cases where the renal secretion is augmented, is somewhat peculiar, and shows that it depends upon the morbid condition of the blood, and has no reference to the renal function.

Another very common phenomenon is the appearance of some cutaneous eruption, or some affection of the subcutaneous cellular tissue. I have been consulted by several patients with such, and have discovered a saccharine condition of urine, evidently most closely connected with the skin-disease, in the relation of cause and effect. In the majority of cases, the eruption has been herpetic in character; now and then scaly; in some, pruriginous; in others, it has assumed the form of boils and carbuncles. From what I have hitherto observed, I am much inclined to think that these cutaneous affections are more marked in cases of saccharine urine unattended with diuresis, than where the urinary secretion is greatly augmented; as if, in these latter cases, there was less accumulation of sugar in the blood, on account of the establishment of free outlet by the kidneys. Dr. Prout had noticed this, for he makes the following remark: "Were I permitted to draw a general inference from my experience, I should say, that diabetes usually *follows* cutaneous affections, and accompanies (perhaps *precedes*) the affections of the cellular tissue. Thus I have several times heard patients observe that they were formerly subject to eruptions in various parts of the body, but that such eruptions disappeared after the diabetic complaint became established; nor do I remember more than one instance in which diabetes actually accompanied a severe cutaneous affection." Within the last few weeks, I had a patient under my care, suffering from diabetes, who exhibited from time to time a large ring of herpes circinatus upon the right cheek; and I am of opinion that there was some distinct connexion between the intensity of the skin affection and the amount of the renal secretion, one being in an inverse ratio to the other. Not many months since, I correctly diagnosed the presence of saccharine urine in a gentleman, mainly from finding that, without any very evident cause, he had been suffering for several years from a succession of herpetic eruptions in different parts of the body.

Pruritus not unfrequently accompanies a saccharine condition of the blood; and several instances illustrating this fact have occurred in my own practice. There also very commonly exists in these patients a tendency to low forms of inflammation, a difficulty of healing parts when injured, and a liability to furuncular and carbuncular affections. In many of these cases, the tongue exhibits in some degree the characters we have before described. There is often increased thirst and dryness of the skin; and, although the patient may be quite unconscious of it, some augmentation of the urinary secretion; but this latter may be insufficient to cause any increased frequency of micturition, and hence pass unnoticed.

As a good example illustrative of this form of disease, I may relate the following case.

A gentleman 66 years of age, had been somewhat out of health for several years, had felt much weaker than usual, and has also been troubled with an herpetic eruption about the prepuce, which had recurred so frequently as to induce phymoses: he had also formerly suffered from some affection of the scalp. At the time of his visit, he exhibited the following symptoms: some herpetic eruption on the prepuce; considerable redness of eyelids; general feeling of debility; pulse weak, about 80; slight œdema of legs, over the tibia; tongue somewhat red, with a small quantity of a rather glutinous-looking mucus on its surface; frequent desire to make water, from a feeling of irritation, but no large amount passed at the time. On examining the urine voided at the visit, about two hours after breakfast, I found it of the usual yellow appearance, clear, acid in reaction, specific gravity 1035 at 60° Fahr., and yielding, with the potash and copper tests, abundant evidence of sugar. On obtaining an estimate of the daily average, I found it to be about four pints, having a mean specific gravity of nearly 1035. I may state that, on the addition of yeast, it fermented very strongly; and, when allowed to stand, gave rise to a precipitate of uric acid in orange coloured crystals. By appropriate diet and treatment, this gentleman lost all his uncomfortable symptoms, gained flesh and strength, and the urine (which is now about two and a half pints per diem) has a specific gravity of 1020, and gives but a very faint indication of the presence of sugar; still this abnormal principle is detectable. In this case, there was a *decided* diuresis; yet, on first questioning, the patient had no idea that he passed a larger quantity of water than usual.

As another example, I may mention the case of a lady about sixty-five, who complained first of great irritability about the neck of the bladder, and afterwards of intense pruritus pudendi: slight pitting over tibia. The urine was, according to the patient's statement, rather scanty than not; but on examination I found it of specific gravity 1045, dark yellow colour, and yielding, by the fermentation and other tests, a large amount of sugar: it was also very rich in urea.

Another gentleman, aged 63, had suffered for some time from an eruption about the lips and chin, with slight pitting over the tibia; otherwise in pretty good health. The urine was found to be distinctly, but not strongly, saccharine. Treatment with a diet deficient in saccharine and amylaceous matters, but not very rigid, appeared to remove the tendency to the herpetic affection, and the urine has recovered its healthy condition.

As a last example, I may mention the case of a gentleman about sixty years of age, who consulted me on account of some affection of the ends of the fingers, which he considered gouty in character. On examination, I found that they were evidently small blebs, which on puncture gave exit to a very tenacious gelatinous-looking substance, semifluid in consistence. These blebs had troubled him for some time, and he had also suffered much from prurigo about the legs and arms. The legs gave slight, but distinct, evidence of pitting over the tibia; the quantity of urine was moderate, not exceeding three pints; specific gravity about 1030, and yielding strong indications of sugar by the various tests.

On a subsequent examination of the urine, after following for a month or two a plan of treatment I had proposed, the urine ceased to exhibit the reactions of sugar; but whether it has remained free from saccharine impregnation, or whether the symptoms have become ameliorated, I am unable to say.

British Medical Journal.

SATURDAY, APRIL 11th, 1857.

THE SHORTCOMINGS OF OUR HOSPITALS.

The fact that Miss Nightingale is making a tour of the Metropolitan Hospitals, will be received with an ill suppressed sneer, we know, by many individuals, who fancy that, whatever may be the shortcomings of our military asylums, those dedicated to the civil element of society cannot be bettered. We willingly admit that neither in London nor in the provinces do we find such glaring examples of bad sanitary arrangements in our hospitals, as are to be found either at Fort Pitt, Chatham, or at the Woolwich Military Hospital, or, if report speaks truly, as we are likely to find at the great military hospital now building at Netley. That is to say, they are almost universally dry, and tolerably well lighted and ventilated; the diet in them is liberal; and the attendance, as regard nursing and medical assistance, is excellent. There are many shortcomings, however, in our best metropolitan hospitals, which the eye of an intelligent and sensitive lady, such as Miss Nightingale, will instantly see, but which the boards of governors, under whose direction they are, either never will see, or, if they do see, will never attempt to remedy.

Sidney Smith has wittily said that public boards have neither bodies to be killed, nor souls to be saved. This observation, in a modified degree, holds good with respect to the boards of hospitals; composed as they are of so many heterogeneous elements, they have no mind for the performance of those finer duties and acts, which a single good and cultivated intellect is so capable of performing. The more obvious routine work of an hospital they direct well enough, but here their function ends; if any philanthropic individual suggests some plan for

the benefit of the patients out of the ordinary course, he is put down as a visionary, and but too often treated as a nuisance.

Miss Nightingale has the *prestige* of a great name in her favour, and certainly the old cuckoo cry of *visionary* cannot apply to her. We therefore rejoice in her inspection of our hospitals, and feel certain that her womanly heart will be able to suggest a score of little improvements in their arrangements, which never would have struck the minds of the hard men of business, who so often hold in their hands the comfort and temporary happiness of invalids.

For instance, she must be struck with the glaring want of anything like convalescent wards in any of our best hospitals. There are many forms in which that terrible infliction *ennui* assails a man in the course of his lifetime. It is no doubt a miserable thing to have to linger in the waiting-room of a railway station a full hour for the next train, with nothing to look at but the front of a patent water-closet, and nothing to read but the time-table; it is most certainly a terrible infliction to be shut up in a country inn of a wet afternoon, and to have no prospect but the pump in the back yard; a voyage to India in a dull sailing ship is admitted on all hands to afford hours of *ennui* which are almost too terrible to bear. It must be admitted, however, that in all these passages of life the unhappy sufferer has the benefit of pure air, and that he is not annoyed by depressing sights and sounds. All these elements of mortal misery are, however, contained in the hospital ward—than which nothing can be conceived more cheerless and unhealthy. We do not doubt for one moment that the terrible *ennui* of the hospital ward is an active agent in predisposing the convalescent patient for the reception of any infectious disease which may happen to be present: and the neglect to draft off every day as many patients as possible from rooms contaminated by sometimes scores of beds, is a glaring imperfection in our hospital system. At Bethlem Hospital there are some convalescent wards which fill with pleasure the mind of the philanthropic physician. Here the patient not only finds cheerful light literature and the current newspapers, but the windows are fitted up with vivaria, fernaries, and cages full of birds and the smaller animals. It is impossible to estimate too highly the value of these little aids to pass the vacant hour; yet we venture to say that, in ninety-nine cases out of a hundred, the members of a hospital Board who would propose the introduction of such cheap amusements as these for the patients would be laughed at.

If our hospitals are utterly wanting in every kind of indoor amusement, they are equally unprovided, in the metropolis at least, with any space out of doors in which the patients can breathe a pure air and enjoy the sunshine. There are, we know, airing courts and hospital gardens—such gardens and such airing courts! The heart sinks in merely contemplating them: the sparrows seem so heavily laden with soot that they can scarcely fly: and the flowers, if they ever venture to appear through ground studded with brickbats and oyster-shells, soon put on the livery of mourning. It will, of course, be objected by the gentlemen who ever have upon their tongues "it can't be done," that there is no help for this state of things. But, let us ask, is not glass now so cheap that covered galleries may be made, in which the poor patients may walk in all weathers amid flowers and evergreens? The traveller who arrives at the Paddington station is surprised to see many acres of ground inclosed with a glass shed, simply to keep goods dry. If we can go to such vast expense simply to preserve hardware and groceries from the weather, cannot the governors of our hospitals afford a few thousand square feet of glass in order to preserve that which is far more precious—human life? We have, it is true, the admirable establishment for convalescents at Carshalton; but the accommodation there is limited, and we want better arrangements for the convalescents in the hospitals themselves. We appeal to the hundreds of associates, who are connected with hospitals throughout Great Britain, whether or not we have exaggerated the evil resulting from a want of due care and attention to the convalescents? And we sincerely trust that Miss Nightingale, who sees these matters with the sentiment of a woman and with the feeling of a practical philanthropist, will so loudly call attention to the want as to ensure its being speedily supplied.

POOR-LAW MEDICAL REFORM.

Mr. Griffin has addressed to the Poor-Law Board a letter, which is published at p. 309, and which, while its text is the treatment he himself has undergone, is pregnant with matter for reflection in regard to the entire question of the position of Poor-Law medical officers. It will be probably said by some, that the subject is becoming hackneyed: nevertheless, be the subject new or old, an essential element in the progress of remedying all abuses is, that the said abuses shall be from time to time brought prominently forward, even to the distaste of the fastidious. Mr. Griffin's statements, therefore, far from being out of place and tedious, are altogether seasonable; and we trust that they will have their good effect both on the Honourable Board to whom they are addressed, and also on his colleagues throughout the kingdom.

If Mr. Griffin's letter is carefully analysed, it will be found to present several salient points for consideration, each of which might form the subject of extended comment.

In the first place, the quiet shelving of just claims to which union surgeons are liable under the present system of Poor-Law medical relief, is exhibited in the outline given by Mr. Griffin of the fate of the application made by him for an increase of salary. He applies to both the Central and the Local Board; the Central Board promise to take the matter into consideration, under certain circumstances; the Central Board corresponds with the Local Board, and informs Mr. Griffin that the Local Board will give the subject their further consideration at a certain time. The time appointed comes and passes, and has passed for a year or thereabout; but the increase of Mr. Griffin's salary is an ignored question. Thus he has been kept revolving, Ixion-like, on the circumlocution wheel; and there he is likely to go on revolving, in the present state of affairs, unless the Poor-Law Board accede to his entreaty, and put a little extra weight on their side of the wheel, so as to enable their suppliant to enjoy a more comfortable position.

Much as has been said regarding the inadequacy and inconsistency of the payments for medical relief in many districts, we are somewhat struck with Mr. Griffin's demonstration of these facts in regard to the three districts under the care of the Weymouth Board; these districts having, it must be observed,

originally formed but one. The following summary will show at a view the accurate manner in which work and pay are sometimes proportioned by Boards of Guardians.

	Annual average of patients.	Annual salary.	Per case.
1. *Undivided District* . .	642 ..	£110 ..	3*s.* 5*d.*
2. *Divided District*—			
Weymouth	509 ..	35 ..	1 4½
Melcombe	314 ..	40 ..	2 6½
Wyke	43 ..	35 ..	16 3¼

One would almost think that, in such a benighted part of the world as Weymouth, the aid of Cocker, Walkingame, and other well known friends of the schoolboy, was a yet unknown benefit. Nothing can be more just than Mr. Griffin's brief but pointed remark: "The glaring inconsistency of these payments, so manifestly disproportionate to the services performed, must convince your Honourable Board that, if my remuneration is sufficient, that of my colleague is more than sufficient, and the ratepayers are unjustly assessed. If, on the contrary, the gentleman with the forty-three orders is but fairly paid, I am most unjustly treated."

As to the question, whether 1*s.* 4½*d.* per case is adequate remuneration, and whether it can enable the medical officer to do his duty conscientiously, there can be no doubt whatever. The tendency of this insufficient payment is hinted at by Mr. Griffin; and it must be plain to every one who knows or cares to know anything of the matter. Either the Poor-Law surgeon must be a loser by his appointment, or the poor must be punished for the faults of their guardians.

In the concluding parts of his letter, Mr. Griffin gives an outline of the recent and proposed proceedings in regard to Poor-law medical reform, and urges on the Board the necessity, both on the score of economy and of humanity, of remedying the evils of the present system.

Thus far, we have adverted to those parts of Mr. Griffin's letter which are of general application. There remains the more personal part. It must be well known that Mr. Griffin has made himself very obnoxious to his masters—we could call them by a harsher name—and that their animosity has been carried so far as to lead them to attempt his removal. The letters numbered II, III, IV, and V, subjoined to Mr. Griffin's letter to the Poor-Law Board, contain the correspondence bearing on this point. They are short and intelligible, and therefore scarcely require analysis. But there is something a little curious in the different style of address assumed by the Clerk to the Board in his two communications. In his first, notifying to Mr. Griffin the resolution of the Board that he "ought to be dismissed", he adopts the stiff business formula of "Sir, your obedient servant": in the second (letter No. V), he condescends to "Dear Sir—I am, dear sir, yours most obediently". There may or may not be anything in this difference of style; but can the concluding sentence of Mr. Griffin's letter No. IV have had the effect of producing it? We much suspect that Boards of Guardians are not always aware that their medical officers are *gentlemen*, to whom, perhaps, circumstances have rendered it convenient, for a time at least, that they should submit themselves to the dictation of persons of, it may be, a different stamp from their own.

In conclusion, and while we commend Mr. Griffin's letter to the earnest attention of our readers, we may be permitted to impress on them the importance of taking every opportunity of privately bringing the subject of Poor-Law medical reform before the notice of the newly elected members of Parliament especially of those gentlemen who have not hitherto held seats. The recently published pamphlet of Mr. Griffin will furnish them with such information as will enable them to prime any honourable member whom they may have an opportunity of meeting, with the facts of the case. If a fair number of members are made well acquainted with the merits of the case before it is publicly brought forward in Parliament, a portion of success will have been already obtained.

THE WEEK.

The Justices in full Session at Pontefract, in the West Riding, settled, on Monday last, that the district was far too prodigal in the matter of Coroner's Inquests. The Finance Committee gave it as their opinion that out of 311 inquests which they had investigated, 147 were, in their opinion, held unnecessarily! We should like to ask these gentlemen, in the name of common sense, how they could know whether these inquests had been held needlessly unless they had been held? If there is one thing more certain than another, it is that the coroner is not often enough called upon to hold his inquest in cases of suspected death by foul means. Have not the late trials for poisoning proved the fact, that the friends and neighbours of the persons poisoned commonly talked about their having been put out of the way long before any investigation took place? Are not the ghastly remains of parent, child, or friend being continually disinterred, years after their burial, in consequence of suspicions having incidentally come to the ears of justice, long after they were the public talk of the village? How many persons now sleep under the turf with arsenic in their intestines who would have been alive at this moment, if those who put them away had known that a coroner's inquest would inevitably succeed a suspicious death? Nevertheless, the West Riding justices have determined to be sparse with their inquests, and have set about curtailing them by disallowing the coroner's fees in ten instances. We say deliberately that this conduct is nothing less than offering a premium upon poisoning, and we trust the attention of the Home Secretary will speedily be directed to it.

Another case of wife-poisoning has come under the notice of the authorities at Chorley. The prisoner, a shoemaker, obtained, it appears, a drachm of tartar emetic from a druggist in that town, and, shortly afterwards, *half a pound* of arsenic from Mr. Crutchley at Preston. How such a quantity of a prohibited drug came to be thus publicly sold, does not appear; but it seems clear that both arsenic and tartar emetic were administered to the woman, as they were found in her stomach by the surgeon who made the *post mortem* examination. It is certainly singular that, since the Palmer murders, tartar emetic has come into such deadly use. The fact points to the imitative tendencies of criminals, and to the injury done to society by the dissemination of the particulars of poisoning cases.

It will be remembered that, in the Dove trial, that criminal's belief in witchcraft was instanced by several of the medical witnesses as one of the proofs of his insanity. We took the liberty to protest against this kind of proof at the time; and we

then stated that the belief in evil spirits was the commonest possible thing among the lower orders of this country; aye, and even among a certain class of the higher orders. The late extraordinary revelations in the *Times* with respect to witchcraft have indeed borne out our remarks, and proved to the world that the medical psychologists must no longer assert that a belief in witches is any proof of a disordered mind. Having lived amid a population of small farmers in the western counties of England, we deliberately affirm that the commoner orders of that class, and those below them, are very little advanced in their ideas with respect to witchcraft from what their forefathers were centuries ago. We have but to scratch the lacker work of the nineteenth century off the western countryman, and we see beneath the same good man who burned witches in the days of Elizabeth. There is not a village in some districts, to our knowledge, where some old woman would not have to undergo the ordeal of being "swum" or half drowned, to see whether or no she would float under all circumstances, and so prove herself a witch, if the ignorant inhabitants were not in fear of the law.

The recent determination of the Council of the Royal Medical Benevolent College to increase from £30 to £40, the annual amount charged for each exhibitioner, has met with disapprobation from a portion of the Governors. A requisition having been made to the Council to call a general meeting, for the purpose of taking into consideration certain resolutions, having for their object a return to the original charge of £30 *per annum*, about two hundred of the Governors assembled on April 3, at the Freemasons' Tavern. The resolutions, which were proposed by Mr. H. Bateman and seconded by Dr. Ballard, were:—

1. "That the council be and are hereby requested forthwith to draw up such bye-law as shall enact that from and after Christmas, 1857, the annual amount charged for each exhibitioner (exclusive of any payments in respect of remaining at the college during the vacations) shall be the sum of £30, payable in advance by three equal payments of £10, on or before the commencement of each Term, viz., Hilary, Easter, and Michaelmas.

2. "That this meeting is of opinion that a committee should be appointed to investigate, and at the next annual meeting to report upon, the affairs of the college generally, more especially with reference to its working expenses, and the further development of the educational department.

3. "That the Royal Medical Benevolent College Act of the 18th and 19th Victoria, having annihilated the rights of exhibitioners, be so amended as to enable the council to board and educate exhibitioners for an annual charge not exceeding £30, inclusive of all extras whatsoever."

In issuing the notice summoning the meeting, the Council expressed their opinion that the aforesaid resolutions would not be in accordance with the Act of Parliament under which the College is incorporated. The subject was freely discussed on both sides; and the following amendment, moved by Mr. Josiah Wilkinson and seconded by Dr. Sparke, was carried by a large majority:—

"That this meeting has the fullest confidence in the Council, and is of opinion that the annual amount of £40, charged for each exhibitioner, is just and reasonable."

Association Intelligence.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

NOTICE TO MEMBERS IN ARREAR.

Notice is hereby given, that after the 18th day of April inst., the British Medical Journal will be withheld, in accordance with the Laws, from all members whose subscriptions for last year shall remain unpaid.

Philip H. Williams, *General Secretary.*

Worcester, March 1857.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 24th, 1857.

Charles Locock, M.D., President, in the Chair.

ON FORCIBLE EXTENSION AND RUPTURE OF THE UNITING MEDIUM OF PARTIALLY ANCHYLOSED SURFACES.

BY BERNARD E. BRODHURST, ESQ.

The author commenced by stating that excision of the articular surfaces of bones is at the present time an operation of frequent occurrence, and that it is undertaken not as a substitute merely for amputation, but that this operation is performed in cases where amputation would not be thought of, and where forcible rupture of partially anchylosed surfaces would be advantageously had recourse to. He related three cases of partial anchylosis of the knee, in which the adhesions were ruptured and motion was restored. He also cited three similar cases in which the articular extremities of the bones were excised, and related four cases of partial anchylosis of the hip, and one case of partial anchylosis of the elbow; in all of which rupture of the uniting membrane was successfully performed. The author then gave a brief historical sketch of the operation, to show the means which have been hitherto adopted in the treatment of these cases, and to contrast them with those which he has practised and which he recommends; and concluded with some details as to the after-treatment adopted by himself. The cases related were—

1. A youth, aged fourteen, with partial anchylosis of the knee at a right angle, together with subluxation of the tibia backwards, of nine years duration.
2. A female, aged forty-two, with angular false anchylosis of the knee, together with subluxation of the tibia backwards, of ten years duration.
3. A female, aged seventeen, with angular false anchylosis of the knee, which had existed one year.
4. A female, aged eight, with angular false anchylosis of the hip-joint, of three years duration.
5. A female, aged thirteen, with false anchylosis of the hip, of four months duration.
6. An artillery officer, aged twenty-five, with false anchylosis of the hip-joint, of fourteen months duration.
7. A gentleman, aged twenty-one, with partial anchylosis of the hip-joint, of twelve years duration.
8. A boy, aged eight, with angular false anchylosis of the right elbow, of five years duration.

The author stated that in no instance did inflammation occur; and also that in all these cases motion was obtained. In some, complete power of motion in from six weeks to three months; in others, less-extended motion. He concluded that fibrous adhesions may safely be ruptured when they have formed between articular surfaces. And he recommended that when muscular retraction exists and there is much rigidity present, the tendons should first be divided, and subsequently the adhesions should be ruptured, when the punctures have healed.

Mr. Ure observed that Langenbeck had attached great im-

portance to reduction of the tonic muscles by chloroform, and had rarely resorted to subcutaneous section, except in the cases referred to by Mr. Brodhurst, in which fasciæ or cicatrix interfered. He mentioned six cases of anchylosis overcome by his method, five of the knee-joint, and one of the hip-joint, the ages of the patients varying from four or five to thirty-five years. In some cases, the patients walked about in a fortnight or three weeks after the rupture, by alternate flexion and extension of the diseased articulations. The after treatment which was found necessary was simply a small dose of morphia, and occasionally cold applications; leeches were in one or two cases applied, and in one instance venesection was resorted to. He (Mr. Ure) had followed Langenbeck's plan in the case of a little girl in St. Mary's Hospital, suffering from contraction of the knee-joint. A great improvement was effected in the articulation.

Mr. Henry Lee remarked that the author had described the advantage of subcutaneous section of the tendons and fasciæ in cases of partial anchylosis. In those cases, there must be some effusion of matter, more or less solid, into the joint; and where this was the case, it must be apparent, if the ligaments were left entire, that forcible extension of the joint must not only lacerate, but occasionally bruise and crush, the soft structures. The surfaces of the articular cartilage must be altered in their outline, so that it might be impossible for a semianchylosed joint, even if the adhesions were free, to be moved. In cases where inflammation affected the ligaments, without any alteration of the articular cartilages, it was often impossible fully to extend or flex the joint, on account of the alteration that had taken place in the ligaments themselves. He asked Mr. Brodhurst whether he had tried the plan of dividing the ligaments. It appeared to him (Mr. Lee) that, if the ligaments could be subcutaneously divided, the joints might be extended with much less force and injury to the parts, and very much less chance of inflammation. It might be said there would be a chance of opening the joint, but if it were so, the opening of the joint under such altered circumstances would be nothing in comparison to the opening of a sound joint; the opening would not be into the cavity, but into the soft structure.

Mr. Coulson expressed his regret that the author had not entered somewhat more in detail into the pathological conditions under which the treatment recommended in the paper should be carried out. He thought it might be applicable to the knee-joint, in which cases there was little or no destruction of bone, and the contraction of the muscles had a great deal to do with the displacement; the limb also was useless. He did not, however, think that the method was applicable in cases of diseased hip-joint, in which muscular contraction had little or nothing to do with the deformity, and in which there was a considerable destruction of bone. In such cases anchylosis was the natural cure, and the joint was as useful as could be expected after a disease of the kind. Under such circumstances, the application of the plan of extension as recommended would probably again light up a disease such as that which had terminated.

Mr. Chas. Hawkins inquired whether the author had enumerated all the cases he had met with in his practice, or whether instances had occurred to him which had not terminated so successfully. He (Mr. Hawkins) should be very reluctant to interfere with a well anchylosed joint, especially the hip-joint, where extensive disease had existed. The cases related by the author certainly appeared to be remarkably successful; but he should be glad to know whether there was any return of the disease, or whether the patients had, in any case, been left in a worse state than before the extension. He had seen great improvement in the shape of extremely distorted joints effected by properly applied instruments, without either the division or rupture of the tendons.

Dr. Wood had seen the case of the officer of artillery mentioned by the author, and could testify to its successful termination.

Mr. T. S. Wells had seen Langenbeck's practice in Berlin, and testified to the groundlessness of the fears expressed by Mr. Hawkins as to the after results of the system. He had seen the operation performed in six cases. In two instances it was upon the elbow-joint after a fracture of the internal condyle, in two or three upon the hip-joint, and in one or two upon the knee-joint. In none of these cases did a bad symptom present itself. The patients were placed fully under the influence of chloroform, and in one instance the operation was performed a second time. In consequence of the successful issue of these operations, he (Mr. Wells) had been encouraged to resort to the proceeding in a case in which the internal condyle and the humerus having been fractured, the limb was firmly flexed upon the arm. It yielded, however, to extension, and motion was re-established without any ill consequences whatever.

Mr. Hutchinson bore testimony to the little danger which was incurred in breaking down adhesions of the knee-joint—an operation frequently performed in the larger hospitals of London. In only one or two cases had he seen any considerable amount of inflammation follow the proceeding. He could not give a decided opinion as to whether the plan recommended offered any material advantages over the one in common use at the Orthopædic Hospital. He thought, however, in his own practice, that he should prefer the latter mode of dividing the tendons, and procuring gradual extension by an apparatus. Mr. Brodhurst had referred to excision in some of his cases—an operation which had never suggested itself to him (Mr. Hutchinson)—an operation, in his opinion, only justifiable when acute disease was going on, as the alternative of amputation.

Mr. Brodhurst had brought the subject before the Society, in consequence of a statement made at a medical meeting in Vienna by Baron Dumreicher, that the division of tendons was necessary, and that extension alone was required in cases of partially anchylosed joints. He believed, from the cases of Langenbeck and Louvrier, that the tendons ought to be divided in cases where great rigidity existed. He had seen no evil effects from extension, except a rather serious inflammation in one case; but this subsided, and motion was established. The author had not found it necessary to divide the ligaments, though there might possibly be cases in which that operation would be expedient. He should hesitate to extend the limb immediately after the use of the knife. He had only had thirteen cases, all of which had terminated successfully. In one of his cases resection had been suggested, and it was on that account that it came under his care.

MEDICAL SOCIETY OF LONDON.

Saturday, March 7th, 1857.

W. D. Chowne, M.D., President, in the Chair.

The meeting this evening was for the election of office-bearers, and other business.

From the Treasurer's Report, it appeared that the receipts during the past year had amounted to £422, and the disbursements to £301, leaving a balance of £121 in hand. The Librarian's Report showed, that in addition to the periodicals, etc., forty new volumes had been added to the library, and a new catalogue was in preparation. The council have decided that the subject for the Fothergillian Gold Medal for 1859 should be—"The Anatomy of the Human Lungs".

Proceedings for expulsion of a fellow of the society.

At the conclusion of the ordinary business, the meeting was made special, for the purpose of considering the propriety of expelling one of the Fellows for unprofessional conduct. Reference has already been made to this occurrence in the Journal for March 14th, p. 221.

Diagnosis of apneumatosis (pulmonary collapse).

By Grailly Hewitt, M.D.

In the first part of the paper, a brief *résumé* was given of the present state of our knowledge respecting that change in the condition of the lungs, formerly described as "lobular pneumonia," and here alluded to under the designation of *apneumatosis*, and the connexion of that change with inflammation of the bronchial mucous membrane. It was shown that the pathological danger, consisting essentially in collapse of the air-cells of certain lobules of the lungs, is observed almost constantly in the lungs of infants and young children dying from bronchial affections. It being a fact, that one-third of the mortality in the second year of life arises from affections in which the bronchial mucous membrane is implicated, the importance of diagnosticating the presence of what may be sidered the fatal element in these affections—apneumatosis, was quite evident. The effects produced on the system generally by the supervention of this condition, involving, as it must do, a serious diminution in the *degree* of the respiration, were then briefly described. The *general* symptoms observed in particular cases, so far as they are diagnostic of the presence of apneumatosis, were then considered. Children of weakly constitutions are particularly liable to be attacked with that form of bronchitis in which, as a sequence, apneumatosis takes place. In such cases the febrile stage of the bronchitis is of brief duration, and a state of prostration soon ensues, charac-

terised as follows:—The skin becomes pallid, or dull and shrivelled; its temperature sinks. The dyspnœa is aggravated, but altered in character; the breathing is very shallow; the rhythm of the movements "expiratory," very little air entering the chest at each inspiration. The pulse is very weak; the eyes half closed; the lips blue: the cough is extremely feeble. This is a typical description of the symptoms in cases where apneumatosis has followed bronchitis; but many modifications of these are observed in different cases. The shallowness of the respiration, the peculiar kind of dyspnœa, and the pallidity of the skin, were considered as diagnostic signs of great value. There was a great resemblance afforded by the condition just described and that of the cold-blooded animals, the respiration, physiologically considered, being in both cases small in amount. The congenital condition described by Jörg as *atelectasis*, differed from apneumatosis, inasmuch as the latter change occurred after birth, and affected portions of lung which had once been properly aërated, although the two conditions otherwise resembled each other. The differential diagnosis of atelectasis and apneumatosis would be based on a consideration of the history of the case in question.

The diagnostic data derived from a *physical examination* of the chest next formed matter for deliberation. The diagnosis of a chest affection in early life, the physical signs alone being considered, was shown to be by no means easy. By *inspection* of the chest in cases of apneumatosis, the ribs at their junction with the cartilages, and the cartilages themselves, are observed to be drawn in during inspiration; the lung does not expand, and the descent of the diaphragm produces a falling in of the thoracic walls at their parts which are the most yielding. At a point two inches below and outside the nipple, the walls most readily give way to atmospheric pressure. The antero-posterior diameter of the chest is then increased, the transverse diameter diminished. Retraction of the chest walls is, in conjunction with certain symptoms, of value in a diagnostic point of view. It is not observed to so great an extent when emphysema to a notable degree exists, a circumstance which is not uncommon. *Percussion* gives occasionally information of great value, although the irregular manner in which the apneumatic portions are scattered over the surface of the lobes renders it often difficult to establish the existence of a marked degree of dulness. *Auscultation* shows absence of respiratory murmur when the portions of lung affected are of considerable extent. There is generally heard, however, a rhonchus, which has a somewhat grating character. Rhonchi more or less fine are also usually discoverable, but the fine crepitus of true pneumonia is not heard. The respiratory murmur is often bronchial in character over the affected portions. The absence of continued and persistent heat of skin, as well as of the true pneumonic crepitus, distinguish cases of apneumatosis from cases of *pneumonia*, in addition to which the rarity of this latter affection in early life affords evidence of a presumptive nature against its being present in a particular case. The history of the case will in most instances be sufficient to distinguish apneumatosis from *tuberculisation of the lungs*. The remarks now offered as to the diagnosis of apneumatosis were to be regarded as suggestive only, a larger experience being necessary in order to do more than indicate the general principles on which the diagnosis in question is to be arrived at. The chief points alluded to in the paper were illustrated by means of drawings of the lungs of patients who had been under the author's observation during life.

Anniversary Meeting, Monday, March 9th, 1857.

W. D. Chowne, M.D., President, in the Chair.

The eighty-fourth Anniversary Meeting of the Society was held at Willis's Rooms, King Street, St. James's.

ELECTION OF OFFICERS AND COUNCIL.

The following gentlemen were elected officers and council for the ensuing year:—*President:* Francis Hird. *Vice-Presidents:* Thomas Hunt; H. P. Robarts; T. Davidson, M.D.; W. A. Harrison. *Treasurer:* T. Davidson, M.D. *Librarian:* W. A. Harrison. *Secretaries in Ordinary:* C. H. Rogers-Harrison; J. S. Stocker, M.D.; *Secretary for Foreign Correspondence:* T. Davidson, M.D. *Councillors:* W. Adams; R. Barnes, M.D.; J. Bird, M.D.; L. Cape, M.D.; A. Clarke, M.D.; V. De Méric; W. C. Dendy; John Gay; G. D. Gibb, M.D.; C. J. Hare, M.D.; F. W. Headland, M.D.; James Hinton; Jabez Hogg; E. Lankester, M.D., F.R.S.; Henry Lee; C. H. F. Routh, M.D.; W. B. Ryan, M.B.; E. Smith, M.D., LL.B.; S. Stedman; E. J. Tilt, M.D.

ANNUAL ORATION.

The annual oration was delivered by William Adams, Esq.

The subject of the oration formed a sketch of the pathology and practice of subcutaneous surgery. In the first part, the general pathology of subcutaneous wounds was discussed, and Mr. Adams especially advocated the claims of Hunter to the discovery of the law of the reparative process in subcutaneous wounds upon which the whole practice of subcutaneous surgery is based. Hunter's division of wounds into those which are not and those which are exposed to the air, was quoted; and then his observation that "the injuries of the first division, in which the parts do not communicate externally, seldom inflame, while those of the second commonly both inflame and suppurate." Mr. Adams stated that M. J. Guérin had laid down the same law, and in the same words as those used by Hunter, without the mention of his name. Mr. Adams, however, fully admitted Guérin's claim to the complete development and surgical application of this law. The different results following simple and compound fractures, simple dislocations and open wounds, even of small size, communicating with joints, were adduced in illustration. The physiological question—how does the air act in exciting inflammation?—was then discussed. In alluding to the importance of excluding the air as quickly and completely as possible from wounds, the result of accidental injuries, Mr. Adams adverted to Stromeyer's opinion, that the suppurative inflammation followed the trephine operations was chiefly due to the prolonged exposure to the air during the operation. Stromeyer had not used the trephine during two campaigns; and out of forty-one cases of gun-shot fracture of the skull, with depressed bone, had only lost seven; whilst in our late Russian war we had only saved seven trephine cases out of about the same number operated upon. In the second part of the oration, the surgical operations to which the subcutaneous method of operating has been found to be especially applicable, were enumerated, and arranged in five classes, according to the objects to be effected in reference to the avoidance or modification of the inflammatory process. It was shown that the surgeon can perform many operations so that no inflammation may follow; or he can avoid excessive inflammation when its occurrence in some degree is unavoidable; or, when a limited amount of inflammation is necessary, as in some operations, he can purposely excite it, and regulate its intensity, not with absolute certainty, but to a great extent and generally, so as to avoid the dangers of suppuration and pyæmia; or, when inflammation already exists, and some troublesome and unfavourable termination is threatened, the surgeon can frequently arrest the inflammatory process, and avert such terminations almost to a certainty. Some general observations on the practical importance of subcutaneous surgery concluded the address.

THE MEDALS.

The Fothergillian Gold Medal was presented to Edwin Canton, Esq., for an Essay on Diseases of the Spine; and the Society's Silver Medal to Edward Smith, M.D., LL.B., for the valuable services rendered by him to the Society during the period in which he has performed the duties of Secretary.

Editor's Letter Box.

DIAGNOSIS OF THE PRETUBERCULAR STAGE OF PHTHISIS.

Letter from Edward Smith, M.D.

Sir,—In your report of the proceedings of the Pathological Society, at a meeting at which I was not present, Dr. Markham took occasion, from a case of his under discussion, to object to "such terms as *pretubercular* stages of phthisis". The objection rests, I understand, upon the belief, that as tubercle has been found in the lungs without its existence having been ascertained during life, it is impossible in any case to affirm that tubercle does not exist; and he states, "that the absence of physical signs is no proof of the absence of tubercle in the lungs." If this mode of reasoning were applied universally, it is manifest that we should have doubts in everything; but whilst it is not required of any one to prove a negative, it is the practice to throw the onus of proof upon him who affirms the positive; and it is also the practice of the world to recognise the existence of such things only as give evidence of their existence. Thus, reasoning abstractly, if any one should object in any case to an assertion that there is no tubercle there, custom demands that he should prove that tubercle is there.

But, in so prevalent a disease as phthisis, surely an objector need not to rely upon metaphysical objections. When we have proved that tubercle is present, are we not necessarily constrained to admit that there was a period when it was first deposited; and, further, when it was not deposited? And do we not practically admit that a large portion of mankind have not tubercle? Need we, or do we hesitate, for life assurance, and similar purposes, to testify that persons are not phthisical? and if we may do this, we may certainly be permitted to affirm that tubercle is not then present. A period in which tubercle does not exist in some persons must be admitted; and is it not to be presumed that those who now have tubercle might have been, and in fact were, of that number, when they did not at the period referred to exhibit any of the signs by which we are enabled to affirm that tubercle does now exist? By what do we affirm the existence of anything but by evidences which did not appear before its existence? and in a series of changes, does not the positive evidence of one stage depend for its value chiefly upon the negative evidence of a former stage? Surely, a state of the lungs without the existence of tubercle is practically admitted; and to state that we cannot prove the non-existence of tubercle, is to do that which science and reasoning have never required, and which only a distrust of an art, or of our knowledge of it, induces us to object.

But I go further, and affirm that there are marks of this pretubercular stage which are as positive as are the marks of the tubercular stage; and that it rests with an objector to first make himself acquainted with them. It is unnecessary and theoretical to object that when the two stages merge the one into the other, the diagnosis may be impossible; as it is also irrational to object that this has ever been a source of dispute amongst physicians. The disease is progressive, and hence any period of doubt is limited in duration; and in like manner the science is progressive; and there is no reason why Dr. Markham should not make that plain now which was a mystery to men as talented as himself; but I venture to affirm that there is something wrong when it is stated that in a case in which "miliary tubercles were found thickly scattered through every tube of each lung," there was "nothing abnormal detected on a most careful stethoscopic examination" seventeen hours before death. It is needful to know what is meant by "miliary tubercles", by "tubes of the lung" in relation to them, and by a "careful stethoscopic examination". The written explanation of Dr. Markham does not give this; for if a part of the lung be occupied by thickly scattered miliary tubercles, it will contain a less volume of air; and although "healthy air-containing tissue might intervene", the relative proportions of aëriform and solid contents of the lungs are altered, and the "percussion sound" must be altered also. So with the statement that the "respiration was loud and clear", the explanation that the respiratory murmur is clear because the air enters freely into the lungs, is opposed to the fact that the tubercle must have impeded the entrance of air at the points where it was deposited. To state that there is a deposition of solid material in parts which normally contain only air, and at the same time affirm that the air freely enters those parts, and that the "percussion sound" is unchanged, is opposed to all that science teaches, and fully justified Dr. Theophilus Thompson in his expression of surprise that in Dr. Markham's case the respiratory sounds were normal. With such views, I do not wonder that any one should object to a pretubercular stage of phthisis, or to anything else. Skoda's opinion that isolated masses of tubercle cannot be diagnosed, is inapplicable here; since in the case which appears to have given origin to these objections, "miliary tubercles were found thickly scattered through every tube of each lung".

I do not gather from Dr. Markham's statement, that a question is raised as to the difficulty of diagnosing tubercle in an acute case apart from other deposits, but that there was no deposition of any kind which could be detected; nor that he considers the tubercle thus so largely scattered, to have been deposited in the interval between the "careful stethoscopic examination" and the death of the child, or his objection would have been inapplicable, and he would have lugged in this objection to the use of a term in a subject foreign to it; but I understand him to state that he was unable to detect the "miliary tubercles scattered through every tube of each lung seventeen hours before death."

I am, etc., Edward Smith.

63, Grosvenor Street, W., March 28th, 1857.

EXTERNAL USE OF SULPHUR IN RHEUMATISM.

Letter from W. O'Connor, M.D.

Sir,—My attention has been directed to a notice of the second edition of Dr. Fuller's book on *Rheumatism* in your Journal of Saturday last, in which prominence is given to "remarks on the effects of sulphur externally applied". In that extract from Dr. Fuller's book, he appears to claim credit for originality in a plan of treatment pursued by me for some years in the cure of certain rheumatic states, as well as in sciatica; namely, the external application of sulphur with flannel bandaging. Now, sir, if there is any credit due to any person for the introduction of this plan of treatment to practice, it is surely to me, as I think I shall be able to prove to your satisfaction.

I have for many years had recourse to the external use of sulphur with flannel, and it is now nearly fourteen years since I first tried it in London, in the case of a patient residing at 2, Baker Street, Portman Square, who was seen in consultation with me by Dr. Bright. In that case, the patient was recovering from a severe attack of acute rheumatism, when the disease appeared to become concentrated in the right arm, which was very painful, and the elbow-joint was bent at right angles. Various remedies were tried without any benefit, when I at last recollected having some years before read a paper by an old physician on flannel bandaging in a case of chronic rheumatism. This I tried without any benefit; and, knowing sulphur externally applied to be a very common remedy, I combined the two, with almost immediate relief. Since that time, I have constantly had recourse to that plan of practice.

I have on several occasions given publicity to this plan in some of the medical societies. More than three years ago, during a discussion at the Medical Society of London, on a paper read by Mr. Hancock, on the Treatment of Sciatica, I mentioned it. One year after, on the 13th February, 1855, during a discussion at the Medico-Chirurgical Society, on a paper by Dr. Garrod, I also mentioned it, as will be found in the report of the discussion in the *Lancet*. In the hospital reports of the *Lancet* of Nov. 1st, 1856, there will be found the report of a case in which I used it with success at the Royal Free Hospital.

Dr. Fuller, instead of making it appear that he is the author of this plan of treatment, ought in all fairness to have given me credit for it in the second edition of his book, because to me alone is he indebted for any knowledge of it.

Dr. Fuller surely cannot have forgotten that, at the conclusion of the meeting at the Medical Society of London to which I have already referred, I explained to him how I applied the sulphur and flannel bandaging; and, at the same time, I gave him the names of two physicians, one of Edinburgh, the other of Dublin, who had written many years before on the use of flannel bandaging in the cure of chronic rheumatism—a plan of treatment which, until that evening, he said he was entirely ignorant of.

Dr. Fuller certainly cannot have forgotten that he wrote me a note, now in my possession, and which I yesterday showed to his friend Mr. Spencer Wells, bearing date "Thursday, March 13th, 1856," in which he reminds me of my observations at the Medical Society of London two years before, and asks me for information on the subject.

I now ask Dr. Fuller to bring forward any proof that he ever used sulphur externally with flannel bandaging before the time I communicated the plan of treatment to him at the Medical Society of London, more than three years ago.

Trusting to your honour as a journalist and a member of the profession, I hope you will kindly give insertion to this letter in the next number of the British Medical Journal.

I am, etc., William O'Connor,

Assistant-Physician to the Royal Free Hospital.

30, Upper Montagu Street, Montagu Square, March 31st, 1857.

Cork Medical Protective Association. The following resolutions were unanimously passed at a meeting of the Committee of the above Association on April 4th:—"That the best thanks of the Association be accorded to the candidates *for*, and members *of* Parliament, who have, in courteous and candid replies, promised to support, in the House of Commons, the rights and privileges of the medical profession. That the Association regrets the letter of the member for Mallow, which stands much in contrast with the tone of the replies of Messrs. Fagan, Beamish, Heard, Deasy, McCarthy, and Scully, addressed to our highly respected and efficient Honorary Secretary."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Beaman. On February 15th, at Hoshungabad, the wife of Ardern Hulme Beaman, Esq., Assistant-Surgeon H.E.I.C. 28th Regiment, and Civil Surgeon of Hoshungabad, of a son.

Down. On April 1st, at Foxley Place, Kensington, the wife of George Down, Esq., Surgeon, of a son.

*Haines. On April 3rd, at Cowbridge, Glamorganshire, the wife of William Haines, Esq., Surgeon, of a daughter.

Poulton. On March 30th, at Gloucester Crescent, Regent's Park, the wife of Charles Walter Poulton, M.D., of a son.

*Tinker. On April 2nd, at Hyde, Cheshire, the wife of Frederick Tinker, Esq., Surgeon, of a son.

*Wood. On April 6th, at 54, Upper Harley Street, Cavendish Square, the wife of William Wood, M.D., of a daughter.

MARRIAGES.

Sutherland—Leask. Sutherland, Peter, M.D., F.R.G.S., to Rebecca Urquhart, eldest daughter of Mr. Leask, Old Aberdeen, at Durban, Natal, on January 31st.

DEATHS.

Everest, Charles Evreux, Esq., late Surgeon H.E.I.C.S., at 4, Leighton Terrace, Kentish Town, on April 2nd.

Grant, George, M.D., R.N., of Richmond Hill, Surrey, aged 65, on April 5th.

*Haines. On March 28th, at Cowbridge, Glamorganshire, Mary Jane, eldest daughter of William Haines, Esq., Surgeon, aged 5½ years; and on April 6th, John, youngest son of the above, aged 1 year and 9 months.

Hogg. On February 15th, at Calcutta, drowned by falling overboard of the ship *Alfred*, Robert, youngest son of John Hogg, M.D., of 51, Gower Street, aged 17.

Lacon, Graham, M.D., Surgeon 9th Native Infantry, at Allyghur, East Indies, on February 13th.

Nash, Joseph, M.D., of Chilton Polden, Somerset, late of Box, near Bath, at Mount Place, London Hospital, aged 58, on March 28th.

Rimington. On February 27th, at Hyderabad, Scinde, Clement Francis, infant son of Joseph S. Rimington, Esq., Bombay Medical Establishment.

Sedgwick, Roger, Esq., Surgeon, at Boroughbridge, Yorkshire, aged 65, on April 2nd.

Sympson. On April 3rd, at Lincoln, Catherine, widow of the late T. C. Sympson, Esq., Surgeon, aged 54.

Thorp, John, Esq., Surgeon, at Maldon, Essex, aged 80, on April 1st.

APPOINTMENTS.

Ogle, J. W., M.D., elected Assistant-Physician to St. George's Hospital.

HEALTH OF LONDON:—WEEK ENDING APRIL 4TH, 1857.

[From the Registrar-General's Report.]

In the week that ended on Saturday, the total number of deaths registered in London was 1235, of which 620 were deaths of males, and 615 those of females. In the ten years 1847-56, the average number of deaths was 1192, but for comparison with the deaths of last week, which occurred in an increased population, the average must be raised proportionally to the increase; in which case it will become 1311. The deaths now returned are therefore less by 76 than would have occurred if the average rate of mortality had prevailed.

The deaths from pulmonary diseases, which in the two previous weeks were 292 and 278, were last week 264, the corrected average for the ten weeks corresponding with last week being 273. Bronchitis, one of the diseases of this class, was fatal in the last three weeks in 164, 160, and 130 cases, showing a decline with the higher and steadier temperature of last week. Hooping-cough numbered 64 cases, which differs little from the numbers returned in many previous weeks. Small-pox, scarlatina, and diarrhœa exhibit a low mortality, the deaths from them being respectively 2, 12, and 7. Eight persons had attained the age of 90 years or upwards; they were all women except one; the three oldest died at the age of 93 years. A young seaman died in the *Dreadnought* Hospital ship of "scorbutus, abscess, and tetanus;" and a labourer, aged 71 years, died at 30, Duke Street, Old Artillery Ground, of "neglect, filth, and imperfect nutrition."

Last week the births of 936 boys and 902 girls, in all 1838 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1555.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·334 in. The mean temperature was 47·8°, which is 4·2° above the average of the same week in 43 years. The mean temperature was above the average on every day. The thermometer in the shade rose to 58·4° on Friday, the *highest* point in the week; the *lowest* temperature was 40·1° on Wednesday. The mean dew-point temperature was 42·7°, and the difference between this and the mean air temperature was 5·1°. The general direction of the wind was south-east. There was more or less rain on every day; and the whole amount in the week was 0·45 in.

In the first quarter of the year, namely, the thirteen weeks that ended on March 28th, the deaths in London were 16,093; which exceed the deaths of the same quarter in 1856, but are less than those of 1855. The increase on last year arises from pulmonary diseases,—bronchitis, pneumonia, and phthisis; for though the mean temperature was nearly 39°, which is about the average of the winter quarter, and the mean weekly temperature was on nine weeks above the average, the fifth and sixth weeks were very cold, and on two days at that time the thermometer fell to 20°. But though there is an excess in last quarter as compared with the same quarter of 1856 in the total number of deaths, there is a decrease in those arising from zymotic diseases; and it is remarkable that the deaths from this class of complaints (2713) were less than in any of the four previous corresponding quarters of 1853 56, though the population has increased. The deaths from small-pox were 60, being little more than 4 in a week. There is a marked decrease also in typhus, which numbered 489, having in the same quarters of 1853 56 ranged from 572 to 719. Twelve persons, or nearly one in a week, died from want of the common necessaries of life; 26 persons from intemperance; and if to these be added 14 who died from delirium tremens, it will appear that excess in intoxicating liquors was fatal to three persons weekly.

POOR-LAW MEDICAL REFORM.

The following correspondence has been forwarded to us for publication.

I. *Mr. Griffin to the Poor-Law Board.*

"12, Royal Terrace, Weymouth, 4th April, 1857.

"My Lords and Gentlemen,—I have the honour to acknowledge the receipt of your letter, dated February 24th. You will perceive by the annexed correspondence that I have endeavoured, in every possible way, to obtain the charges preferred against me by the Board of Guardians, but have failed. I therefore conclude they were either entirely false, or had so slender a foundation that they would not bear investigation. I need scarcely point out to your Honourable Board the injustice of permitting these resolutions to remain in the books, and beg you will insist on the Guardians expunging them, as they have declined even to attempt to support them.

"Two years since, I accepted my present appointment under the impression that when the Guardians divided the original district into three, they also fairly apportioned the salary. I soon discovered this had not been done; at the end of the first quarter, and subsequently, I represented the circumstance to the Board of Guardians and to your Honourable Board, and in reply received a letter from you, dated 10th July, 1855:—

"'The Board concur with the Guardians in thinking, that although the number of cases attended by you, during the period for which you have held your office, may have been unusually large, it is by no means certain that the duties have permanently increased; the Board can only now add, that if this should be the case, they will give the subject of your salary their further consideration.'

"On November 22nd, 1855, Lord Courtenay wrote:—

"'I am directed to inform you, that the Board have communicated with the Guardians on the subject, and have re-

ceived a letter from them, in which they state to the effect, that having considered your application, they see no sufficient grounds for increasing your salary at present, but on the expiration of twelve months from the date of your appointment, they will give the subject their further consideration. Under these circumstances, and looking to the short period for which you have been the medical officer for the Weymouth district, the Board must decline to interfere further in the matter.'

"By the foregoing letters it will be seen that your Honourable Board promised to give the question of my salary your further consideration, should the increase of the duty be permanent, and that you afterwards declined to interfere further in the matter for the specific reason, that the Guardians agreed to take it into consideration at the end of twelve months. This they have not done. Two years have elapsed since my appointment; ample time, surely, to test the permanency of the increase of my duties. I now, therefore, respectfully call upon your Honourable Board to fulfil your promise of July 10, 1855, which, indeed, is only requesting you to carry out that which the law has empowered you, and not the Guardians, to do. I accepted the medical charge of the sick poor of this district, believing that my salary would certainly not be *less* than that of my predecessor, who received £110 for attending, during the last year of his office, 642 patients (or 3*s*. 5*d*. per case).

"When the Guardians divided the district and salary into three parts, you no doubt sanctioned their recommendation, on the supposition that it was a just one; the reverse, however, is proved by the following facts:—I have had 1019 orders in two years, or an average of 509 yearly for £35, or 1*s*. 4½*d*. per case. The medical officer of the Melcombe district has had 728 orders in two years, or 314 yearly for £40, or 2*s*. 6½*d*. per case. The medical officer of the Wyke district has had 87 orders in two years, or 43 yearly for £35, or 16*s*. 3½*d*. per case: the patients being nearly equidistant from the residence of their respective surgeons.

"The glaring inconsistency of these payments, so manifestly disproportionate to the services performed, must convince your Honorable Board that if my remuneration is sufficient, that of my colleagues is more than sufficient, and the ratepayers are unjustly assessed. If, on the contrary, the gentleman with the 43 orders is but fairly paid, I am most unjustly treated. I appeal to your Honourable Board for that justice which has been denied me by the Guardians; I appeal to you to give me a salary that will enable me to do my duty to the poor without injury to myself. You cannot for a moment think it possible I can be remunerated for skill, medicines, and labour at 1*s*. 4½*d*. per case, each case, on an average, lasting one month (which is the average duration of the returns from five hundred medical men). If this payment is not remunerative, what must be its tendency? Is it reasonable to expect medical officers will continue to sacrifice time and money? Is there not a danger of the poor being sufferers, and also the ratepayers?

"Did not the Guardians divide the district into three, because they were not satisfied with the medical attendance on the poor? They appointed me to a district which has not increased in population, and yet nearly double the number of orders are now given. The poor are not now driven to seek aid from private medical men whom they are unable to pay; they come to me simply because I do my duty by them, and not because I give them meat at the expense of the ratepayers, as has been asserted. My predecessor gave, during the last year of his office, 1484¼ lbs. of meat, which, divided amongst his 642 cases, gives an average of 2 lbs. 4¾ oz. to each. I have had 1019 cases in the two years, and have given 1739½ lbs. of meat, or 1 lb. 11¼ oz. to each, or 9½ oz. less per case than he gave; and yet, by a distortion of facts, I have been accused of attracting the poor to me by giving them meat-orders, and I believe that was the origin of the resolution of December 24, although no reason has been officially assigned to me.

"The resolution of January 20th had its origin in a guardian (a retired tradesman) meeting me in a bookseller's shop, and saying to me 'it was no gentleman that put that disgraceful letter in the *Lancet;* no gentleman would write such a letter' (the letter alluded to was a copy of that which I addressed to you on Dec. 3rd). A few angry words ensued, which he reported to the Board, and thus a private squabble was converted into an official insult, and a resolution was passed requesting my dismissal.

"The Board of Guardians have not paid me the fee to which you said I was entitled (see your letter to them of January 28th, No. 2843, (1857). The course pursued by the Weymouth Board of Guardians must surely convince you that it is not well to leave the absolute control of the medical officers in such hands. The law has empowered your Honourable Board to fix the rate of payment; I therefore earnestly hope you will lay down a scale for the entire kingdom. A large meeting of medical men was held May 30th, 1856, when they petitioned Parliament, and at the same time memorialised your Honourable Board on the subject; in reply to which, on June 20th, No. 2200, (1856), you stated 'that that portion of the memorial which related to the subject of the remuneration at present received by medical officers shall receive consideration.' Ten months have, however, elapsed without any improvement; I therefore implore you no longer to delay the necessary reform. About two thousand of your medical officers have already taken part in this agitation for a redress of the monstrous grievances under which they labour; and all, with few exceptions, would do the same were they permanently appointed, which many are not, either in consequence of non-residence in their districts, or of not possessing the double qualification said to be required; they therefore think it unwise, under these peculiar circumstances, to endanger their private practice by rendering themselves obnoxious to the guardians, and risking the introduction of a stranger; but they nevertheless feel acutely the galling yoke they have to bear.

"It has been urged there are plenty of men willing to fill up vacancies as they occur, which is no doubt at the present time correct; but the day will shortly come when that will not be the case (indeed, even now I find two districts are not unfrequently allotted to one man), and then the cry for justice may not be so humble as at present.

"You are no doubt aware of the large meeting in London of medical students from all the metropolitan and provincial Hospitals which took place last month in St. Martin's Hall, under the presidency of Mr. Layard, late M.P. This has been followed by others in Edinburgh; and, as soon as Parliament assembles, petitions from these gentlemen will be presented.

"A general meeting of union medical officers will shortly again be held, and petitions be forwarded to the legislature. These meetings prove incontestably the necessity for reform. In no other branch of the medical department are there so many changes annually as in this; witness the resignation of 290 union medical officers in 1855, and 249 in 1856. Surgeons in the army, navy, and those connected with jails do not throw up their appointments in like manner; neither do the clerks to unions. Evidence has been given before the House of Commons that '72 per cent. of all paupers are made paupers through sickness'; hence the importance of paying your medical officers sufficiently well to enable them to purchase the best medical appliances, that they may do their utmost to cure the suffering poor as speedily as possible. Is this to be done for 1*s*. 4½*d*. per case, or even at the average of 2*s*. 9¾*d*.? Would any member of your Honourable Board like to be attended during a month's illness for such a sum? To underpay your medical officers is false economy. Humanity, too, demands that the evils of the present system should be speedily redressed.

"I have the honour to be,

"My lords and gentlemen, your obedient servant,

"Richard Griffin.

"The Poor-law Board, Whitehall."

II. *Mr. Griffin to the Clerk of the Weymouth Union.*

"12, Royal Terrace, Weymouth, March 2nd, 1857.

"Sir,—I beg to acknowledge the receipt of an extract from the minutes of the Board of Guardians, dated December 23rd, 1856; and, as I cannot clearly comprehend how any 'feeling of mine can have acted prejudicially to the interests of the ratepayers and the poor,' I shall be glad to be furnished with the antecedent which originated this idea, and instigated the guardians to the unusual course they have adopted. Report says, the resolution was passed in consequence of a communication made to the Board by Mr. William Symonds, a guardian of the Weymouth parish. I therefore beg you will give me the actual statement made by him, in order that I may take the necessary steps to vindicate my professional reputation, which has been so cruelly assailed by the unparalleled proceedings of the Board of Guardians.

"I am likewise informed that, on or about the 20th January last, a second resolution was passed, and transmitted to the Poor-Law Board, recommending my dismissal on account of a representation made to the guardians by Mr. Thomas, a member of that body. I therefore desire a copy of this resolution also, and the *specific charge* that gave rise to it, that I may be enabled to decide on my future course of action. The Board of Guardians will readily perceive the necessity of furnishing me with the full particulars in both cases, as their honour as a

public body, and my reputation as a medical officer, are equally at stake. "I have the honour to be, sir,

"Your obedient servant,

"Richard Griffin.

"Philip Dodson, Esq., Clerk, Weymouth Union."

III. *The Clerk of the Weymouth Union to Mr. Griffin.*

"Weymouth Union, 3rd March, 1857.

"Sir,—I am directed by the Board of Guardians to forward you (on the other side) an extract from the minutes of their proceedings of the 20th January last.

"I am, sir, your obedient servant,

"Philip Dodson, *Clerk.*

"R. Griffin, Esq."

Extract from Minutes, 20th January.

"Resolved unanimously,—That this Board mark with their severe censure the very insulting and ungentlemanly language addressed by Mr. Griffin to Mr. Thomas, a member of this Board, on Friday last; and that they are unanimously of opinion that he ought to be dismissed from his situation as medical officer of the Weymouth District in this Union."

IV. *Mr. Griffin to the Clerk of the Weymouth Union.*

"12, Royal Terrace, Weymouth, March 16th, 1857.

"Sir,—I beg to acknowledge the receipt of a second extract from the minutes of the Board of Guardians, and regret you have omitted to furnish me with the charges made by Mr. Symonds and Mr. Thomas, upon which the resolutions to suspend and dismiss me were founded. I must, therefore, again request you will be good enough to do so.

"The Chairman of the Board has resigned; I cannot, therefore, apply to him; but I do appeal to the vice-chairman, Mr. Gooden, who, as a magistrate, and from his legal acquirements, is fully aware that no man in this country can justly be condemned without first being informed of the offence imputed to him, and his defence being heard. I ask no favour; I simply seek that justice which, in this enlightened country, has hitherto never been denied to an accused party. I desire a copy of the charges, that I may have the means of proving I do not deserve the censure that has been heaped upon me. Deny my request, and you will compel me to appeal to another tribunal, as I cannot allow resolutions detrimental to me as a gentleman and a professional man to remain on the books of the Board unchallenged. "I am, sir, etc., Richard Griffin.

"Philip Dodson, Esq., Clerk to the Weymouth Union."

V. *The Clerk of the Weymouth Union to Mr. Griffin.*

"Weymouth Union, 18th March, 1857.

"Dear Sir,—In reply to your letter of the 17th instant, I am directed by the Board of Guardians to inform you that there is no further minute in their books bearing upon your case, other than that which has been already supplied you.

"I am, dear sir, yours obediently,

"Philip Dodson, *Clerk.*

"R. Griffin, Esq."

The Sands Cox Testimonial. The following letter has been received by the Mayor of Birmingham:—

"Temple Row, Birmingham, April 3.

"My Dear Sir,—I am desirous of addressing through you a few lines of grateful acknowledgment to the Committee which has been so unexpectedly formed for offering me a 'public testimonial.' No man can be more deeply sensible than I am of the high honour done to me by the opinions and labours of that Committee; no time will efface the recollection of it from my mind. It would be most gratifying to my feelings that the money raised by the munificent liberality of the subscribers to this unlooked-for testimonial, should not be expended in any memorial of myself, or be applied to any purposes merely personal in character. Permit me, by your kind intervention, to suggest to the Committee, for their consideration, whether the amount subscribed might not be laid out in some manner that would permanently benefit Queen's College, and furnish instructive recreation for the inhabitants of this my native town. It has occurred to me that those objects might be concurrently promoted by devoting part of the fund to the foundation of medical scholarships, and the remainder towards the completion of the College Museums, under the stipulation that the Council of the College do undertake, by a legal instrument, to grant *free admission* to the industrious classes once a week, under such regulations as may be deemed necessary and proper. I remain, my dear Sir, yours faithfully, William Sands Cox." (*Aris's Birmingham Gazette.*)

THE APPREHENDED MURRAIN.

The *London Gazette* of Friday, April 3, contains the following order in Council:—

"At the Court at Buckingham Palace, the 2nd day of April, 1857. Present, the Queen's Most Excellent Majesty in Council.

"Whereas it has been represented to Her Majesty that certain contagious or infectious disorders are now prevalent among cattle in certain countries or places bordering upon the Baltic Sea, and that there is danger of the said disorders being introduced into this country by means of cattle, and horns, hoofs, and raw or wet hides, or skins of cattle, from such countries or places; now, therefore, Her Majesty, by and with the advice of her Privy Council, doth order, and it is hereby ordered, that from and after the date hereof no cattle and no horns, hoofs, or raw or wet hides, or skins of cattle, shall be imported or introduced into the united kingdom which shall come from or shall have been at any place within those territories of the Emperor of Russia, or of the King of Prussia, or of the Grand Duke of Mecklenburg Schwerin, which respectively are in or border upon the Gulf of Finland, or any other part of the Baltic Sea between the Gulf of Finland and the territories of the Free City of Lubeck, or which shall come from or shall have been at any place within the territories of the Free City of Lubeck; and also that, from and after the date hereof, no cattle and no horns, hoofs, or raw or wet hides or skins of cattle, shall be imported or introduced into the united kingdom which shall be, or shall have been, on board any vessel at the same time with any cattle or horns, hoofs, or raw or wet hides or skins of cattle, which shall have come from or shall have been at any such place as aforesaid.

"And Her Majesty, by and with the advice of her Privy Council, doth hereby further order, that all cattle, and all horns, hoofs, or raw or wet hides, or skins of cattle, the importation or introduction whereof is so hereby prohibited as aforesaid, and also all hay, straw, fodder, litter, or manure, being or having been in or on board any vessels at the same time with any such cattle, or horns, hoofs, or raw or wet hides or skins of cattle as aforesaid, shall, upon their arrival in this country, be destroyed, or otherwise disposed of, as the Commissioners of Her Majesty's Customs may direct.

"And the Right Hon. the Lords Commissioners of Her Majesty's Treasury are to give the necessary directions herein accordingly. "C. C. Greville."

The Jacksonian Prize. At a meeting of the council of the College of Surgeons on the 8th instant, the Jacksonian prize was awarded to Victor de Méric, Esq., of Brook Street, Grosvenor Square, for his essay on *The Pathology and Treatment of Syphilis.*

Medical Society of London. A paper will be read here this (Saturday) evening by V. de Méric, Esq., on Condylomata.

TO CORRESPONDENTS.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from:—Mr. Sands Cox; Mr. Richard Griffin; Mr. L. Owen Fox; Dr. J. C. Hall; Dr. Garrod; Dr. Nevins; Sir Charles Hastings; Mr. A. B. Steele; Dr. John Sloane; Mr. J. F. Nicholson; Mr. Charles Browning; Dr. Edward Smith; Mr. Haynes Walton; Mr. T. Holmes; Mr. Stone; Dr. P. H. Williams; Mr. Nunn; Mr. W. G. Sutcliffe; Dr. G. G. Rogers; Mr. McDermot; and G. B. M.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Cattle Plague and Diseased Meat in their Relations with the Public Health, and with the Interests of Agriculture. A Letter to the Right Hon. Sir George Grey, Bart. By *Joseph Sampson Gamgee. London: T. Richards. 1857.
2. A Contribution to Comparative Pathology: being a further Inquiry into the Reasons why the Horse rarely vomits. By *Joseph Sampson Gamgee. London: 1857.
3. The Hygienic Treatment of Pulmonary Consumption. By *Benjamin W. Richardson, M.D. London: John Churchill. 1857.
4. The British Botanist's Field Book. A Synopsis of British Flowering Plants. By A. P. Childs, F.R.C.S. London: Longmans. 1857.
5. The Functions and Disorders of the Reproductive Organs in Youth, in Adult Age, and in Advanced Life. By William Acton. London: Churchill. 1857.
6. On the Performance of Operations on the Teeth without Pain. By Samuel A. Parker. Birmingham: 1857.
7. The Quarterly Journal of Dental Science. No. 1. London: Walton and Maberly. 1857.

To the Medical Profession.

Water Beds and Cushions.—S.

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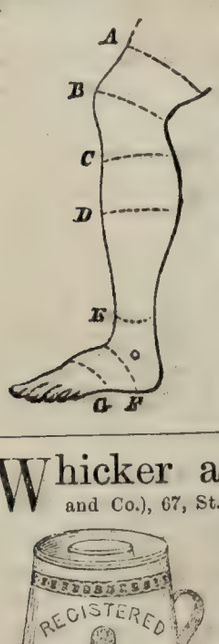
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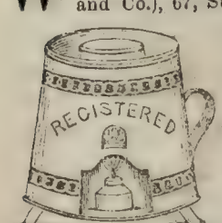
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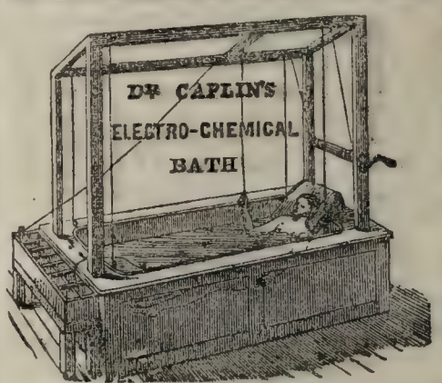
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XVI.] LONDON: SATURDAY, APRIL 18, 1857. [NEW SERIES.

Diseases of SPECIAL OCCUPATIONS.

No. I.

THE SHEFFIELD GRINDERS.

By JOHN CHARLES HALL, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

[*Concluded from page* 295.]

C. THE SHEFFIELD GRINDERS' DISEASE.

IT remains to consider, lastly, in this, my fifth communication, the *post mortem* appearances presented by the lungs of those who have died from the Sheffield grinders' disease: I purpose making, also, a few observations on its treatment.

(*b*) *The post mortem appearances found in the lungs of those who have died from the Sheffield grinders' disease.* CASE IX. George Capper, aged 45, a razor grinder, was admitted at the Sheffield Public Dispensary, October 19th, 1855. He complained of difficulty of breathing, tightness over his chest, and some pain on the left side. He said he had worked at his trade since he was twelve years old. His father, a table-blade striker, died at the advanced age of 82; his mother died at 62. He was one of a family of twelve. "He could not remember that any of his relations had died from consumption, but they might have done, for anything he knew." He had led a very irregular life, had never been married, and had always been very intemperate. He was a good deal emaciated. He measured only five feet; his chest was thirty inches in circumference; and there was much less mobility on the left than on the right side. The respiration on both sides was unequal, and the expiratory murmur was prolonged. There was considerable dulness under both clavicles; he was very sallow; the stools were white; and the urine was high coloured.

A small blister was applied under each clavicle; he was ordered, during the day, an expectorant mixture; and he took, for ten nights, two pills consisting of a grain of ipecacuanha, two grains of blue pill, and six grains of the extract of taraxacum. Under this treatment, he rapidly improved; and he was desired to go into the country, and to take a dessert-spoonful of cod-liver oil three times a day, and to apply the croton oil liniment to his chest until the usual eruption was produced; and, as this died away, the embrocation was to be repeated, so that the skin might be kept more or less sore for six weeks. He was also ordered eight grains of the compound ipecacuanha pill every night, a good diet, and a pint of beer daily. He recovered sufficiently to resume his calling of a razor grinder; and twelve months elapsed before I again saw him. When he was again admitted, the disease had made rapid progress. I saw him again three months before he died. There was then great dulness under each clavicle; the respiration over those portions of the chest where it could be heard was hard and unequal; and a diffused blowing sound could be detected on the right side, below the nipple. Once or twice, on urging him to take as deep an inspiration as he possibly could, an interstitial creaking sound was produced. During the very cold weather we had at the end of January in the present year, he was attacked with pain in the left side, and with very great difficulty of breathing: he did not apply to any medical man for assistance, and he died on the 28th of January, 1857.

POST MORTEM EXAMINATION, made twenty-four hours after death, with the assistance of my friend and colleague, Mr. George Atkin. The body was considerably emaciated, but not so much as might have been expected in one who had for so many years been ill. On opening the chest, the lungs did not collapse, and there were evidences on the left side of the recent attack of acute pleuro-pneumonia which had proved fatal. Here the adhesions were easily broken down, and evidently but recent. The left cavity of the chest contained a few ounces of serum, and the pleura covering the lung in the same situation was coated with recently effused lymph. The middle lobe of the left lung was in a state of red hepatisation. On both sides there were extensive adhesions; these formed, at the apex of each lung, a cartilaginoid cap, from which it was impossible to detach the lungs entire. The whole of the superior lobe of both lungs was extremely dense, and of a black grey colour. The external surface was sprinkled over with small black spots; some as small as a large shot-corn, others as large in circumference as a sixpence. On cutting into the solidified lung—a task of no little difficulty—we observed similar bodies: here and there these were aggregated into masses of a large size; one near the bifurcation of the trachea, on the left side, was the size of a large egg. The bronchial glands were enlarged and blackened; several of them contained a good deal of gritty matter.

In the following woodcut, made from a drawing by Mr. Tuffen West, Mr. Orrin Smith has enabled me to present the exact appearances exhibited by a section of the superior lobe of the right lung of this man.

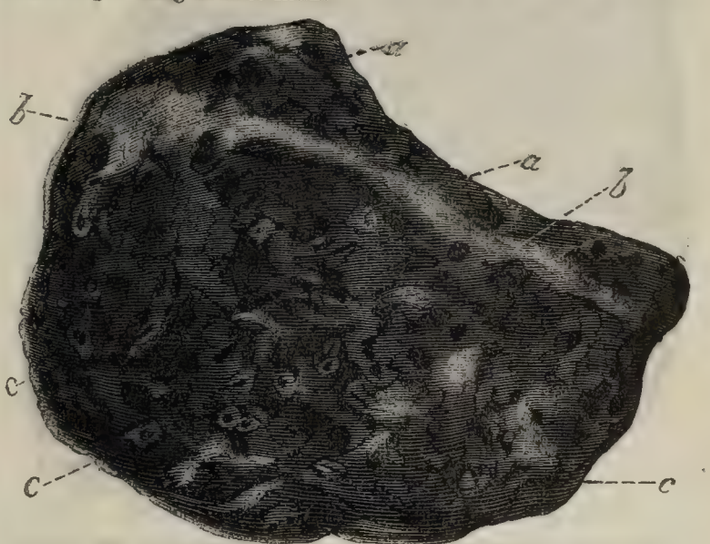


Fig. 3. Section of the lung of a razor grinder.

The peculiar dark spots, to which reference has already been made, will be seen at *a*; the white appearance seen at *b* is also evidently a result of chronic inflammation; enlarged bronchial tubes will be noticed at *c*.

The *post mortem* appearances of the bronchial glands were exactly similar to those seen in Fig. 4. It was sketched by Dr. Branson, from one of the bronchial glands of a grinder who had died in the Sheffield General Infirmary; and I am indebted to my friend Henry Jackson, Esq., F.R.C.S., the senior surgeon of that institution, for the use of the drawing from which the annexed woodcut has been taken.

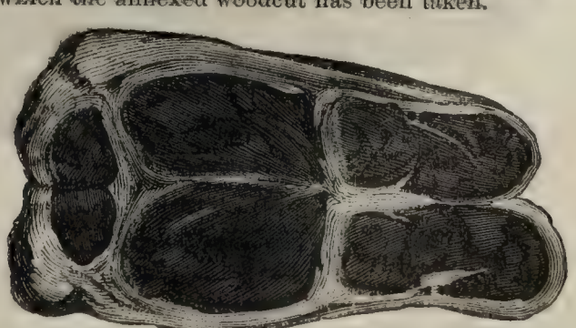


Fig. 4. Appearances frequently present in the bronchial glands of those who have died from the grinders' disease.

The heart was slightly enlarged; valves normal. The other organs of the body were not examined; permission having only been given to open the chest.

Microscopic Examination of the Lungs. I examined various portions of the lungs of this razor grinder, with very great care; and, although several gritty particles could be detected, I did not discover a trace of steel.

The general appearances of each section when examined, even with a very high power, were only such as might be expected in any ordinary case of chronic inflammation. In a case of such importance, however, I wished that, in addition to my own observations, my fellow Associates should have the benefit of the opinions of some of the first microscopists of the day. I accordingly sent a section to my friend Professor Bennett, of Edinburgh, and another section to my friend Dr. Lionel Beale. Dr. Bennett discovered for the most part "chronic exudation tinged with pigment", and fully agreed with me as to the nature of the lesion. Dr. Beale writes: "My impression is that the black granular matter is situated in the smaller bronchial tubes upon the mucous membrane. Much of it is certainly contained within cells; or, perhaps, more correctly speaking, is aggregated into masses having all the characters of cells. At the same time, I think it very likely that some of it is in the vessels, and consists, as you suggest, of altered blood."

I am again indebted to my friends, Dr. Branson and Mr. Henry Jackson, for the use of the beautiful drawings whence the next two woodcuts have been taken.



Fig. 5. Section of the lung of a fork grinder.

The above engraving very accurately represents the appearances frequently seen in the lungs of those who have died from the grinders' disease. We observe that portions of the lung are infiltrated with toughly solid exudation, in the state of induration matter. When cut, portions of it resemble new India-rubber in colour, and they are quite as tough and difficult to cut.



Fig. 6. Section of the lung of grinder.

Of the general appearances observed in the lungs of those who perish from this disease, Mr. Orrin Smith's skill has enabled me to present, in this series of engravings, a very correct representation. We observe:—

1. The little black spots on the surface and throughout the substance of the lungs.
2. Dilatation of the bronchial tubes.
3. Enlargement of the bronchial glands. On making a section, they are often seen, as in Fig. 4, of a greyish and blackish colour; for the most part of a very firm consistence. In other cases, they are soft. Calcareous matter is often present in them.
4. Large masses, varying in size and in colour, in different portions of the lungs.
5. Adhesion of the pleuræ.
6. Inflammation of the lining membrane of the bronchi, trachea, and larynx.
7. Frequent enlargement of the heart, disease of the liver, and a granular condition of the kidneys.

These *post mortem* appearances naturally suggest a few observations, which, remembering, as I do, the great length to which these articles have already extended, shall be condensed as much a possible.

1. *The black spots on the surface and throughout the substance of the lungs.* It may be well to remember, in considering the question of exudation in the lungs, that since the beautiful injections of Adriani and of Rossignol it has been known that the bronchial arteries and veins may be filled from the pulmonary veins, and the latter again from the bronchial arteries; the intercommunication of the two systems is thus demonstrated, and we have been thereby taught how disturbances of the circulation in one system, may account for those which are witnessed in the other.

Andral has remarked, "that black discoloration of the lung with augmentation of its consistence, is nothing more, in a great number of cases, than black pulmonary matter, with the superaddition of a morbid induration wholly independent of it. In other words, the lung affected with chronic induration blackens in the same way that an intestine does that is similarly affected, and passes by degrees from red to brown, and even to the black colour."

The same distinguished pathologist speaks also of four forms of melanosis; 1, Masses, incysted or not; 2, Infiltrated in different tissues; 3, Layers on the unattached surface of membranous organs; 4, Liquid. The fourth form was rejected by Laennec, who regarded melanosis as a tissue. These masses in the Sheffield grinders vary in size; some are about the bulk of a small bean; some are about the size of a large egg. I would remark, however, that much of the induration observed in the lungs of the grinders does not depend on the melanotic deposition, but simply on chronic inflammation. With regard to the colour of chronic induration it is sometimes red, yellow, iron grey, brownish, or black. The colour is in some degree of an accidental character, dependent as it is on the presence, in variable proportions, of blood, and of black or dark blue pulmonary matter. Dr. Gregory, of Edinburgh, found the black lungs of a collier to contain coal, which, on destructive analysis, yielded carburetted hydrogen and the other usual products.

In the section of lungs from which fig. 3 was taken, some of the vessels were pervious and the arrangement of the capillaries natural. The walls of the air-cells were thicker, and the elastic fibres more abundant than in a perfectly healthy condition of the lung. In many reptiles which have been kept without food, and with insufficiency of air, the vessels of the lungs and other organs are found to contain similar dark matter.

2. *The enlargement of the bronchial glands* is clearly the result of the chronic inflammation which has been set up in the pulmonary tissue by which they are surrounded. The black pigment which is so often found in them in considerable quantity (fig. 4) does not, so far as I am aware, differ from that generally found in the pulmonary parenchyma. That it bears (as Dr. Sieveking has shown) a close relation to the defective oxygenation of the blood, is manifest from the normal tendency to the deposit being greater in proportion to the advance of life; and, in the attacks of chronic inflammation to which the Sheffield grinders are so liable, it evidently accumulates in considerable quantities.

3. *The cartilaginoid capsule* at the apex of the lungs on both sides is by no means an unusual occurrence. When placed under the microscope the deposit was found to be of a fibrous or, as Lebert has termed it, chondroid character. If the result of former inflammation of the pleura, it involves the free surfaces of the membrane with which it closely combines, which was the case here; if arising from subserous congestion, it is found in the subserous tissues and in the membrane itself.

The whole question of chronic pneumonia and its results,

including hypertrophy of the intervesicular tissue, owing, probably, to a deposit in them of an albuminous character, involves considerations of the highest importance, and demands a careful and patient investigation.

Dr. Williams mentions, in his *Principles of Medicine*, a chronic form of pneumonia in which the hepatised portion, owing to the thickening of individual vesicles, assumes an oolitic aspect. In this form of pneumonia he is of opinion that thoracic consumption may commence without the pre-existence of tuberculous disease.

(*c.*) *Treatment of the Sheffield Grinders' Disease.* This disease requires to be treated on general principles. All causes of irritation must be removed, attacks of inflammation must be subdued as they arise, and every care should at all times be taken to keep up the strength of the patient.

The Sheffield grinders' disease, in the first instance, is simply bronchitis, arising from the irritation produced by the presence of fine particles of stone and metal in the tubes. Removal for a time from the wheel, and a residence in the country, at least during the early stages of the disease, is an essential step to be taken; and the man should resolve for the future to work only in a hull where the revolving fan properly adjusted carries off the greater portion of the irritating particles.

In a grinder somewhat advanced in years, and in whom the disease has made considerable progress, when, in addition to dilatation of the bronchi, the surrounding portion of the lung is not only condensed by pressure, but very often also locally consolidated by chronic pneumonia, it often happens that an acute attack of bronchitis supervenes on the chronic disease. Such a case requires to be treated with the greatest possible caution. The patient, under such circumstances, broken down in constitution, does not die from the inflammation, but from the large accumulation of mucopurulent secretion thrown out by a congested surface. This copious secretion, which the patient has not sufficient strength to throw off, is the cause of death, the brain and tissues becoming poisoned by venous blood. Strong stimulating embrocations are here required to the chest, and doses of the sesquicarbonate of ammonia and of chloric ether should be given at short intervals.

With regard to the treatment of the chronic form of bronchitis, so common amongst the grinders of Sheffield, much will depend on the peculiar complications each case presents. The addition of a dilated state of the tubes to chronic inflammation of their mucous membrane, adds much to the difficulties of treating with success a patient so affected. In the great majority of such cases that I have seen, both in private and dispensary practice, the sputa have been very abundant, solid, opaque, and, for the most part, purulent. The face is bloated, the lips are blue, the countenance is generally livid; such symptoms arise from the altered state of the mucous membrane preventing the proper aëration of the blood. When the disease is of long standing, it is not uncommon to find enlargement and thickening of the right ventricle.

Blisters applied to different parts of the chest at intervals, and repeated dry cupping, are useful in many cases. In the chronic forms, counter-irritation, especially with the croton oil, or the turpentine and strong acetic acid liniments, should always be employed. The expectorant medicines to be selected must depend upon the condition of the discharge from the bronchial tubes. When the expectoration is excessive, balsam of copaiba and pyroxylic spirit are medicines of considerable value; and the inhalation of the vapour of tar, or of creasote, or of chlorine, much diluted, has unquestionably a tendency to reduce the irritability of the mucous membrane, and to lessen the quantity of its secretion.

Surrey House, Sheffield, April 13th, 1857.

ERRATUM.

[In Dr. J. C. Hall's paper on the Sheffield Grinders' Disease, in the Journal of last week, by an error in revision, the woodcuts were unfortunately transposed; the description appended to Fig. 1 belonging to Fig. 2, and *vice versâ*. To non-microscopists this error might prove embarrassing; and, therefore, to prevent any possibility of mistake, we again append the woodcuts illustrative of the sputa to this the conclusion of his elaborate articles on the Sheffield Grinders' Disease, with a correct description to each. Editor.]

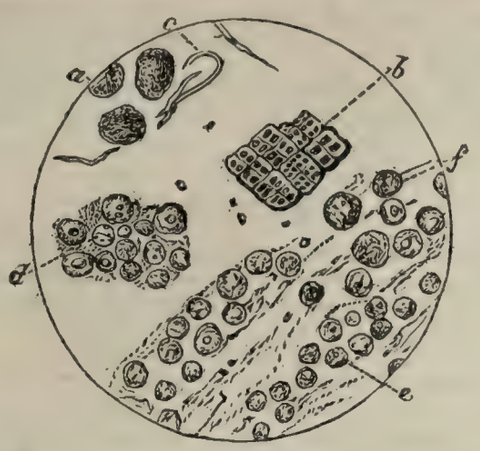


Fig. 1 contains the sputa of a table blade and file grinder. (*a*) cells containing pigment; (*b*) sarcina ventriculi; (*c*) curled elastic fibre; (*d*, *e*, *f*) pus and mucus cells; some very transparent, shewing a distinct nucleus; others (*f*) with pigment.



Fig. 2. Sputa of a fork grinder (dry). (*a*) epithelium from the mouth; (*b*) epithelium from the fauces; (*c*) silicious particles; (*d*) metallic particles; (*e*) blood-corpuscles; (*f*) pus and mucus cells.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL, MANCHESTER.

BELLADONNA IN INCONTINENCE OF URINE.

Under the care of G. B. Masfen, Esq.

M. B., aged 5, who had been under my care at various times since February 6th, 1856, suffering from incontinence of urine, under a variety of treatment, and with, at the best, very trifling amendment, was again admitted on the 28th of January 1857. He is a delicate looking boy, but apparently healthy in all other respects than the disease, for which he was under treatment. He had rarely passed a night, that his mother could recollect, without wetting his bed; and the treatment which had appeared to do him most good, was abstinence from drink in the after part of the day; but this could not be successfully carried out in warm weather.

I prescribed an anodyne alkaline mixture, with an occasional drastic aperient, till having seen Mr. Brooke's case in the Journal of February 21st, I ordered, on February 28th, one-twelfth of a grain of extract of belladonna to be taken three times a day, when a marked improvement immediately commenced, which continued till after having the medicine for twelve days there was no more appearance of the symptoms. He continued under the same treatment till March 21st, when I discharged him apparently cured. I shall keep this case under notice, and, should any relapse occur, shall not fail to place it on record.

While on this subject, I may mention that I wrote to a sometime patient of mine, who had consulted several eminent practitioners in various parts of the kingdom, and who seldom passed a night without wetting his bed, from birth to the age

of sixteen, to suggest this remedy to him. He replied as follows:—"The weakness with which I was afflicted so long has at last left me entirely.... Very likely the sea bathing at Boulogne did a great deal towards a cure, as I was not subject to it after I took a bath three times a week at six in the morning."

ST. GEORGE'S HOSPITAL.

I. POPLITEAL ANEURISM: LIGATURE OF THE FEMORAL ARTERY AFTER THE UNSUCCESSFUL APPLICATION OF PRESSURE: GANGRENE: AMPUTATION OF THE THIGH.

Under the care of T. Tatum, Esq.

[*From notes by* F. Wintle, Esq., *Surgical Registrar.*]

[*Continued from page* 268.]

The case reported in the number of this Journal for April 4 has, unfortunately, not turned out successful. We shall proceed with the history of the case, and give an account of the appearances observed on dissection of the limb. The main features of the case up to the time of our last report were, that pressure had been employed for three weeks with the effect of entirely checking the pulsation of the tumour, which, however, enlarged and began again to pulsate after the suspension of the pressure for a week; that pressure was reapplied for six days, with great care as to its direction and proper adjustment, notwithstanding which the tumour continued to increase, and that on the day before the operation a sudden attack of sharp pain, and the rapid increase of the swelling, induced the belief that the aneurism had burst into the cellular tissue. The artery was tied on March 26; and here it may be noticed that the vessel, when it was taken up, looked of a redder colour than usual. On the following day, the patient had had no sleep, and was feverish. There had been no sickness after the chloroform; the foot and leg were of good temperature.

On the 28th he was better, and the extremity still retained its natural appearance and heat; but on the 29th, a little blackness was observed over the ends of the first and second toes, which extended to their roots. On March 30th and 31st, patches of discolouration extended up the leg, and the superficial veins, both of the leg and thigh, began to show distinctly through the skin. On the 1st April, as the whole leg below the knee was discoloured, and there was considerable œdema of the thigh, it was impossible to defer the removal of the limb. During all this time he had been ordered liberal diet and stimulants, and every attention had been paid to keeping up the local temperature.

At the amputation, which was performed by the circular operation at the lower third of the thigh, there was much hæmorrhage from numerous vessels which had enlarged subsequently to the ligature, and the vessels were hard to secure, as the muscles seemed to be much infiltrated and their colour and consistence altered. The patient bore the operation well, however, had no sickness after the chloroform, and ate a good dinner four hours afterwards. An incision was made on the outer side of the upper part of the thigh to relieve the infiltration of the cellular tissue.

On examination of the amputated limb, all the muscles of the leg and foot were found to be sloughing. This extended down to the interosseous membrane on both aspects of the limb. The artery and vein had been divided just after their passage through the opening in the adductor magnus muscle. The coats of the artery were very much injected above the aneurism, so that its colour here presented a striking contrast to that of the vessel below the tumour; the lining membrane also appeared rough, as if from effused lymph. The artery was quite empty, except for a few shreds of loose coagulum. The aneurism was of great size, about as large as a fœtal head, and its sac was extremely thin. Where the vein and the sciatic nerve passed over it, it was so very attenuated that by the separation of these structures (which were much bloodstained) the clot was exposed; but this was most probably accidental, and it appeared most likely that the sac, though extremely stretched and thinned, had not been lacerated. It contained hardly any laminated fibrine, but was filled with soft, loose, dark red clot, of the colour and consistence of black currant jelly. The arteries below the aneurism were traced for some distance down each aspect of the leg; all seemed natural. As to the situation of the aneurism with respect to the artery, the disease had involved the whole calibre of the vessel, so that the artery opened above and below into the large spherical sac; the latter projected considerably towards the knee-joint, thereby occluding the artery. The joint itself, however, was quite natural. The vein was next examined. It was stretched tightly over the back of the swelling, and at the upper part, where the amputation had divided it, was almost obliterated by a plug of adherent and decolorised fibrine. This was so closely adherent to the walls of the vessel (which were themselves somewhat thickened at this part), that it was very difficult to dissect it away. The vein was not absolutely obliterated at any point, as, on making pressure upward, a little of the serosity of the blood was seen to exude between one part of its walls and the clot. The latter was traced downwards for about an inch and a half. Below this point, the veins, which were followed down with the arteries below the middle of the leg, were quite natural. The sciatic nerve was also raised by the swelling, but not altered in shape or size. One or two branches of the popliteal artery in the ham were traced; they seemed not to have been enlarged beyond the natural size.

The man has been doing very well since the operation up to the last note (April 14); the ligature had not come away from the femoral artery.

Remarks. This case is a remarkable instance not only of the failure of the compression treatment, in a case where there seemed every antecedent probability of its success; but even, if the appearances on dissection have been rightly interpreted, of the mischief which may sometimes (rarely indeed, it is true) accompany its employment. For the failure of the treatment it is not very easy to account, as the case was watched as closely, and the treatment persevered in as sedulously as in other cases where it has been rapidly successful; nor was there anything in the size of the tumour, or any constitutional irritability of the patient, to render want of success probable. If it be alleged, that the attendants might have neglected their duty in applying the compression properly, or that it might have been too soon omitted, this still seems inconsistent with the fact, that afterwards, when the pressure was resumed and more closely watched, the aneurism, nevertheless, went on steadily and rapidly growing. It is, indeed, open to conjecture, that the shape of the swelling was unfavourable for the treatment by compression; *i. e.*, that the free communication of the artery above and below with the sac prevented coagulation in the latter, except under the total stoppage of the circulation for a time, which follows the ligature, but which is never produced by compression. As to the harm which resulted from the treatment, it seems clear that the inflammation—of which traces were observed in the artery—and the plugging up of the vein from the same cause, must have had their origin in the irritation so induced. The colour of the artery, at the point of application of the ligature, induced Mr. Tatum to predict inflammation of that vessel; and the clot which was found so completely decolorised, and so firmly adherent to the walls of the vein, could not have been produced in the six days which intervened between the ligature and the amputation, even if there had been anything in the operation of tying the femoral artery to account for such a result. Nor could this phlebitis have been a result of the pressure of the aneurism in the ham, since the clot was much thicker at the part divided in the amputation, and rapidly diminished, as it was traced downwards till, in the middle of the popliteal space, it ceased altogether. Higher up (that is, in the stump), it is very probable that the vessel was altogether occluded, and the only cause which is at hand to account for such a result, is the application of pressure on the vessels in the thigh. Why then, it may be asked, did not the leg slough before the application of the ligature? Probably because, however much the main vein might have been blocked up, the force of the heart and arterial circulation was still sufficient to carry the blood through the collateral channels; while, on the cessation of this *vis a tergo*, consequent on the obliteration of the artery, the venous circulation became also suspended, and the blood stagnated in the superficial as well as in the deep veins. This latter effect was observed, and is noted in the history of the case. But also, there can be little doubt that the occlusion of the veins had been progressive, and was advancing during the days subsequent to the ligature.

As to the severe attack of pain, which occurred on the day before the ligature, this was most likely due to the sudden increase of the contents of the sac, and its consequent pressure on the sciatic nerve. It will be noticed, that this nerve was not flattened or much stretched, and had not, therefore, been long exposed to the pressure of the tumour, but was found so closely united to it at the dissection, that it was a question whether it had been in contact with the blood or no.

The patient appears at present to have a fair chance of recovery,

and the case is so far complete. If by any misfortune it should turn out less happily, and if any appearances should be then observed in the vessels calculated to throw any further light on it, a supplemental note will be given.

II. PYÆMIA AFTER AMPUTATION OF THE LEG, RAPIDLY FATAL: INFLAMMATION OF SUPERFICIAL VEINS NOT INCLUDED IN THE LIGATURES: ESCAPE OF THOSE SO INCLUDED.

Under the care of H. C. Johnson, Esq.

[*From notes by* F. Wintle, Esq., *Surgical Registrar.*]

Peter B., a middle aged man, was admitted March 17th, under the care of Mr. Johnson, on account of disease of the right ankle of sixteen years duration, attributed to a slight accident. He was in good general health, but looked pale and sallow. He had been a patient in this Hospital on three previous occasions, but had derived no benefit from the treatment, and was now very anxious to have the leg removed, as the necessity he was under of resting the knee always on a wooden leg interfered much with him in his occupation, that of an agricultural labourer. The amputation was performed on April 2nd, at the junction of the lower and middle thirds of the leg, as the tibia was known to be diseased, and it was thought unsafe to amputate at the ankle, under the uncertainty as to the extent of that disease. The result showed the soundness of this opinion; for, on examination of the removed limb, besides extensive disease of the ankle, and ulceration of the cartilages between the astragalus and os calcis, a cavity was found leading up the shaft of the tibia for more than an inch, and communicating with a piece of necrosed, but not loose, bone in the centre of the cancellous tissue. Nothing remarkable occurred at the amputation. There was little hæmorrhage. The patient passed a tolerable night, and had no sickness from the chloroform, but was a little feverish next day. This, however, passed off, and he was going on well; but on the evening of April 4th hæmorrhage came on from a small vessel near the tibia, which had to be tied. During the same night he was very restless, and suffered from cold sweats; his face was anxious, and his complexion more sallow than usual. His tongue, however, was clean, and his functions regular. During the night of the 5th, he had three distinct attacks of severe rigors, and when seen in the morning of April 6th his face was yellow, and he was scarcely sensible. At about 1 p.m. on April 6th he became violently delirious, and died in a quarter of an hour from this time.

On *post mortem* examination the skin over the whole body was found extremely yellow. All the viscera, including the brain and its membranes, were found perfectly healthy, except that the liver showed traces of fatty degeneration, and that the kidneys were large, coarse, and soft in texture. The appearance of these latter organs, however, was not decidedly that of disease. On examining the stump, a good deal of diffused suppuration was found in the subcutaneous cellular tissue, and infiltrating the muscles. There were four ligatures still in position. One of these was tied on the anterior, and another on the posterior tibial artery, a third on one of the veins accompanying the anterior tibial, and the fourth embraced a smaller artery (probably the peroneal) and its venæ comites. None of the veins so tied were in the least degree inflamed, but the short saphenous vein was standing out in the cellular tissue, its walls thickened, and its mouth patulous from adhesion to the neighbouring parts. On laying it open, purulent fluid was found in it, but no clot. The femoral and iliac veins were distended with dark blood, and their lining membrane, as well as that of the arteries and of all the cavities of the heart, was deeply stained by imbibition, but there were no marks of inflammation. The blood showed, under the microscope, numerous bodies, having all the characters of pus-globules.

Remarks. This case is cited as one of the most rapidly fatal on record, and as having some bearing on the question of the mode of origin of pyæmia. It will be observed that death occurred before the falling of the ligatures, and that thus an opportunity was given of observing the vessels included in the latter, and their condition. As to the former point, every one must have come to the conclusion that very few amputations are performed in which some veins, large or small, are not tied with their accompanying arteries; and it is frequently necessary to tie up large veins, such as the femoral, on account of regurgitating hæmorrhage: but how seldom is any bad effect seen to follow on this proceeding. In the present instance the veins tied were perfectly natural both as to their walls and contents, while the superficial vein which had not been tied was much inflamed, and contained some pus, apparently secreted by its lining membrane, or perhaps really inhaled, as the old term was. It has been sometimes objected to the use of this term "inhalation", that no force is present by which inhalation can be produced. This, however, is not so self-evident as has been sometimes supposed. The vein is, no doubt, after the amputation, collapsed and empty. When inflamed, as a consequence of external phlebitis, and adhesion to the thickened cellular tissue in its neighbourhood, it is found, as in this case, round, rigid, and patulous. Hence a true distension of its calibre must have taken place, and the space so gained must be filled by something. This something will probably be blood drawn from the next branch below the valves, or the fluids of the stump, attracted up from its open mouth. Thus the passage of pus into the vein by a process truly resembling inhalation appears, theoretically at least, possible enough.

The case before us is worthy of note also, from the extreme rapidity with which death followed the first appearance of the symptom. No suspicion of pyæmia could have occurred before April 4th; nor was any distinct symptom noticed till the night of April 5th,—not much more than half a day before his death. It is true, indeed, that he had a suppurating wound before the amputation; but as there were no more symptoms from this, at the time of the operation, than there had been for fifteen years before, the supposition that the pyæmia was consequent on the original disease, is perfectly gratuitous.

ST. MARY'S HOSPITAL.

CASES OF DISEASE OF THE LIVER.

Under the care of J. Alderson, M.D., and T. K. Chambers, M.D.

[*From Notes by* M. Farrant, Esq.]

Case I. Ann F., aged 28, was admitted Nov. 25th, under the care of Dr. Chambers. She stated that, about three months previously, she had been seized with sickness, and pain in the back and hepatic region, increased by taking food, which was always followed by vomiting in about a quarter of an hour. This used to subside soon, and then leave her pretty well till the next meal. During the previous three weeks, this pain had been aggravated, and followed by a swelling about two inches to the left of, and four inches below, the xiphoid cartilage. She had vomited blood occasionally during this time, but not in great quantity. The skin was of a deep yellow colour, increased in intensity as the pain and swelling subsided. On examination, the swelling was found to be resonant on percussion, and appeared attached to the diaphragm, moving on inspiration. The finger could not be passed between it and the ribs. She was ordered milk and farinaceous food, with lime water and a grain of acetate of morphia every night. Under this treatment, she improved for some short time; but, as the sickness and pain recurred, she was ordered, on December 6th, to take a powder containing pepsine, with a mutton chop for dinner. The yellow tinge had by this time increased, and bile was found in large quantities in the urine. At first the mutton chop caused pain, but not sickness; and, after a few days, was taken without any ill effects following. She began to improve in strength and appearance. This favourable change did not, however, last long; for, in the middle of December, the appetite began to fail, so that she could take hardly any meat, but still managed to retain it on the stomach with the help of the pepsine. She began to be more restless, and to lose flesh and strength. She was now ordered a mixture containing muriatic and prussic acids; but this seemed rather to produce vomiting, and was omitted. The vomiting now recurred, especially after taking solids. Some temporary relief was obtained by blistering, and mercury exhibited till the gums were slightly touched. Examination of the region of the liver now showed dulness extending to about three inches below the tenth costal cartilage. The structure felt harder than natural, but no nodulation was perceptible. The pain here and in the epigastrium, on pressure, seemed diminished; sharp lancinating pain, however, occasionally occurred in the hepatic and gastric regions. She lost flesh and strength rapidly; the abdomen became distended and tympanitic; and she died January 5th.

Post mortem examination showed the stomach universally distended, reaching down to the pubes, and covering the whole of the abdominal viscera: it was filled with fluid resembling coffee-grounds, and there were patches of extravasation here and there beneath the mucous membrane. The liver was large and dark; the gall-bladder was quite obliterated by the deposition in this part of the liver of a large scirrhous mass,

extending across the longitudinal fissure into the left lobe, which had almost made its way through the substance of the organ to its upper side. This mass was as large as the fist, and adhered firmly to the first and second parts of the duodenum. On both surfaces of the diaphragm (but to a less extent on the upper), between the layers of the omentum and mesenteries, and beneath the peritoneum, visceral as well as parietal, there was found everywhere a deposit of small hard tuberculous masses, the microscopic section of which resembled exactly that of the larger mass in the liver.

Remarks. This case appeared of interest, as showing how closely the symptoms of disease of the liver sometimes simulate those of organic disease of the stomach: in fact, the cause of the most prominent symptoms was the same in this case as in cancer of the pyloric end of that viscus; viz., pressure obstructing the passage of aliment into the duodenum. The history of the case also shows that partial relief may be obtained, even in these circumstances, from the more rapid digestion of the food by means of pepsine; and may serve as an encouragement to the trial of this drug as a palliative in cases where, from the failure of strength, it is desirable to give animal food, while the irritability of the stomach causes its rejection when administered in a fluid form.

In connexion with this case of disease of the liver, short notes are appended of a remarkable tumour which was lately observed at the same hospital, having its origin apparently in a hydatid cyst; but where, from the solidification of the external layers, the usual diagnostic signs of hydatids were entirely absent.

In this case also the fatal result seems to have been due as much to the renal as to the hepatic disease. It is merely mentioned as illustrating the diffiulties which may be experienced in diagnosing a pretty common ailment, and as an interesting description of the condition at which a hydatid cyst may arrive.

Case ii. Harriet G., aged 28, was admitted November 27th, 1856, under the care of Dr. Alderson. She had been ill about two months, suffering from great pain in the left side of the thorax, and in the liver, with inability to stand from weakness. The menses had been suppressed for two years. Her countenance was anxious, eyes prominent, skin jaundiced. She complained of bearing down, and of constant desire to evacuate the bowels; and seemed to have partly lost power over the sphincter. She had suffered from diarrhœa for some time, and was much reduced, with anxious face, parched lips, and dry tongue. The abdomen was dull to percussion as low as an inch below the umbilicus: pressure did not produce pain.

The treatment consisted merely in the exhibition of tonics and support, and in checking the diarrhœa by means of astringent medicines. On December 1st, she was attacked with rigors; the tumour of the abdomen began to be tender to pressure; and she lost strength rapidly, dying on December 3rd of exhaustion.

On *post mortem* examination, the thoracic viscera were found healthy, except that one of the bronchial glands was enlarged and distended with pus. The liver filled the left hypochondrium, and extended down into the iliac region; thus the left lobe was greatly enlarged. On the right side, at the upper and posterior part, a large cyst was found, projecting into the liver, and occupying nearly half the right lobe. It was adherent to the diaphragm, and overlapped by the substance of the liver, the margins of which surrounding it were irregular and dentated. The cyst had a lobulated appearance, one portion being in front, one posterior, and one along the outer margin. On cutting into the cyst, an hydatid escaped. The cyst contained also a quantity of bright yellow fluid, which was inodorous, and exhibited, with strong sulphuric acid, the reaction of bile. The cyst-wall was dense and fibrous, and lined by a gelatinous looking substance, arranged in concentric layers, very soft and friable. The anterior lobule was continuous with the posterior, but the outer one was separate; it contained the same substance as the other, but of a different colour, being of a bright green; it was also much firmer and more tenacious, and appeared to be the older growth. The substance of the liver was very pale, hard, and bloodless. The weight of the liver and cyst was 6 lbs. The gall-bladder was half full of fluid bile. The kidneys were very large, the right weighing 8 oz., and the left 10½ oz.; they were surrounded with much fat, and the cortical part was almost replaced by yellow fatty matter, the medullary substance also disappearing in places. The spleen presented a number of small abscesses scattered through its substance.

Original Communications.

SALARIES TO SCIENTIFIC MEN.

By Henry W. Rumsey, Esq., Cheltenham.

In a paper published in this Journal for April 4th, I gave an outline of the manner in which I considered that the position of science and its cultivators might be improved through the agency of Government. A position totally different from mine has been assumed by Dr. J. E. Gray, of the British Museum, in his reply to the question to which reference was made in my former paper as having emanated from the British Association for the Advancement of Science. His opinion is, that "the position of science will be best improved by its being left entirely unfettered by any interference on the part of Government or of the Legislature": and he further deprecates any direct action of the Government in regard to the position of the cultivators of science. He also would "regret to see the number of scientific offices under the Government increased"; but he thinks it highly desirable (at least, before an increase is made) that "scientific men now holding office under Government, or under private societies, should be fairly remunerated for their labour".

As I conclude that Dr. Gray's opinions are open to general remark, I shall proceed to offer some criticism on them.

While I fully admit the importance of the facts whtch Dr. Gray adduces with regard to the low and inadequate rates of remuneration awarded to the officers of scientific and literary institutions in England; and while I agree with him that the strange discrepancy here existing between the salaries of highly qualified scientific *employés* and those of officers in the civil service is anything but creditable to us as a nation; I confess that it appears to me that Dr. Gray has presented but a partial and limited view of a large question, which presses daily with increasing force upon public attention, and must, at no distant period, be fairly met by the Legislature.

Now, in my opinion, it is not meeting this question fairly, to appeal to the prejudices and self-complacencies of Englishmen against foreign arrangements for the promotion and endowment of science—especially when such an appeal is calculated, if not intended, to defeat rational and feasible projects for the formal recognition of science in the administration of our own public affairs.

Dr. Gray's assertion, that science has attained a superior position and greater practical importance in England than in any other European state, seems not to be substantiated by the observations of learned foreigners.*

One could hardly expect to conciliate the goodwill and respect of distinguished philosophers on the continent, by describing them, in Dr. Gray's words, as "dressed out in orders and other gewgaws," as badges of political servitude. I doubt both the correctness and the policy of any statement to the effect that the "great body of scientific men", in the "despotic" states of Europe, are mere "servants and pensioners of the government." And I venture to repudiate the notion that a "dependent position" could possibly be rendered "palatable" to men, like themselves, of noble minds and vast acquirements, by decorating their persons with "gewgaws." As well might one hold up to contempt the professor's robe, the academic hood, the military uniform,—nay, even the ermine and the coronet which so fitly reward great services in law and in arms, in administration and in diplomacy.

Dr. Gray's main proposition is, I think, urged inconsistently with his premises. Surely, the higher the salary the more closely is the scientific officer bound to the authority which employs him, the more dependent on that authority (of whatever description) does he become.

The philosopher, in receiving a public salary, no doubt becomes a public servant; but he does not thereby become, necessarily or even probably, a political tool of a ministry of state. Instead of merely seeking to obtain respectable salaries (a very proper demand, in itself), scientific officers would, I believe, do more wisely to propose a legal *status*, an

* See Liebig's opinion, quoted in the Glasgow Report (p. lvi). See also some very sensible remarks in Henke's "Zeitschrift" for 1856, on the miserable expedients for bringing science to bear upon forensic inquiries in England. This able writer's conclusion has been thus translated:—"But John Bull's conceitedness tells him that that which he does must be the best; and it will require a good deal to make him admit that he has yet to learn much in those matters from abroad."

organised polity, such as would protect them against the unreasonable claims of corporations, boards, and bodies of trustees, to which, be it observed, they are at present quite as much in subjection in this country as foreign scientific officers are to their state governments. They might justly call upon the legislature to assimilate their position somewhat to that of the *legal* profession, the highest authorities of which, while handsomely remunerated, are nevertheless, by the British constitution, made wholly independent of political influence.

It is, however, very noticeable, that gentlemen holding scientific appointments, under English corporate bodies, public institutions, and voluntary associations, are apt enough to cry loudly for better pay, although they too often denounce, as unconstitutional, any scheme of organisation which would make their services more generally available and beneficial.

A wise Legislature and a foreseeing Government will scarcely sanction, still less interfere to enforce, a rate of salaries commensurate with the notions of learned officials, without requiring, at the same time, a regulated system of inspection and reports, so as to render scientific appointments of the greatest possible service to the community. Liberal salaries should, indeed, be paid to those who hold such appointments, but not so much for the object of raising science in public estimation, as of providing a useful and important body of public servants. A grand defect in Dr. Gray's proposition is, that he does not attempt to show how or by whom the good salaries which he asks for are to be paid. Mere exhortations to "governing bodies"—mere appeals, whether to their justice or to their mercy, are not likely to improve the remuneration, to elevate the position, or to promote the independence of the petitioners. The customary reply, though silly enough, is always at hand:—"Many persons, equally qualified, equally scientific, accomplished, skilful, and honest, are ready to undertake these duties for the salaries already paid: we cannot raise the market-price of intellectual labour." Those who are destitute of the power or of the will (perhaps of both) to think correctly on the subject, gladly accept so convenient a solution of the difficulty,—and the officers are bowed out.

"Governing bodies" are the last to discover the fallacy of their market-price theory. They do not perceive, or, at least, do not admit the obvious conclusion, that, if it be in principle just and correct, and therefore expedient, it ought also to be applied to the higher offices of the State, the Church, and the Law,—offices which, curiously enough, are often held by their own members. In determining the salaries of scientific officers, corporate bodies are not yet to be trusted; and Dr. Gray deprecates the intervention of the Legislature. Is the House of Commons, indeed, unwilling to recognise the claims of science when properly submitted to it? If it be so, which I doubt, what can we say of our boasted representative system? If, then, the Government is not to act in this matter, where is Dr. Gray's resource? But, if scientific men would take another course; if, through the British Association, they would unite in a reasonable request and a well-considered plan for organisation, by legislative enactment, so that their corps might constitute an integral part—a distinct element of the polity of the state, in both its *central* and its *local* spheres of action,—proving, also, as might easily be done, how the public would benefit to an extent far exceeding the full amount of the cost of such organisation,—there might be a fair prospect, even in this commercial country, of their proposals being received with consideration, and ultimately adopted.

Queen's Hospital, Birmingham: Retirement of Dr Fife. At a special meeting of the council of Queen's College, held on the 3rd instant, the Vice-Principal Chancellor Law in the chair, the resignation of Dr. Fife, one of the physicians of the Queen's Hospital, was received, and entered on the minutes. It will be seen by advertisement, that candidates for the appointment are requested to send in their testimonials on the 30th of April; that the council are pledged, in accordance with the fundamental laws of the College and Hospital, without favour or affection, to elect the candidate best qualified and most eligible, whoever he may be; and that canvassing, either personally or through friends, is strictly prohibited, and will be held to be an entire disqualification. In addition to the usual routine, the successful candidate will be required to give practical instruction at the bedside to the student; thus, the utmost possible zeal and energy on the part of the physician will be thereby secured to the patient, inasmuch as whatever is a matter of daily demonstration must be maturely and carefully reflected upon.

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture II.

Mr. President and Gentlemen,—At the close of my first lecture (which, from pressure of time, was necessarily somewhat hurried and curtailed), I was endeavouring to point out the frequent occurrence of saccharine urine, *unattended* with any notable diuresis; and to press the importance of attempting more accurately to diagnose such cases by other symptoms than the altered condition of the urine. I then stated, as my opinion, that there was no one symptom which could be regarded in any way as pathognomonic, but that the existence of a group might often excite such suspicions as would lead to the examination of the urine, and detection of the disease. The symptoms upon which I dwelt most strongly were the presence of slight *œdema of the legs*, not arising from cardiac disease or albuminuria; and certain cutaneous affections, especially herpetic eruptions and prurigo. I also mentioned that I had met with other forms of skin-disease connected with this condition of urine; and likewise that these patients, as well as true diabetics, were very liable to boils and forms of low inflammation.

Saccharine urine is occasionally met with as a temporary occurrence in severe derangements of the digestive organs, and in chronic gout and rheumatism; and sometimes it is detected in severe and apparently functional disturbance of the nervous system.

Having passed in review the most important symptoms of this disease, I shall devote a few minutes to the consideration of the course it usually runs. I must beg of you, however, to bear in mind that my remarks at present will apply especially to the cases of confirmed melliturla, and not to such forms of saccharine urine as appear to be temporary only in their nature, or to those where the diuresis is not well marked. I must also anticipate somewhat, by stating that, although these cases can be most materially benefited by treatment, yet few, if any, can be really absolutely cured. A diabetic patient, notwithstanding he may live for very many years, and arrive even at old age, is one whose life is at all times precarious, standing as it were on the brink of a precipice; and accidents, diseases, and shocks of various kinds, which to a healthy person would be of little moment, to him may be the cause of the greatest apprehension and danger. It is not in my power to give instances from my own practice of patients who have been diabetic for a *very* lengthened period; but I can point to cases of six, eight, and twelve years standing, the urine still remaining saccharine. These cases, I fear, form the exception rather than the rule; and the lengthened course of the disease, when it occurs, is probably due to the great care exercised by the patients themselves, and is seldom found among the poorer classes, who are necessarily exposed to the vicissitudes of the weather, and at the same time are seldom able to adopt such a plan of diet as is most conducive to their well-doing.

Among the secondary affections to which diabetics are liable, may be mentioned boils and carbuncles. Dr. Prout laid great stress on the connexion between a saccharine condition of the urine and the occurrence of these affections: in his article, he observes, "Diabetes very frequently (as far as my personal experience goes, *always*) *accompanies* carbuncles, and malignant boils or abscesses allied to carbuncles. This is a fact mentioned by several of the older writers, and is of great importance to surgeons, who usually have the management of these affections. Some years ago, an interesting case of this kind occurred to me. The patient was a middle aged man, who told me that, for a long period, he had been subject, at intervals of a year or two, to boils, one of which, generally on the back or neck, assumed the form of carbuncle; and that, during such attacks, he always passed a large quantity of saccharine urine. When I saw him, he was recovering from one of these

carbuncular suppurations; and the urine was copious and very saccharine. I lost sight of him afterwards, and am therefore unable to state whether the urine, in the interval of the attacks, recovered its healthy character. He repeatedly assured me, however, that its quantity, after a certain time, always became quite natural." I have given this quotation at length, as I consider the subject of great importance—at the same time, one upon which, as far as my experience goes, much error is entertained. That diabetic patients are liable to boils and carbuncles, I have little doubt. Some time since, a gentleman, a diabetic subject, who had previously consulted me, again called, after an interval of about two years. Almost the first question I asked was, "Have you managed to escape boils?" His astonishment was great, for he informed me that it was for this troublesome affection that he had come to town for advice. Such cases are by no means uncommon, and many instances will be found in the writings of Chesdelden, the late Dr. Latham, and others. The point, however, to which I wish to direct attention is this, Are boils and carbuncles *necessarily* attended with a saccharine state of the urine? Dr. Prout was inclined to think they were; for he states that, as far as his personal experience went, diabetes always accompanies carbuncles and malignant boils, or abscesses allied to carbuncles. Within the last few years, I have made several observations to determine the correctness of this statement, and am quite convinced that it is erroneous. In one instance, a gentleman, aged about 70, suffering from a large carbuncle between the shoulders, from which he subsequently died, I examined the urine very carefully when the disease was fully developed: no trace of sugar was discovered. In the second, a gentleman about 60 years old, the urine, at the time when a carbuncle existed on the back of the neck, exhibited no trace of sugar. I have also made several other examinations of the urine of patients suffering from boils and carbuncles, without being able to find any saccharine impregnation. I think I am justified, therefore, in concluding that, *although boils and carbuncles are of very common occurrence in diabetic subjects, the presence of sugar in the urine of patients suffering from these affections is by no means constant, probably very rare; and that, when carbuncles and boils occur in patients not previously diabetic, sugar is very seldom found in their urine.* My colleague, Mr. Marshall, has, I believe, also examined this point in many hospital patients, and with the same result.

I have in some few instances seen *gangrene* in connexion with diabetes, and have no doubt that there is a close connexion between the two affections, in the relation of cause and effect. In one case, a female, aged 33, who appeared to have suffered from diabetes for some years, gangrene of one leg came on a few weeks before her death. This patient had also, during the last few days of her life, a purulent discharge from the right ear; and, on *post mortem* examination, a considerable quantity of pus was found upon the membranes of the brain. Another and more interesting instance occurred in a gentleman about 68 years old, who consulted me last year, and whom I found labouring under well marked diabetic symptoms, with strongly saccharine urine. I ascertained from him that the disease had certainly been present for many years; and that, about twenty months before I saw him, he had been laid up for several weeks with gangrene of the base of one toe; the cicatrix was still well marked. My patient was totally unable to account for the affection, for he had received no blow or injury upon the part. This connexion between gangrene and diabetes appears to have been noticed by a Frenchman, M. Marchal, who has recently read a paper on the subject before the Academy of Sciences. He relates a case of a man who, after having suffered from a succession of furuncles, exhibited gangrene of a toe, without obvious cause; and his urine was found to be strongly saccharine. The gangrened part came away; the wound cicatrised; and, by means of appropriate treatment, he much improved, and enjoyed pretty good health for about the space of two years. He then neglected himself, and his diabetic affection returned; the whole foot afterwards sphacelated, and the patient died. M. Marchal relates also a case, in the practice of M. Landouzy of Rheims, of sphacelus of the lower extremities occurring in a diabetic patient; and two other instances, under the care of M. Menestrel. One, a plethoric man, aged 60, had a patch of gangrene on the thigh and back, accompanied by much thirst and saccharine urine. The second patient had a large gangrenous patch on the back of the neck, also coincident with the presence of sugar in the renal secretion. M. Marchal considers that the presence of sugar in the blood induces an inflammatory condition of the lining membrane of the blood-vessels; and that this, in connexion with the low vitality which exists in such cases, induces the gangrenous tendency, which may lead either to furuncles or gangrene.

I could bring forward several other instances of gangrene occurring in subjects who have suffered from a saccharine condition of their urine: for example, Dr. Durand Fardel states, in his work on the *Vichy Waters*, that, of two instances of diabetic patients who have died under his charge at that place, the immediate cause of death in one was gangrene of the leg; and my friend Dr. Halley also informs me that he has lost two diabetic patients from the same affection. I have taken this opportunity of dwelling a little upon the point; for though, I doubt not, the fact is familiar to many, still I think that, up to the present time, the frequent occurrence of this secondary affection has scarcely been noticed by authors, and gangrene has seldom been looked upon as one of the immediate causes of death in diabetes.

Diabetic patients, although apparently enjoying pretty good health, and feeling tolerably strong, are usually unable to bear any sudden shock to the system, such as would probably be but little felt by those in health. The late Dr. Prout informed me that, during the course of his practice, he had more than once been summoned to see diabetic patients who had travelled some long distance to consult him, and had found them either dead or dying—in his opinion, the result of over fatigue. Not long since, a lady, a diabetic subject, whom I had seen professionally, suddenly died, apparently from over fatigue, produced by watching at the bedside of a relative. That such patients have but little power to resist the attacks of febrile or inflammatory diseases, I had a very striking proof a few years since. Two diabetic patients, a male and female, were in my hospital wards at the time when an epidemic of influenza was prevalent. The male patient, a man 38 years of age, had improved very much in health during his sojourn in the institution; had gained flesh, and lost most of the ordinary symptoms of the disease. His urine also had been reduced to about the average of 80 or 90 fluid ounces *per diem*, specific gravity 1031. One day he was seized with cold chills, slight sore throat, and redness of the tonsils and uvula. From this time he gradually became colder and colder, the respiration more and more difficult; and, in the course of a few days, he died, seemingly in the cold stage of a febrile attack, the system not possessing the power of reaction. At the *post mortem* examination nothing was discovered capable of explaining the cause of his sudden death; no other appearances, in fact, than those met with in other diabetics. A day or so after the seizure of the man, the female patient was attacked in a similar manner; the pulse became very rapid and almost imperceptible at the wrist; and it was only by the immediate administration of large amounts of ammonia, wine, and other stimulants that life was preserved. Many of the other patients in the same wards suffered from influenza, but exhibited simply the ordinary symptoms of that disease.

It will generally be found that patients with saccharine urine are ill able to bear injuries or surgical operations. The following case well illustrates the fact. A man, about 35 years of age, who had suffered from diabetes for several years, but in whom the disease had been kept, to a considerable degree, in abeyance, injured one of his toes from a tight boot or some such slight cause. Ulceration ensued, and, after a time, opened one of the phalangeal articulations; the toe was amputated, but the stump refused to heal, and in about three weeks the patient died from the supervention of a gangrenous form of erysipelas. Most surgeons would hesitate to perform operations upon diabetic patients unless there is great urgency in the case. One of the most common terminations, however, of diabetes is by the occurrence of phthisis; and it is the prevalent opinion that this secondary affection constitutes the immediate cause of death in the majority of cases. I am, however, disposed to question the correctness of this opinion, although, at the same time, willing to allow that very many die from tubercular consumption. In most of the cases where I have had an opportunity of making a *post mortem* examination tubercle has been present in the lungs; in some in its advanced stages, in others but little developed: some lungs, on the other hand, have been completely free. Numerous other causes of death in diabetic subjects have been mentioned by authors; for example, Dr. Prout has noticed hepatic affection with jaundice, apoplexy, over distension of the stomach by food, excessive in quantity or improper in quality, etc.; sometimes the patient becomes comatose, the urine suppressed, and death ensues with all the symptoms of uræmic poisoning.

There is one point connected with the supervention of secondary diseases in diabetes to which I would wish par-

ticularly to draw attention, as it is apt, if passed over unnoticed, to be a fruitful source of error. I allude to the alteration which the urine often undergoes during these affections; it is not very uncommon to find a complete absence of sugar, a sign often regarded as favourable, generally, indeed, as a proof of the efficacy of some particular mode of treatment which a patient is pursuing at the time, but which is in fact too frequently a symptom of some secondary disease which may speedily terminate in death. I could quote many instances illustrative of this; one or two, perhaps, may not be without interest.

A gentleman, about five years since, consulted me, having all the characteristic symptoms of diabetes; urine strongly saccharine; specific gravity 1040, etc. After a few months every trace of sugar suddenly disappeared; but this apparently good sign was only induced by the rapid supervention of phthisis, of which he soon died. Within the last two months I had a patient in the Hospital labouring under diabetes and phthisis in a somewhat advanced stage; and it was interesting to watch the increase and decrease of the diabetic symptoms (including the specific gravity of the urine), alternating in an inverse ratio with those of the tubercular affection.

Lastly, I may mention the case of a lady who had suffered from diabetes for many months, but whose urine became perfectly free from sugar during, and for a short time after, a mild attack of scarlatina. The importance, then, of the knowledge of the disappearance of sugar under these circumstances cannot be too firmly insisted upon.

Occasionally diabetes assumes an intermittent or recurrent form; the patients, for a time, more or less lengthened, losing all traces of sugar, and this principle again appearing in the urine. I have seen one or two cases of this form of disease; and Dr. Bence Jones has drawn particular attention to it. A very careful watching of such subjects would be exceedingly interesting, and might perhaps afford some clue to the nature of this disease, by the discovery of other phenomena which perhaps may arise at the time of the cessation of the saccharine matter from the urine. Patients who lose the sugar for a time from the occurrence of other detectable disease, cannot with propriety be considered as suffering from recurrent diabetes; the term should be confined to those cases in which it takes place without the presence of any such secondary affection. Now and then patients are found exhibiting sugar in their urine during full digestion, but not in the intervals; and these, if not absolutely diabetic, are yet probably on the brink of this affection, and liable to have it developed from slight exciting causes.

Lastly, diabetic patients *may* permanently recover. Several instances have been related; but those well authenticated are exceedingly few in number. I cannot say I have ever seen a diabetic patient, whom I have known to have been affected with the disease in a well marked degree, suffering, for example, from the thirst, dryness of skin, and great diuresis, *permanently* lose all traces of sugar from the urine. I have, however, been assured by patients that they were formerly diabetic, and I have been unable, after repeated examinations, to find sugar in their urine. In many of the slighter cases, where the urine has been distinctly saccharine, and the patients have experienced symptoms, doubtless arising from the morbid state of the blood, as the herpetic eruption, etc., I have seen the renal secretion become perfectly normal, and remain so as long as I have been able to keep the patients under my observation.

From what we have now shown of the liability of diabetic patients to be affected by the occurrence of secondary affections, by shocks and injuries of various kinds, and from what we have stated as to the rarity of their ever completely getting rid of the disease, I fear we cannot fail to regard the prognosis as anything but favourable: but at the same time I am convinced that in many instances life can be greatly prolonged, so as to enable the patient to reach at least a moderate old age. To effect this, however, the strictest attention must be paid to diet and regimen, and the avoiding of great mental exertion and over fatigue of body.

CAUSES OF DIABETES.

I am not aware that the cases which have fallen under my notice, in which I have been able to trace what appeared to have induced the affection, will throw any new light upon the etiology of this disease; still it will be of some importance to dwell a little on this part of the subject, as, when discussing the pathology of saccharine urine, the recent physiological discoveries as to the nature of glycogenesis may, perhaps, be in some degree, confirmed or refuted by such a study.

Dr. Prout believed that diabetes was much more frequently inherited than acquired; as far as my limited experience goes, I cannot acquiesce in this opinion. I have, indeed, known several instances in which more than one member of a family have suffered from the disease; but in by far the greater number of cases, I have seen no proof of any hereditary tendency: females appear to enjoy a greater exemption than males; but, as in gout, I should be disposed to consider this immunity due to the greater absence of powerful exciting causes: adults are, I believe, more subject to diabetes than children, although the latter are by no means exempt. With regard to temperament I can say little. As to other predisposing causes it seems to be a pretty well ascertained fact, that depressing agencies long continued, such as residence in cold, damp, and malarious districts, frequent excesses in alcoholic liquors, a poor and unwholesome diet, tend to induce the disease; but very commonly no such causes have been in operation, and the affection has come on suddenly in the midst of at least apparent good and robust health. The most commonly recognised *exciting* causes of diabetes may be divided into three classes:—

1st. Causes influencing particularly the skin.
2nd. Those affecting the nervous system.
3rd. Those influencing more particularly the mucous membrane of the alimentary canal, and the organs in connexion with this tube.

Among the first class may be mentioned, exposure to cold; drinking a large quantity of cold water when very warm; bathing when over-heated, and afterwards becoming chilled; attacks of rheumatism, and other febrile diseases, followed by exposure; the occurrence of boils, etc., but probably these last may be rather indications of already existing disease, than true causes of the affection. These form one class of exciting causes, and, perhaps, the most numerous: the majority of my hospital patients have assigned some one of these.

The second class of causes has, of late years, excited some interest, on account of recent physiological researches on the subject. Under this head are included cases in which injury to some portion of the nervous system has occurred, or where the patient has experienced some powerful mental shock, as sudden and intense grief, or extreme mental anxiety. A case has been related to me by a very intelligent person, in which saccharine diabetes was produced by prolonged anxiety and fear, arising from the following cause:—Two gentlemen fought a duel in Holland: after the first had fired he remained for some time in a state of suspense, from his adversary's pistol once or twice missing fire. He was uninjured, but, a day or so after, became diabetic. The narrator of this case was not a professional man, but appeared to be fully conversant with the subject. That diabetes occasionally follows diseases and injuries of the nervous system, in the relation of effect and cause, seems pretty certain. Epileptics sometimes die with diabetes: I have known one instance. I have also seen examples of saccharine urine accompanying great, apparently functional, disturbance of the nervous system; and there are on record numerous instances of a diabetic state being induced by injuries to the back, concussions of the brain, and fracture of the skull. I examined and discovered sugar in the urine of a boy, a patient of my colleague, Mr. Marshall, who had a fracture of the temporal bone, produced by a blow on the mastoid process, and in whom, after death, pus was found in the cochlea and in the canal of the seventh nerve. One of my hospital patients, with confirmed diabetes, received a very severe blow on the head shortly before noticing the symptoms of his disease; and many examples of the influence of injuries to this part of the body, producing a saccharine state of the urine, have been brought before the profession by Dr. Goolden. We shall shortly, when treating of the pathology of this disease, detail experiments having a considerable bearing on the subject.

A third class of causes, of which, at present, little is known, consists in the introduction of irritating matters, as alcoholic fluids, indigestible food, etc., into the stomach. An excessive debauch has been followed by the disease; drinking large amounts of cider, or other diuretic fluids, have been stated to have produced the same result. A gentleman, well versed in such subjects, informs me, that he can produce, and has more than once produced saccharine urine in his own person by eating very indigestible substances, and that such a state has lasted some days. An exclusively vegetable diet has been asserted to have caused diabetes; and the case is related of a priest, at a convent in the south of France, where the diet is of this character, having acquired the disease. A case is also related of

nitre, taken in a very large dose in lieu of Epsom salts, causing great diuresis and mellituria, after the symptoms of irritant poisoning had passed off. In lower animals we shall also find that the introduction of alcoholic and other irritants into the duodenum, or portal vessels, is followed by a saccharine condition of the urine.

Lastly, it is affirmed, that the administration of certain remedies, as arsenic and quinine, produces, at times, a temporary impregnation of the urine with saccharine matter. Although the causes included under the third head may occasionally operate in inducing the affection, yet they by no means necessarily cause it; otherwise we should find diabetes a much more frequent disease than it actually is. With regard to the whole subject of the etiology of diabetes, and of our knowledge of the causes which will temporarily produce a saccharine state of the urine, many and more accurately ascertained data are required than we at present possess.

[*To be continued.*]

Reviews and Notices.

On the Pathology, Symptoms, and Treatment of Ulcer of the Stomach. With an Appendix of Cases. By William Brinton, M.D., Fellow of the Royal College of Physicians; Physician to the Royal Free Hospital; etc. pp. 227. London: Churchill. 1857.

Among the several works which have in recent years been written on the diseases of the stomach, that of Dr. Brinton, though confined to the consideration of a special lesion, possesses a high value; inasmuch as it contains evidence that the author has laboured with much industry and a good share of success at the elucidation of the somewhat obscure subject of his investigations. We speak with limitation as to the absolute success of Dr. Brinton's researches; but in this we do no more than the author himself, who candidly admits "how much we have yet to learn respecting even the more obvious pathological indications of this important malady." The manner, however, in which Dr. Brinton has performed that which has been done, shews him to be competent for the performance of what remains to be done.

In his treatise, the author arranges his remarks under three heads:—1. Pathology; 2. Symptoms; and 3. Treatment. An appendix contains the histories of ten cases, "reprinted, with little change, from the Association Journal." We note with satisfaction, *en passant*, that these cases "are intended to illustrate the more common (and therefore important) varieties of the malady." The recognition of the importance of *common* cases shews Dr. Brinton's good sense; and it would be better if this principle were much more generally recognised.

In the first part—that on Pathology—Dr. Brinton gives a large amount of valuable statistical information regarding the frequency of ulcer of the stomach, as well as of perforation and hæmorrhage, the age at which and the sex in which it most commonly occurs; and also particulars as to its size, shape, number, margin, base, depth, etc., of gastric ulcer, and its combination with cancer, tubercle, and other diseases.

In the second part, the author has derived his information regarding the symptoms of ulcer of the stomach from two sources, viz.:—"1. The records of several hundreds of cases, affording in many instances little more than an outline of the chief symptoms present, but always verified by careful necropsy. 2. The personal study of about one hundred and fifty cases, affording minute details respecting symptoms, but only verified by necropsy in a small proportion of that number."

Of the succession of symptoms in a typical case, Dr. Brinton gives the following outline:—

"The malady is announced by disturbances of gastric digestion: at first, mere uneasiness and pain in the epigastrium; then nausea and vomiting, or regurgitation, which expel the food previously taken, or a tasteless or acid watery secretion. At this stage of the disease, it is sometimes cut short by the occurrence of perforation, with its sequel of fatal peritonitis. Failing such an accident, the dyspeptic symptoms are next complicated by hæmorrhage from the stomach; sometimes a sudden and dangerous gush, oftener a slow and intermittent drain, of blood. The anæmia produced by this hæmorrhage is generally associated with a cachexia which seems to be essentially independent of it; being chiefly the result of the inanition necessarily implied by frequent vomiting of the food, or by large destruction of the gastric mucous membrane, and consequent impairment of its function. In young females, another symptom is often present, in the form of more or less complete amenorrhœa, which may be associated with either of these two states of anæmia or cachexia; in other words, may be connected with ulceration, with hæmorrhage, or with both.

"The gradual acquisition of all these symptoms conducts the disease, in a variable period of time, to a climax, from whence we may next briefly trace it towards its termination. Retaining the liabilities to death by perforation, by hæmorrhage, by vomiting, and by exhaustion, which the above organic results of ulceration severally imply, the lesion often ends by one of these modes of dying, or by two or more of them in combination. In other cases, a spontaneous subsidence of these symptoms, in something like the inverse order of their occurrence, announces a recovery; or a similar amendment is only effected by careful medical treatment, such as quite entitles us to dignify it by the name of a cure. In less numerous instances, these symptoms continue with what is (for obvious reasons) rarely more than a moderate intensity, during a variable period of life; in the course of which their uniformity is from time to time varied by considerable fluctuations of severity. The remissions which form one extreme of such fluctuations sometimes merge into intermissions so complete, that we are left in doubt whether the process of ulceration has been merely reduced to a stand-still, or has broken out afresh after the cicatrisation of the lesion. In any case, the protraction of these symptoms during many years of life gradually complicates the impairment of nutrition they produce, with that naturally resulting from the approach of old age; mingled with which they then constitute an indirect or conditionating cause of death, the influence of which it seems scarcely possible to estimate with any exactness." (pp. 60-2.)

But the symptoms vary much in different cases; and hence they each demand careful examination. The phenomena of pain, vomiting, hæmorrhage, constipation, diarrhœa (a comparatively rare symptom), amenorrhœa, cachexia, perforation, and ampliation, or enlargement of the stomach as a result of the constriction produced by a cicatrix, are therefore fully and ably discussed in all their varieties.

One of the statistical facts referred to in the first part of the work is the frequency with which perforating gastric ulcer occurs in females, especially in the six years between fourteen and twenty. This remarkable liability to perforation at this period of female life—a fact first established, as Dr. Brinton acknowledges in complimentary terms, by the industry of Dr. Crisp—naturally leads to the inquiry whether it has any relation with the physiological phenomena of the female system. The existence of any such relation is, as Dr. Brinton observes, very problematical.

"Not only do the proportions of older females, and of males, who succumb to this accident, afford abundant evidence that it is essentially independent of any such cause, but the circumstances of many of these cases (occurring in young females) themselves are such as inculcate great caution in coming to any definite conclusion on their causation. Some of them are expressly mentioned as not having arrived at puberty: others are recorded to have menstruated regularly, and even profusely: and finally, one of the most characteristic instances occurred in a person who, though supposed to be a female, was proved by a careful necropsy to be devoid of ovaries. And whatever the relations which the various symptoms of such cases bear to each other, or however expedient it may be to regard these, with their age and sex, and their liability to perforation, as constituting them a special group, there can be no doubt that we know nothing at present which would justify us in regarding them as pathologically distinct from others. On the contrary, there is every reason to affirm, that in a large number of the females who became the subject of the lesion at this epoch of life, it has precisely the same origin, course, termination, and

appearances, as the gastric ulcer of any other person, old or young, male or female." (pp. 32-3.)

After some further remarks on the etiology and diagnosis of gastric ulcer, the author proceeds to speak of the treatment. From among the valuable matter contained in this part of the book, we will extract the author's observations on the use of opium in cases of gastric ulcer.

"Respecting the operation of this drug in gastric ulcer, I might say much that would be both interesting and true, but nothing that would include those elements of accurate physico-chemical research on which alone a conscientious physician ought to base his theory of the action of this or any other medicine. As regards mere facts, I am quite certain that, though the pain often present in these cases is of course an additional indication for the use of opium, yet it is by no means the chief (far less the only) guide to its administration. It is not as an anodyne, not even as a sedative, that opium seems to be most useful. On the contrary, my experience would lead me to conclude, that it is especially in ulcers of long duration, of large size, of obstinate character, and in broken exhausted constitutions, that this invaluable remedy comes most fully into play: and that the condition these circumstances presuppose being present, its use is not one whit less advantageous, even though the habitual pain is but trifling, or though (far from having to replace the customary alcohol of the drunkard) it is prescribed for a patient who has been always of temperate (or even abstemious) habits.

"In short, I am anxious specially to urge upon the profession the importance of giving opium in this dangerous and frequent disease, with just the same views as those with which I suspect it has long been employed in phthisis, or (a still more apt illustration) in diabetes. To relieve this or that pain, to check great irritation or undue secretion of this or that mucous membrane, supposing such symptoms to be present. But to support the strength, to buoy up the nervous system, and to check the waste or expenditure of the tissues generally, whether the above local symptoms are present or no. That it is thus opium aids to heal a gastric ulcer, I can scarcely doubt. And that, in this way, the same drug which diminishes the saccharine constituent of a diabetic patient's urine, may also check that destructive absorption which a gastric ulcer expresses and measures, is quite in accordance with all that we know respecting its power of lessening bodily waste.

"But I am more anxious to state the fact of its usefulness in combating this lesion, than to explain the principle upon which it does so. It is, therefore, with very great pleasure that I have found my own experience of its efficacy in ulcer of the stomach confirmed by the statements of other observers with respect to its uses in ulcer of other parts of the body. The reader may take the analogy of the two classes of ulcerative lesion at what it is worth; and may estimate at a higher or lower rate that remarkable parallelism which the pathological details I have established respecting gastric ulcer exhibit with those of the ordinary ulcer of the leg, as shown by Mr. Critchett's able treatise. But should he be disposed to think favourably of statements founded on such wide research as mine have been, he will probably hardly fail to be struck by their perfect agreement with the independent results of a better authority in the treatment of a kindred disease. Allowing for the situation of the lesion, and for a variety of details which that situation chiefly dictates, there is hardly any difference between the opinion I have come to respecting the efficacy of opium in ulcer of the stomach, and that which has been so clearly and happily put before the profession by Mr. Skey, as the result of his large hospital practice, with respect to its benefits in ulcers of the limbs.

"As regards the mode of administering opium, where vomiting is moderate, or where diarrhœa is prominent, the compound kino powder is a very convenient formula. But when vomiting is at all excessive, or resists a combination of this powder with bismuth, the drug is generally better borne in the solid form; either as a small pill of the watery extract, or a few grains of the compound soap or styrax pill, two or three times a day. The effect of opium given in this way seems to be often quite as striking as in ordinary ulcers of the leg.

"For the same elderly or intemperate class in which opium is so generally beneficial, other sedatives will occasionally afford similar (though less marked) results. Hyoscyamus, conium, belladonna, and other extracts of this kind, are thus sometimes beneficial, though I have rarely had occasion to resort to them. The extract of hemp sometimes answers admirably; indeed, were its effects more uniform, it might often be advantageously substituted for opium itself." (pp. 142-6.)

We have derived much instruction from Dr. Brinton's work on *Ulcer of the Stomach*, and shall look forward with pleasure to future communications with its author.

British Medical Journal.

SATURDAY, APRIL 18TH, 1857.

THE RECENT TRIAL OF ALFRED MATCHAM FOR MANSLAUGHTER.

The recent trial of Alfred Matcham, at Bury St. Edmunds, before the Chief Baron, for the manslaughter of Mary Ann Jeckells, at Lowestoft, affords another striking proof of the necessity for some fundamental reform in our profession.

Here is a person possessing, or affirming that he possesses, a diploma from the College of New York, after having studied under a physician in that city. Although he has no legal qualification to practise in this country, he succeeds in obtaining an extensive midwifery connexion, together with a considerable amount of popularity, as evidenced by the sympathy shown towards him subsequently amongst a certain class of the inhabitants of a provincial town. It is only natural, under the circumstances, that he should not be recognised by the resident regularly qualified practitioners. Such a person is not likely to have an uninterrupted path of prosperity before him, for sooner or later the time will come when he will really stand in need of the advice and assistance of one or other of his professional opponents. However confident and self-satisfied he may be whilst all goes on smoothly, he must feel perplexed and anxious when the difficult case—the case in which the counsel, the sanction, or the hand of the experienced auxiliary is invaluable—falls to his lot. But, in such a strait, what is he to do? From his isolated position he is obliged to act, and perhaps rashly, on his own responsibility, inasmuch as he probably knows too well, that not only would he fail to obtain competent assistance at his own request, but that no one would meet him in consultation at the request of the patient. Ought such a state of things to exist? Ought any man to have the opportunity of attaining such a responsible and, at the same time, professionally friendless position? Ought the life of any poor woman to be endangered, to say the least of it, by an unqualified man refusing to allow another doctor to be called in, because he knows that such a step must lead to himself being turned out? A case has terminated unfortunately; an inquest has been held; a verdict of manslaughter has been returned; and the prisoner has been committed for trial. The first thing that strikes us is the charge of the judge to the grand jury, and certainly nothing could have been more just and liberal than his lordship's observations on the relative position of the medical man to his patient; but then the accused was treated as a legally qualified practitioner. So, in summing up, his lordship remarks, "In a case of this kind, the jury would inflict a great injury on society if they did not start with something more than a presumption of the innocence of the accused; if he were properly educated; and did not obtrude himself by

a pretence of learning he had never acquired; if he were what he professed to be, a student of medicine, admitted somewhere."

Now, may we not fairly ask, what constitutes a properly educated man? Does the mere affirmation of having studied under a physician of New York answer the question? Does not a man obtrude himself, by a pretence of learning he has never acquired, when he proceeds to deliver a woman with instruments that slip, to say the least of it, twice, and then has recourse to a spoon, the patient, during the operation, exclaiming, "Oh, sir, you are hurting me! you appear as if you were pulling me to pieces!" Does the evidence of wounds, one of them two inches long, of the walls of the passage, as displayed at the *post mortem* examination, and deposed to by three respectable qualified witnesses, solve the question? Was the accused in this case really what he professed to be, viz., the holder of a diploma from the college of New York, and if so, why was it not produced?

Were not these questions fair ones for the consideration of the jury? But according to the present state of the law, *the possession of a diploma is a matter of little or no importance.* The counsel for the prosecution is obliged to pass this point over: "If a man undertakes to act as a physician, he is bound to bring to his case all reasonable and proper skill. If he undertakes to act without a diploma, he ought, perhaps, to be more cautious than one duly qualified." Now, who is not able to see, by a glance at these words, how the case stands? Any ignorant pretender is at liberty to perform operations or administer drugs, from month to month and year to year; he may maim or disfigure for life, it may be, the mother of a young family; or, from his want of scientific medical knowledge, he may let acute disease go on, unchecked, which shall convert the strong man—the staff of the house—into the chronic and burdensome invalid, or hurry him to a premature grave. If the victims themselves of these horrors be but satisfied that all reasonable and proper skill has been brought to their case, the law does not interfere. If death close the scene unexpectedly, and a coroner's inquest end in a verdict of manslaughter, it will be exceedingly doubtful if the judge at the trial will not discover there has been a want of fair play towards the accused, or that the evidence of the cause of death is defective; and so the jury will find that "they are not in a situation to judge whether want of skill was displayed or not, or whether the death were attributable to anything else, and if so, then *the prisoner's want of skill is of no importance whatever*," and their verdict is therefore, *Not Guilty.*

But now let us look at some of the points more immediately connected with the case under consideration. The counsel for the prosecution raised the question, "that the defendant was entirely mistaken in supposing that the pains, with which the deceased was affected at this time (the end of seven months), were labour pains at all." This position is untenable. Is it likely that any one, who had attended many cases of midwifery, would, after watching a case closely for some days, be unable to know whether labour had really set in or not? Or is there anything remarkable in labour coming on at the end of seven months? The pains were thought by Mr. Image to be spurious; but why were they not the pains of the first stage of labour—at all events, those pains that were described as intermittent, and which prevailed for forty hours before the birth of the child? It is only justice to state, that Matcham does not appear to have used the instruments before the os uteri was dilated; for, whilst he was using the spoon, the child was born. The following is a more important question:—Was it right to use any instrument for the delivery of a seven months child, in a woman who had previously given birth to four children at term? As a rule, the answer would undoubtedly be in the negative; although it is quite possible that, in extreme cases, circumstances might occur that would render instrumental aid justifiable.

In the defence of the case, great stress was laid upon the charge of professional jealousy. We are asked to believe that a respectable member of the profession, who has had the leading practice of the town and neighbourhood for nearly thirty years, could "instigate and foment proceedings" against a man to whom, perhaps, he had never spoken,—proceedings that would, in all probability, ruin him, and this not upon the deliberate conviction, that he was doing a duty to society, but from the miserable motive of jealousy? The statement of Mr. Worthington is a satisfactory answer to this charge: "His practice is with a different class of people to mine." Again, it is said,—and this is a matter of consequence, as the learned judge endorses the opinion,—that Mr. Worthington ought to have communicated with the accused, and given him notice of the proceedings; that he ought to have invited him to be present at the opening of the body. Now if the accused had been legally qualified, he or his representative ought certainly to have been present at the *post mortem* examination; but probably Mr. Worthington was not aware, at the time, that Matcham was even possessed of a diploma from the College of New York.

As regards the medical evidence for the prosecution, it must be confessed, that the cause of death is not conclusively established. A more searching examination of the body ought, undoubtedly, to have been made; the kidneys especially, independently of the previous history of the case, should have been carefully examined. How such important organs were overlooked, we cannot understand; and we think every pathologist will admit, that Dr. Webb's attempt to supply the defect in the evidence, by stating, that they appeared healthy, as viewed *in situ*, had better have been omitted. Of this we feel assured, that the examination of them was not purposely neglected. One cannot help regretting, that the character of the injuries to the passage was not more minutely detailed. What was the condition of the wounds? were they sloughing? What was the depth of them? Were they completely through the walls of the vagina, as stated by the counsel for the prosecution? Again, What did the tympanitic state of the abdomen indicate, as deposed to by Mr. Worthington, on his first visit to the patient? Mr. Worthington distinctly states in his evidence, that there was no inflammation (peritonitis). As to the mode in which the injuries to the vagina were inflicted, there seems to have been a difference of opinion. Mr. Worthington at first thought they were produced by the spoon, but afterwards considered they were caused by the "plunging" or "thrusts" of the forceps. If the latter opinion be correct, there must have been great violence used. One can conceive that, if the soft parts were locked in between the blades, and traction were made, the patient might utter such exclamations as she is said to have done. At the same time, the forcible introduction of the instruments might give rise to the same feelings in the

patient, and more satisfactorily account for the injuries discovered after death.

There are several other points for consideration; but we must defer that duty to a future opportunity.

THE FINANCIAL REPORT OF THE ASSOCIATION AND "THE MEDICAL TIMES AND GAZETTE".

The publication of an Annual Financial Report of the affairs of the Association forms a necessary portion of the duties of the Committee of Council. Our contemporary, the *Medical Times and Gazette*, with that amiable spirit which should characterise the bearing of one journal towards another embarked in a similar scientific purpose, never fails to make this Report the foundation for an attack upon this paper. It devotes itself once a year to prove, in short, that the Association is entirely in error by having a Journal at all, and that it had far better transfer its 2,100 subscribers at once to its own list. As the *Medical Times and Gazette* is a purely trading journal, this system of attack is all fair enough; but if it would condescend to take our advice, it would pursue its tactics a little less clumsily. The ostrich, as we are informed by travellers, sticks its head in a bush when pursued by the hunter, and thinks that because it cannot see that it cannot be seen: we can assure our contemporary that everybody can see the philanthropy and purity of purpose which dictate his attacks upon the existence of this Journal. We need scarcely say that the weekly Journal of the Association is the rivet which keeps the Association together. Of course we do not refer to our own editorial exertions, but simply to the fact that in the Journal, as in a mirror, our two thousand and odd associates see each other, interchange opinions, learn what is going on, and see reflected, not only the metropolitan, but the provincial practice of the empire. The vast majority of the Association are agreed upon this point; and we can afford to allow our contemporary to entertain a different opinion, taking his motives into due consideration. One thing we cannot afford to see him do uncorrected, however, and that is to misstate entirely the figures of the Annual Report. It seems to be his aim to prove that the entire receipts of the Association are absorbed in the production of the Journal. To wit:

"Out of £2040 : 13 : 1 expended in 1856, it appears that the whole was on the Journal account, with the exception of £50 reform committee, £12 circulars for special meetings, and £31 : 5 : 2 for sundries—or £93 : 5 : 2 in all!" Anyone who knows anything about the Association at all knows that this is an entire mistake. Why, the salary of the Secretary alone is more than the sum thus set forth as comprising the whole items devoted to the purposes of the Association. It would be under, rather than overrating the matter, to state that the machinery of the Association, even if no Journal existed, would cost upwards of £300 annually. Our contemporary again, more ingeniously than ingenuously, states that "the expenses of the Journal for the year have been £2475 : 7 : 9, while the actual receipts for subscriptions due in 1856 were only £1565 : 1 : 6." How the former sum has been arrived at our contemporary alone can tell. We, who ought to be acquainted with the Journal expenses, know that all its liabilities are covered by £2100 a-year. It is a more simple matter to discover the manner in which our contemporary endeavours to convey an idea of our having very inadequate receipts; it is by merely omitting an item of £600 a-year for advertisements, and by saying nothing about outstanding subscriptions—a singular example of what is familiarly known as "cooking an account," and very bad cooking too. Having thus contemptuously disregarded Mr. Cocker, he proceeds to draw the inference so comforatble to himself, that "The British Medical Association is *clearly therefore (!)* an association whose income is almost entirely devoted to the support of a weekly medical journal."

This is the view of the *Medical Times and Gazette*. Now our own view is somewhat different. It appears to us that the whole machinery of an extensive Association spread over the superficies of these islands, together with the publication and postage of a weekly journal, which we flatter ourselves is not inferior to our contemporary, are conducted at an expense to each member *actually of nine shillings and fourpence a year less than the annual subscription to his journal alone*. It is an old saying that those who live in glass houses should not throw stones; and as our contemporary so persistently assails this Journal, and contends that there is no necessity for its existence, we may be permitted to ask whether it is to the interest of the profession, and especially of the authors of the profession, to support a journal whose proprietor is one of the chief publishers of medical literature.

To return, however, to the report itself, we may congratulate the associates on the fact that in one year our debts have been reduced from £1,312 : 17 : 6 to £475 : 11 : 7, or by no less a sum than £837 : 5 : 11. As upwards of £500 of the Call Fund has not yet been paid, but is still coming slowly in, we may expect to see the balance still further reduced, independently of the aid received from the increase of the advertisements, which, our associates must perceive, have of late greatly improved. If we are not quite out of the wood yet, we can see the light between the branches, and shall, we believe, soon stand once again on the "open".

THE WEEK.

Our contemporary, the *Medical Times and Gazette*, does not appear to agree with a position which he gratuitously assumes we have taken up with regard to the Army Medical Department and the Medical Officers of the Army. He accuses us of having made an unnecessary "onslaught" on innocent officials, and of having unfairly traduced the services of military surgeons. "It is a pity our contemporary had not studied the past history of the department," rather condescendingly remarks our contemporary. We can only say, that it is a still greater pity that he has not read correctly the very "onslaught" he condemns. It never entered our minds to cast the slightest blame upon any member of the Army Medical Department. We have over and over again stated, that they have all done their duty manfully; but we complain that no ability, however splendid, can have fair play in the present dependent position of the Army Medical Department. We possess a machinery consisting of a Director-General, and of Inspectors of Hospitals of different classes; they make reports very admirably, and, no doubt, with great punctuality; but what comes of them? Nothing. It is an elaborate machinery which illustrates admirably Dickens's scheme of "How not to do it." We can assure our contemporary that we have not hammered

at this subject, week after week, without a full knowledge of the past history of the Medical Department of the Army. We were perfectly well aware that, in 1810, the Old Board, which once formed this department, was abolished: we stated so in a late article. But such a Board! consisting of "an ignorant and corrupt trio; composed of a successful apothecary from Weymouth, and two gentlemen, who knew nothing of soldiers or their diseases but what they saw of the Guards in Hyde Park." Such is the history of the last Board, and little wonder that it was cast to the winds. But is there any reason that the abuse of a good plan should be urged against the plan itself? We want no ignorant pretenders constituted into a Board, but three of the best men that can be fouud,—a Bright, a Brodie, and a Dr. Farr, to preside over the health and physical efficiency of 150,000 of our fighting men. Our contemporary further complains, that we have not sufficiently shown that the ameliorations which have already taken place in the army were the results of the suggestions of members of the Medical Department. No doubt Inspector-generals have made admirable reports; but it is only by the accident of their having fallen into the hands of such determined friends of the soldier as Lord Metcalfe and Earl Grey that these are, under the present system, attended to. We do not think that the welfare of the British soldier should depend upon any such *accident*. The Medical Department of the Army should be sufficiently powerful to make itself attended to, irrespective of any great patron whatever. Our contemporary must be aware, as well as ourselves, that sweeping Reforms are in contemplation with respect to the Medical Department of the Army, and his aim must be the same as our own,—to see that department placed in a much more independent position than it at present occupies; and also, to see that its scientific direction should be of the highest order to be found in the country. That is not possible to find in any single individual such a powerful direction, must be clear; hence our advising of a Board of three thoroughly able men, each distinguished in the three departments necessary for the due care of our military establishments.

The Foreign Correspondent of the *Times* of Wednesday makes the following announcement: "Dr. Wagner, the private physician of Prince Frederick Wilhelm of Prussia, has been summoned to England to be present at the Queen's approaching confinement." As no mention is made in the bulletins of the happy accouchement of Her Majesty, signed by Drs. Sir J. Clark, Locock, and Fergusson, of Dr. Wagner's name, we must, we suppose, conclude that these distinguished physicians did not need the advice of Prince Frederick's private physician. Of course the invitation of such a foreigner would have been an insult to Her Majesty's physicians, and the idea could only have originated in the mind of a newspaper correspondent: at the same time it is an indication of the Prussian belief that their *savans* will, under the royal patronage, find comfortable quarters in this country.

Dr. Headlam Greenhow has addressed a letter to the Right Honourable the President of the Board of Health, on the subject of the apprehended murrain among cattle. He states that the disease recently or at present prevailing in Holstein and the adjoining countries is the "pulmonary murrain"; and that this disease has already proved destructive to cattle in Great Britain and Ireland during the last fifteen or sixteen years. As it is, he says, as prevalent here as on the continent, no danger exists to our cattle from the importation of foreign cattle suffering from the disease. At the same time, all animals suffering from any serious disease that arrive from abroad are detained by the Inspectors of the Board of Customs, and their bodies are destroyed, if utterly unfit for human food. Besides the pulmonary murrain, Dr. Greenhow refers to a different and more contagious and fatal disease—the "steppe murrain". This is spontaneously developed only in the countries of Southern Russia, where it is never absent, and whence it often spreads by contagion into Poland, and sometimes into Prussia and Austria. Stringent measures are employed in Russia, Prussia, and Austria, for preventing the extension of the disease; diseased cattle being killed, and the importation of them, or of any part of them, being prohibited. This disease having appeared to have reached places in the vicinity of the Prussian frontier, Her Majesty's Government has prohibited the importation from the Baltic provinces of any article likely to introduce the infection into this country.

The Guardians of the West Derby Union, near Liverpool, appear to have a most exalted opinion of the capability of the medical officer of their workhouse to do an unlimited quantity of work in the way of attending to the sick. When that gentleman—Dr. Birkbeck Nevins—undertook the duties of his office, several years ago, there were 45 beds; and now the number amounts to above 250. His salary has been raised from £50 to £120. The salary, however, is not the point on which Dr. Nevins insists in his remonstrances to the Board of Guardians, and to the magistrates of the Hundred of West Derby. He represents that—

"For the entire attendance upon the 250 sick he is responsible, and without assistance; and not only so, but also for dispensing all the medicines they require—for the whole hygienic direction of the workhouse, and for a weekly return of the dietary of all the sick; which latter duties always make a great demand upon his time."

From this amount of work—far too great for any one man to perform—Dr. Nevins begs to be relieved, by having proper assistance granted to him; but it appears that his request is met by contemptuous refusal on the part of the guardians. They did, indeed, lately allow him a dispenser, but on such conditions that the person engaged left in disgust at the end of the first day. Further, according to frequent custom, an attempt is made to charge Dr. Nevins with neglect to the poor. This charge he replies to by the following striking exposure of mismanagement.

"It is not long since the visiting committee desired me to report upon the great number of cases of ophthalmia in the house; and the prevalence of this disease was a special subject of inquiry by Mr. Mainwaring, the assistant commissioner of the Poor-Law Board, during his recent visit. I have brought before the Board—until it is weary of hearing, and I am weary of making them—representations upon the state of the children's playground in the workhouse. There are 204 boys and girls, besides infants; and there is not the slightest protection for them from the weather when not in school, except the stone steps leading to the sick wards. Rain or frost, hail or thaw, they are exposed without shelter to the weather; and, with melting snow thick upon the ground, they have been throughout the winter in the exposed yards, or else crouching beneath the steps alluded to, for such protection as they afforded; and the consequence has been, that a very large number of children at a time have been confined to the sick wards with ulcerated frost-bites, and there has been an amount of ophthalmia which has appeared strange to the Board. And now what has the Board done in consequence of my representations on this subject?"

Reports of Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, February 17th, 1857.

Thomas Watson, M.D., President, in the Chair.

ULCERATION OF ONE KIDNEY, SLOUGHING OF THE BLADDER, AND FISTULOUS OPENING FROM THE BLADDER INTO THE RECTUM. BY C. BROOKE, ESQ.

The subject of this disease, a middle-aged man, was admitted, under the care of Mr. Brooke, into the Westminster Hospital, with extensive extravasation of urine, which had existed for four days previously. The distention was freely relieved by incisions, and the scrotum was saved; but the integument of the perinæum appeared to have almost lost its vitality, and a large portion subsequently sloughed; after which the urine escaped freely from an orifice at the bottom of the wound. A small catheter was introduced and retained, through which the urine flowed, and was occasionally ejected per saltum. Nevertheless, the catheter could not be satisfactorily passed into the bladder; the point probably hitched in the vesical orifice of the fistulous canal, which appears to be of long standing. The patient stated that no instrument had been passed for four years, and for some years previously one of very small size only. The fistulous communication with the rectum was inferred from the passage of some apparently vesical mucus per anum. The patient sank from exhaustion. The slough contiguous to the neck of the bladder probably comprises the strictured portion of the urethra. There was also a very much constricted congenital phymosis.

DISEASE OF THE AORTA; ANEURISMS; FIBRINOUS CLOTS IN THE ARTERIA INNOMINATA AND THE LEFT CEREBRAL ARTERY. BY W. O. MARKHAM, M.D.

L. S., a female, aged 50, had long suffered from shortness of breath and palpitations: latterly, also, and especially in cold weather, she had been troubled with attacks of faintness and giddiness. The difficulty of respiration increasing, she sought relief at St. Mary's Hospital, on Feb. 4, 1857. At this time the breathing was much impeded, her face livid, and the cervical veins swollen, and no pulse was perceptible at the right wrist. Shortly after her admission, she was found lying in bed insensible, her right arm and leg entirely paralysed, the pupils of the eye immovable and contracted; no pulse could be felt at the right wrist, nor in the vessels on the right side of the head and neck; a diastaltic murmur was heard over the sternum. She lay in this state, the difficulty of breathing gradually increasing, for sixty hours, when she died.

A large amount of serum was found in both pleuræ, the lungs much congested, and in parts compressed. The pericardium was everywhere adherent by old and organised attachments. The heart was larger than natural; the aortic valves, somewhat thickened and retracted, were incompetent; the arch of the aorta was much diseased, exhibiting everywhere at its internal surface the signs of fibroid and atheromatous degenerations. One small aneurism was found at the left side of the aorta, immediately above the left valve; two small aneurisms also existed on the right side, above the semi-lunar valve; the larger, about as big as a pigeon's egg, pressed upon the right auricle and also on the vena cava descendens, so as to have much diminished its size. The arteria innominata was completely closed by a firm fibrinous clot, closely adhering to its walls; a clot also reached up the whole common right carotid. The opening of the left carotid artery was contracted to one-fourth of its proper size, by hard fibroid deposit beneath its inner membrane. The brain was congested; its ventricles contained much serum; the left internal carotid, after leaving the sella Turcica and left middle cerebral artery, was closed by a firm red clot of blood; the left corpus striatum and parts around, supplied by the artery, were much softened.

This case seemed to demonstrate, that the arrest of the circulation of blood through the innominata had produced no marked changes either in the locomotion or sensation of the individual (for, *before* the paralysis came on, no pulse could be felt at the right wrist), and that life was carried on for sixty hours solely by the blood which was conveyed to the brain through the left vertebral artery. The paralysis, it might be presumed, occurred at the moment the clot was formed in the left internal carotid. The cause of the formation of the fibrinous clots in this artery, and in the innominata, was hypothetical; but it might fairly be suggested, that the clots were in some way connected with the aneurismal fibrinous layers; the openings of the aneurisms were large, and thus broken down bits of fibrine might have readily escaped, and been carried along by the current of blood into the arteries, blocking them up, after the manner described by Dr. Kirkes. That no return of sensibility or movement took place after the paralysis might, of course, be attributed to the circumstance, that no blood could pass to the brain through the right carotid, and thereby in part compensate for the cutting off the blood by the clot in the left carotid.

PARTIAL DISLOCATION OF THE LOWER JAW. BY W. OLIVER CHALK, ESQ.

The accident occurred in J. S., a female, aged 37. By the constant and long continued pressure of an enlarged tongue, the condyles of the maxilla inferior had been partially luxated from the glenoid cavities, so that this bone had been carried obliquely downwards and forwards, projecting nearly an inch beyond the superior, and forming a prominence beneath the chin. The tongue, which undergoes considerable variation in form and size, being at times so swollen as to protrude from the mouth, was, when measured, three inches in width by three-quarters of an inch in thickness; it was deeply indented by the teeth of the upper jaw. Mastication was exceedingly difficult, her speech was impaired, and she suffered from severe facial pains in the vicinity of the articulating surfaces of the jaw. The preceding case was interesting, inasmuch as it afforded an additional proof to that already given by Mr. C. Vasey of the effects of slow and continued pressure of the tongue on the lower jaw. The cases, however, differed, inasmuch as in the instance cited by that gentleman, the protrusion was caused by the cicatrix of a burn on the neck and chest, together with an altered condition of the alveolar processes; whilst in this it was the result of partial luxation without any alteration whatever in the osseous structure.

Editor's Letter Box.

SULPHUR USED EXTERNALLY IN RHEUMATISM.

Letter from Henry W. Fuller, M.D.

Sir,—In your last week's Journal is a letter from Dr. O'Connor, charging me with claiming originality in the practice of applying sulphur externally in rheumatism, and stating that I not only derived my knowledge of it from him, but had actually written to him so lately as March 1856, begging him to give me information on the subject.

The facts of the case are simply these. In the evening of February 25th, 1854, I chanced to meet Dr. O'Connor in the street close to my own residence. He told me that he was returning home from a meeting of the Medical Society of London, at which a paper on Sciatica had been read by Mr. Hancock. I therefore expressed regret at having been unable to attend the meeting, on the ground that I should have liked to submit to the Society the details of a method of treatment (viz., the external use of sulphur) which, to me at least, was new, and on which I was desirous of obtaining information. I then related how a patient, who was admitted under my care at St. George's Hospital in May 1853, had first directed my attention to the remedy, and how successful it had proved in my hands. In reply, he stated that the treatment was not new; that he had long since employed it in every form of rheumatism, and had that very evening described its virtues in his speech at the Medical Society of London; and that certain physicians at Edinburgh and Dublin had actually written and published on the subject.

So the matter rested until I was about to publish the second edition of my work on *Rheumatism, Rheumatic Gout, and Sciatica*, when, being anxious to consult the writings which Dr. O'Connor had referred to, with the view of obtaining additional authority for the practice, and recording all that was known on the subject, I addressed a polite note to him (the note alluded to in his letter), begging him to favour me with a reference to the works to which he had made allusion at our interview. That note—the only one I ever wrote to him—Dr. O'Connor had not the courtesy either to acknowledge or to answer; and now, by the publication of his letter, I am apprised, for the first time, of his having received it!

Having proved unsuccessful in my search for the writings, if any such exist, alluded to by Dr. O'Connor, and having failed

to obtain from him any reference to them, I found myself obliged to state, as I have done in the second edition of my work, p. 456, that "in no recognised treatise with which I am acquainted do I find the slightest notice of the curative action of sulphur applied externally in the way I recommend", and that "I am indebted to one of my hospital patients for directing my attention to the subject". But, so far from claiming any originality in the matter, I stated on the same page that, "in many parts of England, the sulphur ointment of the Pharmacopœia is a favourite remedy among the poor for the cure of rheumatism, whether affecting the joints or other parts of the body; and that brief notices of its virtues, when thus employed, are to be found sparsely scattered through our periodical literature."

But now, sir, that the question of originality has been raised, I will not hesitate to say that, had I claimed priority over Dr. O'Connor, the facts of the case would have fully justified my doing so. The first public notice of Dr. O'Connor's having employed sulphur externally in rheumatism is to be found in some observations he made during a discussion at the Medico-Chirurgical Society in February 1855, nearly two years after I had employed it publicly at St. George's Hospital, and just one year after I had explained to him the mode of applying it, and the excellent results I had obtained from it: and, though he claims to have made similar observations at the Medical Society of London in February 1854, after the reading of Mr. Hancock's paper on Sciatica, he does not even pretend to have mentioned it publicly, or to have spoken to me privately on the subject before that date. Therefore, as it is well known that I constantly employed it at St. George's Hospital in 1853, and my hospital case-books (see case-books for 1853, vols. vi and vii, *men*), which are open to inspection, bear witness to the same fact, it is obvious that, although Dr. O'Connor may have learned the practice from me, I cannot have been indebted to him for the suggestion. How, then, shall I characterise his assertions that, until that evening (*i.e.*, Feb. 25th, 1854), I was "entirely ignorant" of that plan of treatment, and to him alone am "indebted for any knowledge of it"?

In a matter of this kind, sir, originality appears to me to be of little importance. I have not laid claim to it in my work on *Rheumatism*, neither do I wish to do so now; nor to any merit beyond that of having placed before the profession the carefully digested records of three years observation on this plan of treatment. But I cannot imagine that any one will admit Dr. O'Connor's claim after perusal of the facts recorded in this communication, and of the statement contained in his own letter, that "two physicians, one of Edinburgh, and one of Dublin," had written many years ago on this very subject.

I will only add that, from the day on which I first became acquainted with this application of sulphur, I spoke of it to all the professional men whom I chanced to meet, pointing out the cases in which I had found it useful, and those in which it does not give relief; and the only reason why I did not publish it before I issued the second edition of my work on *Rheumatism* was, that I am always very careful not to advance anything which will not bear the test of experience; and that, until I sent my manuscript to the printers, I did not consider that I had had sufficient opportunities of observing its action to justify my expressing an opinion in its favour. I am, etc.,

Henry W. Fuller, M.D.Cantab., F.R.C.P.L.,
Physician to St. George's Hospital.

13, Manchester Square, April 13th, 1857.

THE OPHTHALMOSCOPE.

Letter from James Dixon, Esq.

Sir,—In a lecture by Mr. Coote, reported in the British Medical Journal for March 28th, there is a statement respecting the ophthalmoscope which requires to be corrected, especially as coming from a gentleman whose well-known literary attainments give weight to any assertion he may make regarding the history of surgical inventions. Mr. Coote says, "the merit of invention of this instrument, accorded by the French to a Greek physician, named Anagnostakis, and claimed by the Germans as their own, is in truth due to an Englishman, Mr. W. Cumming", &c; and he adds, "It is unnecessary to repeat how Helmhotz, E. Jäger, Coccius, Ruete, Gräfe, and Anagnostakis, with others, have worked with laudable perseverance, until the instrument now in use has been constructed."

Now, undoubtedly Mr. Cumming was the first to point out that the fundus of the healthy human eye is not a black, but a coloured, reflecting surface; and this most important discovery at once rendered worthless all that had been written by Beer and others about *Cat's-eye Amaurosis*, etc. This discovery led the way to Helmholtz's invention, but Mr. Cumming himself never constructed or suggested any form of ophthalmoscope. His simple mode of viewing the reflection from the fundus of the eye is detailed in the 29th Vol. of the *Medico-Chirurgical Transactions* (1846), and no attempt was made by him to obtain, by any optical contrivance, a view of the vessels and other details of the retinal surface. I can speak confidently on this point, inasmuch as Mr. Cumming's experiments were chiefly made upon patients of myself and of my colleagues at Moorfields. The tract published by Helmholtz in 1851 (*Beschreibung eines Augenspiegels zur Untersuchung der Netzhaut im lebenden Auge*) contains the earliest description of an ophthalmoscope. It was Coccius, I believe, who substituted for Helmholtz's superimposed layers of plain glass, a reflecting mirror with a small hole in the centre; and the various instruments alluded to by Mr. Coote, are but modifications of this perforated mirror, and are all based on the discovery of Helmholtz. I am, etc., James Dixon.

Portman Square, April 14th.

DISEASES OF SPECIAL OCCUPATIONS.

Letter from A. B. Steele, Esq.

Sir,—Your remarks upon Dr. Lewis's *Report on the Health of the London Postmen*, induce me to call attention to a system of lighting and ventilating rooms and buildings, which has been adopted by Mr. Edwards, of Liverpool. It has been in operation for some time in many of our local public buildings, and has proved most satisfactory in its results; and I conceive that it would be equally applicable to the London Post Office, and that, if adopted, it would effectually obviate the evils which result from all ordinary modes of gas illumination.

The plan having proved eminently successful in Liverpool, and being in my opinion valuable and important in a sanitary point of view to the public at large, I have deemed it advisable to request you to insert this communication in the Journal. The report of a paper, read by Mr. Edwards, on the apparatus, was published in the *Pharmaceutical Journal* for April 1854; and an abstract of the description may prove acceptable to those of your readers whose attention may not have been directed to the subject.

In the use of the ordinary burners, with the exception of Faraday's, the products of combustion are allowed to escape into, and mix with the atmosphere of the room; and as the first cost of Faraday's burner is high, the expense of keeping it in order great, the glasses frequently cracking, and the attention it requires more than most persons would be inclined to give, it is not likely to come into very general use. To obviate, therefore, all the objections to the usual gas burners, Mr. Edwards designed what he termed the "Sunburner arrangement". Its construction is very simple. Seven clusters, each of nine fish-tail burners, are supplied by gas through a pipe and branches. These burners are surrounded by a cone, to the top of which is attached a tube, passing through the ceiling to carry away the products of combustion. In this tube is placed a butterfly valve, for the purpose of regulating the current of air, so that the lights may burn perfectly horizontal. A strap of flat iron keeps the tube in the centre of the cone. These parts are all that are necessary for lighting, but round the exterior of the cone there are placed three sheet-iron cases, which, while they aid in ventilating, also prevent the heat from being transmitted from the cone to the woodwork of the building. These cylinders are not connected to each other, or to the cone, so that distinct currents of air pass between each two of them.

As a proof of the economy of the sunburner, the expense of lighting the Philharmonic Hall, in Liverpool, may be cited as an example. In the sunburner over the orchestra there are one hundred and seventy-one lights, and they burn at a cost of about 7½*d.* per hour; while round the cornice there are nine hundred and forty-two lights, which, if they consumed a proportionate quantity of gas to those in the sunburner, should cost 3*s.* 7*d.* per hour, but they actually cost 6*s.*, and are burning at a higher temperature too, and consequently consuming less gas than they would if placed in chandeliers, for when the temperature of the external air is 55°, the average temperature of the hall is 66°, and of the ceiling 124°.

The arrangement of the sunburner causes it to act remarkably well as a ventilator, the currents of air continually passing between the cone and the cylinders, drawing off the vitiated

atmosphere of the apartment, which is replaced by openings in the floor; and by having the air-flues beneath the floor of larger area than the total amount of the areas of their openings into the building, draughts are prevented and general diffusion attained.

I am, etc.,

A. B. Steele.

Liverpool, April 6th, 1857.

ROYAL MEDICAL BENEVOLENT COLLEGE: PAYMENTS FOR EXHIBITIONERS.

Letter from William Cholmeley, M.D.

Sir,—In your report of the Extraordinary General Meeting of the Governors of the Royal Medical Benevolent College, held April 3, you have been led into the error of stating that all the three Resolutions advertised "were proposed by Mr. H. Bateman, and seconded by Dr. Ballard." In fact, only the first of the three resolutions was proposed to the meeting. Immediately after the amendment to this first resolution had been carried, and while I was vainly endeavouring, in the midst of much noise and confusion, to gain the Chairman's attention and to propose the second resolution, the meeting was hastily adjourned *sine die*. It is important to notice this; because when Dr. Ballard, in seconding the first resolution, was proceeding to adduce proofs that, even supposing the Council right in their interpretation of the Act of Parliament (which we entirely, and on counsel's advice, deny), still the charge to the exhibitioners need not be increased beyond £30 per annum, he was stopped by the Chairman, and not permitted to enter into the question of expenses, on the ground that that would be trenching on the subject of the second resolution, though nearly every one who spoke against the first resolution, or in support of the amendment, discussed, without restraint, the "justness" and "reasonableness", and even necessity, of the increased charge of £40 per annum.

It was doubtless owing to the fact that there was also some degree of confusion prevailing, when the amendment was put to the vote, that the Chairman could not hear the calls for the ballot.

I am, etc.

Wm. Cholmeley.

40, Russell Square, w.c., April 14, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Black. On April 12th, at 49, Queen Anne Street, the wife of Patrick Black, M.D., of a daughter.

*Hodges. On April 8th, at Rochford, Essex, the wife of Richard Hodges, M.D., of a son.

Mitchell. On April 9th, at Bath, the wife of James Johnston Mitchell, Esq., Surgeon, of a daughter.

*Robertson. On March 31st, at Nottingham, the wife of W. Tindal Robertson, M.D., of a son.

Shillitoe. On April 10th, at 34, Finsbury Circus, the wife of Buxton Shillitoe, Esq., Surgeon, of a son.

Waggett. On April 9th, at 4, Stanley Terrace, Kensington Park, the wife of John Waggett, M.D., of a daughter.

MARRIAGES.

Bradley—Chitty. Bradley, William Henry, Esq., Surgeon 2nd Regiment Cavalry Hyderabad Contingent, to Josephine, youngest daughter of the late Joseph Chitty, jun., Esq., of the Middle Temple, at St. Thomas's Cathedral, Bombay, on March 14th.

Colston—Armfield. Colston, Henry Samuel, Esq., Surgeon, of 31, St. Paul's Road, Camden Town, to Miss Armfield, of Grafton Street, Fitzroy Square, at St. Pancras Church, on April 11th.

Grant—Todd. Grant, James, Esq., Solicitor, of Symonds Inn, London, to Mary Anne, second daughter of John Todd, Esq., Surgeon, of Colinsburgh, Fife, at Colinsburgh, on April 8th.

DEATHS.

Burman. On April 13th, Mary Redin, wife of — Burman, Esq., Surgeon, of the Crescent, America Square.

Brown. On April 7th, at Warsash House, Hants, Charlotte Swinton, widow of Dr. Brown, late of the Medical Staff at Calcutta.

Heward. On April 11th, Elizabeth, wife of T. Spencer Heward, Esq., Surgeon, of 56, Grosvenor Street.

Skelton, J., M.D., Battalion Surgeon Coldstream Guards, at Abbey Road, St. John's Wood, on April 9th.

Symes. On February 7th, supposed by falling overboard from the *True Briton*, George, son of George Symes, M.D., Bridport, Dorset, aged 20.

*Wood. On April 11th, at 54, Upper Harley Street, Cavendish Square, Clara Ramsden, infant daughter of William Wood, M.D.

Yate. On April 6th, at Grappenhall, Cheshire, Cordelia, wife of James Yate, Esq., Surgeon.

PASS LISTS.

Royal College of Physicians. At the usual Quarterly Meeting, held on Monday, April 6th, after having passed the necessary examinations—

Dr. Fredk. Cock, Westbourne Park Terrace, was admitted member of the College.

At the same meeting, were elected Consiliarii—

Dr. Roots
Dr. Ferguson
Dr. Arthur Farre
Dr. Sir John Forbes
Dr. Cursham

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, April 3rd, 1857:—

Blackmore, Humphrey Purnell, Salisbury
Carter, Alfred, St. Ann's Bay, Jamaica
Cockerton, Richard, Girton, Cambridgeshire
Foxwell, James John, Bristol
Harris, Lewis, Broadhempston, Totnes, Devon
Hawkins, Thomas, Spaldwick, Huntingdonshire
Kerman, George Davy, Liverpool
Litster, William, Bridgton, Glasgow
Neal, James, Birmingham
Peppin, Henry Cole, Martock, Somerset
Thomas, Hugh Owen, Seacombe, Cheshire
Thomas, John Little, Carmarthen
Wilson, John, Whitby, Yorkshire

At the same meeting of the Court—

Baird, William James, of H.M.S. *Wellesley*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons: his diploma bearing date April 10th, 1852.

Monday, April 6th:—

Barrette, Whatly, Bath
Bate, George, jun., Plymouth
Cockcroft, George Edmondsaco, Middleham, Yorkshire
Edwards, Thomas Edwin, St. Mary's Hospital, Paddington
Evans, Henry, Blaenant, Cardiganshire
Farr, George Evan, Woolwich
Fisher, Joseph, Manchester
Garlick, William, Park Square, Leeds
Michael, David, Swansea, South Wales
Pauli, Theophilus Isaac William, Oxford
Payne, George Brown, Knutsford, Cheshire
Pope, Joseph John, Mornington Crescent, Hampstead Road
Ruttledge, Thomas Edward, London Hospital
Saunders, Richard Westrap, Pisa, Tuscany
Stevenson, Nathaniel, Cleveland Square, Bayswater

Monday, April 13th:—

Alcock, John, Cobridge, Staffordshire
Bannister, Alfred James, Trafalgar Square, Chelsea
Barford, James Gale, Wokingham, Berkshire
Brock, Edward, Canterbury
Chappell, John James, Axmouth, Devon
Hodges, William, Brecon, S. Wales
Marriott, Charles William, Leamington, Warwickshire
Ramsbotham, Walter Basnett, Amwell Street, Claremont Square
Renlzsch, George Henry, Haverstock Hill, Hampstead
Richardson, Francis Hunt, Highgate

New Fellows. The following members of the College were admitted to the Fellowship, at a meeting of the Council, on the 8th instant:—

Anderton, Henry, Much Woolton

Bernard, Ralph Montague, Clifton
Besemeres, William, Old Kent Road
Brown, Robert, Brixton Hill
Byerly, Isaac, Seacomb, Cheshire
Clifton, Nathaniel Henry, Islington
Croft, Charles Ilderton, Laurence Pountney Hill
Elliott, Robert, Chichester
Evans, Richard David Jones, Hertford
Ewen, Henry, Long Sutton
Fawssett, Frederick, Wisbeach
Fenton, John, Liverpool
Harrinson, Isaac, Reading
Hills, George, Keighley
Ibbetson, George Augustus, Brook Street
Kingsford, Edward, Sunbury
Lister, John, Doncaster
Minter, John Moolenburgh, M.H.S. *Victoria and Albert*
Nicholson, John Frederick, Stratford Green
Nourse, William Edward Charles, West Cowes
Roberts, Watkin William, Carnarvon
Scott, Edward John, Southsea
Strother, Arthur, Darlington

At the same meeting of the Council—

Drever, John, Birmingham
Macmeikan, John, Stratford

Were admitted *ad eundem* members of the College.

Licentiates in Midwifery admitted at a meeting of the Board, on April 15th:—

Baker, William Langworthy, Newton Abbot, Devon: diploma of membership dated March 30th, 1857
Blackall, John George, Hoxton: March 27th, 1857
Davy, Francis Jeafford, Knighton, Devon: March 13, 1857
Denne, Thomas, Sittingbourne, Kent: Feb. 20th, 1857
Evans, Abel, Llantyssil, Cardiganshire: March 25th,
Girdlestone, William Theophilus, Wordsley, Staffordshire: December 12th, 1856
Hamilton, William, Tarbut, Ireland: December 22nd, 1854
Hetherington, Joseph, Lamplugh Hall, Cumberland: March 30th, 1857
Johnson, Osborne, Bassingham, Newark, Nottinghamshire: June 23rd, 1851
Jones, William Padmore, Marlborough Place, Old Kent Road: March 6th, 1857
Knaggs, Henry, Huddersfield: March 27th, 1857
Mudd, William, Hadleigh, Suffolk: Oct. 24th, 1856
Noble, William, Linton, Herefordshire: July 29th, 1853
Thomas, John, Cardigan: March 25th, 1857

HEALTH OF LONDON:—WEEK ENDING APRIL 11TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which in the previous week were 1235, in the week that ended on Saturday, declined to 1059. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1104. But as the deaths of last week occurred in an increased population, the average should be raised for the purpose of comparison in proportion to the increase, in which case it becomes 1214. Hence it appears that the deaths now returned were less by 155 than the number which the average rate of mortality would have produced.

The deaths last week referred to diseases of the zymotic class were 181, whilst the corrected average of corresponding weeks is 246. Typhus and common fever were fatal in 50 cases (20 of which occurred in the north district); the average is 48. Fifty children died of hooping-cough; the number, according to the average rate of mortality, would have been 63. Twenty-three children died of scarlatina, the average being 36. Measles was fatal in 17 cases, the average being 25; small-pox in 3 cases, the average being 14; and diarrhœa in 10 cases, the average being 16. No deaths from small-pox occurred in the east, south, or west districts, and none from measles in the west districts, a portion of the metropolis which was remarkably exempt from fatal cases of the zymotic diseases. Three children died at 17, New End, Hampstead, on the 2nd, 3rd, and 6th instant respectively, of fever; they appear to have taken fever in Hampstead, to which they had been brought for change of air when recovering from hooping-cough. Bronchitis carried off 113 persons, and pneumonia 81; both numbers being near their respective averages. Four persons died of intemperance; two of delirium tremens; and two of carbuncle. Two women died at the age of 94 years; and one in Lewisham Workhouse at the age of 96 years.

Last week the births of 835 boys and 773 girls, in all 1608 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1511.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·519 in. The instrument ranged from 29·27 in. to 29·82 in. The mean temperature of the week was 49·9°, which is 4·6° above the average of the same week in 43 years. The mean daily temperature was above the average on every day except Saturday; on Sunday and Monday, the excess was 10° and 8°. The highest temperature occurred on Sunday, the 5th, and was 65°; the lowest on Friday, and was 37·3°. The range of temperature in the week was 27·7°. The mean dew-point temperature was 45·0°, and the difference between this and the mean air temperature was 4·9°. The wind which had alternated between south-east and south-west during the week, changed to north-west on Saturday. Rain fell on every day except Wednesday, and the whole amount of the week was 0·53 in. Thunder was heard on Tuesday and Friday.

Licenses to Drink. The latest is a Bill before the Albany Legislature establishing a system of licenses for the consumer, instead of the seller; people are to take out a license to drink, like a license to kill game, or a permission to carry arms. There is a nicely graduated scale of fees for liberty to imbibe the various kinds of fluids:—2*s*. a-year make a man free of small beer and "currant wine", or wines of "domestic manufacture": the courage that can venture on the last named liquids deserves to be let off cheaply. Strong beer, porter, and ale, require a payment of 3*s*. Whisky and spirits of home distillation are allowed for one dollar annually; brandy and foreign spirits are accessible by a fee of one dollar and a half. The sliding scale stops there. The next fee is high and inclusive: five dollars annually purchases a license to drink beer, spirits, and wine, or anything, from *aquafortis* to champagne. The payment of five dollars elevates the payer above all restrictions on his beverage. Aldermen and justices of the peace are the granters of the licenses; and no person can sell or even give anything in the shape of drink, unless the applicant produces his license to swallow it; and then only the special kinds specified in the document, such sale or gift to the unlicensed being a misdemeanour. No license whatever, not even for currant wine, is to be granted to a married woman without the previous written consent of her husband. Such is the last legislative absurdity, based on that fruitful source of it, good intentions, when divorced from common sense. While the State Legislature of New York is pestered with such ridiculous schemes, the Federal Legislature at Washington, by the new tariff, has just reduced the duties on foreign spirits from 100 per cent. to 30 per cent., the only effect of the higher duty having been to encourage adulteration.

Warning to Photographic Artists. Our photographic friends will do well to take warning from the following extract, taken from a Cape paper, in which it is stated that Dr. Atherstone, an eminent photographer, had nearly poisoned himself:—"It appears that in removing the stains of nitrate of silver from his hands with that deadly poison cyanide of potassium (the plan commonly adopted by photographers), he suddenly felt a glow through his whole frame, accompanied by a tremulous feeling. The thought flashed across his mind that some of the poison had been absorbed by some scratches or cuts on his hands which he had forgotten. He washed his hands instantly, taking ammonia and wine. But the symptoms increased, his sight grew indistinct, his memory was impaired, and a sense of fainting warned him that a poisonous dose had been absorbed. He then tried cold affusion, with temporary relief; and a powerful shower-bath gave great relief for a time, but the symptoms returned at intervals of a few minutes; the jaws felt constricted, and there was a spasmodic action of the muscles of the arms, parched throat, and sense of faintness. In three hours these symptoms left, and he fell asleep. The next day he suffered from great exhaustion. This case shows the necessity of extreme caution on the part of photographers and others in the use of this highly poisonous salt. The following will be found a safe and equally efficacious mode of removing the stains of nitrate of silver from the hands:—Moisten the stain with a saturated solution of iodide of potassium in water, and afterwards with nitric acid, diluted with two parts of water, then wash in a solution of hyposulphite of soda."—(*Madras Spectator*, Feb. 2, and *Times*, April 6.)

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XVII.] LONDON: SATURDAY, APRIL 25, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

UNIVERSITY COLLEGE HOSPITAL.

I. STRICTURE: SYME'S OPERATION: ALARMING SYMPTOMS FOLLOWING THE USE OF AMYLENE.

Under the care of J. E. ERICHSEN, Esq.

J. J., a middle-aged man, was admitted, under Mr. Erichsen's care, on account of stricture of the urethra, for which he had long been a patient at this Hospital. Every possible means had been adopted for the relief of this condition, but all had failed; as, though Mr. Erichsen was usually able to pass a catheter and dilate the stricture to the size of No. 5 or No. 7, the instrument never would pass with sufficient ease to enable the patient himself to use it, and the urethra soon contracted again to its old dimensions. The patient, who is an exceedingly intelligent fellow, was anxious to have an operation performed four years ago, in consequence of seeing another man in the Hospital on whom this treatment had been successfully adopted; and accordingly Mr. Erichsen at that time performed Syme's operation. It was not possible, however, after the operation, though the wound healed kindly, and all other things went on well, to pass a catheter larger than No. 7, and no permanent benefit resulted from it. On this and on two other occasions the patient inhaled chloroform, but suffered so much from the vomiting induced by the anæsthetic that he had a great horror of it; and, on the present occasion, as the stricture was as obstinate as ever, and the only prospect of benefit seemed to be from its division, he was inclined to submit to this operation without any anæsthetic. As it was believed, however, that amylene would be less likely to induce vomiting or other serious symptoms, he was persuaded to inhale this drug. Accordingly, on March 18th, amylene was given in an inhaler, and Syme's operation was performed in the usual manner, with the sole modification that Mr. Marshall's staff was used instead of the ordinary Syme's staff.

The operation did not offer anything to call for special observation. It was accomplished without difficulty. The patient, however, seemed to resist the action of the amylene, and it is noted that it was half-an-hour before he became insensible. There was considerable congestion and much struggling, and he affirms that though in a condition resembling intoxication, he felt and can remember the whole operation, and has since recognised some persons present whom he had not seen before. When seen an hour afterwards, he was quite comfortable and free from pain; his pulse of its usual strength. At 8 P.M., however, having been quite comfortable a few minutes before, he was seized with severe rigors and nausea, which soon terminated in vomiting. He was violently convulsed, paid hardly any attention to things around him, and was in a state of the greatest distress. Calomel was given, as it had controlled the vomiting after chloroform; but it now failed to check the vomiting, which continued at very short intervals during the night, accompanied by intense thirst, so that he drank between thirty and forty tumblers of cold water. During March 19th, the vomiting continued, but not so frequently. He complained of intense headache, and passed only a very small quantity of water during the day. He was ordered a grain of opium every four hours, and stimulants both by the mouth and in enemata. The vomiting, however, persisted, and next morning (March 20th, 4 A.M.) he was in a very alarming condition. Only a few solitary beats of the pulse could be felt occasionally. The lips were livid, the skin clammy, the extremities cold. As the stimulants would not remain on the stomach, frequent injections of brandy and water were given, and appeared to be of service, as in a few hours he was somewhat relieved of the pain in his head, the pulse in the carotids was perceptible though weak, and the skin warmer. The vomiting, however, persisted. As he was getting under the influence of opium (as evidenced by the pupils), this drug was omitted, and an effervescing saline draught ordered with a view of checking the vomiting. This, however, failed, and was therefore discontinued. He had passed no water since the last note. Blisters were applied to the loins. In the afternoon, he was put into a hot bath (at 105°) for eight minutes. This did not increase the faintness. It is noted that the odour of the amylene still remained about him. In the evening a quart of warm water was injected into the rectum. He was now evidently recovering. The radial pulse could be clearly counted 112, and he was not so livid. Next morning, he had passed a small quantity of water, after suppression of urine of fifty-four hours duration, the urine passed being very albuminous. Before the operation, it had been found healthy. The vomiting still continued, but was mitigated. It is not necessary to follow this case further into detail. The vomiting continued at short intervals for more than a week after the operation, and resisted all medicinal agents, but the general condition improved steadily; the pulse regaining its natural force, and the urine coming in proper quantity, and losing its albuminous character. He was last seen on April 17th, and said that he still recalled the taste of the amylene occasionally, and still suffered at those times from nausea. His general health, however, is completely re-established.

Meanwhile, everything connected with the operation had been going on perfectly well. A fortnight after the operation, No. 8 was passed with ease, and soon followed by No. 10. The wound is now nearly closed, and the patient passes a full stream of water; which he had not done for five years before.

REMARKS. This case is of special interest at the present moment, when the attention of the profession has been strongly excited by a fatal case of the administration of amylene, which has lately occurred in London, in the practice of Dr. Snow, and the details of which have been laid before the public by that gentleman, with his usual candour and accuracy. It is to be noticed that, from some peculiarity in the patient's constitution, he had been found particularly liable to suffer from the use of narcotics. Still, the symptoms which had followed the inhalation of chloroform, though so severe that he deliberately preferred the pain of an operation, had not excited any fears for his life. On this occasion, however, his condition was at one time desperate; and it was only by the most vigilant attention, and the constant exhibition of stimulants, that he was rescued from the alarming state of prostration into which he had fallen. The indications for the treatment of the case were sufficiently simple; for the vomiting was found to be quite uncontrollable by any medicinal measures, and, although all the usual remedies for this condition were of course employed, his recovery was owing mainly to his being kept alive by the stimulants while the system was gradually freeing itself of the anæsthetic vapour.

Another interesting point in this case is the long continuance of suppression of urine. Whether this symptom was also due to the poisoned state of the blood may be matter of doubt; but, as it had not followed the previous operation, such an opinion is at least probable.

The operation hitherto appears to have been perfectly successful, and there is every prospect of the urethra remaining permanently dilated.

II. APPLICATION OF SULPHATE OF ZINC AS A CAUSTIC IN CANCER OF THE CLITORIS AND INGUINAL GLANDS.

Under the care of J. E. ERICHSEN, Esq.

[*From notes by* I. M. DOWN, ESQ.]

This case has been already reported as far as it had gone. The caustic was reapplied on February 5th, and again on February 23rd; and the surface, as the slough came away, was dressed with red wash. The abscess in the groin healed entirely, and the

sores of the vagina had much contracted when she left the house on March 5th. A small nodule, however, still remained on the labium, and will have to be again treated with the caustic.

Remarks. This case, which was reported in the number of this Journal for February 14th, is, as far as it has proceeded, an encouraging example of the benefit which may be derived from the local application of caustics in malignant diseases which do not admit of radical removal by operation. The cure, however, is not as yet complete; but it seemed better to report it now as the woman has left the Hospital, and has neglected hitherto to apply, as she was directed to do, for further treatment.

ST. GEORGE'S HOSPITAL.

EPILEPSY: ULCERATION OF THE RECTUM IN A CHILD.

Under the care of W. E. Page, M.D.

Mary H., aged 9, was admitted February 25th, on account of derangement of the bowels. She was said to have been perfectly healthy till two years before admission, when she got a fright from the death of two of her brothers by cholera. On admission, she was suffering from some pain in the abdomen, aggravated after food. Her face was flushed; the abdomen was slightly tumid; but there was no enlargement and no tumour, and no tenderness to pressure. The stools were lumpy and light coloured, and, when they took a solid consistence, extremely small, not larger than the stem of a tobacco-pipe. On March 1st, she complained of severe pain in the head; and convulsive twitchings came on, unattended by loss of consciousness. A more severe attack followed on March 9th, with convulsive movements of the right eye, and twitching of both arms and the right leg; but still no loss of consciousness. This was followed by a slighter fit on the morning of the 10th, and a very severe seizure on March 28th. The stools were now much more offensive, remarkably small in diameter, and contained scarcely any bile. On April 15th, she was seized with severe pain over the whole body, and became remarkably blue and cold. Slight cough was also now noticed for the first time. From this date she sank rapidly, without further brain symptoms, and died of exhaustion on the 18th.

Post mortem examination revealed nothing the matter with the brain or its membranes, except that the dura mater and the other membranes of the brain were united in one or two places by firm and apparently old adhesions to the surfaces of the cerebrum. The brain was somewhat full of blood, but otherwise healthy. There were two small vomicæ at the apex of the right lung, and both pleuræ were extensively adherent. No other disease was found, except that the lower end of the rectum, for the extent of an inch and a half, was found entirely denuded of its mucous membrane, with the exception of two small limited patches, each about as large as a fourpenny piece.

Remarks. This case seemed worthy of notice, as an example of a state of the mucous membrane of the lower bowel rare in childhood, and of the very grave symptoms to which such a condition may lead. The epilepsy may be confidently referred to the irritation of the ulcerated mucous membrane; and, although the presence of phthisis complicated this case, still it was the opinion of those in charge of the patient that it was not the direct cause of death; nor were the symptoms such as to point to this conclusion.

ST. MARY'S HOSPITAL.

I. BELLADONNA IN INCONTINENCE OF URINE.

Under the care of Spencer Smith, Esq.

[*From Notes by* E. A. Hart, Esq., *House-Surgeon.*]

Walter S., aged 8, was admitted under Mr. Smith's care on February 14th. He had been operated on for stone three years before in this Hospital, by the usual lateral incision, and left the house six weeks afterwards cured. No incontinence or other bad symptom then existed. Soon afterwards (but how long is not known), being then at home, badly fed and ill cared for, incontinence of urine came on. He passed water, at the time of his admission, thirteen or fourteen times in the course of the day, without pain or scalding, and his bed was constantly wetted at night. For eleven days he was treated with cod-liver oil and steel wine, together with good diet and the usual regimen, but no amelioration was noticed. On February 25th one sixth of a grain of extract of belladonna was added to each dose of his medicine, and he was ordered to take no fluids after 8 p.m. On the third day the nurse reported that he did not wet himself so much; and he continued to improve till March 8th, when he was nearly free from the symptoms, as he hardly wetted his clothes at all during the day, and did not pass water at all in bed. At this time he fell sick for a day or two, his appetite failed, and the stomach rejected food. The belladonna was omitted for five days, and a little acetate of ammonia mixture substituted. A marked relapse took place; his clothes were saturated with urine, and the usual ammoniacal smell became again evident about his person. The stomach had now regained its tone, and the former treatment was resumed and continued till April 14th, when he left the Hospital greatly improved: he no longer wetted his clothes by day or night, and the only remaining inconvenience was that of more frequent micturition than can be considered quite healthy.

Remarks. This case is one of much interest both on account of the great benefit derived from the administration of belladonna, of which other instances have been already quoted in this Journal, and as bearing on the question of the occurrence of incontinence of urine after the operation for lithotomy. In reference to the latter point, it will be seen that the symptoms are not indeed very clearly connected with the operation as effect and cause, in consequence of the obscurity of the history. Still they seem to have followed more speedily after the injury done to the bladder, than would have been expected if they had been caused only by his return from the Hospital regimen to a mode of life, less favourable, indeed, to health, but one to which he had been previously accustomed without any such bad result; and it is known that, in children especially, incontinence of urine does occasionally follow this and other minor operations. Thus Mr. Coulson observes (*Diseases of the Bladder*, p. 86) that, after the operation for stone, the bladder often remains irritable; and, in another place, he notices the frequency with which incontinence of urine has been observed by Deschamps to follow lithotomy, and states that he has himself occasionally, but much more rarely, noticed a similar result in young subjects.

Instances of this kind are, however, as far as our experience goes, of very rare occurrence. The cure by the action of belladonna (if it should prove permanent) would be another argument for attributing the incontinence rather to the state of the bladder, than to anything in the composition of the urine or to constitutional causes.

II. OPERATIONS FOR PROLAPSUS UTERI AND RECTO-VAGINAL FISTULA, AND FOR OVARIAN DROPSY.

Under the care of I. B. Brown, Esq.

The interesting operation described in this Journal for April 4th, appears to have been perfectly successful. The patient was kept for nine days without any action of the bowels, according to Mr. Brown's usual plan. An enema with castor oil was then given, and the bowels acted naturally. The wound was perfectly closed, and the uterus remained in its natural position. The perinæum appeared quite sound and deep; and there is every reason to hope that the woman is perfectly cured of both the disgusting infirmities under which she had so long suffered.

Mr. Brown's case of ovarian dropsy injected with iodine (see this Journal for March 21) also progressed favourably. The woman left the Hospital three weeks afterwards, apparently perfectly well, and rapidly regaining health and flesh. Future observation will show whether the cure be permanent.

ST. GEORGE'S HOSPITAL.

CASES FROM THE MEDICAL WARDS.

Communicated by G. Goddard Rogers, M.D., Medical Registrar to the Hospital.

I. PNEUMONIA: BRONCHITIS: TRACHEITIS.

Under the care of H. Bence Jones, M.D., F.R.S.

G. G., aged 3 months, was brought to the Hospital on March 26th, with severe dyspnœa. About ten days before, the child had been operated upon for hare-lip; and after going on well for two or three days, it probably caught cold, whilst being carried to and from the Hospital. It was not until 11 A.M. on March 25th, that anything was noticed amiss with the respiration. Later in the day, the child became blue in the face, and the extremities were cold. A warm bath was used, and mustard poultices applied to the chest, but only with temporary relief. At noon on March 26th, as all the symptoms were much aggravated, the parents brought the child as an in-patient. Salines and ipecacuanha were given, and stimulating

liniment was rubbed on the chest; but the prostration rapidly increased, and the breathing became quite stridulous. The pulse was only perceptible for a very short time after admission; and in a few hours the child expired.

At the *post mortem* examination, on laying open the larynx and trachea, a thin layer of recently effused lymph was found lining the tube from the epiglottis downwards. Just above the bifurcation of the bronchi it ceased abruptly. The bronchial lining membrane, as well as that beneath the effused lymph, was extensively inflamed. The lower lobe and the posterior surface of the upper and middle lobes of the right lung were in a state of red hepatisation. All the other viscera were healthy.

Remarks. The chief point of interest here is the example of pneumonia and bronchitis preceding tracheal inflammation, whereas they are generally noticed as sequences. The mischief in the right lung had been progressing for some little time before any croupy respiration awakened the parents to the full danger of the case; and still further proof is afforded of the croup being secondary by the *post mortem* appearances. Inflammation first attacked the lung, then the minute bronchi, and lastly, the large tubes up to the trachea. Here, inflammation being set up, the peculiar tendency to effusion of false membrane was at once manifested; and it is but seldom that one sees so strict a line of demarcation between bronchial and tracheal inflammation proper; generally, more or less of the fibrinous exudation spreads to the air-tubes.

II. Bronchitis: dilatation (diffused) of bronchial tubes: consolidation of lung.

Under the care of H. Bence Jones, M.D., F.R.S.

R. C., aged 48, a day-labourer, was admitted on March 25th, in an extremely weak and emaciated condition. He had been ill with cough and dyspnœa since Christmas; but for years had been subject to oppression of breathing during the winter months. Coarse breathing existed all over the front of the chest, but no dulness at the apices of the lungs. Posteriorly, on the right side, the respiration was harsh, and in one or two places wanting. On the left side, a little below the centre of the back part of the lung, exceedingly well marked amphoric breathing could be heard. He expectorated abundance of puriform fluid. From time to time he had severe attacks of dyspnœa, which the medicines alleviated but little; and during one of these he sank, about five days after admission.

The body was examined twenty-one hours after death. The right pleural cavity was completely obliterated by old adhesions, which in several places were semicartilaginous, but did not display any of the microscopical characters of cartilage. The left pleura was obliterated for about a third of its extent; the remaining portion of the cavity contained about a pint of straw-coloured serum. The right lung was healthy, except that the bronchial membrane was somewhat vascular. On the left side, the tubes were loaded with inspissated purulent fluid; at the apex they retained their normal calibre, but at the base they were much distended: so that, close to the diaphragmatic border of the lung, the tubes were large enough to admit a goose-quill. One limited distension was met with in a small tube near the middle of the lung: it was large enough to contain an almond, and was full of pus. Around the dilated bronchi, the pulmonary tissue was much solidified, and sank in water. Every part of the lungs was carefully searched, but no tubercles nor vomicæ were found.

Remarks. These cases of chronic bronchitis, where profuse purulent secretion arising from the lining membrane of the tubes rapidly induces a hectic condition and carries off the patient, are among the most interesting to the auscultator. It is not often that well marked specimens of dilated bronchi occur; and when they do present themselves, it is rare to find amphoric resonance so complete as in this case. The sound was thought by some to arise from a vomica, although the situation was unusual; and the general appearance of the patient was strongly indicative of tubercular disease. Had the effusion into the pleura occupied every part of the sac, none of these phenomena would have been brought under notice; but the portion of lung containing the dilated bronchi was closely adherent to the costal pleura, and the peculiar sounds were transmitted through the stethoscope in a remarkably clear manner. There was no shifting of the sound, and therefore the notion of air in the pleural cavity was excluded; but whether the patient had tubercles and a cavity, or simply dilated bronchi and consolidated surrounding tissue, remained *sub judice* until after death.

III. Phthisis: vomica of enormous size: empyema.

Under the care of W. E. Page, M.D.

F. I., aged 23, a tailor, of irregular habits, was admitted on December 10th, 1856, in an anæmic and emaciated state, suffering severe pain in the chest, accompanied by cough and expectoration, which had been getting worse for three months. He had a quick pulse and furred tongue, and perspired profusely at night. At the upper part of the left lung, gurgling and pectoriloquy were heard. The apex of the right lung was somewhat dull on percussion; and the respiratory murmur was very coarse all over this side of the chest. Towards the end of the month, he became exceedingly hoarse, got thinner, and complained more of the night-sweats. His breathing was very short and hurried. The same auscultatory signs existed, but the gurglings were louder and more extended.

Early in January, the expectoration increased in quantity; and, as he grew weaker, he would often expectorate a pint of matter in the day. His appetite was ravenous throughout, and he lasted much longer than would have seemed possible with such extreme emaciation. Shortly before his death, some hæmoptysis occurred. He expired on April 3rd.

The *post mortem* examination was made twenty-six hours after death. On cutting into the larynx, a large ragged ulcerated opening was found on either side, below the true vocal cord. On the left side of the chest, the pleural cavity was obliterated in its upper third: the remainder of the space was distended with purulent fluid. The surface of the lung was adherent throughout to the pleura. The whole of the lung was hollowed out into one immense vomica, the walls of which were about half an inch in thickness. Crossing the cavity were bands of consolidated pulmonary tissue, five or six in number, which sank in water, and in which no air-tubes were found. The vomica was about one-third full of purulent fluid. No communication with the pleural cavity was discovered. The upper part of the right lung contained small vomicæ. The lower part of the small, and the upper part of the large intestine, were examined, and found free from ulceration.

Remarks. It is curious to compare this with the case of the patient with dilated bronchi. Both these men expectorated profusely. In the one, scrofula was the cause of the drain upon the system; in the other, simple bronchial inflammation; and, *à priori*, it seems likely that the latter form of disease would kill more slowly than the former, where fearful disorganisation was at work. Such complete destruction of lung-tissue is, I believe, rare; and, when it does occur, there is usually more hæmoptysis present than in this case.

IV. Apoplectic clot in the brain: encysted abscess of the cerebellum.

Under the care of H. Bence Jones, M.D., F.R.S.

E. W., aged 46, was admitted on March 25th. Her friends stated that she had been ill about thirteen weeks; the original cause of her indisposition being a fall, in which she struck her head against the kerb-stone. The accident was followed by violent bleeding at the nose, headaches, and frequent vomiting of very offensive matter, which last continued until three weeks before her admission. Her family had observed before the sickness ceased a gradual failing of her mental powers. When brought to the hospital, she was partially delirious. Her tongue was very dirty; the bowels were constipated; the pulse extremely weak; and the pupils rather sluggish. She was well purged; and, as she had slight cough, a squill mixture was given. The following day, port wine was ordered on account of her great exhaustion. On March 27th and 28th, she was very delirious, and got but little sleep; and when she dozed, was continually talking or groaning. The evacuations and urine were passed unconsciously; and independently of this, a most offensive and peculiar odour arose from her body. Some pulsation was noticed in the line of the abdominal aorta, but not more marked than is often observed in emaciated subjects, nor was there any accompanying thrill. On April 2nd, she sank from exhaustion, continuing delirious to the last.

At the examination, twenty-seven hours after death, the blood was found very fluid. The skull-cap was exceedingly thick and very heavy, from thickening of both tables; the diploë existing in comparatively small quantity. Nothing unusual was observed about the membranes of the brain. The cerebral convolutions were remarkably flattened, and there was a considerable amount of clear fluid in the ventricles, but hardly enough to account for the great flattening. The arteries at the base of the brain were very atheromatous. In the left lobe of

the cerebellum was a bilocular cyst, containing healthy pus. Each partition of the cyst was about large enough to contain a hazel-nut. In the lower part of the right posterior lobe of the cerebrum was a large loose clot of freshly extravasated blood, around which the substance of the brain was much broken up. The heart was large, and its walls were very thick. It weighed thirteen and a quarter ounces. The spleen contained several small blocks of fibrine. The rest of the viscera were healthy.

Remarks. The apoplectic clot discovered in this case probably had direct relation to the atheromatous condition of the cerebral vessels; whilst the abscess of the cerebellum might have owed its origin to injury produced by the accident above named. Doubtless, the cerebellum had been the part first affected, for it is scarcely likely that so large an apoplectic clot should have existed any length of time without the occurrence of more or less paralysis. It did not appear, from inquiries made after the *post mortem* examination, that the patient's gait was affected by the fall on her head; nor did she refer the chief pain at any time to the occipital region.

Original Communications.

LECTURE ON MORAL INSANITY.

By John Kitching, Esq., Medical Superintendent of the Retreat, near York.

We are in the habit of talking very glibly of the sane and the insane, as if these terms were universally understood, and as clear as the difference between sunshine and cloud. The terms are clear enough, but in the thing signified there is often a good deal of obscurity; otherwise we should not witness, as we sometimes do, the spectacle of learned people giving evidence on different sides, when a question involving the meaning of the terms is to be decided. And if this is the case amongst persons whose studies have led them to familiarity with these subjects, how can we expect that the public at large, from whom juries are selected, and who are necessarily almost strangers to them, should accept without reluctance or gainsaying, the conclusions which would embrace in the category of insanity what they have been accustomed to call by another name—whether it be vice, crime, oddity, eccentricity, impulsiveness, intractableness, wilfulness, cruelty, passion, turpitude, or by whatever other name the thing before them may seem to them properly designated? It is a difficult thing to decide in many cases, and it is sure to come to be a difficult thing, if it were not now so. Everything that raises a serious question in these days is a difficult thing, and ought to be. The age of easy things is past: *ad majora vocamur*. Then, if we are surrounded by so many difficult things, and we battle with them with so much more alacrity and determination to wrestle the difficulty out of them, let us also face this one additional difficulty of moral insanity, and calmly examine the subject with a view to the solution of the difficulty; not turning our backs upon it with a grin of angry ridicule, as if the foundations of society were going to be uprooted, and the flood-gates of impunitive crime let loose, because an unexpected interpretation may be put upon some notorious phase of character.

The study of all mental phenomena involves difficulties of great magnitude. The operations of mind are so various, that the attempt to discover the laws by which these are regulated has engaged the profoundest attention of the most gifted men; and the greatest metaphysicians, whose science concerns mind only in a state of health, have been brought to very opposite conclusions. When, however, we turn our attention to mind in a state of disorder, an additional source of complication and difficulty is introduced: and we may cease to wonder in the presence of so much that is obscure and arduous, that men who are practically conversant with insanity should not see eye to eye on all the subtle points embraced in so comprehensive a subject. If this be a correct position, let me ask, is it at all likely that those who have no acquaintance with the changes produced in the workings of the mind by disease, should form correct conclusions respecting the phenomena of insanity? I think, therefore, there is nothing either unreasonable or arrogant in the assumption, that it is only from those who have studied the joint action of the mind and body in both health and disease that we can look for any enlightenment in the science of morbid psychology.

The broader features and more violent forms of insanity render it easy to recognise the presence of the disorder. The three principal forms in which it is thus displayed, are mania, melancholia, and the possession of delusions.

When a person is in a state of mania, his whole mental condition is changed. Instead of the calm flow of thought and feeling which characterise him in health, his ideas follow each other with rapidity; the operations of his mind are tumultuous; his feelings are impulsive; and his utterance is loud, rapid, and imperious: the physical system participates in the exaltation; the patient performs feats of strength to which he is at other times unequal; every thought, word, and action, assume an exaggerated character. The want of rest is not felt. It is as if every function of life had received an irrepressible accession of ardour and activity, and the whole economy, animal and intellectual, were carried on under high pressure. The man lives through the vital force of a week in a single day; and the process is therefore an exhausting one.

This form of insanity exists in many degrees. In its highest development it deprives the person entirely of his senses. He has no control whatever over his thoughts, words, and actions. The promptings of his brain have an absolute dominion over him. He is carried about by a mental whirlwind, which mingles in one confused jumble the rapidly generated and evanescent impulses, and breaks them up into fragments, so that there is little or nothing of continuity or coherence. The whole series of phenomena are the beginnings without middle or end; the connecting links or associations are lost, because one fresh idea is begun before the others have been followed out. A less degree of excitement allows a little more time for each suggestion; and as the urgency of the symptoms is abated, the incoherence and rapidity of all the actions is lessened till a condition is arrived at, which presents nothing more than a certain amount of ardour or excitement—not greater perhaps than that which is the natural state of a more sanguine person.

In this direction, then, we are led by gradual stages to the very confines of the disorder; and there is a "border land" of considerable breadth, which admits of doubt and hesitation sometimes, to which region it shall be consigned. With this, however, at present, we have nothing to do, and will pass therefore to the contemplation of another of those well marked forms, which at once dispel doubt, and convince the judgment.

It is the opposite of mania, and is named melancholia. This is by no means so simple a form as mania. It exists chiefly under two aspects—the active and the passive forms. In the former, the sensations are acute and the movement of the ideas rapid, but these are always of a painful and afflicting nature. Horror, remorse, fear, and apprehension, hang over the mind with an appalling, overwhelming canopy of darkness. Undefined terrors shake out the reason, and extract cries of suffering, under which the moral and physical constitution trembles with undefined dismay. Sometimes the agony assumes a perceptible shape, and concentrates itself into an absorbing and terrible delusion. Once a tender and most affectionate mother, whose Christian solicitude for the right bringing up of her children was possibly the means of overstretching her powers, was tormented by the audible cries of those dear children, who shrieked into her ears from the depths of hell, and inflicted upon her, through a diseased brain, torments less endurable than their own. The groans and cries of the active melancholic are a painful publication of their form of disease. But the same kind of insanity is exhibited in a quieter and less demonstrative way, by the silent and unobtrusive endurance of a grief which seeks no publicity, and utters no complaint. No bell tolls, no dirge is rung. The quiet luxury of the silent tear, or the half suppressed sigh, alone forms the outward sign of the worm that gnaws within; but gnaws so keenly, that the whole attention is riveted upon the working of his unseen teeth; and all the life is a prey to the absorbing grief, to the general, all embracing, indefinite sorrow, paralysing resistance, annihilating exertion, wrapping up the entire being in a shroud of dismal and helpless inertia.

> "Who art thou with anxious mien,
> Stealing o'er the shifting scene?
> Eyes with tedious vigil red,
> Sighs by doubts and wishes bred,
> Cautious steps and glaring leer,
> Speak thy woes and speak thy fear."

Like the state of exaltation previously described, this condition also goes through a wide range of degrees, varying from the deep abstraction of settled melancholy to the mere obscuration, by a thin cloud, of the usual standard of healthy feeling.

The next form of insanity to which I shall introduce you is

not necessarily accompanied by any exaltation or depression of the natural scale of the animal spirits. It consists in the derangement of the intellect, or a change in the reasoning powers of the mind, either to such an extent as to produce an entire confusion, or to destroy their proper action in certain directions. In the former case, the mental condition is characterised as one of incoherence; in the latter, some idea or belief is generally entertained contrary to all sound ratiocination, and the term delusion is applied to it. When the mind is in a state of incoherence, it is impossible to converse for a few seconds with the patient without becoming aware of his condition. If he addresses you as the King of Spain, and tells you he saved your life last night at the battle of Corunna, it is clear that his perception, memory, comparison, and judgment, are so impaired that his mind is under the dominion of a wild and extravagant association of ideas, and that his reason is powerless to check his thoughts or guide his expressions. But he may utter this absurdity in a calm and assured tone, with no violence or impetuosity of thought or feeling; and, if met with a good humoured contradiction, he may smile at your incredulity. He is often very happy in the unregulated flow of a cheerful imagination, and believes the suggestions of his fancy more implicitly than ever poet, with "his eyes in a fine phrensy rolling", could put faith in his dreams.

This, however, is a condition of mind for which, all the rational powers being impaired, and their coherency and mutual check destroyed, we find little difficulty in accounting. The intellectual functions of the brain are partially or wholly suspended, and isolated ideas and suggestions of broken memory succeed each other at random. There is a congruity and concurrence of ruin, which, however melancholy, is satisfactory to the observer. But there is a condition in which the understanding remains to a great extent entire, and still harbours a delusion on one or more subjects, perhaps quite outrageous and absurd. Correct, and even clear-headed and acute, on general topics, the individual may still cherish a delusion on some points, which creates a want of harmony in the whole mind, very difficult to comprehend. A person, whose interesting and intelligent conversation you may have enjoyed on a variety of subjects, may suddenly surprise you by the announcement that he is a great prophet, possibly a deity; that he is destined to live for ever; or that he has no liver, lungs, or heart. You may have very likely read of a patient who, when being examined as to his sanity, conducted his defence in so rational a manner that the judges were unable to detect any infirmity of mind, till some person, acquainted with the nature of his case, led him to announce that he was Jesus Christ, the Saviour of the World. Dr. Haslam mentions the case of a man who had been many years in Bedlam as an incurable patient, but who was, during his confinement, as far as could be ascertained, completely in his senses; but, whenever he went home, which he did several times, he felt uneasy, and found himself bewitched at all points. "The devil and his imps had preoccupied the best places in the house." Another patient is mentioned by the same author, who, during the time he knew him, always conducted himself in a very gentlemanly manner, whose disposition was remarkably placid, and whom he never knew to utter an unkind or hasty expression, but who still never omitted in his letters to style himself "God's King, Holy Ghost, Admiral, and Physician". Another patient is also mentioned, whose insanity consisted in a belief that the germs of sprites entered into his ears during the night, and on this account he always stopped his ears closely with wool, and, in addition to a flannel nightcap, usually slept with his head in a tin saucepan. Horace mentions the case of a man who was exemplary in all the social relations of life, kind to his wife, hospitable to his friends, etc., who harboured the delusion that he was listening to lively dramatic representations in the theatre, when he was the only creature in the building, and who would sit and applaud the wit and sparkle of the dialogues, which took place, in reality, nowhere but in his own cranium.

The delineation of various forms of insanity was a favourite subject with several of the classical writers. Readers of these will call to mind the vivid picture of the madness of Orestes, after he had slain his mother, Clytemnestra, in revenge for her treacherous murder of her husband Agamemnon, who was replaced in her affections by the scoundrel Ægistheus; also the madness of Hercules, from the torments of the poisoned shirt which the jealous Dejanira had sent him, an insidious revenge for her slighted love; the ludicrous but furious onslaught of Ajax upon the sheep, mistaking them for the enemies who had baulked him of the shield of Achilles; and, above all, the sublime and tragic madness of Medea when, deserted by Jason, she laid violent hands upon her two children, and sacrificed them at the shrine of outraged love. The copiousness of the Greek lexicon in terms relating to insanity, shows that many different forms of this malady were known to the ancient Greeks, and had engaged their discriminating attention.

These examples of delusion are sufficient to illustrate this kind of disorder. They show that the mind may be affected with insanity which at first sight seems partial, and confined to some special subjects, and on this account the kind of insanity now spoken of was distinguished by the name of monomania; mania on a single point. The term monomania is now, however, but little used.

The three forms of insanity which we have now reviewed are those which afford the most conspicuous symptoms, and which are generally conceived by the popular mind as types of the disorder, when a person is said to be insane. They present broad and unmistakable marks of departure from soundness of mind which are satisfactory and convincing. When a man is seen raving and violent, unable to control his words or guide his actions; or when he is seen brooding over some imaginary sorrow, neglecting every duty of life, and delivering himself to the sway of causeless terror, or rapt in vague abstraction; or when he utters some opinion grossly at variance with the general perceptions and common sense of mankind; or when his discourse is a jargon of unconnected words, the world is satisfied that he is insane. The justice of the verdict is accepted, his insanity accords with the popular notion of that disorder, and the judgment of all approves what belies the prejudices of none.

We have, however, by no means exhausted the wide field over which the manifestations of insanity are displayed. We have taken the mind, as it were, in its totality, and have viewed it under the influence of certain disturbing forces which place it in a condition of disorder, as a storm of wind may sweep an entire ocean, and produce wild confusion and turbulence from shore to shore. The sea, however, may be subjected to a gale which shall blow over one region, within circumscribed limits, and leave the rest in entire or comparative calm. This somewhat coarse simile may serve as an illustration of what I wish to substantiate in the following part of my discourse. We are all conscious in our own minds of the possession of many distinct faculties, and of our power of carrying on mental operations, and discharging mental functions of very different kinds. When we are following out in the pages of Adams or Le Verrier one of the grand mathematical problems by which they forced the solar system to reveal to the astronomical world its long hidden orb of Neptune, and taught the exact spot in the heavens where the remote planet might be seen; and when, filled with admiration at the reach of the human intellect, we turn and bend in humble adoration of that Great Being who created both it and the objects about which it had been occupied, and prostrate ourselves before him in humility and self-abasement, how great is the difference between the two mental operations we then perform! We are sensible of the distinctness between the faculties by which the two acts are accomplished, and that they belong to two distinct orders of psychical powers. In the one, the reasoning power is tasked to its utmost stretch. In the other, the reasoning power performs the smallest share. When we are following the glowing creations of some bewitching poet, and revelling passively in the charms of a Milton's or a Shakespeare's fancies, how differently we are employed, what a totally distinct set of mental faculties are we calling into operation from those we use when, stung by the taunts of an enemy, or roused by the opposition of an antagonist, we burn with anger or glow with a desire to retaliate! When fondly caressing our children, and mixing with a childlike glee in their young sports, for the love of seeing them happy, what different beings we are, in so far as regards mental phenomena, from the scheming, plodding, acquisitive creatures we exhibit ourselves when toiling to win from the world the wealth that is to be bestowed upon their support.

Now, if we analyse the mental phenomena concerned in the very few and every day modes to which I have just adverted, we shall find that the powers brought into operation are referrible to two distinct orders; and it is convenient to designate these as the intellectual and the moral faculties. All those powers of the mind by which we maintain our position as rational creatures, which enable us to cultivate science and art, to invent, discover, and apply, to reason, to compare, and to infer, to remember, to combine, and to imagine, are intellectual powers, and would make a rational being if he were possessed of no other powers besides. But we feel that we have other

powers. We feel that we have affections which render us kindly disposed to each other; that prompt us to love our friends and all others who love us; that dispose us to relieve the wants of those who are about us; that lead us to desire the good opinion of others, or to entertain a good opinion of ourselves; that incite us to a reverential feeling towards our Creator, to persevere in the decisions of our own will, or, on the other hand, that we have faculties which render us eager in opposing anything which we dislike, which make us triumph in the surmounting of difficulties, and resolute in the battle against oppression and injury; also that we have instincts which lead us to take every care for the preservation of our lives, and the satisfaction of our bodily wants. These various powers and faculties, so distinct from the former set, are conveniently designated by the term "moral and instinctive faculties." They are called moral, because they preside over the regulation of our conduct towards others, and determine our sentiments and affections. Now, it needs no discussion to establish the proposition, that men differ very widely in the amount of their intellectual faculties. So universally is this difference recognised, that we have no commoner phrases in the language than those used to denote the differences between men in this respect. And not only do they differ in the aggregate amount of their intellectual ability, but they differ very greatly in the power of particular faculties; and grown up men scarcely differ in these respects more than boys and children. This shows that the difference is not entirely acquired, but is innate. One boy displays an aptitude for argumentation; another, for the accumulation of facts; a third, for the composition of verses; a fourth, for the acquisition of languages; a fifth, for the construction of machinery; a sixth, for the discovery of new relations between the things he observes; and so on in almost endless variety: and, as boys grow into men, we have the intellectual world peopled with statesmen, philosophers, logicians, grammarians, orators, poets, and artists; and these all of every possible grade of intellectual power and excellence.

In the same way that it admits of no dispute that the intellect offers these varieties of power, we may observe again a difference in the relative manifestation of the intellectual faculties, as compared with the other order of faculties, which I have just called the moral faculties. A man may have intellectual abilities of the first order, and yet be deficient in those qualities which go to the composition of a good subject in his social, domestic, and moral relations. These latter faculties do not appear to hold any definite relation to the development or strength of the former. The circle of our own acquaintance may supply us with examples of men conspicuous for the zeal and success with which they cultivate science, commerce, or the arts, or the ability with which they follow out any favourite pursuit, who are, nevertheless, greatly deficient in those moral perceptions and sensibilities which are necessary for the formation of a great and useful character. How much has the history of the world and the peace of nations been disturbed by the unregulated ambition and unscrupulous daring of clever and gifted men, in whom Nature had implanted excellent powers of mind, but left them unfurnished, or scantily provided, with the controlling and humanising faculties of an equally powerful moral constitution. Had the moral faculties of such men been equal to their intellects, how differently would the history of a Cæsar or a Napoleon, or a Nicholas, have been written. Instead of being traced with a pen dipped in blood, and guided by the light of a thousand fires of sacked and burning villages and towns, inspired by the drum of war and the thunder of cannon, it would have beamed with the light of love to human kind, and would have formed, each in its time, an epoch in the advancement of the human race in the arts of civilisation, literature, commerce, and peace.

If we find, on the one hand, that great mental endowment may be consistent with a deficiency in the moral powers and affections; we also find that these latter not unfrequently coexist with a very moderate scale of intellectual development. When we see a man exercising all the offices of a good citizen, of a kind husband and tender parent, full of good works towards his neighbours, benevolent to the poor, forgiving towards his enemies, anxious to promote the welfare of all around him, increasing the amount of happiness within the whole circle of his influence, however unlearned he may be, if he be ever so unable to excel in science or literature from the want of abilities for their attainment, that man still possesses talents and powers, which, though of a very different order from those which we style intellectual, are no less surely psychical faculties, which the merely intellectal man does not possess, and which lead him to a sphere of action in which the other could no more supplant him than he could rival the other in the productions of his intellect.

This diversity in the relative prominence of the two orders of faculties towards each other, admits, I think, of no kind of doubt. We must unhesitatingly grant that it is so. It seems as clearly established as the disparity between the intellectual capabilities of one man and those of another, or as that between the strength of one man's muscles and bones, or the size of his corporeal frame, from those of another. A phrenologist might say it was all owing to the difference in the size of some part of his head or brain. I shall have something to say on this by and by. At present I wish to establish the fact on common experience and observation alone. We shall arrive at the truth by these methods, with as much certainty and clearness as if we endeavoured to establish it by arguments not so generally understood, and much more open to debate. The concession, then, of a discrepancy between the intellectual abilities of different individuals, and between the intellectual and moral faculties of the same individual, leads us to the subject of the difference between the moral faculties of one individual and those of another. Shall we question the existence of such a difference? Shall we say that if children and boys are gifted with various degrees of intellectual ability, they are all equally endowed in this respect, and that the differences afterwards exhibited are due to the comparative success or failure of education or training? to the operation of the multifarious agencies, favourable or unfavourable, to which the individual has been subjected in his earlier years. Is this the entire philosophy of St. Giles and St. James? No doubt of the vast influence of these agencies. No doubt of the substantial truthfulness of Hogarth's masterly design in the subsequent fortunes and allotments of the virtuous and disorderly apprentices. For it is indisputable, that "as the twig is bent, the tree's inclined." But is this all? Is there no difference in the original quality and innate property of the twig? I will ask the fathers and mothers whether there is not a great original difference in their children in these respects? Is there in all your children alike the same affectionateness of disposition? Is there the same degree of kindliness towards brothers and sisters? Is there in all of them an equal degree of calm and placid good temper? Do you find it equally easy to instil into all their young and tender minds the love of truth, ready obedience to orders, the forgiveness of offences, the virtue of self-denial? Can you teach them all equally the subjugation of their young passions? Are not some among them much more impetuous, irascible, vain, proud, resentful, disobedient, sensual, avaricious, and mischievous, than the rest? And are not these differences of character manifested before they can be the result of any external influences? Are we not satisfied by the irrefragable convictions of our experience that these differences are inherent in the very constitution of the children, and are also quite independent of their intellectual abilities? How often, indeed, it happens, that the brightest sparks of intellectual ability in a young child are dimmed by some concomitant defect in its moral constitution! How often it happens that the one who shines the least in this direction, is redeemed by the compensating gifts of a sweet temper and an amiable mind, and grows up, with no more advantages of care and education than the rest, to be the solace and comfort of her family, possibly much in need of them from the wilfulness and errors of that one whose intellectual endowments apparently fitted him to be their pride and ornament. If these differences exist in children before the influence of external impressions can have produced them, they must obviously be considered inherent qualities which will show a tendency to persist during the remainder of life. They grow up with the advance of years, and become more and more conspicuous as the sphere for their manifestation enlarges. Education may do very much for the individual towards their extinction; the influences of religion may do more; but the radical cause of the difference is still there; and education must greatly extend its scope, and widen the objects at which it aims, before it can strike at the origin of the evil. "A corrupt tree will bring forth corrupt fruit." Thistles will not yield figs, nor brambles grapes. The axe must be laid to the root of the tree, and it must either be prevented from bearing fruit, or the ameliorating influences must work from one generation to another, that a gradual improvement may be accomplished in each descending generation, before any grand result will be realised.

[*To be continued.*]

ON THE SECOND SOUND AND MURMUR OF THE HEART AND GREAT VESSELS, IN THEIR RELATION TO DIAGNOSIS.

By John Cockle, M.D., Physician to the City Dispensary, and to the Margaret Street Dispensary for Consumption, etc.

The following contribution has for its object an inquiry into the second sound and murmur of the heart and great vessels, in their relation to diagnosis. It is solely one of practical character; in some points, not altogether in accordance with the current teaching; and is, consequently open to the fullest discussion and criticism. The facts are stated as they occurred to me, together with such inferences as may be considered fairly warranted from the subject matter.

I shall premise a few observations generally respecting the impulse, rhythm, and sounds of the heart, before entering into the question of the special modifications in disease connected with the second sound, etc. The ordinary expression of the heart striking against the chest-wall appears inaccurate, since it is now pretty generally admitted that the heart, in the perfectly normal state, never disconnects itself from the parietes. The conditions necessary for an actual stroke are, therefore, absent. In the language of Charles Robin, "On ne peut frapper ce qu'on touche et l'on ne bat que ce que l'on ne touche pas." The apparent stroke consequently appears to consist simply in elevation of the corresponding soft structures of the chest-wall. This matter, however, is too complex to challenge from me here the arguments in its support. To pass on, then, to the rhythmic action and sounds of the heart, I may state that I have for some time past been engaged in an experimental investigation of these phenomena. Taking into consideration the retrograde course of the coronary arteries, and the fact that, during the systole of the ventricles, the blood of the coronary arteries would be prevented penetrating their tissue, it occurred to me to revive the old inquiry as to the time when the nutrient arteries of the heart were filled. I remembered the physical demonstration of Bernouilli, that, if fluid was injected into a tube of given calibre, it would pass with facility into secondary tubes, the direction of which was in harmony with that of the main branch; but if, on the contrary, the direction of the secondary tube was opposed to that of the trunk, not only would the onward current be prevented passing into such diverticulum, but that fluid would actually be drawn up into the latter from a reservoir below.

I applied, I say, at first, this argument to the action of the coronary arteries, and conjectured, from their direction with respect to the main trunk, that they must be filled during aortic systole. Subsequently I found, experimentally, that this chain of reasoning, however sound with regard to fluid traversing empty tubes, would not accurately apply to those already filled. I have consequently thus modified my view with respect to these phenomena.

While admitting fully a controlling influence of the nervous ganglia of the heart, I adopt, at the risk of being thought antiquated in my notions, the Hallerian doctrine relative to the automatic action of this organ; and contend that, with reference to the invariable sequence between the systole and diastole, it is purely one of muscular action conditioned upon the contact of the blood with its tissue.

I conceive that the heart's alternating systolic and diastolic action is, in the healthy subject, maintained by two causes; the one intrinsic—the contact of blood with the endocardial membrane; the other extrinsic—the blood injected by the coronary arteries into the proper tissue of the muscle. The necessity of the first cause—the ingress of blood from the cavæ into the auricle—seems proved by the early experiments of Bartholini, and their subsequent modification by Haller, Cardan, Senac, and others. The second cause I attempt to explain in the following manner, commencing from that period of a revolution of the heart's rhythm corresponding to the ventricular systole. At this time the auricle is dilating from the blood of the cavæ; its tissue is lax, and easily permeated by aortic arterial blood. These two acts, being simultaneous, determine at once its contraction. The contracted condition of the ventricle during this period had prevented the entrance into its tissue of the nutrient blood; but now, commencing its diastole, and filling with the blood from the auricle, the obstacle is removed, and instant contraction again ensues, as before described.

With regard to the sounds originating at the cardiac orifices, I accept the teaching of Skoda, that there are two engendered at each venous, and two at each arterial ostium.

I incline, however, to the belief that the first ventricular sound may be produced in the following manner. During the closure of the auriculo-ventricular valves, they carry, in the funnel shape partially assumed during the process, a portion of the ventricular blood back into the auricle: this layer is reinforced by blood streaming from the cavæ; so that the reaction between the lower and upper columns, the valves intervening, gives rise to the dull prolonged first ventricular sound, the upper blood-layer acting as a damper to the valve-sound. And this view leads me to consider that, during the ventricular systole, the chamber cannot be entirely emptied. If, during the period of ventricular contraction, we imagine the blood-stream divided into two columns, one rushing through the aortic mouth, the other assisting in the momentarily sustained closure of the auriculo-ventricular valves, this latter portion must, theoretically, by the nature of the contraction, be left in contact with the ventricular face of those valves, and rendering their mid portions of dome-like form, which latter condition has been recently experimentally demonstrated by Chauveau.

However this may be, one point appears clear, if the recent experiments of Dr. Halford may be considered trustworthy, that the obstruction of the blood from the cavæ into the heart annihilates the normal sounds. Some indefinite sound, it appears, may still exist; muscular bruit, the visible vibrating motion described by Haller during contraction, caused possibly by the stimulus of the blood, still existing in the coronary arteries, upon the muscular tissue of the heart. Hence we may exclude the notion of the first sound, at all events, being principally muscular.

Of the several theories proposed in explanation of the second ventricular sound, that of Julius Roger appears to me the simplest and the best; viz., that membranes may cause sound both by impact and by separation. The wedge-like column of blood traversing the auriculo-ventricular orifices may, by impinging upon the separating valves, engender sound, a certain amount of force being imparted to the blood-stream, to prevent the tendency to partial vacuum left by the relaxing ventricle. Physiologists are not clear as to the actual amount of overlapping, but it is doubtless sufficient to explain the phenomenon. And one fundamental fact is admitted by most auscultators; viz., the occasional occurrence, in the normal state, of a second sound highly intoned at the apex, while the basic sounds are weak, and, it may be, of different pitch. I shall advert to this point again, when speaking of murmurs at the apex.

The second arterial sounds are supposed to have their *maxima* at or near the mid sternum, and, for purposes of differential distinction, are recommended to be auscultated at the aortic and pulmonic cartilages respectively. Whether the information sought be gained by this procedure, has always appeared to me doubtful. To solve this point, I have recently attempted various experiments. The following was one. Two watches, of nearly equal timbre, intensity, and synchroneity, were covered with oilskin bags, and to the neck of each an India rubber tube was attached; the watches were placed one upon the other; and the tubes, after being connected at their origin, were made to diverge to a given distance. It was always impossible, upon listening alternately at the open end of each tube, to distinguish the relative position of the watches, the mean note only being heard. They were afterwards introduced into the aorta and pulmonary artery respectively of an ox recently slaughtered. Auscultation, as before, always yielded the same result. Media of different density, brought temporarily into contact with the free portion of a tube, modified the note at its open end.

It must, however, be borne in mind that synchronous with these arterial sounds, is the sudden injection of blood into the auricles from the large veins; and, from their unequivocal muscularity, it is hardly possible to conceive that this impulse can be altogether aphonous. According to a celebrated physiologist and auscultator of a certain school in Paris, Dr. Beau, although in a different sense, the auricles are said to yield under these conditions distinctly audible sound.

With respect to the second arterial sounds, it is taught by some, that the aortic sound is loudest; and this would, certainly, on *à priori* grounds, be probable, considering the area of the vessel and the stronger valves at its mouth. So far, however, as my own observations extend, I have not found this assertion practically true. I have observations relative to this point extending to one hundred cases, and I found on analysis they gave the following results.

About 60 per cent. equal at both aortic and pulmonic cartilages.
" 26 " loudest at aortic cartilage.
14 loudest at pulmonic cartilage.

The question may therefore fairly be asked, whether the loudness of the second sound does stand in a direct causal relation to the strength of the ventricular systole and the reaction of the arterial walls?

I have observed in typhus fever, fatty heart, spanæmic women, and cases of general debility, that when the first sound was decidedly weak, the second was still loud and clear. In the so called accentuation of the second sound of the pulmonary artery where it would be said to exist, it has appeared to me usually rather a forcible diastolic recoil of the artery than an accent properly so called.

Taking the second aortic sound, or its replacement by murmur, as a basis for differential diagnosis, the following points have presented themselves to my notice.

A preternatural accent of the second sound in the direct course of the aorta, to the right of the sternum, has been observed and specially indicated in some cases of aortic aneurism. I have recently had an opportunity of watching throughout a case of aneurism of the ascending aorta. The earliest symptoms were those which apparently indicated an inflammatory condition of the aorta: at this period, the only persistent physical sign appreciable was marked intensification of the second sound over the aorta. Some months later, pulsating tumour was seen and felt about the second and third right costal cartilages; the second sound still being preternaturally loud. In the early stage, it occurred to me that the loud second sound might be explained on the hypothesis that the inflammation of the aorta had induced unusual contractility of this vessel, and thus, by rendering it more rigid, making it a better conductor of sound. At a later period, the extensive thickening of the coats, by excessive deposit, might have rendered the tube a better conductor; at all events, the intensified sound could not be explained upon the hypothesis of increased recoil of the vessel, since here the elastic reaction of the vessel was impaired or even destroyed by extreme degeneration. A further argument against the loudness of the second sound being supposed to result from the injecting force of the heart, may be borrowed from Dr. Stokes. When treating of softening of the heart in typhus fever, he states, that in his 41st and 56th cases, the second sound was preternaturally loud, and in the latter case attended with impulse, while the first sound was extinct, and the impulse not appreciable by palpation. I again submit, therefore, that the hypothesis of the causal relation between the loudness of the second sound and the propulsive force of the ventricle, requires reconsideration.

It is hardly necessary to mention induration of the pulmonary tissue, excavations therein, contraction of the lung from phthisis, permitting the pulmonary artery to come in immediate proximity with the chest wall—a pathologic condition first indicated, I believe, by Dr. Sibson—enlargement of the liver, etc., as sources of intensification of the sounds. I have, however, some reason to believe that a marked intensification of the sound in the post clavicular space may, now and then, assist in the diagnosis of deposit at the apices of the lungs.

In insufficiency of the aortic orifice, the second sound is more or less perfectly replaced by murmur, soft, harsh, or musical. Such murmur, however, does not nor cannot measure the amount of patency. I have particularly observed that in some cases, in which, judging from the extraordinary collapse of the arteries, the patency was extreme, that the murmur in its physical characters differed in no respect from other less advanced cases in which no collapse was observed.

I believe enlarged experience scarcely supports the notion of Dr. Hope, that aortic may be distinguished from other murmurs by the pitch. The pitch of a murmur at any orifice infinitely varies with the physical condition engendering it. An aortic regurgitant murmur may be of so high a pitch as to approach sibilation in point of intensity.

I may add, that this distinguished observer was also decidedly in error when he stated that a mitral murmur was never audible above the level of the aortic valves. Murmurs at the orifices are not so restricted as many suppose.

There are one or two points, however, with regard to aortic diastolic murmur, which I will take leave to mention. The first is that, contrary to the opinion of some observers, I have not unfrequently found it attended with well marked diastolic fremitus even at the apex, and this in cases unattended with any excessive degree of spanæmia; and, indeed, there appears no reason why a partially rigid valve should not be susceptible of being thrown into tactile as well as sonorous vibration by he refluent current.

It is usually taught that the differential diagnosis of aortic regurgitant murmur may be, at least, in part established by the clear click of the valves of the pulmonary artery auscultated to the left. I am far from asserting this is not occasionally correct; but so far as my opportunities of observation extend, I should, in the majority of cases, deny the validity of this proposition.

When the diastolic murmur is at all intense, I believe the second sound of the pulmonary artery is always more or less obscured, and in musical murmur almost invariably so. Indeed, if we bear in mind the anatomical condition existent, and consider how readily vibrations are excited in contiguous and homogeneous structures, the difficulty of conceiving the reverse is obvious.

The limits of these murmurs again, and particularly the musical, have been too much restricted; they extend over a very wide area; at times, all over the anterior and posterior surfaces of the chest, from the epigastrium to the pubis; and posteriorly, from the vertex nearly down to the lower end of the sacrum. From their site of origin, they may, I am quite sure, from comparison of cases examined after death, extend across the apex and round the axilla to the posterior scapular region; and this without coexistent disease of the mitral valve.

Excluding from consideration some rare cases of aortic aneurism, described by Gendrin as being liable to be confounded with aortic patency, is there any other condition which gives rise to similar physical phenomena? I believe there is.

A few months ago, I exhibited, at the Pathological Society, a specimen of diseased suprarenal capsules; they were removed from a female advanced in life, who had exhibited well marked symptoms of cardiac disease: a harsh double murmur was heard, with its maximum near the base, and extending with great intensity up the aortic, and downwards to the apex, axilla, and posterior scapular region. The heart's action was somewhat heaving, and its rhythm irregular. These phenomena were persistent, and scarcely underwent any change when examined on several occasions by Mr. Robinson (whose patient she was) and myself. We considered there might possibly exist both aortic and mitral disease. After death, hypertrophy of the heart was found. The aortic and mitral valves were apparently intact; but the aorta at its arch was nearly converted into a long tube; and in its ascending portion, rough, calcified portions projected, the lining membrane being entirely destroyed.

In another case, of Dr. Hawksley's, similar physical phenomena were constantly observed, and the same irregular rhythm. After death, enlargement of the heart was found; rough, calcified projections studded the ascending aorta and its arch; a slight calcification was certainly found at the base of one of the aortic valves, but not preventing tolerably fair closure; and, to the best of my judgment, quite inadequate to the production of the intense double murmur audible over base, apex, and axilla.

[*To be continued.*]

ON THE OCCURRENCE OF AMAUROSIS IN PATIENTS SUFFERING FROM BRIGHT'S DISEASE OF THE KIDNEY.

By Holmes Coote, F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, etc.

The connexion between amblyopia, or amaurosis, and Bright's disease of the kidney, was, I believe, first pointed out in 1849 by Landouzy of Rheims, who published, in *L'Union Médicale*, a paper containing several cases in illustration of the fact, occurring in patients in whom nephritis had been produced by the use of alcoholic drinks, by exposure to damp, or by want of the common necessaries of life. It is a matter of surprise that, with the knowledge of the frequency with which extravasations of blood and other accidents occur within the cranium in persons the subject of albuminuria, the idea should not have more readily suggested itself of examining in such cases the condition of the nervous contents of the orbit, constituting, as they do, an integral part of the cerebro-spinal centre. We might in many instances reasonably expect to find there morbid changes of a similar character to those noticed on the convolutions, or in the substance of the brain, provided there were any means of illuminating the retina and the choroid behind the transparent media of the eye. I need scarcely remark, that this end is readily attained by the use of the ophthalmoscope.

When the kidneys are so diseased that the proper urinary

excretion is impaired, and the effect is felt in the general constitution of the blood, the walls, not only of the larger arteries, but likewise of the capillaries, undergo a molecular or granular degeneration, by which they lose their elasticity and strength, and are very liable to give way. In the examination of the body of persons who have died under these circumstances, I have found in the brain four or even more small extravasations of blood in the various stages, between recent effusion and complete repair. The same morbid changes occur, I believe, in the arteries of the choroid, retina, and vitreous humour, where they give rise to changes which impair or destroy vision, and may be recognised during life.

I had occasion to make an examination of the eye, a few days ago, in the following case.

Anne P., aged 50, an unhealthy looking woman, with puffy countenance and sallow complexion, was under the care of an eminent physician, a friend of my own, for a complication of diseases, any one of which was sufficient to shorten life. She had had chronic bronchitis for many years; the right cavities of the heart were dilated, and there was general anasarca; she suffered from pain in the loins; the urinary secretion was diminished in quantity, and albuminous; there was hard cancer of the right mammary gland, with similar disease of the absorbent glands extending into the neck. Three weeks ago, while under treatment, she became suddenly blind of the right eye, and continues so up to the present time. Upon examining the affected organ (April 10th) with the ophthalmoscope, I found the transparent media of normal consistence, but the posterior surface of the eye wanted the usual brilliant hue; the vessels of the retina appeared to me smaller than natural, and to cease more abruptly; the vessels of the choroid membrane were not made out with common ease. By throwing the light to the right of the entrance of the optic nerve, I brought into view three smaller and one larger extravasations of blood, the former towards the lower part of the globe, the latter directly in the axis of the pupil: they seemed to be either in the structure of the retina, or between that membrane and the vitreous humour; the usual colour of blood was apparent. In another part of the retina, there was a yet darker spot, apparently of pigment, and of uncertain character.

In such a case, it is obviously impossible to direct, for the treatment of the diseased eye, the administration of any remedies which might interfere with the management of the more serious affections of the kidneys or thoracic viscera. In all probability, this patient will have ceased to live before the completion of any process of repair in the eye; and we know by experience that absorption of blood or other fluids takes place very slowly in a diseased organ, however rapid may be the same process among tissues perfectly healthy. In such a case, the administration of mercury would be inadmissible, on account of the general condition of the patient's health; and, even if it were otherwise, I am yet to learn that mercury "promotes absorption" otherwise than indirectly; namely, by controlling the action of the smaller vessels in an inflamed part, and preventing further effusion. Such circumstances do not exist in the case now under consideration.

Although Blödig found only three cases of this combination of amaurosis and Bright's disease of the kidney during the five years he studied in the Ophthalmic Clinic of Vienna, I believe it will be found of more general occurrence—not perhaps always manifested by sudden loss of vision from the rupture of diseased capillaries and the effusion of blood, but by changes dependent on the disturbed circulation through vessels which have lost their elasticity and power of regulating the flow of blood through tissues perhaps the most delicate in the human body—changes which, though slow, are not the less sure to terminate in the disorganisation of those parts upon which depends the susceptibility to the impressions of light. Thus Dr. Heymann of Dresden found, in one case of similar nature, turbidity of the vitreous humour; in another, a sort of serous swelling of the optic nerve papilla; in another case, the retina was covered "as if by a cicatrix". I found, in a case recently examined, loss of brilliancy in the choroid—absence of defined arrangement of the arterial capillaries. The vessels brought into view appeared to be venous, and were tortuous and varicose.

The case here related illustrates the importance of studying diseases of the eye in conjunction with other branches of medicine; for, by attending to the condition of organs which may be remote, and not long ago would have been considered wholly unconnected with the ophthalmic affection, can we alone hope to be of service to our patient.

THE ANATOMY, PHYSIOLOGY, AND DISEASES OF THE MEMBRANA PUPILLARIS.

By Augustin Prichard, Esq., Surgeon to the Bristol Royal Infirmary.

[*Read before the Bath and Bristol Branch, February 19th*, 1857.]

I have ventured to introduce this subject to the notice of the members of the Society, for the purpose of pointing out one or two anatomical errors which, in my opinion, have hitherto existed in the descriptions of the membrana pupillaris and its vessels, and for the sake of bringing forward an opinion which I hold as to the office it serves in fœtal life, and also because I wish to narrate a few cases of disease of the eye, which I refer to the continued existence of this organ.

The membrana pupillaris, a clear transparent membrane, closing the pupil during fœtal life, was first discovered by Wachendorf, in 1738. Afterwards, Albinus, Haller, Zinn, Wrisberg, and Dr. William Hunter, described it about the same time, but no one of them with complete accuracy. It is a simple membrane, continuous with the *anterior* surface of the iris, quite transparent, and found at every period of fœtal life. The centre of the posterior surface is in contact with the anterior capsule of the lens. Dr. Jacob was the first British author who pointed out that the membrane exists until the ninth month of fœtal life; for it had been considered previously not to exist after the seventh—an error originating from the fact that the vessels cease to be permeable at that time; and consequently the membrane is almost invisible, and can only be demonstrated by great care. Tiedemann, Retzius, Arnold, and M. Portal, were also of the opinion that the membrane remained till birth.

I must call to your remembrance one or two facts respecting the iris, which it is necessary to keep in mind in order to understand the subject, and which, like other anatomical minutiæ, are apt to slip away from the recollection, unless there is something to induce us to dwell upon them.

In the fully developed and healthy iris, the vessels are posterior, and are covered in behind by the pigment or uvea: the vessels are tortuous and anastomose tolerably freely, the general direction being towards the pupil, where there is a more free anastomosis, miscalled the "circulus arteriosus iridis minor". The human iris, freed from pigment, is almost transparent. In the very dark eye, particularly in those of the coloured tribes, there are pigment-cells scattered upon the anterior surface, in addition to the uvea behind; but, in the blue or light coloured iris, there is no pigment in front: the colour is due to the reflection of the light through the transparent iris from the uvea, the light being decomposed, and colour thus developed by the finely divided surface of the membrane; and when the pigment has been removed by washing, there is no appreciable difference in colour between an iris that was originally blue and one that was grey, or green, or light brown.

In the human fœtus, there are vessels upon both surfaces of the iris. The posterior set passes as far as the pupillary margin, and not beyond; whilst the anterior run onwards in a straight course upon the membrana pupillaris, and, turning round at a little distance from the pupil, pass back to gain another part of the membrane, but still upon the anterior surface.

In an injected fœtus of about six months, the membrana pupillaris is seen in perfection. The iris is narrow, and not fully developed; the pupil is large; and the membrane is thin, transparent, and covered with fine vessels, visible by the naked eye, particularly if it is stretched upon a white surface. (Fig. 1.) These vessels form a series of loops upon the membrane, and occasionally one traverses the centre. Cloquet, in his memoir on the subject, says that there are thirty or forty distributed in this way; and Henle says there are from ninety to a hundred. The number no doubt varies in different specimens, for I have counted upwards of one hundred and twenty upon an injected fœtal iris, passing forwards to supply the membrane. I have also seen that a few vessels run from the posterior vessels of the iris, and inosculate with the arteries on the membrane. As the fœtus advances towards the termination of intrauterine life, whilst the membrane is still entire, the vessels are gradually obliterated, like the vessels of the posterior capsule of the lens, which become incapable of carrying red blood, and gradually disappear, leaving the organ perfectly transparent. I have found the membrane entire and transparent in the eyes of a fœtus of nine months; and I have once seen, in a specimen of

this kind taken from a still born child, one or two loops of vessels running over the margin of the iris upon the membrane, and returning to the iris, whilst the greater part of the



Fig. 1. The iris and membrana pupillaris of a six months fœtus. The anterior vessels of the iris are here shewn to be continuous with those on the membrane, and one vessel is seen to traverse the centre.

surface was free from vessels. (Fig. 2.) After birth, the membrane gives way, most likely from the action of the pupil; a few shreds are sometimes left, and these are gradually absorbed.



Fig. 2. The iris and membrana pupillaris of a nine months fœtus (*i.e.*, still-born, at full time). A few remaining loops of vessels are seen running from the iris upon the membrane.

In order to see the vessels properly, the iris and the anterior part of the choroid, with the ciliary ligament and body, are to be removed from the eye of a six months fœtus which has been successfully injected from the umbilical vein. The removal is done by dividing the organ into an anterior and a posterior half, removing the cornea and sclerotic from the anterior portion, and washing away the pigment from the uvea and ciliary processes by gentle agitation in spirit and water. Upon examining the posterior surface of a specimen thus prepared by the aid of the microscope and a low power lens, the ciliary processes are seen full of vessels, and from under cover of them a vast number of vessels are seen to run for a short distance in a straight course (Fig. 3), and then to turn and anastomose very freely. These vessels are solely distributed to the iris, and but three or four of them pass on to the membrana pupillaris. I have seen these arteries with very similar anastomosing branches on the back of the iris in a fœtus of nine months, where the anterior vessels were but indistinctly seen.

There is no doubt that the disappearance of the membrana pupillaris occurs at different periods in different cases; for I have often searched for it in vain in a nine months fœtus, and found the pupil perfect and open: in other words, it sometimes disappears before birth, and sometimes at that period. I have also found it present in one eye, and absent in the other.

In a fœtus of a few weeks, no trace of an eye is to be seen; but, at six or eight weeks, it is visible as a small transparent gelatinous body. In the third and fourth months, the exterior of the globe is completed, and the choroid is almost entire, but still there is no iris; but, in the fifth month, the latter membrane is first visible as a narrow blueish or brown ring. The iris is formed subsequently to the choroid; and, as soon as it is to be demonstrated, a membrana pupillaris may also be seen. A writer in Von Ammon's *Zeitschrift* says that the membrana pupillaris is present when there is no iris and no corpus ciliare, in a fœtal sheep. The vessels of the iris, choroid, and ciliary processes, are distinct. As time goes on, and the development becomes more complete, the pupil becomes narrow, until, at the ninth month, it is very narrow, and the colour of the iris is tolerably distinct.

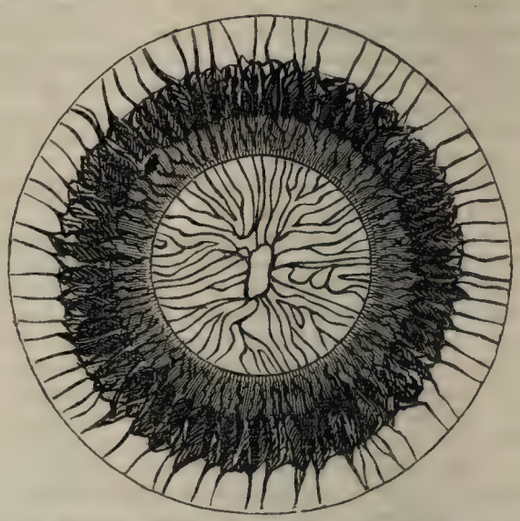


Fig. 3. The anterior half of an injected fœtal eye (six months) seen from behind. The pigment, the cornea, and the sclerotic, have been removed. The straight vessels leading to the ciliary processes are seen outside, then the posterior vessels of the iris, and in the centre the vessels of the membrana pupillaris coming from the other (anterior) surface of the iris.

Taking all these points into consideration—viz., that the membrana pupillaris exists before the iris; that the latter membrane is very narrow in its earlier stages, and gradually becomes wider; that the cause of the colour is the deposition of a posterior layer of pigment; and that the anterior vessels of the iris disappear at the same time as those of the membrana pupillaris—I am inclined to come to the conclusion that the use of this membrane is to form a substratum upon which the iris may be developed; and that the posterior vessels spring from the great arterial circle to form the iris, as others do posteriorly to form the ciliary processes; and that these are the arteries which exist permanently as the arteries of the iris during life.

As the embryo advances towards maturity, the vessels are elongated, and more pigment is deposited: in other words, the iris increases in width; and the process is probably assisted in later months by contraction of the orbicular muscular fibres at the edge of the pupil.

This view of the development of the iris, and of the use of the membrana pupillaris, has not, to my knowledge, been before laid down; and it moreover explains satisfactorily to my mind certain pathological conditions which I will briefly describe.

The disease called "central opacity of the capsule" is well known to all ophthalmic surgeons of the present day, and has been tolerably accurately described in books upon diseases of the eyes. It is a white opaque spot in the centre of the anterior capsule (Fig. 4), without any connexion with the

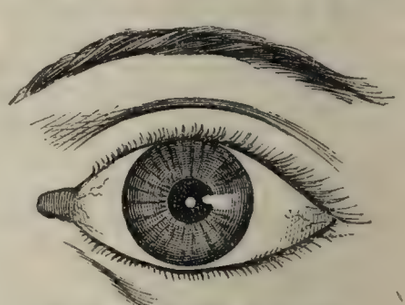


Fig. 4. Central capsular cataract.

pupillary margin of the iris. There is sometimes a corresponding opaque spot upon the cornea, and sometimes upon the posterior capsule also. It occurs in those only who have suffered in their earliest infancy from an attack of *ophthalmia neonatorum*, or the purulent ophthalmia of newly born infants, and commonly comes under the notice of the surgeon accidentally. There is little or no dimness of sight; but the prominent symptom is an involuntary oscillating movement of the eyes, rendered necessary by the central position of the

opaque spot, that a complete image of the object may be impressed on the retina.

The following cases are among those which have come under my own notice.

Case I. Richard Mathews, aged three weeks, was admitted at the Bristol Eye Dispensary on the 17th of December, 1834, labouring under acute purulent ophthalmia. It commenced upon the third day after birth, and had been allowed to run on without any particular treatment until the time of his admission. There was an ulcer upon the centre of each cornea, of considerable depth, giving an appearance as if the iris were protruding. The appropriate treatment was adopted, and the child gradually recovered from that time.

Sept. 18th, 1844. The boy is now 10 years old. He has a light corneal opacity in each eye, and a minute spot of opacity upon the anterior capsule of each lens. He is in the City School, and can see to read well.

Case II. Rosina Cole, aged two weeks, was admitted June 7th, 1843. The attack of purulent ophthalmia commenced upon the third day after birth. The left eye only was affected. Upon her admission, there was a large opacity upon the lower part of the left cornea: the discharge was profuse. The mother had purulent vaginal discharge. Under the usual treatment she recovered.

August 2nd. The eye is free from inflammation. A large white superficial opacity covers the lower part of the left cornea. There is a small white opaque spot upon the anterior capsule of this eye.

Case III. Charles Doyle was admitted on the 16th of May, 1849. There was a small central capsular opacity in the right eye. The child had suppurative inflammation when three days old, and the mother had vaginal discharge. No treatment was adopted, and the sight did not appear defective.

Case IV. Mary J. Price, aged one month, was admitted on the 10th of September, 1855. The right eye had been affected for three weeks, and the cornea was entirely opaque. On the 29th of November, the opacity was very much lessened, and there was a central capsular cataract.

Case V. Ellen Bancroft was admitted May 1st, 1853. Both eyes had always suffered. She was five years old. The corneæ were slightly opaque. There were well marked oscillatory movements. The child saw to read large letters. It was near sighted, and had a central opaque spot on each capsule.

Case VI. Ellen Price, aged five weeks, was admitted on the 2nd of September, 1853. Both eyes had been affected with suppurative inflammation for four weeks. The right was opaque, apparently in the lens. The left cornea was clear. There was still some puriform discharge.

On the 1st of October, 1856, it was found that the patient had a corneal opacity, and a large deposit on the capsule of the right eye, near the upper part of the pupil.

Case VII. Amelia Essay, aged 34, was admitted on the 29th of October, 1856. Both eyes were affected, and the sight was becoming worse. The opacity, which existed as a central spot, was becoming more obvious. This patient could not remember that any account of purulent ophthalmia, or of any inflammation of the eyes, was connected with the state of her sight. Her mother was operated on for cataract by Mr. Estlin.

Case VIII. Upon searching among the records of the operations performed by Mr. Estlin, I found the case of this last patient's mother. Sarah Oakinfeld was admitted as a patient at the Eye Dispensary, with some imperfection of the sight, and central opacity in each capsule, of the size of a large pin's head; but no rapid deterioration of sight was occurring. Some time afterwards, the lenses became more generally opaque (exactly as occurred subsequently in her daughter's case), and vision became useless. The eyes were operated on by needle; and, after two operations, the right became quite clear from the absorption of the lens; and the other became amaurotic, in consequence of the irritation produced by the presence of the cataract in the anterior chamber, having escaped from a laceration in the capsule.

Case IX. John Leaman, aged ten days, was admitted on the 21st of August, 1839, suffering from purulent ophthalmia. The left eye was entered in the book as having the cornea sloughed; and the note, which is in Mr. Estlin's handwriting, says, "There was a burst of aqueous humour while examining it." The other eye was tolerably clear.

I saw this patient again a few months ago, when he was nearly 18 years of age; and it is a matter of considerable interest to notice how the eye had recovered itself during the time that had elapsed, leaving permanent signs of the actual mischief produced by the inflammation. There is a corneal opacity in the lower and inner part of the eye, with a distorted pupil, which has been drawn down to the point where the rupture took place. There is a spot of opacity upon the capsule of this eye, of about the size of a small pin's head; it is also situated rather to the inner part of the eye.

Case X. Elizabeth Lease, aged nine months, was admitted on the 10th of September, 1856. The right eye only was affected. She had purulent ophthalmia three days after birth. There was a small corneal opacity, and a small central capsular cataract. The left eye was perfect. No treatment was adopted.

In most of the works on ophthalmic diseases this peculiar condition of the capsule is referred to general inflammation, or increased vascularity of the eye, spreading from the more superficial membranes in the cases of severe purulent ophthalmia; but no kind of explanation or reason is given why there should be a deposit of this peculiar appearance and position, instead of cataract in the ordinary form.

The most accurate description has been published in a thesis by Dr. Beck, printed at Leipzig in 1830. The author says that the general congestion and increased activity of the circulation in the whole of the eye having prevented the usual obstruction to the course of blood in the arteria centralis retinæ and its branches upon the posterior capsule, which takes place ordinarily at birth, the consequence is thickening and deposit upon the posterior capsule from the artery itself, and upon the anterior capsule from the branches which he considers to be distributed to this part of the eye; and with this opinion Von Ammon coincides.

The formation of the posterior opacity by the arteria centralis retinæ, as described by these authors, is very reasonable and intelligible, and is undoubtedly the true state of the case; but the attempt to attribute to the same cause the production of the deposit upon the anterior capsule fails most completely upon anatomical grounds, for there are no vessels to be demonstrated upon the middle of the anterior capsule. I believe that the following explanation will be found satisfactory with regard to the anterior opacity, and will account for the introduction of these cases in the present paper.

I have already shown that at the termination of the ninth month of fœtal existence the membrana pupillaris still exists, and is, to a certain degree, supplied with vessels; whilst in some cases it is entirely wanting at that period. It is obviously impossible that the membrane and its vessels can disappear instantaneously; and we can easily understand how the highly increased vascularity of the whole eye, which is so obvious in the ophthalmia neonatorum, can cause the reappearance or redevelopment of the vessels which had so recently become obstructed, or can prevent their becoming obliterated, as it probably also does in the case of the arteria centralis retinæ and its capsular branches. We must also keep in mind the fact before mentioned, that the centre of the membrana pupillaris is in contact with the anterior capsule of the lens. The subsequent adhesion of these parts is an almost necessary consequence of the inflammatory process, which has thus spread from the superficial parts of the eye.

The remaining stages are easily understood: the eye gradually recovers from the inflammation, and becomes capable of bearing exposure to light; the membrana pupillaris is ruptured, and disappears as usual; but the central portion is still adherent, and remains an indelible spot upon the anterior capsule.

This explanation of this morbid condition of the anterior capsule of the lens meets every difficulty of the case, and appears to me to be the only way in which we can at all intelligibly account for this peculiar deposit. The posterior opacity may arise, as Beck and Von Ammon have described it.

The following case is one where the entire membrane existed after birth in an opaque condition, and where an operation failed to give sight.

Case XI. Thomas Stone, aged fifteen months, a poor weakly child, was admitted in August of last year. The pupils were of about the size of pin holes, filled with opaque matter, adherent to the iris. Belladonna had no action. He obviously saw the light, but the eyes were small and rather soft.

Aug. 8th. I introduced a fine curved needle through the cornea, and tried to drill a hole in the right pupil, and but partially succeeded. I then passed a straight needle in from behind, and drew back the opaque membrane which filled the left pupil, and it did not rise again. The child was cutting its teeth, and had swollen and suppurating gums on the third day after the operation.

The gums were lanced, but on the fourth day it was heavy and dull, and on the fifth it died. No *post mortem* examination was made.

I have met with the following case of extreme rarity, which, if my idea of the pathology of this central opacity is correct, will illustrate the disease, as well as one point in the early development of the eye which I have brought forward, viz., the existence of the membrana pupillaris before and independently of the iris.

I have before mentioned that the choroid is early formed, that the iris and the ciliary body are the results of a fresh effort (as it is called) of the "nisus formativus"; and we know that in certain rare instances the iris is entirely wanting, although it is probable that the membrana pupillaris exists. The case which I am going briefly to narrate is one of congenital absence of the iris (or irideremia), where there was, by coincidence, also a central opacity of the capsule.

Case xii. A child was admitted at the Eye Dispensary about ten years ago with complete absence of the iris. It was six months old, and was brought because it was supposed not to see. The posterior chambers were fully exposed, and presented the red reflecting glare round the edge of the lens, usually seen in these cases; in the left eye there was a central spot of opacity upon the anterior capsule, which gave a very peculiar appearance to the eye. The mother was healthy. The child disliked the light, and shrank away from it. I saw it again after a considerable time, and found that it had become a little more used to the light, but otherwise its state was the same.

The following question will most probably occur to my hearers: If inflammation of the membrana pupillaris and its adhesion to the capsule are the cause of the central cataract, and if the inflammation of these parts is merely an extension of disease from the superficial membranes of the eye, why do we not more frequently see central cataract, when we so frequently see cases of acute purulent ophthalmia in newly born infants? The proportion of cases of acute purulent ophthalmia in infants to the entire number admitted to an Eye Dispensary or Hospital is probably about one in sixty; whilst the proportion of instances of central cataract is about one in several thousand cases. In reconciling this great disparity, we must remember that for the production of such a result as this deposit, there must be a coincidence of at least two distinct conditions. The inflammation must be unusually severe even for these cases, and it must have attacked the eye soon after birth, with a tendency to spread to the internal parts; and, secondly, the membrana pupillaris must be entire, and some vascular connections with the iris must remain. Now, when we combine the probable rareness of this latter condition with the chances which this individual has of suffering from purulent ophthalmia, we shall be able to understand the cause of the very great comparative rareness of the central capsular cataract.

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25th, 27th, and MARCH 4th, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture II *(concluded).*

We will next endeavour to throw some light upon this obscure disease, and discover what is its real and intimate nature; in this pursuit we shall find that many and diverse opinions have from time to time been held, most of them having facts, obtained either from morbid anatomy or the symptoms presented during life, in their support. In passing the most important of these hypotheses in review, we shall have to detail the principal morbid appearances which have been found after death, and shall thus include the morbid anatomy of this disease.

The first, and perhaps the most ancient theory, refers diabetes primarily to a disease of the kidneys, either functional or organic. Such was the opinion of the ancient Greek writers and of Galen, and within the last half-century it has been supported by Watt, Cullen, Mason Good, and many other high authorities. It is an hypothesis which must naturally occur to the mind, seeing that the most important symptom of the disease has direct reference to the renal organs; morbid anatomy also appears at first sight to favour this view, for the kidneys are generally found much hypertrophied, the vessels enlarged and often very congested. In some cases of diabetes where I have had an opportunity of testing this point, I have also found such a condition. At times, however, especially when the disease has not been of long standing, the kidneys have presented a normal appearance, as seen by Andral and Christison; and in certain instances, they have been even contracted. In four cases in which the kidneys were weighed, I obtained the following results.

	Right kidney.	Left kidney.
D. H., a very attenuated phthisical patient	4½ oz.	5 oz.
E. H., male	4½	4 oz. 6 drs.
H. B., female	7½	8
J. B., male	7	7½

The advocates of this view of the pathology of the disease have assumed that sugar is not present in diabetic blood, and suppose that in saccharine diabetes, the kidneys, being in a morbid state, not only secrete an increased quantity of urine, but also possess the power of *forming sugar* from the blood. Dr. Elliotson, who was inclined to favour this hypothesis, makes the following remark in his lectures: "The absence of sugar in the blood, and the very frequent absence of dyspepsia, or anything connected with the stomach, except the hunger (which the excessive loss will explain), makes it appear most probable, that the disease is situated in the kidney."

At the present day, it is scarcely worth pursuing this hypothesis further; for, as I shall show you, diabetic blood taken from either the arterial or the venous system is always rich in sugar, and the abnormal presence of this principle cannot be explained by the irritation or altered action in the kidney itself. Again, although the kidneys have for the most part been found altered in structure, yet increased function would be quite sufficient to account for this change; and, that it *is* so produced, is rendered probable by the fact before alluded to, that in recent cases, no enlargement or morbid appearances have been observed. Lastly, we find instances in which the kidneys have for a very long period of time secreted enormous quantities of urine, and yet no trace of sugar has been found in it; and other instances, when a strongly saccharine condition of the urine exists without any notable diuresis.

An enlargement or simple hypertrophy of one kidney may be artificially produced in the lower animals by the extraction of the other; an increase of work is accompanied by an increased volume; it has also been found that the frequent injection of saccharine fluids into the veins of an animal sometimes induces an inflammatory condition of the kidneys.

By very many physicians, both of the present and of former times, the origin of this disease has been located in the stomach; and the important names which are found arrayed in support of this view, show the favour in which it has been held.

The arguments and facts were very forcible, and until recently, almost irresistible. In many cases, the stomach has been found after death in a morbid condition, often preternaturally large, with considerable thickening of the coats, a vascular state of the mucous membrane, and other signs of irritation. When no very distinct evidence of disease could be brought forward, it was explained by supposing that the error had been functional only, of which the ravenous appetite and dyspeptic symptoms have been regarded as proof. The experiments made some twenty years since by Mr. M'Gregor have been likewise usually adduced by the advocates of this theory. This gentleman fully confirmed the discovery of the existence of sugar in the serum of the blood of diabetic patients, which had been previously announced by Ambrosiani and Maitland; and he afterwards proceeded to further researches which have usually been considered as favouring the doctrine of diabetes arising from an error of the primary assimilating process: whether they do so in reality, we shall now proceed to inquire.

Mr. M'Gregor, by the use of emetics, procured the partly digested matters from the stomach of a diabetic patient, and found that fermentation by yeast could be readily induced in them; the same, however, took place, though in a less degree, when a healthy subject was substituted. He next fed the two individuals for three days upon roast beef and water, having on the previous day administered to each an emetic and purgative, for the purpose of completely clearing out the alimentary canal;

three or four hours after the next meal, the contents of their stomach were procured by an emetic of sulphate of zinc, and after due preparation, submitted to the action of yeast; those from the healthy man gave no evidence of sugar, whereas in the vomit from the diabetic patient distinct fermentation was obtained. Mr. M'Gregor also obtained sugar from the alvine discharges of diabetic subjects. This discovery of sugar in the alimentary canal, when a purely animal diet had been taken, and therefore quite free from amylaceous or saccharine matters, has been held, as a proof, that in these cases the stomach possesses an abnormal power of *forming* sugar from nitrogenised principles: but I apprehend that we need not have recourse to this explanation; for if the blood contains sugar in any abnormal proportion, as has been fully proved to be the case in diabetes, the secretions from this fluid may also be rich in this principle, and among others, the gastric and intestinal juices; Mr. M'Gregor himself discovered it in the saliva.

Sugar is found in the serum derived from blisters applied to diabetic patients, and I have likewise discovered it in some blebs similar to those of pompholyx, which occurred in one of my patients labouring under saccharine disease. There appears to be some doubt as to its existence in the perspiration of such subjects; though Dr. Willis, in his work on urinary diseases, states that he has known the furfuraceous cuticular exfoliation of the legs to be distinctly sweet to the taste.

M. Bouchardat supposes that in the stomach of diabetic patients a peculiar secretion takes place; that a species of ferment or diastase is present, which possesses the power of converting starch into sugar; this, however, has been found to be a normal change in the duodenum, and induced probably chiefly by the action of the pancreatic fluid.

Dr. Macintyre was of opinion that the stomach is primarily in fault, and adduced, in support of his views, certain cases in which perforation of the coats of this viscus has been found after death, an effect he attributes to the altered character of the gastric fluid; but we know that this corrosion may happen in many other diseases; whether it is more common in diabetes has not been determined; but considering the great activity of the digestive functions which then so often occurs, it is not at all improbable.

Many have regarded diabetes as arising from some altered condition of the blood, from some error in what has been rather obscurely named the secondary assimilating process, or in those changes which matters introduced into this fluid undergo before they become a portion of the solid frame or are eliminated from the system.

Dr. Willis was the first who advocated this doctrine; and the following passage gives a summary of his views on the pathology of this affection. He states, that "diabetes is rather an immediate affection of the blood than of the kidneys, and thence derives its origin; for the mass of the blood becomes, so to speak, melted down, and is too copiously dissolved into a state of serosity; which is sufficiently manifest from the prodigious increase in the quantity of urine, which cannot arise from any other cause than from this solution and waste of blood." Many have been the supporters of such an opinion, among whom may be mentioned the name of the great Sydenham; but, at the present day, more definite explanation than that of a mere abnormal waste of the nutrient fluid is required to satisfy pathologists. It is an explanation, also, so general in its character, that it may be applied to various other diseases besides the one under consideration. The late Dr. Prout, who perhaps had more diabetic patients under his care than any physician before or since his time, and who did so much both in advancing the knowledge of organic chemistry, and in applying this knowledge to the study of medicine, held opinions as to the pathology of this affection which, however profound and plausible at the time they were promulgated, cannot, I think, be now regarded as correct. Dr. Prout considered—"1. That the assimilation of the saccharine principle is a distinct function; 2. That the cellular tissue represents the saccharine aliment; 3. That a secondary assimilating process, analogous to that in the digestive organs, is constantly going on in all parts of the body; and lastly, that an important function of the kidneys is of a disorganising character—that is, consists in the reduction of organised into crystallisable compounds." And it was his opinion that "the proximate cause of diabetes lies partly in the assimilating organs, and partly in the kidneys; and may be thus stated. When *crystallised* sugar is taken into the stomach by a diabetic individual, it is reduced to a low state, remains more or less unassimilated, and passes through the system to the kidneys, by which organs (being already crystallisable) it is separated unchanged. When *organised* saccharine principles, as farinaceous matters, etc., are taken into the diabetic stomach, they are, in the first place, reduced to the form of *low* sugar, part of which is assimilated as in the healthy stomach, while another portion is modified or remains unassimilated. The portion that is assimilated is applied to the purposes of the economy; the portions modified and unassimilated pass together through the system to the kidneys, by which glands the portion modified is disorganised, and finally appears in the urine as crystallisable sugar, along with the portion originally remaining unassimilated in the stomach. The same remarks are applicable to gelatinous, and, in extreme cases, perhaps, to albuminous and oleaginous aliments. The *secondary* assimilating processes in diabetic individuals participate in the derangements of the primary processes just detailed; that is to say, the gelatinous tissues are either reduced to sugar, and thus not assimilated at all, or they are imperfectly assimilated, or they are malassimilated; in all which conditions the saccharine principle derived from the gelatinous and other tissues may be supposed to pass through the system to the kidneys, by which organs, like similar matters brought from the stomach, the various modifications of the saccharine principle are further disorganised, and converted into crystallisable sugar."

On examining this explanation of the cause of the disease, we shall discover that there are many points of which no demonstration can be afforded. Modern chemistry does not recognise a distinction between the different forms of sugars spoken of by Dr. Prout, nor has any proof been given of the assimilation of sugar by the animal economy, in the sense just alluded to; that is, of its being ever built up into animal tissue. From what we now know of the changes occurring in the animal economy, it would appear that they are mostly of a disintegrating nature; that, on the other hand, it is to the vegetable organisation that we owe the construction of complex principles from the simpler combinations; and, lastly, it would be scarcely worth while to go into much detail in refuting this view, as important recent researches have indisputably proved that sugar is produced in the system by a special formative organ.

Others have imagined that diabetes is induced, not from abnormal *formation* of sugar in the animal economy, but from a loss of *destructive* power over this substance occurring in the system; that is to say, the sugar, either taken as such into the stomach, or formed from amylaceous matters, does not undergo the ulterior changes as in health; and hence the blood becomes impregnated with this principle, which is afterwards eliminated by the kidneys. Dr. Bence Jones remarks, when speaking of amylaceous digestion, that "the changes which occur in health may be represented by the following series—starch, dextrine, sugar, vegetable acid, carbonic acid;" and that diabetes may be represented by supposing the changes stopped short at sugar; and that, from some cause, the conversion of the sugar into the vegetable acid and carbonic acid does not take place. Dr. Jones, at the same time, makes the same objections to this theory, to which we shall presently allude.

M. Mialhe of Paris, assuming the theory just propounded to be correct, has endeavoured to proceed a step further, and to explain why such an arrest of change takes place—why sugar, which is evidently *formed* in the healthy body, ceases to undergo the next series of changes. His theory is as follows: that, in health, the blood is alkaline; and that this condition is necessary, in order that the sugar constantly introduced into it may undergo the proper changes, and be resolved into carbonic acid and water; that a diabetic condition is induced whenever this alkalinity is diminished to such a point that the tranformations just spoken of are no longer possible. This condition of the system, he believes, may be induced by various causes, as suppression of the perspiration, which is naturally acid; the too free use of acid drinks, and of acid fruits; the exclusive use of an azotised diet, containing much sulphur and phosphorus, giving rise to a large quantity of sulphuric and phosphoric acids, and thus neutralising the alkaline bases of the blood.

There are many points about M. Mialhe's hypothesis which are at first satisfactory to the mind. It explains readily what really appears to be a frequent cause of diabetes, namely, the occurrence of suppressed perspiration, and the taking of large quantities of beer and acid fluids; but, when closely examined, the theory will, I believe, be found very defective; for no proof has as yet been given that diabetic blood is *less alkaline* than the same fluid in health: and this would certainly be the case in a marked degree if the non-destruction of sugar were due to this cause; and, again, therapeutic treatment founded on this basis has certainly, in most instances, signally failed. How happy would it be for the diabetic community

were M. Mialhe's doctrines correct! How readily could a sovereign remedy be found for their malady! In our next lecture on the therapeutics of our subject, I shall have occasion to bring forward evidence of the real value of the proposed alkaline treatment.

I may remark, before quitting this part of the subject, that, in the system of diabetic patients, other oxidisable substances, where the products of the decomposition are readily discovered, appear to undergo decomposition: for example, acetate and tartrate of potash are resolved into carbonate of the base; and salicine, when administered, can be discovered in the urine as saliculous acid—an effect due to oxidation. For this last fact, I am indebted to Dr. Ranke.

Within the last few years, most important facts have been brought forward, throwing considerable light upon the nature of the glycogenic function of the animal body—facts which must necessarily tend, ere long, to give us more correct views of the nature of diabetes. It is chiefly to M. Claude Bernard that we owe these important additions to our knowledge. It had generally been contended, in spite of many and trustworthy statements to the contrary, that the whole of the sugar found in the animal body, both in health and disease, was derivable from saccharine or amylaceous principles; and that no sugar could be produced from albuminous, gelatinous, or other nitrogenised matters. This, however, has now been demonstrated to be erroneous. M. Bernard has shown that all animals, including man, possess the power of forming sugar; that this function is located in the *liver;* and that, as the other organs of the body are impregnated with the products of their secretions, so the liver of the healthy animal always contains this principle, which can be easily extracted therefrom. He has likewise shown that, in health, it is *only* from this organ that it can be obtained. To prove this, we have merely to take a portion of hepatic tissue in a fresh state; bruise it thoroughly in water; boil, in order to coagulate the albuminous matters, and afterwards filter. The liquid portion gives unequivocal evidence of the existence of sugar, by the potash and copper tests before spoken of; and, when fermented with yeast, yields carbonic acid and alcohol. From a portion of a bullock's liver weighing 82,150 grains, M. Bernard obtained, in one experiment, a quantity of sugar corresponding to 651 grains in the entire organ, or 1·79-100 of the weight of the liver. He has also examined the livers of several men who had been executed, or had died suddenly from accident; and in all cases found this organ rich in sugar, the percentage varying from 1·10 to 2·14. The investigations on this important subject have been extended over almost every class of animals; and sugar has been found in the livers of members of the articulata, mollusca, crustacea, fishes (cartilaginous and osseous), chelonian, saurian, ophidian, and batrachian reptiles; in various birds, and in a great number of mammiferous animals. Some differences are discovered in the relative amounts of sugar yielded by the livers of different animals, and in the cold blooded it is less than in birds and mammalia. These experiments have now been repeated by many observers, and it appears placed beyond doubt that the livers of animals killed when in a healthy state are rich in saccharine matter: at the same time, the other organs are destitute of this principle. It will be observed that the food of the animals whose livers have been subjected to this analysis is of very varied character; in some, the diet is purely vegetable; in others, entirely animal; and, in a third class, of mixed nature; yet sugar has been found alike in all, and in an equally large amount in carnivora and in herbivora. To prove that the sugar is not obtained from any saccharine or amylaceous matters in the food, but is simply derived from nitrogenised principles, M. Bernard has fed dogs for six and eight months exclusively with meat, and still found the same proportion in the liver. The experiment has likewise been repeated on owls fed for three months on bullock's heart, and with the same result. To demonstrate even more conclusively that the sugar is formed in the liver, M. Bernard has made the following experiment. He has kept a dog without food for thirty-six hours, and afterwards fed it copiously with cooked sheep's head. After three hours, when in full digestion, the animal has been killed by pithing, and the blood collected both from the venæ portæ and also from the hepatic veins; that from the vena portæ, or before entering the liver, has given no trace of sugar by any of the tests; but the blood from the hepatic veins gave an abundant precipitate with the copper test, and also fermented on the addition of yeast. To make the experiment, if possible, still more conclusive, the meat with which the animal had been fed was examined, and proved not to yield a trace of sugar.

M. Bernard has proceeded a step further, and has shown that, within the liver itself, after removal from the body, sugar is capable of being formed. To demonstrate this, he has carefully removed the organ from a full grown, vigorous, and healthy dog, which had been killed about seven hours after a full repast of tripe, by pithing the medulla oblongata; he then, before the blood had coagulated, passed a continuous stream of water through the liver, by attaching a gutta percha tube to the vena portæ, and connecting it with a tap. After the blood had been washed out, and the water escaping from the hepatic veins colourless and free from albumen, the washing was continued for a short time. It was found that the strongly coloured water which flowed from the hepatic veins at the commencement of the experiment was saccharine, but that, when the colour disappeared, sugar could no longer be discovered in the fluid. The tissue of the liver was afterwards examined by the method I have before mentioned, and a complete absence of sugar proved by the negative results given by the copper and fermentation tests. However, on leaving the liver for twenty-four hours, distinct evidence of this principle was obtained. The sugar thus found could only have resulted from its formation within the twenty-four hours from some of the insoluble matters left in the organ after the first washing. This experiment, therefore, proves, if proof be wanting, that sugar can result from albuminous or other principles present in the liver. M. Bernard has found that, after a short time, no further saccharine formation goes on, but the ordinary decomposition ensues. It has been ascertained that a high temperature completely checks this formation of sugar. If, for example, a washed liver be divided into two equal portions, and one half exposed to the air, without any preparation, but the other half boiled, and afterwards exposed for a few hours, sugar will be found in the first half, but no trace in the second. It appears, from these researches, that one most important function of the liver is to secrete sugar from portal blood, and this *irrespective* of the nature of the food, and for a time even altogether independent of it. This function of the liver appears to be totally distinct from its bile-secreting office, and, as has been observed in some of the lower animals, not to be isochronous with it. The knowledge of the glycogenic function of the liver enables us to explain much which was before obscure in the physiology of respiration: how, for example, one and the same material—namely, sugar—destined for the supply of this process, is provided for in animals of every species, and with every variety of aliment. This discovery has also taught physiologists that there may be internal as well as external secretions; that is, secretions where the products, in place of being eliminated from the body, are thrown directly into the circulating fluid; the liver throwing *bile outwards* (a fluid containing no saccharine matter), and *sugar into* the blood itself. May not this fact give some clue to the function of certain organs, as the spleen, suprarenal capsules, thymus, etc.—glands destitute of excreting ducts? In order that the liver should secrete sugar, certain conditions are necessary; remove these, and the glycogenic function ceases. For example, if the pneumogastric nerves are cut in a rabbit or any other animal, and life is preserved for some hours, no sugar is afterwards found in the liver, because the glycogenic function of the liver ceases when the nervous influence is cut off, and that which previously existed in the organ is removed and destroyed by the changes constantly in operation. This even happens when the animal is freely digesting amylaceous matters at the time of the operation. Our knowledge of this fact enables us to explain why, in acute and severe diseases, the urine of a diabetic patient often becomes less saccharine, or even free from sugar; and why, also, the principle is not ordinarily found in the liver, except death has occurred suddenly, even when the patient was previously diabetic.

M. Bernard was led, by a train of reasoning which has since proved to have been erroneous, to discover a remarkable fact, one which has excited much attention among physiologists: I allude to the artificial production of saccharine urine by the irritation of the floor of the fourth ventricle. The experiment is thus performed. A healthy animal, either a rabbit or dog, is chosen, and the urine shown to be free from sugar by the different tests for this substance; a small instrument is then introduced through the walls of the posterior part of the cranium, in such a manner that the floor of the fourth ventricle can be reached; and this portion of the nervous structure is irritated by means of a fine point, and in such a manner as only to injure the upper stratum of fibres of the medulla oblongata, which constitute the floor of this ventricle. After a short time, usually from half an hour to an hour, if the operation has been successfully performed, the urine becomes sac-

charine to such an extent that sugar can be readily discovered by all the tests. This abnormal condition remains for several hours, sometimes for a whole day; at the same time, the quantity of the renal secretion is not unfrequently augmented. It was at first thought that the appearance of sugar in the urine in such experiments was due to the irritation being directly propagated by the pneumogastric nerves to the liver, but this has since been found not to be so; and these nerves, in respect to the glycogenic function, act simply as incident nerves; and, when divided in the neck, saccharine urine can be produced, not by irritation of their peripheral extremities, but by causing the influence of the irritation to be propagated to the medulla from their central extremities, and thus to the liver through the medium of the spinal cord and splanchnic nerves.

Before quitting the subject of M. Bernard's important investigations, it is necessary to state, as pertaining most closely to our subject, that no greater amount of sugar was found in the liver of animals fed on amylaceous substances, than when an exclusively meat diet was employed. He deduces from this, that no more sugar then enters the hepatic blood. I do not think this is necessarily a true deduction. We must remember that the animals upon which the experiments were made were in a state of health; in disease, the results might be different. M. Bernard thinks that the amylaceous and saccharine matters are converted by the liver into oleaginous substances, and in support of this opinion brings forward many facts.

Reviews and Notices.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L. April: 1857.

This is a capital number of this interesting quarterly. The great work of M. Morel, on the *Degeneracy of the Human Race*, is reviewed at length by the editor, in an article which gives an admirable view of the author's ideas on this very important subject. We think ourselves that M. Morel cannot substantiate his position that there are now more numerous agents which act as degenerators of the race than at any previous period: in fact, we think that an extended view of the subject points in the opposite direction. Nevertheless, his work furnishes an immense amount of matter which will startle the psychologist.

Dr. Webster's papers on Foreign Pauper Lunatic Asylums have culminated this quarter in a most interesting account of the great Pauper Lunatic Colony of Gheel. It appears to us that the publication of this paper will do much toward silently revolutionising our present system of detaining pauper lunatics in large asylums, conducted on principles analogous to those only to be found in our workhouses and prisons. At Gheel, 800 pauper lunatics are distributed among the 8,000 inhabitants of this district of the Low Countries—not in a few large buildings, but dispersed in twos and threes among the different households. The domestic system of treatment is here carried out to its full extent. The lunatic, instead of forming one of a herd shut up in wards and confined in dismal airing courts, partakes freely of the *family life* of the people; restraint in the form of walls, and locks, and bolts, and a separation of the sexes, are unknown: nevertheless, the average number of cures is higher than in the expensively built asylums of England. Every medical man interested in the treatment of the insane should make a point of reading this most interesting paper.

A very instructive Report on American Institutions for the Insane is extracted from the *American Journal of the Medical Sciences*. The other articles which make up this journal are, the Physiology and Psychological Phenomena of Dreams and Apparitions; the Psychology of Spinoza; on Civilization and Insanity, by Dr. F. Parigot, late Inspecting Physician to Gheel—an admirable paper; Physiological Psychology; on Marriages of Consanguinity; Pathology of Insanity. We have not seen so good a number of this quarterly as the present one for a long time.

Illustrations of the Pathology of Cancer. By John Zachariah Laurence, F.R.C.S., Surgeon to the Northern Dispensary. pp. 59. London: T. Richards. 1856.

This little work is a reprint of some papers which originally appeared last year in the Association Medical Journal. Of the able manner in which the author has discharged the difficult task undertaken by him, our readers have already had ample opportunity of judging. It therefore only remains for us to notice the fact of the publication of Mr. Laurence's papers in their present form, and to recommend the book as a highly valuable contribution towards the elucidation of that obscure and difficult subject—the pathology of cancer. Great praise and hearty thanks are due to Mr. Laurence for his labours.

British Medical Journal.

SATURDAY, APRIL 25th, 1857.

THE RECENT TRIAL OF ALFRED MATCHAM FOR MANSLAUGHTER.

In our number for last week, we commented at some length upon a few points arising out of the trial of Alfred Matcham for manslaughter, reserving others for future consideration. In the mean time, however, we have had access to sources of information not previously available, and have thus been enabled to correct some of our conclusions, and to lay before the public an amplified and more accurate version of some matters which have hitherto been imperfectly detailed.

The facts of this case resolve themselves into three groups: those which relate to the medical history of the case; those connected with the trial; and those which are known as to the career and character of the man.

The medical history of the case, owing to the want of requisite knowledge of such matters on the part of the counsel for the prosecution, was very meagrely elicited at the trial. In brief, it amounts to this. A young and well formed woman, who had borne four children, again became pregnant. At the fifth month, about the middle of last June, some indisposition came on, which, in the defendant's voluntary statement, was represented as inflammation of the kidneys, of such a character that her recovery was thought impossible. Now, it must be remarked, that this assertion was only brought forward at the inquest after the result of the *post mortem* examination was known to Matcham, and that at the trial the husband had no recollection of any such alarming illness.

It so happens, however, that we have before us, in the shape of a bill delivered to the husband, for the attendance and medicines which were found necessary for what is called "the cure" of this nearly fatal disease, a refutation of the whole story sufficiently clear to satisfy any unprejudiced mind. This document is in the hand-writing of Matcham, and specifies two mixtures, a bottle of drops, a *lini*, pills, and a powder, as having been supplied on three days, the 17th, 19th, and 21st of June. No other item is charged for till the 17th of August, when the last act of the tragedy began. Can any further demonstration be wanted of the fabrication of this fiction, which so deluded the judge, and misled the jury?

At the seventh month, somewhat similar symptoms appear, and are interpreted as the commencement of labour.

From the midnight of Wednesday till two o'clock on Friday afternoon, the defendant is in almost constant attendance, and frequently uses so much violent interference as to cause exclamations indicative of great suffering. Instrumental force is then applied at intervals for three hours, and the child is born. At the end of a week, the patient dies, having had the usual train of symptoms following severe injuries. The *post mortem* examination discloses a condition of the vagina and pelvic structures, which was very inadequately described by Mr. Worthington. Dr. Webb's notes ought to have been produced on evidence. Therein we find a very different representation. The perinæum is stated to be torn through nearly its whole length, the wound extending along the right labium. We quote from those notes the following passage:—

"A large and deep wound, beginning about two inches within the vagina on its posterior surface, reached down to the right labium, and there joined the laceration continued into it from the perinæum, making together a wound about six inches in length. It penetrated into the tissues on the right side of the rectum, and completely divided the walls of the vagina. There was also a smaller wound on the left side of the vagina, about three-quarters of an inch long, through the mucous membrane only at its upper end, but becoming deeper inferiorly so as to give the appearance of a puncture."

Other parts of the vagina, the rectum, and the bladder, all showed indications of having been more or less roughly contused. Indeed, the evidence now before us quite makes manifest the cause of death, which last week we thought was "not conclusively established".

The anomalies in the legal proceedings, we find upon investigation, all admit of easy explanation. The false inferences on the part of the judge were, that the proceedings originated in professional jealousy; that Matcham, though having no British qualification to practise, was really the possessor of a New York diploma; and that the medical witnesses endeavoured to establish positions which were untenable. So far as regards Mr. Worthington, it seems, as we have already stated, to be evident enough that he has no cause for jealousy. His reputation, and five-and-thirty years career of successful practice, make him quite indifferent to any one whose business consists principally of five-shilling midwifery. Dr. Webb has for some years declined seeing any patients, and is only an occasional resident in Lowestoft during the vacations. He is therefore far beyond the reach of the Chief Baron's remarks, and may fairly retort upon his lordship the charge of prejudice.

The question of Matcham's qualification may be thus dismissed. He says he has a diploma from a college in New York. We might legitimately ask, Where is it, and why was it not produced? But, in addition to the absence of any positive evidence of its existence, we may rely for disproof on the man's own admission at the inquest, in answer to a question from one of the jury, that he had never been in America, had never been out of England, and was presented with a diploma by some individual who examined him in London. Moreover, in the printed bill-heads, of which he makes such reputable use, he styles himself—"Alfred Matcham, Surgeon Accou*cher*, member of the reformed College of Physicians". Would any one, except a special pleader determined not to recognise adverse facts, require more to be said?

Nor is there any better foundation for the charge of want of courtesy and consideration for an accused man. Notice of the proceedings was given to Matcham by the churchwarden; and he was represented at the *post mortem* examination by Dr. Webb, who was sent expressly to watch the operation on his behalf. This fact has, since the trial, been made public by a declaration unanimously signed by the coroner's jury. Matcham paid no regard to the churchwarden's communication, and abstained from seeing Dr. Webb, as he might have done, if he had thought fit to seek access to him. Whatever the Chief Baron may say, it certainly was not Dr. Webb's place to run about after a man who chose to absent himself.

As to the medical evidence, it was, as usual, very much garbled in the published reports. At any rate, a sufficient cause of death was made out; though this matter was almost ignored by the judge in his charge. It is true that no account was given of the brain, spinal cord, heart, lungs, or other viscera; and so far, the case against the prisoner was weak. But we have already exposed the apocryphal story and false reasoning about the kidneys.

Of the man's history, little need be said. Matcham made his first appearance in the east of England, in connexion with a notorious case of imposture, at a small village called Spottisham, near Ipswich. A young woman, whose impudent pretensions to excessive holiness and the power of total abstinence from food were assisted by the cooperation of this man for a time, duped a certain number of weak-minded people, and created some local sensation. Proper investigation soon exposed the duplicity of saint and accomplice, and caused the departure of the man from the neighbourhood, where he had begun his disreputable proceedings. We next trace him to Lowestoft. There, by joining himself to the lower class of dissenters, raving at public meetings about the poor man's rights and the rich man's oppression, giving indecent lectures in a chapel with closed doors to women, of whom he takes sixpence for the equivocal privilege of admission, and charging a mere trifle for his services in labours and sickness, he manages to secure a kind of notoriety and practice which may easily be understood by our readers, but which has been greatly exaggerated as to its extent.

That the Chief Baron, whom we must presume has seen something of most phases of life and character, should have been so imposed upon by specious appearances as to bring himself into the belief that the unfortunate man before him was a scientific martyr, will remain upon record either as one of the psychological enigmas which so often show themselves in the study of the forensic mind, or else as a singular instance of the perverse tyranny of old habits, leading him to forget his judicial character in the indulgence of the more exciting duties of the advocate.

THE WEEK.

The *Moniteur* of Wednesday publishes a list of English Military and Naval Officers who have been, on the proposal of the Minister of Foreign Affairs, promoted to the Imperial Order of the Legion of Honour. Among those gentlemen selected for this foreign decoration, we find the names of the following army surgeons, who have been made knights of the order:—Surgeon-Major Arthur Anderson, M.D.; Surgeon-Major John Ramsay Brush, M.D.; Assistant-Surgeon John Wyatt, Cold-

stream; Surgeon-Major John Ashton Bostock, M.D., Scots Fusilier Guards; Surgeon-Major R. F. Valpy de Lisle, 4th Regiment; Surgeon-Major A. P. Lockwood, late 7th Regiment; Surgeon-Major Thomas Longmore, 19th Regiment; Surgeon-Major D. R. Mackinnon, 21st Regiment; Surgeon-Major B. G. Barlow, M.D., 28th Regiment; Surgeon-Major G. M. Muir, M.D., 33rd Regiment; Surgeon-Major John Fraser, M.D.; Surgeon-Major J. B. St. Croix Crosse, 11th Hussars. The following Naval Medical Officers have also been decorated: Dr. David Deas, Chief-Surgeon of the Fleet, who is made an officer of the order; and Dr. James Carmichael, Dr. Richard Denton Mason, Surgeon William V. E. Reynolds, and Surgeon Ahmuty Irwin, who have been constituted knights. These names must have been selected by the War Office authorities, and then transmitted to the French minister. We make this remark for the purpose of showing that our naval and military surgeons have done well in the eyes of both home and foreign authorities. We may be permitted to ask, however, how it is that so many names can be found worthy to receive a foreign order, whilst not one was selected as worthy to receive the new and greatly prized Victoria Cross? We shall be told, we know, that the latter decoration was instituted to reward bravery in the field, and that many names worthy of receiving the order of the Legion of Honour are not eligible for the Cross. But it is well known that several medical men distinguished themselves either in the trenches or in the "open" before the Redan in bringing in medical officers and men upon their backs amid a shower of balls. It is well known also that the Duke of Cambridge owed his life to an assistant-surgeon on the bloody day of Inkermann. Are not such acts worthy of the Victoria Cross —the reward "for valour"? Our professional brethren have been without doubt slighted in the distribution of the latter order, and the offence will not be obliterated by the liberality with which they have been selected for the minor decoration.

He Majesty has created her Physician-Accoucheur a Baronet. The whole profession must recognise this is a due compliment to the physician who has been in attendance during the birth of so many scions of the Royal House. It appears that Her Majesty was taken so suddenly with the pains of labour that a common hack cab had to be despatched for Dr. Locock, who probably comforted himself, while driving along in this crazy vehicle, on the crowning honours which awaited him.

The Metropolitan Board of Works have done one good thing at last; they have approved of the Report of their Committee, which recommends, among other important river-side improvements, the embankment of the Thames from Westminster Bridge to London Bridge, on the Middlesex side of the river; and from Lambeth to London Bridge on the Surrey side of the river. In a sanitary point of view, we look upon this recommendation as one of the highest importance, involving as it does the health of the large population which dwells upon the banks of the Thames within this space. It is well known that, in the summer months, fevers and agues are constantly attacking the river-side population, in consequence of the exposure at low water, to the burning sun, of the large expanse of mud saturated with sewage refuse. A particular form of croup has also been noticed lately to be produced principally by the fœtid exhalations arising from these pestilential shores. The covering up with solid masonry of these long strips of land will, we trust, effectually banish these sources of disease from this portion of the metropolis, at the same time that our metropolitan river is adorned by an architectural magnificence of which it is indeed worthy.

In the Journal of April 4th, we inserted a letter from Mr. L. O. Fox of Broughton, containing an account of the proceedings that had taken place in regard to his resignation of an Union appointment, and the acceptance of the vacated office by Mr. Francis Taylor of Rumsey. The dispute between these gentlemen having been brought before the Southampton Medical Society, a resolution was at first agreed on, condemnatory of Mr. Taylor's conduct; but it was withdrawn, being supposed to be libellous. Mr. Taylor also appears to have made a communication to the Society, in explanation of his conduct; part only of which he allowed to be made public. It is reasonably enough conjectured, that the motive restraining him from publicly expressing himself has been the fear of an action for libel on the part of Mr. Fox. To obviate this difficulty, and to give Mr. Taylor the fullest opportunity of explaining his apparently unprofessional conduct, Mr. Fox now generously offers that, if there be anything in Mr. Taylor's explanation prejudicial to Mr. Fox's private or professional character, he will indemnify him from all legal consequences, provided he can offer the slightest evidence of the truth of his assertions. This is a fair offer; and we trust that, for his own sake, Mr. Taylor will accept it.

According to Mr. Gough, the great temperance orator, the Maine Liquor Law is a complete failure in America. "The cause," he writes, "in this country is in a very depressed state. The Maine Law is a dead letter everywhere—more liquor sold than I ever knew before in Massachusetts, and in other States it is about as bad. . . . I see that Neal Dow is to be in England. I am glad; you will all like him; he is a noble man and a faithful worker. He can tell better than any other man the state of the Maine Law movement here, and the cause of the present universal failure of the law to produce the desired result." Mr. Dow, however, demurs to this statement, and thinks this depression is only a "reaction." No doubt; but a reaction which will carry things further the other way than they were before. There are some foolish persons in this country who have established an anti-tobacco-smoking league, and who seek to put the practice down by the strong arm of the law. To all such persons who wish thus foolishly to intermeddle with the habits of the population, we recommend Mr. Gough's declaration as to the results of the movement in America.

Our cousins in New York have an exceedingly free and easy style in most things, and especially in writing. The *New York Herald*, for instance, has discovered that the natives of the Marquesas Islands are in the habit of wedding the fairest damsels they can find, for the purpose of eating them up! Instead of descanting upon the enormity of such a practice among a people well supplied with missionaries, the editor takes a sanitary view of the matter, which would be curious enough were it not for its bad taste. He says:

"Our gallant correspondent is indignant at this sad misuse of so much loveliness, especially as the native pork and game are good of their kind, and so plentiful as to make it obvious that no man need pick his wife's ribs or cut steaks from her person from necessity. We need not say that we concur with our countryman in this view, not only on humane, but on hygienic grounds. Every medical man will vouch that the flesh of female mammalia is less wholesome than that of males. We fear the people of the Marquesas must be injuring their health by their unwholesome diet."

The ladies of the Marquesas must feel obliged for this solicitude, not for the integrity of their own persons, but for the proper nourishment of their carnivorous spouses.

Association Intelligence.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	York House, Bath.	Wed., April 29, 6½ P.M.
South Midland. [Annual Meeting.]	George Hotel, Northampton.	Thurs., May 21, 2 P.M.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, March 1856.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

An ordinary meeting of the Birmingham and Midland Counties Branch was held on Thursday, April 9th, at the Hen and Chickens Hotel, Birmingham; S. J. Jeaffreson, F.R.C.P., President, in the Chair.

There were also present: H. Adkins, Esq. (Meriden); A. Allcock, Esq. (Smethwick); E. Bartleet, Esq. (Birmingham); J. Bassett, Esq. (Birmingham); E. H. Coleman, Esq. (Wolverhampton); J. Davis, Esq. (Dudley Port); Bell Fletcher, M.D. (Birmingham); John Fraser, M.D. (Wolverhampton); W. Hinds, M.D. (Birmingham); G. Jones, Esq. (Birmingham); J. W. Keyworth, M.D. (Birmingham); G. H. Marshall, Esq. (Birmingham); J. R. Nicholson, M.D. (Redditch); Oliver Pemberton, Esq. (Birmingham); James Russell, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); W. F. Wade, M.D. (Birmingham); J. Wickenden, Esq. (Birmingham); T. Watkin Williams, Esq. (Birmingham); C. Yarwood, Esq. (Ashton Manor); G. Yates, Esq. (Birmingham).

SUBSCRIPTIONS PAID.

Mr. Solomon (one of the Secretaries) reported, in accordance with a resolution of the Council of the Branch, that the following members had paid their subscriptions to the Secretaries during January, February, and March:—H. Adkins, Esq. (Meriden); A. Allcock, Esq. (Smethwick); A. Baker, Esq. (Birmingham); R. L. Baker, Esq. (Bordesley); E. Bartleet, Esq. (Birmingham); J. Bassett, Esq. (Birmingham); J. Davis, Esq. (Dudley Port); W. Downes, Esq. (Birmingham); Dr. Fraser (10th Hussars); J. J. Hadley, Esq. (Birmingham); J. L. Hobbes, Esq. (Belbroughton); James Johnston, M.B. (Birmingham); J. Johnstone, M.D. (Birmingham); J. H. Kimbell, Esq. (Knowle); W. Kimbell, Esq. (Tamworth); W. J. Kite, Esq. (West Bromwich); T. Moyles, Esq. (Birmingham); J. R. Nicholson, M.D. (Redditch); O. Pemberton, Esq. (Birmingham); J. V. Solomon, Esq. (Birmingham); W. F. Wade, M.D. (Birmingham); H. Walker, M.D. (Brierly Hill); C. Warden, M.D. (Birmingham); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham).

CASE OF LUPUS: WITH PHOTOGRAPHIC ILLUSTRATIONS. BY J. R. NICHOLSON, M.D.

This paper related a case of simple lupus, which had resisted treatment for twenty-two years, and now succumbed to apparently simple remedies. The disease occurred in a female, and commenced at the age of eight years: when first seen, in November last, it occupied almost the whole of the face. After describing the appearance the patient presented, the paper went on to state that the treatment mainly consisted in the local application of ointment of iodide of sulphur, with the internal use of, primarily, cod-liver oil, and subsequently glycerine with iodide of iron. It was further remarked, that the preparations of iodine and sulphur, as well as the analogous compounds of iodine and mercury, did not receive the same amount of attention, as local applications in the tubercular forms of skin-disease, in this country as on the continent. The paper was illustrated by photographic portraits of the patient in the different stages of the cure; and it was remarked, what valuable results might be expected from the introduction of photography officially into our hospitals, especially as a means of instruction and reference, while the expense and labour would be merely trifling.

THE NATURE AND ORIGIN OF RENAL DISEASE. BY J. RUSSELL, M.D.

[This paper will be published in the Journal.]

Mr. Bartleet expressed an opinion as to the extreme importance of ascertaining the influence exercised by the nervous system on renal diseases; and stated that, at present, his own conviction was, that all the pathological changes in the kidney could be referred to the blood.

Dr. Hinds, in remarking upon the fact that Dr. Russell evidently thought that inflammatory action played a secondary part in the origin of Bright's disease, said that his own experience led him to think that some cases of chronic renal disease had their origin in acute inflammation.

Dr. Wade agreed with the author (who had given a most lucid exposition of Dr. Johnson's views), that a humoral pathology was making way with the medical public. It was probable that the blood-poison theory, if true of the kidney, would also be found applicable to the diseases of other secreting organs: hence the vast importance of not too readily accepting as fact that which is, at present, nothing more than a theory based on an hypothesis. Dr. Wade had no doubt that the blood played an important *rôle* in renal disease, but whether by over-stimulating the organ in the manner imagined by Dr. Johnson, or by affecting the nutrition of the active secreting agents, viz., the epithelial cells, in consequence of an abnormal condition of its albuminous element, we are not yet in a position to decide. Dr. Wade thought that the latter view had not received the attention it merited, for that as much evidence could be produced in its favour as in support of the eliminant or blood-poison theory.

Dr. Keyworth considered that it was asking too much of pathologists to explain how the poisoning of the blood operated on the condition of the epithelial cells. It was impossible to explain all diseases of the kidney by poisoning of the blood.

The President made some observations relative to the condition of the blood preceding changes in the kidney. Statistical facts should be referred to, in order to show whether renal diseases prevailed in large towns, where cachexia was so abundant.

Dr. Russell, in reply, said that it was impossible, in the limits of a paper like the present, to attempt to touch upon all the recent doctrines in relation to renal diseases. It was his opinion that we were not yet masters of "blood-poisoning and its effects". We could not yet say as to the exact way in which poisons were translated from blood to cells. We were, in fact, ignorant of cell-life, and were unable to trace its existence; neither could we say what constituent of the blood was translated. He by no means asserted that all renal diseases

were due to poison in the blood. Dr. Russell then referred to the extra work which the kidneys are called on to perform in certain acute diseases; and hence the importance of relieving this by acting as quickly as possible on the skin and bowels, and so diminishing the functional activity of the organs.

Cases in which a disorganised eyeball was excised for the relief of amaurosis of the companion eye.

By J. V. Solomon, Esq.

Mr. Oliver Pemberton observed, that the cases narrated by Mr. Solomon had too much the tendency to underrate the severity of an operation like that of extirpation of the eyeball. It was an operation, in his opinion, which should not be performed, as a general rule, except as a means of relieving malignant or ulcerative irritation in a disorganised eyeball; and it certainly did not appear to him to be established that the cases so treated by Mr. Solomon would not have had their amaurotic condition relieved by other remedies. The question was, however, one of great importance; and the cases required to be most attentively considered before a decided opinion was given on the form of treatment that should be adopted in such cases.

Mr. Marshall stated that, having assisted at the operation, and witnessed the subsequent progress in three of the cases brought forward by Mr. Solomon, he bore willing testimony to the great benefit resulting in those cases. The operation of extirpation, for the relief of the sympathising eye, must, however, he contended, be accounted a severe measure, and, under all circumstances, called for the exercise of calm judgment and some degree of self-restraint on the part of the surgeon before resorting to it. Mr. Marshall was aware there existed a difference of opinion as to the propriety of the operation, but believed that some of the most eminent ophthalmic surgeons of the present day practised successfully the plan of treatment advocated by Mr. Solomon. He still, however, considered the matter *sub judice*, and did not doubt that, ere long, a sufficient store of facts would be accumulated to enable the profession to arrive at a just conclusion.

Mr. Solomon, in reply, said that he was most firmly convinced of the value of the treatment he advocated. He did not agree with Mr. Pemberton in his view of the dangers attendant on the operation of extirpation, as performed by him. It was a very different operation from the old one, where all the contents of the orbit were removed. He was satisfied that the nature of the cases most fully bore out the propriety and value of the treatment; and he could only regret that he had been unable to bring them before the meeting in a more elaborate form.

Editor's Letter Box.

PRETUBERCULAR STAGE OF PHTHISIS.

Letter from W. O. Markham, M.D.

Sir,—You will, I know, permit me a rejoinder to Dr. E. Smith's letter; for the matter which he disputes with me involves something more than a mere personal interchange of epistolary amenities. A scientific question of direct practical interest is here concerned, which in the present condition of our knowledge will, I venture to think, be none the worse for a little further ventilation in your Journal.

Dr. E. Smith objects to certain views respecting (so-called) pretubercular stages of phthisis, which I upheld at the Pathological Society. He very properly remarks that, as I made an assertion, it is my business to prove it. I quite agree with him in this; but, in doing so, I must remind him that, after the same just measurement, he likewise is bound to prove the correctness of his own—an opposite—thesis.

Now, I certainly believed that I had proved and demonstrated my position—*les pièces à la main;* and regret to find that I expressed myself so mazily, as to have subjected myself to the odium of being thought a medical theorist; of having given utterance to that thinnest, and flimsiest, and most readily woven of all imagination-textures (the very bugbear of true progress in medicine), a medical theory.

Let me once again state the case. Writers (and not merely Dr. E. Smith) speak of a pretubercular stage of phthisis, that is, of an abnormal condition of the lungs and of the body, which precedes the deposition of tubercular matter in them, but which is nevertheless a stage of phthisis. Now this I venture to call the language of hypothesis; and for the following reasons. How do those writers in such cases prove the non-existence of tubercular matter? Evidently they can only do so by forming their judgment on the absence of those physical signs which indicate the presence of foreign matters in the lungs. But what is the value of such opinion, if it can be shown that the absence of physical signs is not a proof, irrefragible, of the absence of tubercle in the lungs? A lung which I exhibited at the Pathological Society, in my opinion, demonstrated this fact—long, indeed, admitted by our best auscultators—"that there are no distinct signs, by which we can with certainty diagnose the existence of miliary tubercle; and that solitary tubercles do not of themselves produce the slightest change in the percussion sound of the lungs."

Miliary tubercles were found distributed at distances of about half an inch through every part of both lungs, in the case referred to: and yet, when the lungs of the individual were carefully examined, sixteen hours before death, I found no auscultatory signs whatever, appreciable to my ear, which indicated any deviation of those organs from their healthy condition. If my observation was correct, the fallacy of the pretubercular stage is, I think, hereby demonstrated. But Dr. E. Smith very properly hints—and I was prepared that he or some one else should do so—that my auscultatory organs might have been out of order, and perhaps are not very sensitive; and therefore placed myself under the wings of authority, and I quoted Skoda (as above), and I might have quoted Louis to the same effect.

Let me put the matter in another form. Suppose some accident should bring under the hand of the anatomist a case of well marked, as it is called, pretubercular phthisis; and suppose, according to the theory maintained, that no tubercular matter was found present in the lungs; would the admirers of pretubercular stages still venture to call such case a case of phthisis? would they venture to bring the lungs to the Pathological Society, and to say, this is a case of phthisis, but there is no tubercle in the lungs; here is the condition of things which precede the deposition of tubercle? No! I know they would anticipate the answer awaiting them; viz., that, in the present state of medical knowledge, we know nothing of phthisis apart from the presence of a tangible *materies morbi* in the lungs.

Let me not be misunderstood. That there is a morbid condition of the body existing anterior to the deposition of tubercle is certain; and equally certain that the tubercle is not *the disease*, but only the external and tangible manifestation of that condition; and that treatment is directed, not to the local tubercle, but to the arresting of that anterior morbid condition which precedes the deposit of tubercle: all this is clear enough. What I object to is, the assumption of conditions which are not warranted by direct proof and experiment, and the consequent founding of practice upon vague hypotheses. Dr. E. Smith has thus, as I think, hypothetically assumed a pathological condition, as representing the pretubercular stag es of phthisis, and founded a treatment upon the hypothesis. The condition is, "a lessened action of the vesicles of the lung, originating in themselves, or conjoined with an atonic condition of the general nervous system." And the peculiar treatment is, amongst other remedies, teaching the patient to inspire deeply while he is sitting at rest, so as to counteract the hypothetical condition.

But I do Dr. E. Smith injustice. *His* pretubercular stage is not without physical signs. He says that, when he meets "with the slightest dull (sub clavicular) percussion-sound, with lessened vesicular murmur, less forcible and deep inspiration, and flattening of the apex of the lung", he considers he has met with the first condition of phthisis—the stage anterior to the deposit of tubercle. Now, surely, in the present state of pathology, we have a much better right to believe that such a condition indicates the actual deposit of tubercle in the lung. I think we shall continue to do so, unless Dr. E. Smith gives some better proof of his position.

Dr. E. Smith admits, however, that the dull percussion is in such case very slight, and suggests that few people are gifted with that exquisite sense of hearing which is requisite to render them percipients of the morbid auscultatory sounds in question. If so, then it appears that the stethoscope, like the religion of Isis, is to become the property of a few high cultivators of the auscultatory art, in some of its most important indications. To this I cannot subscribe. I believe, indeed, that it would be better for the public that we should abandon the instrument altogether, than submit to the conclusion that only one man in a thousand can use it effectually. I have seen quite enough of stethoscopy to satisfy me that over refining in its practice is fraught with infinite mischief to the patient, and

leads the observer into all sorts of erroneous conclusions and practices. My belief is, that when the auscultatory signs, in any given case, are such as not to present to an ordinarily educated stethoscopic observer clear and distinct indications of deviations from health, they are worth nothing as indications of diseased conditions.

I owe one word of explanation more to Dr. Smith and your readers. Thrice in one column he has made me guilty of uttering an unmeaning absurdity; and he has marked it well by the aid of inverted commas, and so made the most of it. I know not where Dr. E. Smith picked up the words "miliary tubercles widely distributed through the tubes of the lungs". I can assure him I never uttered such wild phraseology, and totally repudiate all connexion with any printer's devil that may have put such words into my mouth. What I did say, Dr. E. Smith may find by referring to my own report, published in your Journal, of the case which he criticises.

Commenting on my record of the case, Dr. Smith judicially observes, "there must be something wrong here". I can assure him that I still prefer the evidence of my own senses to his opinion—however much I value it—as to what *must have been;* and I will now leave it to the profession to decide whether there may not possibly be *something wrong there*—in Dr. Smith's logic—as well as here. I am, etc.,

W. O. Markham.

Clarges Street, April 18, 1857.

THE OPHTHALMOSCOPE.

Letter from Holmes Coote, Esq.

Sir,—The last number of your Journal contains a letter from Mr. Dixon, wherein he says that a statement of mine respecting the ophthalmoscope requires to be corrected. He remarks, that "undoubtedly Mr. Cumming was the first to point out that the fundus of the healthy human eye is not a black, but a coloured reflected surface", and that "this discovery led the way to Helmholtz's invention; but Mr. Cumming himself never constructed or suggested any form of ophthalmoscope."

I believe Mery was the first to notice the bright colour of the bottom of the eye, and the blood-vessels of the retina, in the beginning of the eighteenth century, by accidentally observing the appearances presented in the eye of a cat held under water. Five years after, Lattére pursued the investigation; and, in 1845, an essay on the subject was published by Dr. Kussmaul of Heidelberg. Mr. William Cumming, then, was not the first to point out that the fundus of the healthy human eye is a coloured reflecting surface; but he was, I believe, the first to lay down proper rules for employing light in the investigation of the morbid conditions of the deep-seated structures of the globe. The "merit of discovery" does not belong to those who have constructed complicated or simple instruments, based upon an established principle, but to him who first brought that principle to bear upon matters of practical utility.

I willingly acknowledge that to Helmholtz is due, in 1851, the merit of inventing the complicated apparatus which bears his name. The ophthalmoscope now in use is essentially the same in principle as that shewn to Mr. Wharton Jones by Mr. Babbage, about the year 1847. As Mr. Jones himself observes, "this ophthalmoscope of Mr. Babbage, we shall see, is in principle essentially the same as those of Elkins and Donders, of Coccius and Meyerstein, which themselves are modifications of Helmholtz's."

I beg to refer those interested in the subject to a very able article by Mr. Wharton Jones, in the *British and Foreign Medico-Chirurgical Review*, vol. xiv, 1854.

In my lecture, delivered at St. Bartholomew's Hospital, on the ophthalmoscope, I wished to shew that which I believe is an ungrateful truth; namely, that we are very apt to overlook merit in our own countrymen, while diligently seeking to find it out in foreigners. I am, etc.,

Holmes Coote.

Norfolk Street, Strand, April 20, 1857.

MR. FOX AND MR. TAYLOR.

Letter from L. O. Fox, Esq.

Sir,—I hoped the publication of my last letter in your Journal would have induced Mr. Taylor to make public his defence, or to explain his reasons for declining to do so.

It has been suggested, that fear of legal proceedings may prevent his speaking out. To obviate this difficulty, if it exist, I make the following promise: That, if in the statement communicated privately and confidentially to the President of the Southampton Medical Society by Mr. Taylor, in his own justification, there be anything prejudicial to my private or professional reputation, which, if published, would render him liable to an action for libel (*Does Dr. Oke mean this when he alludes to painful results?*), I hereby promise to indemnify Mr. Francis Taylor from all legal consequences, if he will openly declare the same, provided he can offer the slightest evidence of the truth thereof.

For the last time, I call upon Mr. Taylor, as a member of a noble profession, as a gentleman, and as a man of honour, if he value the opinion of his brethren, to come out in broad daylight, disdaining the dark shadow of the president's chair, and let us read in your bold type what was communicated to Dr. Oke in secret, as Mr. Taylor's defence.

I am, etc., L. Owen Fox.

Broughton, Stockbridge, April 20, 1857.

MEDICAL ETIQUETTE.

Letter from Jukes Styrap, M.D.

Sir,—The Council of the Salopian Medico-Ethical Society, while regretting the necessity for soliciting so large a space in the columns of the Journal, will feel much obliged by insertion being given to the following correspondence on the subject of the Encouragement of Homœopaths by Legitimate Practitioners. I am, etc.,

Jukes Styrap, *Hon. Sec.*

Shrewsbury, 21st April, 1857.

I. *The Secretary of the Salopian Medico-Ethical Society to James Long, Esq.*

"Shrewsbury, 6th April, 1857.

"Sir,—In accordance with my instructions from the Council of the Salopian Medico-Ethical Society, I beg to transmit for your consideration the enclosed copy of a Resolution, unanimously passed at their Half-yearly Meeting held on the 26th ultimo, and approved at a subsequent meeting.

"I beg to add, that, should you feel aggrieved at the implied condemnation of your conduct as a medical practitioner in the case alluded to, the Council will be happy to summon a special meeting of their body for the purpose of hearing, and adjudicating upon any additional explanation you may personally wish to offer. "I am, Sir, your obedient servant,

"Jukes Styrap, *Hon. Sec.*

"James Long, Esq., 3, Hardman Street, Liverpool."

Copy of Resolution.

"After an anxious consideration of the case, and a careful perusal of the correspondence between Mr. J. R. Humphreys, Surgeon to the Salop Infirmary, and Mr. James Long, Surgeon to the Liverpool Royal Infirmary, which has recently appeared in the British Medical Journal, relative to an alleged breach of professional etiquette committed by Mr. Long in meeting in consultation a homœopathic practitioner, in the late fatal illness of A. W. Corbet, Esq., of Sundorne Castle, in this county—notwithstanding that Mr. W. J. Clement, a resident surgeon, had previously refused to consult on the case with the said homœopathist—of which fact Mr. Long admits his knowledge,—the Council in expressing their hearty approval of Mr. Clement's conduct throughout the affair, much regret the necessity for recording their deliberate opinion that the explanation offered by Mr. Long is far from satisfactory."

II. *Mr. Long to the Honorary Secretary of the Salopian Medico-Ethical Society.*

"3, Hardman Street, Liverpool, April 7th, 1857.

"Sir,—I beg to acknowledge the receipt of a list of the members on the roll of the Salopian Medico-Ethical Society, and the Resolution which the Council have taken the trouble to pass, and the members to approve of, concerning me; also your note, in which you state, 'that, should you feel aggrieved at the *merited?* (I am not sure of the word) condemnation of your conduct as a medical practitioner in the case alluded to, the Council will be happy to summon a special meeting of their body for the purpose of hearing and adjudicating upon any additional explanation you may personally wish to offer.' I beg most respectfully to decline the above extraordinary proposal.

"I am, Sir, your obedient servant,

"James Long.

"To Jukes Styrap, M.D., Hon. Sec."

III. *The Honorary Secretary's Reply to Mr. Long.*

"Shrewsbury, 11th April, 1857.

"Sir,—In reply to your note—which, though dated the 7th instant, was not received until the 9th,—allow me to request your re-perusal of my former communication, and I think that you will experience little or no difficulty in deciphering the word, specially alluded to, to be '*implied*', and not '*merited*'.

"With regard to 'the extraordinary proposal', as you are pleased to term it, I would beg to remark, that, however much so it may appear to yourself, you will, I believe, on inquiry, find it to be not only in perfect accordance with the laws of medical etiquette, but an acknowledged principle of society at large, whenever a member chooses to deviate from the defined rules of professional, or general etiquette.

"Since, however, you decline to avail yourself of the offer made by the Council of the Salopian Medico-Ethical Society, I am desired by Mr. Humphreys to solicit your attention to section 3, rule 2, p. 13, of the accompanying bye-laws, and to express his willingness to submit the matter in dispute, for adjudication, according to the principle therein laid down, or to any other which may be mutually agreed upon.

"As a slight proof of the Council's anxiety not, in any way, to prejudice you in the eye of the 'medical world', I beg to call your attention to the fact that no public allusion has been made to the following significant extract from a letter addressed (in December last) to myself, as Hon. Secretary, in answer to the Council's inquiry—'Whether you were a member of the Liverpool Medico-Ethical Association?'—in which case, it was intended to prefer a charge against you of a breach of professional etiquette, to be adjudicated upon by the Ethical Society of which you were supposed to be a member.

"I remain, Sir, your obedient servant,

"Jukes Styrap, *Hon. Sec.*

"James Long, Esq."

The following is the extract referred to in the last paragraph of Dr. Styrap's letter.

"*Mr. J. Long of the Liverpool Infirmary was one of the original members of the Medico-Ethical Society, but on finding that that body would not admit homœopathists, nor in any way recognise them, he sent in his resignation. It was understood at the time, that this step was taken that he might be at liberty to meet homœopathic practitioners.*"

IV. *Mr. Long's reply to the Hon. Secretary.*

3, Hardman Street, Liverpool, April 14th, 1857 (night).

"Sir,—I beg to acknowledge the receipt of your letter of the 11th inst., and a copy of the rules and bye-laws of the Salopian Medico-Ethical Society. I do not find any law which authorises the council and members to pass resolutions condemnatory of a medical practitioner, not a member of the Society—but I do find the council have a power to censure or expel a member, after such member has received from the secretary seven days notice to attend the meeting, and the nature of the charges to be brought against him. I do find that no member shall practise, professedly or exclusively, homœopathy, hydropathy, or mesmerism, or other than legitimate medicine and surgery. I further find that members are not debarred from meeting duly qualified practitioners (with the reservation, I presume, of bye-laws) until the latter shall have been adjudged by the majority of the members to be practising irregularly. I do not find, by the proceedings of the half-yearly meeting which you transmitted to me, that Dr. Wilkin was a professed or exclusive homœopathist, or that he had been adjudicated to be an irregular practitioner.

"I have already stated that when I telegraphed I would meet George Wilkin, I did not at the time recollect who he was, and that I did not know that he was reputed to be a homœopathist, till I heard from his own lips that a Shrewsbury surgeon had declined to meet him on that ground. I consider the ample statement I have made in the British Medical Journal ought to be sufficient for any Society.

"I have already declined to plead at the bar of the Salopian Medico-Ethical Society. I decline equally to refer the subject of your letters to the 'Court Medical' proposed in your last. The council and members have already stated their decision; and I should expect but little favour from a 'Court Medical' composed of three practitioners, one named by me, the other by Mr. Humphreys, and the third by the council.

"I am surprised at the tone of your allusion to the late Medico-Ethical Society of Liverpool; my reasons for seceding from it were no secret, and they were openly stated at the time, in a letter addressed to the secretary.

"I must now beg to decline any further correspondence with the Salopian Medico-Ethical Society on the subject of your letters.

"I remain, sir, your obedient servant,

"James Long.

"Jukes Styrap, M.D., Hon. Sec. to the Salopian Medico-Ethical Society."

V. *The Hon. Secretary to Mr. Long.*

"Shrewsbury, 20th April, 1857.

"Sir,—I regret the necessity for troubling you, contrary to your wish, with a reply to your last communication, the general tenour of which, I am requested to inform you, leaves the council no alternative but to submit the matter for the judgment of the profession at large, through the medium of the medical journals.

"So far from the council having, as you state, pronounced '*their decision*', you will find, on reference to the 'resolution', that it was a simple expression of opinion, and left the case open for adjudication—a course perfectly legitimate, and in accordance with the spirit of the 'resolution' passed at a recent meeting of your Hospital colleagues. And here I would beg to observe that, however satisfactory your statement in the British Medical Journal may have been to yourself individually, it does not appear to have been more approved by the medical and surgical staff of the Liverpool Royal Infirmary, than by the council of the Salopian Medico-Ethical Society, in confirmation of which, allow me to refer you to the record of their proceedings published in the same Journal, on the 28th of February.

"At the same time, I beg to assure you that the council—composed of men of established local reputation—can well afford to disregard the imputation of partiality, which you have so illiberally sought to cast upon them. In answer, therefore, to your insinuation against the proposed 'Court Medical', I will simply remark that the president of the Manchester Ethical Association would have been solicited to act, on behalf of the Salopian Society, in conjunction with the two medical men nominated by yourself and Mr. Humphreys; and a 'Court', so constituted, ought to satisfy the most fastidious practitioner.

"I remain, sir, your obedient servant,

"Jukes Styrap, *Hon. Sec.*

"James Long, Esq., Liverpool."

CONSULTATION WITH HOMŒOPATHIC PRACTITIONERS.

Letter from James Long, Esq.

Sir,—In consequence of the letters which have appeared in the British Medical Journal, associating my name with Homœopathy, I have been much misrepresented both here and elsewhere, and subjected to annoying insinuations. I have, moreover, received from the secretary of the Salopian Medico-Ethical Society, a condemnatory resolution, passed by the council, and approved of by the members of that society at their half-yearly meeting, with an intimation, that if I felt aggrieved, I might appear in person to plead at the bar of that society. I declined this; and a proposal was made that I should submit to the arbitration of a "Court Medical," composed of three practitioners, one to be named by me, one by Mr. Humphreys, and the third by the council. I need scarcely remark, that I have declined this also.

I do feel aggrieved that, on the 13th of December last, I should have been dragged before the profession, and that on the 11th of April I should receive a proposal to submit to arbitration a matter which I am not singular in thinking, that my statements already published should have set at rest in the mind of any one who was solely seeking after truth. Direct charges may be met; but misrepresentations and insinuations are not so readily dealt with. I therefore now beg, through the medium of your Journal, to state, for the information of those who make such free use of my name, the following remarks, which I hope will satisfy, not only my present traducers, but also those who might otherwise feel disposed to come after them.

When Homœopathy was first introduced into Liverpool, a paper upon that subject was read before the Medical Society by one of its members, a Homœopathist. In conjunction with others, I opposed the new doctrines to the utmost of my knowledge and ability. I adopted the same course when a paper was read, at a subsequent period, by the same gentleman, on the Treatment of Cholera. At this period, the only knowledge I possessed on the subject was derived from the *Organon* of Hahnemann. After the meeting, I was introduced to, and subsequently became acquainted with, an ardent fol-

lower of Hahnemann, who, though he had been educated in the London schools, and had for some time pursued the recognised form of practice, had now established himself in Liverpool as a homœopathic physician, from a full conviction of the truth of these doctrines. The statements I heard from him, from time to time, of the extraordinary cures performed under this new system of treatment, were so much at variance with what my own experience and the slight knowledge I had of the subject led me to expect, that I was determined to investigate the subject for myself; and, at his recommendation, I read carefully several works on the subject, and paid frequent visits to his house for the purpose of discussing the novel doctrines and plans of treatment which had been brought under my notice. On these occasions I not unfrequently met with different practitioners of the town and neighbourhood, and thrice, I believe, I met with Dr. Wilkin. Not being satisfied with what I had heard and read, I had two or three of his gratuitous patients sent to my house, whilst under treatment, that I might satisfy myself on the point of diagnosis; and also, on two or three occasions, I saw a similar class of patients at his house for a similar purpose.

At this period, 1850, it was proposed to form a Medico-Ethical Society in Liverpool, and several meetings were held for the purpose: such a society was formed. Being solicited to join it, and having obtained a copy of the laws, and seeing nothing objectionable in them and much to approve of, I did so, and was placed on the council. I attended a meeting of the council on the 29th of October; and finding that I had misunderstood the spirit of one of the laws, which had been altered from what it was in the original copy which I had seen, and not approving of this change, I withdrew from the society, and in a letter, addressed to the secretary, gave my reasons in full for doing so. The society, which numbered a tolerably fair proportion of the practitioners of the town and neighbourhood, was, very soon afterwards, broken up. I mention this circumstance, as it is alluded to in a letter to me, from the secretary of the Salopian Medico-Ethical Society, who quotes a "significant extract" from the letter of a Liverpool correspondent, addressed to him in reply to certain inquiries in December last.

I have treated surgical patients both at my own house and elsewhere, some of whom were in the habit of taking homœopathic medicines during the treatment. So long as they thought they derived benefit from them, I did not interfere; but when other treatment was required, I prescribed it, and should have given up the case if my wishes had not been complied with. I have on two occasions—the one medical, the other surgical—examined a patient whilst a homœopathist was in the house. I have passed a catheter, in an urgent case of retention of urine, whilst a homœopathist was in attendance. On two occasions, in 1850, I operated for hernia on patients under the charge of a homœopathic surgeon. Before doing so, I stipulated that I should have the entire management of the cases, free from all interference on his part: this was strictly adhered to. I have attended, where a portion of the family were under homœopathic treatment, and a portion under mine, without any interference on either side. I have had patients who, being dissatisfied with homœopathy, have put themselves under my care; the converse has frequently happened. I have been called to patients whom I have ascertained to be under no regular practitioner, but have found or suspected to be under homœopathic treatment: under these circumstances, I have invariably given my opinion, and prescribed, if I thought it necessary, but have not called again unless requested to do so.

There are, however, two cases which, at the time, were made the subject of much remark, and have been pretty well handled since. The first occurred in 1850. I was requested to meet a homœopathist in consultation, and I declined. The friends of the patient, who were averse to that system, urged me to go, for the purpose solely of giving my opinion as to the nature of the case. I went; and in the presence of the gentleman who had charge of the case, stated to the family, that I did not agree with him in his diagnosis, and that the system pursued would not meet its requirements. I was then requested to attend for the purpose of watching its progress. I did so several times, and, in presence of the practitioner and family, repeated my former opinion. On an emergency, a regular practitioner was called in; him I met and consulted with so long as the case required it.

The second occurred in 1851. A gentleman was suddenly struck down by apoplexy, obviously arising from the rupture of some large vessel; there were insensibility, stertor, paralysis of one side and convulsive twitchings of the other. I stated to his wife, that medical treatment could be of no avail; she however believed that homœopathy could do everything. I saw the case twice or three times whilst two homœopathists were in attendance; and, in conjunction with another regular practitioner, made in their presence a *post mortem* examination.

I have now stated, to the best of my recollection, all the cases in which I have been homœopathically concerned; yet in none of those cases was I "associated" with these gentlemen in their treatment. My opinions and mode of acting became so well known, that, since May 1853, when I refused to meet two homœopathists on a point of diagnosis, but had the case afterwards put under my charge, I have not had a single application to meet them, and have had nothing to do with them in any way whatever until the Shrewsbury case, as it is termed, occurred. This case, from the prominence it has acquired, requires some further notice, especially in reference to my dealings with Dr. Wilkin. I met him, as I have already stated, twice or thrice by accident, at the house of my homœopathic friend. In May 1852, I met him at an operation with Mr. A., of Shrewsbury. In June 1853, he called upon me in great haste, in a case, requesting me to see a person whom he believed to be dying. I was on the point of leaving home for a distant visit, per railway. I hurried off with him; found the patient dying; ordered some brandy, and left. During the whole of this period, up to the time when he met me in Shrewsbury, I had no further intercourse with him, professional or otherwise, except the interchange of ordinary street civilities, and these were few and far between. Yet it is stated, that it was well known that, before Dr. Wilkin left Liverpool, he was a homœopathist, and that he was practising in Shrewsbury as such, and that, *therefore*, I must have known it; this is the *pons asinorum*. I affirm I did not, and I am not believed. I had no reason to know it from either of the two cases I have mentioned; nor had I any more reason for believing that he had become a convert to homœopathy, than that I myself, or any of the gentlemen whom I met at my friend's house, had. It is urged, however, that what was generally known, I *must* have known. But I submit, that it is perfectly possible that I may be so engaged with my own pursuits and concerns, as not to busy myself about the affairs of my neighbours, or to pay attention to the current rumours of the day, if indeed I happen to hear them. Will this be believed? that the most eminent surgeon in this town openly stated, that he was in the frequent habit of meeting in consultation, a gentleman who is professedly a homœopathist, who is well known to be one, and who has written a small book on the subject, and that he did not know he held those particular doctrines? I believe it; and no one who knows him would, for a moment, doubt his word.

I have already stated that when I telegraphed to George Wilkin I did not recollect who he was, and that I was not aware he was reputed to be a homœopathist till he informed me himself. In the course that I subsequently pursued, as detailed in my first letter, I still feel that I acted perfectly right. If I had declined to give my aid to the patient unless the medical attendant were first dismissed, or had refused, after repeated telegraphic messages, to pay a second visit, knowing that assistance had been denied by the Shrewsbury practitioners; or had I, when further advice was required, neglected to procure it whence it could be best obtained, I feel I should have been guilty of a moral wrong.

For a period of from two to three years after homœopathy was first introduced into this town, I pursued a strictly philosophical inquiry into its theory and practice. During the last four or five years, though not unobservant of its course, I have personally had nothing whatever to do with it. I think I may, therefore, without claiming to be the teacher of others, state the conclusions which I have, from my own observations, arrived at respecting it. I believe that infinitesimal doses of medicines are wholly inoperative; that some of the medicines given (*e. g.*, silica in specks on the cornea) are absurd. I believe that the system and infinitesimal doses are *negatively* beneficial by preventing the ordinary operations of nature (the *vis medicatrix naturæ*) from being interfered with; that many of the extraordinary cures advanced have been merely coincidences, or the result of a cessation from active medication; and I believe it has proved *positively* beneficial by showing that such form of treatment is but rarely required, and that the efforts of nature, if not interfered with, are adequate to rectify most bodily derangements; in short, it has taught us to place more confidence in nature and less in medicine; and has,

to a certain extent, opened the eyes of the public to the absurdity of swallowing the nostrums which are daily advertised.

I have ascertained, from an eminent chemist, no opponent of homœopathy, that he could detect no arsenic in a large number of arsenical globules he had analysed for the purpose. I have heard, from the most eminent homœopathic practitioner of this town, that homœopathy has nothing to do with quantity; that any amount of medicine short of what would produce its direct physiological action, is homœopathic to the diseased condition requiring it (*e.g.*, any dose of opium short of narcotism when this medicine is indicated). I have come to the conclusion that the homœopathy of to-day is not that of Hahnemann; that whilst legitimate practitioners are gradually relaxing in the heroism of their treatment, and giving smaller doses and less active medicines, homœopathists are increasing the magnitude and strength of theirs, and, in addition, are availing themselves of aids and appliances which might be sought for in vain in the works of Hahnemann; that homœopathy, as it is now practised by well educated men, is not rightly understood, either by the medical profession or the public; and that, whilst their opinions on therapeutics are different from ours, they agree with us in other respects. Indeed, the subject appears not to be clearly understood by the Salopian Medico-Ethical Society; for whilst they censure me for meeting a practitioner who is reputed by them to be a homœopathist, they allow, by their own laws, a member to adopt homœopathy, hydropathy, or mesmerism, so long as he does not do so professedly or exclusively. By bye-law No. 1 it is enacted that "No member shall practise, professedly or exclusively, homœopathy, hydropathy, or mesmerism, or other than legitimate medicine and surgery."

I claim for myself, and concede equally to others, the right to form an independent judgment in these matters; in accordance with that judgment I have not been, nor could I be, associated in the treatment of a case with any one who practises homœopathically.

Lest I should be again misunderstood, or misrepresented, I beg to state that whenever I receive a telegraphic or other message, summoning me to meet a gentleman in consultation, whom I know to be an irregular practitioner, I shall not go. But when I do not know the individual, I shall not consider it as part of my duty to inquire of the secretary of a Medico-Ethical Society, or of any one else, whether the medical gentleman is a homœopathist; and if on my arrival I should find the patient to be under homœopathic, hydropathic, mesmeric, or other irregular treatment, I shall not consider it part of my business to insist on the expulsion of the attendant, before I express an opinion, or perform a surgical operation. I shall not enter into consultation with the practitioner, but shall act as independently as if the patient were under my sole care.

Having now recorded facts as they occurred, and having stated my opinions on the subject generally, I challenge any one to come forward and prove that I have at any time acted in violation of them. I have honestly stated "the truth, the whole truth, and nothing but the truth"; and I trust that, so far as I am individually concerned, I have set the matter at rest, and that for the future my sentiments upon it will not be misunderstood, or my acts misrepresented.

I am, etc., James Long.

3, Hardman Street, Liverpool, April 16th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

*Keyworth. On April 17th, at Birmingham, the wife of John White Keyworth, M.D., of a daughter.

*McPherson. On March 30th, at Bristol, the wife of D. G. McPherson, Esq., Surgeon, of Bristol, of a daughter.

*Squire. On April 17th, at 6, Orchard Street, Portman Square, the wife of William Squire, Esq., Surgeon, of a daughter.

Wakefield. On April 13th, at 11, Canonbury Place, Islington, the wife of Thomas Wakefield, Esq., Surgeon, of a son.

MARRIAGES.

Gowlland—Wilkinson. Gowlland, Peter, Esq., Surgeon, of Finsbury Square, to Rose Elizabeth, youngest daughter of John Wilkinson, Esq., of Kensington Park Terrace, at St. John's Church, Notting Hill, on February 16th.

Jenkings—Miller. Jenkings, Henry Gidoin, Esq., 10th Regiment Bengal Light Cavalry, to Lucy Jane, second daughter of George Miller, M.D., of Sidmouth, Devon, on April 14th.

Toulmin—Lenox. Toulmin, Frederick J., Esq., Surgeon, of Upper Clapton, to Eliza, youngest daughter of the late George Lenox, Esq., formerly of Liverpool, at St. Mary's Church, Reading, on April 16th.

DEATHS.

De Carro, the Chevalier Jean, M.D., at Carlsbad, Bohemia, aged 87, on March 12th. Dr. de Carro was the introducer of vaccination on the continent of Europe.

Drury. On April 13th, at Kilcarberry, county Dublin, aged two years and eight months, William Bruton, youngest child of W. V. Drury, M.D., of the Crescent, Camden Road.

*Lambert, William, Esq., Surgeon, of Sowerby, near Thirsk, Yorkshire, aged 71, on April 12th.

Sharpe. On April 14th, Henry, youngest son of John Sharpe, Esq., Surgeon, Waltham Cross, Herts.

*Smith, Thomas Wade, M.D., at Stroud, Gloucester, lately.

Smith, William Gray, M.D., of 59, Vauxhall Walk, aged 63, on April 2nd; and on the same day, at 10, Rochester Terrace, Vauxhall Bridge Road, Charles Doveton Smith, son of the above, student in medicine, aged 19.

*Workman, Thomas, Esq., of 10, Inverness Square, Bayswater, aged 64, on April 21st.

Yates, William, M.D., of Otsego County, New York, aged 90, on March 7th. Dr. Yates was a native of England; he studied at St. Bartholomew's, and there attended the first course of lectures delivered by Abernethy. He left this country at the age of 28; but, before his departure, made the personal acquaintance of Jenner, and received from him a large supply of vaccine virus, with directions for its use. On arriving at Philadelphia, he at once earnestly devoted himself to the introduction of the new doctrine, and was one of the first who conveyed the knowledge of it to America.

APPOINTMENTS.

Johnson, George, M.D., elected Professor of Materia Medica in King's College, in the room of J. F. Royle, M.D.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, April 17th, 1857:—

Brayton, Jonathan, Whitehaven, Cumberland
Foster, William Frederick, Hambledon, Hants
Gardiner, Gideon George, Chalford, Gloucestershire
Gould, William, Denton, near Manchester
Hart, Adolphus Daniel, Brook Street, Hanover Square
Lawson, John Edward Spence, Egremont, Cumberland
Macauley, Thomas, Leicester
Maynard, John Clarkson Martin, Hudson's Bay Company
Newman, Augustus, Oxford
Prentis, Charles, Phillimore Place, Kensington
Thorinley, Joseph, Heaton Mersey, Lancashire
Towle, William Henry, Nuneaton, Warwickshire
Wilkinson, John, Hunmanby, Yorkshire

Monday, April 20th:—

Cooper, Astley, Plymouth, Devon
Gray, John Temperley, Hexham, Northumberland
Hooker, Edward Miles Coverdale, Sheerness
Humphreys, John, Royal Navy
Jones, John Edwards, Dolgelly, Merionethshire
Prall, Samuel, Rochester, Kent
Teevan, James, Killeshandra, co. Cavan

Apothecaries' Hall. Members admitted on Thursday, April 2nd, 1857:—

Clark, T. E., Cotham, near Bristol
James, M. P.
Tait, G. E., Heytesbury, Wilts

Thursday, April 9th:—

Cockcroft, George Edmundson, Middleham, Yorkshire
Edwards, Henry John, Bampton, Devon

Granger, William Slocombe, Bradford Abbotts, near Sherborne
James, Herbert, Merthyr Tydvil
Lewis, Robert Benson, Bradford, Yorkshire
Masters, John, jun., Ilminster
Robson, Frederick Abercrombie Hope, Peninsular and Oriental Company's Service
Skaife, Henry, Easingwold, Yorkshire
Thompson, William Wittman, Bognor, Sussex
Woodhouse, Thomas James

HEALTH OF LONDON:—WEEK ENDING APRIL 18TH, 1857.

[From the Registrar-General's Report.]

The total number of deaths registered in London in the week that ended on Saturday was 1084, showing a slight increase on the return of the previous week, which was 1059. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1058; but as the number recorded last week occurred in an increased population, the average for the sake of comparison must be raised in proportion to the increase, in which case it will become 1164. Hence it appears that the state of the public health was so far favourable that eighty persons survived, who would have died if the average rate of mortality had ruled.

Hooping-cough seems to prevail as much, or continues to be fatal to as many children, as in the midst of winter, when the mean temperature was 12° or 18° lower than it is now. The deaths from this complaint last week rose again to 71, which occurred in proportions of considerable uniformity in most of the metropolitan districts. This increase may be due to the coldness of last week, when the thermometer fell on four nights to 33°, and on one to 31·4°. Seven registrars returned, each of them, 3 deaths from hooping-cough. The average number for corresponding weeks of previous years is 55; and the present return exhibits, therefore, an excess of 16. It is satisfactory to remark that only one death from small-pox occurred in the week; this single case was that of an infant, and took place in Rotherhithe. The numbers referred to measles and scarlatina, respectively 24 and 26, vary little from those of previous weeks. The former disease prevails chiefly in the Central districts; the latter, as well as fever and diarrhœa, chiefly in the Eastern. In the South sub-district of West London, out of 11 persons who are returned as having died since the 11th instant (inclusive) 7 are children who were carried off by hooping cough, scarlatina, measles, and typhus. Typhus (and common fever), which numbered 38 cases, continues to show less than the usual mortality. Fatal cases of phthisis or consumption were numerous; they amounted to 172, the corrected average being 155. Bronchitis has gradually fallen to 104 cases. Two men and two women had attained the age of 90 years or more. The oldest person who has a place in this week's report is a sugar refiner who died in Clerkenwell-close, at the age of 93 years.

Last week the births of 1,002 boys and 931 girls, in all 1,933 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1,567.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·453 in. The readings ranged from 28·82 in. on Monday to 29·83 in. on Friday. The mean temperature of the week was 43·4°, which is 2·3° below the average of the same week in 43 years. On Monday the mean daily temperature was so low as 36·8° (or 8·4° below the average of the same day), and it was below the average on every day till Friday. On Saturday the mean temperature rose to 57·4°, which shows an excess of 11° above the average. On Wednesday the thermometer fell below freezing point, viz., to 31·4°, and on Saturday it rose to 68·5°, making an entire range of 37·1°. The mean dew-point temperature was 38·1°, and the difference between this and the mean temperature of the air was 5·3°. The wind was in the north-west on Monday and Tuesday; it was afterwards in the south-west and south-east. Rain to the amount of 0·38 in. fell in the week. There were heavy squalls of snow and rain on Monday night, and showers of rain or hail on several other days. Saturday was remarkably fine.

Medical Society of London. A paper will be read this (Saturday) evening, by J. M. Moullin, Esq., on "The Necrosis of Cancer and its Consequent Enucleation."

Dangers of the Profession in a Slave State. Mr. H., a planter in Louisiana, had a brother staying with him, who was born and educated in a northern state, a doctor by profession, and had come south in the hope of getting into practice. His experience so far had been most melancholy. He found the people were hardly ever ill enough to call for a doctor, and yet they were hardly ever well. Ailing was, in fact, their normal state. Sometimes he was sent for when somebody was just dying, and it was too late to do any good, and then he had to travel fifteen or twenty miles, often through swamp and forest, and would only receive two or three dollars by way of compensation. There was an old surgeon in the neighbourhood, a regular fire-eater, who had killed his man, not once or twice, but half-a-dozen times, and been so often in difficulties, that his hands and arms were crippled and contracted by the effects of shots and cuts, but not so as to prevent his performing a similar operation upon any one who attempted to cross his path with skill and success. This gentleman, he was told by everybody, would, as soon as he found he was come to set up in opposition to him, assuredly kill him. For the first month, therefore, he lived in daily fear of a catastrophe, and confessed that he avoided the old fellow as much as he could, without risking any imputation on his courage. The crisis came at last, however. A man came one night to secure his professional services for a child, supposed to be already *in articulo mortis*. He got up at once to go; but just as they were leaving the house, the father informed him that this child had been attended for nine months by the old gentleman, who had not, as yet, been formally dismissed. This information had such an effect upon our friend, that he positively declined to go, unless his rival's consent were first obtained to his being called in. The father at first consented to this, but turned back after he had been gone a few minutes, stating, that the child was his, and not old Dr. ——'s, and that he didn't care a darn if he was riled. This led to the junior complying. He prescribed, went home, loaded his revolver, and began to carry it constantly on his person. He met his antagonist a few days afterwards, and prepared for a regular shooting affair; but to his astonishment, received a pleasant salutation instead of a bullet, and rode along for some distance, chatting in a friendly manner. "The neighbours," he said, "were greatly astonished when they heard how the matter had ended." This may help to give some idea of the way in which the laws of professional etiquette are carried out, or expected to be carried out, in those parts. (*Correspondent of the Daily News.*)

Temperance Fanatics. At Albany the fanatics of temperance have resumed their labours. They some time since succeeded in passing a prohibitory law, which proved such a signal failure as almost to cover any attempt to legislate on the subject with ridicule. Its main provisions, when tested before the courts of law, were declared unconstitutional; the Act could not be enforced, and has been ever since a mockery. One thing it did effect; it destroyed the previously existing system of licenses; and, the prohibitory part of the law failing, the whole result was, that the traffic in liquor became free; exactly the reverse of the object the Abolitionists intended. The city lost a source of revenue, and there was less restraint on drinking than before. The party, too, lost so much influence from the ridicule excited by the amazing *fiasco*, that the speculating politicians, who are ready to join any party that seems to be gaining capital, abandoned it. It cannot attempt such another feat of legislation, but it dabbles with the question still, and would be content for the present to "regulate" the sale of liquors by some system of licenses resembling that which they destroyed. Individual members of the party occasionally propose schemes of reform which are of the nature of crotchets.

The Water of Paris. In a paper lately read before the Academy of Sciences at Paris, M. Boussingault has shown that the water contained in the wells of Paris is impregnated with nitrate of potash, or saltpetre. It is true that this water is not generally used for drink, but wine-dealers water their wines with it; and although nitrate of potash is not absolutely poisonous, since it may be taken with impunity in much larger doses than can be imbibed with the water, still its presence always denotes the existence of vegetable and animal matter in a state of decomposition, which is unquestionably injurious to the public health. In consequence of this discovery, the baking establishments of the hospitals of Paris have resolved to use Seine water for making bread, instead of the water brought from the wells of the neighbourhood.

Income of Hospitals and Dispensaries. In a report of the Statistical Society of London it is stated, that fourteen general hospitals in London, possess an income from realised property to the amount of £109,687; annual subscriptions, £17,091; donations, £16,636; legacies, £10,206; and their miscellaneous sources of income to £1,996. The total income of all these hospitals from every source is £155,616, and the annual contributions of the public amount to £45,929. In addition to the above hospitals, there are in this metropolis thirty-six special hospitals, possessing an aggregate income of £117,218; making the income of the general and special hospitals, taken together, amount to £272,834. There are also returns from forty-two general dispensaries, possessing incomes from all sources of £21,000; and eighteen special dispensaries, with annual incomes of £8,064. If these two sums, making £29,064, be added to the former, it gives the enormous amount of £301,898 annually expended in medical charities in this metropolis; and this sum, large as it is, excludes Samaritan and other funds connected with hospitals and dispensaries, Poor-Law medical relief (£28,776), cost of maintenance of pauper lunatics (£79,988), vaccination (£4,292), and nurses' training institutions. All these sums would make a grand total of nearly half a million expended on our sick poor.

London and Parisian Hospitals. From an interesting report of the Committee of Beneficent Institutions, it appears that London and Paris presents a striking contrast in the methods which they adopt for affording relief to the sick poor. In London, a great part of our medical relief is dispensed at the houses of the poor themselves by the physicians and surgeons attached to our dispensaries. In Paris, on the contrary, comparatively little relief is afforded otherwise than in the hospitals themselves. Thus, in the year 1853, the number of in-patients in hospitals in Paris amounted to no less than 91,754, against only 45,808 in hospitals in London, this calculation, in the case of London, being exclusive of patients treated in workhouse infirmaries. But, on the other hand, under the system of out-door medical relief recently set on foot in Paris, 102,472 persons received gratuitous attendance, against upwards of 600,000 patients similarly relieved in London. The nearest approach to a fair comparison between London and Paris, which it seems possible to make, is that afforded by a statement of the sums contributed by the medical charities and the poor rate, taken together, as follows:—In London, income of medical charities and poor relief, £1,150,900; in Paris, expenses of l'Administration Général, £560,853.

The Indian Materia Medica. The Government of India pays upwards of £40,000 a year for quinine alone. Notwithstanding this vast expenditure the supply might be tripled with advantage. Indents for quinine are jealously watched. At civil stations it is almost refused, and during an outbreak of fever it is always the first article to fall short, and the last to be sufficiently replaced. Of the cost of the remaining drugs we are not informed, but it can scarcely fall short of something like thirty lacs of rupees a year. These two figures are sufficient to prove the importance in an economical view of the substitution of native drugs. On the important benefits their introduction, or rather discovery, would confer upon the people, it is needless to enlarge. To the mass of the population English medicines are totally inaccessible. Almost alone among imported goods, drugs maintain the price they bore in the good old days before the Pagoda tree had been shaken into barrenness. Men in sickness do not ask the price of medicine. The vendors have every interest in maintaining it. Doctors have little interest in its reduction, and so the good old profitable rates are allowed quietly to endure. The natives do the best they can, sometimes reviving under drugs that would kill any other race of human beings, but usually dying of attacks which the Englishman regards as temporary ills. The evil and its remedy are both understood, and have been pointed out about once a week during the half of the past century. Yet we have done nothing towards obtaining the remedy we all know to exist. There is probably not a medicine imported from Europe, nor a costly drug from South America, which has not its counterpart in India. What have we done to discover them? Doctors living alone, without communication with their brethren, occasionally stumble on some valuable plant, some febrifuge, or substitute for catechu. They cure all around, satisfy themselves of the correctness of their views, and report to the medical board. The white ants eat the report with gusto, the doctor moves on disheartened to his next station, and there the matter ends. It is useless for the advocates of these effete institutions to talk of the valuable investigations they have suggested or proposed. How many English drugs have they displaced within this generation? It is a result, not a report that is required, and the only one obtained is an immense expenditure. At the present moment there is a committee sitting to ascertain what articles now imported from Europe can be obtained in India. How many drugs will that committee condemn? We will venture to predict not one, though every member of it has probably some vague idea that all the English medicines can be replaced. We need an officer specially appointed for this duty, with power to make researches throughout India, and to compel the services to aid him. Usually all information obtained will be willingly placed at his disposal. It is hopelessness rather than want of energy which leads so many surgeons to leave their information inaccurate or half-digested. No man with brains to devote himself to study will submit his work to a board selected for its age, and still less to a board which is regarded as a sepulchre of records. It is individual persistent energy, solely devoted to this one subject, which can alone accomplish any permanent improvement. A skilled chemist, communicating with all India, testing every drug, and bringing all experience into one focus, would do more in a year to ascertain the true qualities of the native pharmacopœia than the boards will accomplish in a century. Such an officer would be no very expensive addition to the staff of the medical service.—*Bombay Telegraph.*

The Case of Bacon and his Wife. It is understood that the two prisoners will be jointly tried for the murder of their children, and that in such case the statement of the wife that her husband committed the murder may be used as evidence against herself. It is expected that a joint defence will be made, and that this defence will be that the act of murder was committed by Mrs. Bacon while in an unsound state of mind, and that she is consequently not criminally responsible, and that the husband had nothing whatever to do with the crime. If this defence should be successful, and Bacon should be acquitted, he will then be removed to the country to take his trial at the summer assizes for the murder of his mother. It appears that since the committal of the prisoners they have both been in a very desponding way, particularly Bacon himself; and they are never left alone, six additional turnkeys being employed, three women and three men, to watch them, two during the night, and one during the day.

The Queen. As soon as ever Her Majesty is strong enough to travel, it is recommended by the medical gentlemen in attendance, that the Queen should make a short trip to the seaside, so as thoroughly to complete her recovery, and restore her health to its usual vigour in the shortest possible time. For this purpose it is expected, should everything go on as favourably as it has hitherto done, that Her Majesty may be enabled to leave town for her marine palace, Osborne, Isle of Wight, the latter end of the first week in May. (*Observer.*)

TO CORRESPONDENTS.

Dr. O'Connor has sent us a long letter in reply to Dr. Fuller. He appears to claim the merit of *the combination of sulphur with flannel.* This is scarcely a point of sufficient importance to justify our filling the pages of the Journal with a long controversy on the subject.

Communications have been received from:—Dr. G. Goddard Rogers; Mr. Holmes Coote; Dr. Cockle; Mr. Augustin Prichard; Mr. Kitching; Mr. T. Holmes; Dr. Garrod; Mr. H. Terry, Jun.; Mr. J. S. Bartrum; Mr. Crosby Leonard; Mr. Oliver Pemberton; Mr. Richard Griffin; Dr. W. O. Markham; Mr. James Long; Mr. L. Owen Fox; Dr. J. W. Keyworth; Dr. Logan; Dr. Wade; Dr. Nicholson; Mr. Marshall; Mr. Edward McDermot; Dr. Styrap; Dr. P. H. Williams; Mr. John A. Bolton; Dr. Oke; Dr. O'Connor; Mr. Faithfull; Dr. James Russell; and Mr. Griffin.

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PHILIP H. WILLIAMS, General Secretary.

Worcester, April 1856.

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Guy's.—The Summer Session com-

mences on FRIDAY, the 1st of MAY. Gentlemen desirous of becoming Students must produce satisfactory testimony as to their education and conduct. They are required to pay £40 for the first year; £40 for the second year; and £10 for every succeeding year of attendance. One payment of £100 entitles a Student to a Perpetual Ticket. Clinical Clerks, Dressers, Ward Clerks, Dressers' Reporters, Obstetric Residents, and Dressers in the Eye Wards, are selected, according to merit, from those Students who have attended a second year. A Resident House Surgeon is appointed every six months from those Students who have obtained the College Diploma.

MR. STOCKER, Apothecary to Guy's Hospital, will enter Students, and give any further information required.

Guy's Hospital, April 14th, 1857.

St. George's Hospital and Medical

SCHOOL.—The Summer Session will commence on FRIDAY, the 1st of MAY.

LECTURES.

Materia Medica—Dr. Pitman.
Botany—Mr. Maxwell Masters.
Medical Jurisprudence—Dr. Fuller.
Midwifery—Dr. Robert Lee, F.R.S.
Practical Chemistry—Dr. Noad, F.R.S.

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Further information may be obtained from Mr. Pollock, the Treasurer of the School, or from Mr. Hammerton, the Apothecary of the Hospital.

The PRIZES will be awarded on FRIDAY, the 1st of MAY, at 3 o'clock. The Right Hon. LORD JOHN RUSSELL, M.P., will preside.

Bristol Medical School.—The

SUMMER SESSION will commence on FRIDAY, MAY 1st, when the Prizes obtained in the last Examinations will be distributed. The following Courses of Lectures will be delivered.

Midwifery	DR. SWAYNE.
Botany and Vegetable Physiology	MR. ETHERIDGE.
Forensic Medicine	MR. W. M. CLARKE.
Chemical Toxicology	MR. HERAPATH.
Materia Medica and Therapeutics	DR. BURDER.
Practical Chemistry	MR. HERAPATH.

Practical Instruction and Cases are provided for the Students of the Midwifery Class; the Students of the Botany Class attend the Lecturer upon Herborising Excursions.

JOSEPH GRIFFITHS SWAYNE, M.D.,
April 20th, 1857. Hon. Sec.

St. Bartholomew's Hospital.—Lec-

TURES for the SUMMER SESSION will commence on the 1st of MAY.

Materia Medica—DR. FARRE.
Forensic Medicine—DR. BLACK.
Midwifery—DR. WEST.
Botany—DR. KIRKES.
Comparative Anatomy—MR. M'WHINNIE.
Practical Chemistry—DR. STENHOUSE.

Superintendence of Surgical Operations on the Dead Body by MR. HOLDEN and MR. SAVORY.

Clinical Lectures on Medicine by DR. BURROWS and DR. FARRE; and on Surgery by MR. LAWRENCE, MR. STANLEY, MR. LLOYD, and MR. SKEY.

Pathological Demonstrations—MR. CALLENDER.

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Further information may be obtained from MR. PAGET, MR. HOLDEN, or any of the Medical Officers or Lecturers; or, on inquiry, at the Museum or Library.

Mental Affections.—'Harts,' Wood-

ford.—Resident Physician, Dr. W. DANIEL. Consulting Surgeon J. STRUDWICKE BUNCE, Esq., M.D., M.R.C.S., etc.—Dr. WYTHE DANIEL many years the Senior Proprietor and Physician to Southall Park Asylum has taken the above residence, for the reception of a limited number of Mental Invalids of the higher classes. The mansion is spacious, and in every way adapted to carry out the non-restraint system, which is here practised to its fullest extent. The estate exceeds thirty acres, of which twelve are beautifully laid out in pleasure grounds and plantations, commanding extensive views of the surrounding country. "Harts" is nine miles by road from Regent's Park, and half a mile from the Woodford Station.—For terms, etc., apply to Dr. W. DANIEL.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XVIII.] LONDON: SATURDAY, MAY 2, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

FRACTURE OF THE SKULL: ECCHYMOSIS UNDER THE OCULAR CONJUNCTIVA, WITHOUT FRACTURE OF THE ORBIT.

Under the care of E. CUTLER, Esq.

W. O., aged 71, groom, was admitted April 23rd, under the care of Mr. Cutler. He was riding a horse in Hyde Park, and fell off, from some cause which did not appear. He was brought in insensible, with a wound on the right side of the vertex of the skull, in which a very small piece of the bone was exposed. One or two small vessels bled freely, and were tied. Ecchymosis was noticed in the ocular conjunctiva, at the lower part of the left eye. The pupils were dilated and insensible. The pulse was irregular. It was noticed that he groaned a great deal, and moved his arms towards his head as though he felt pain there. There was a whiff in the breathing. There was no paralysis.

April 24th. He appeared slightly sensible, and tried to speak, but did not succeed. The pulse was irregular and weak. Otherwise he was much the same as yesterday.

April 25th. The pulse failed more, and became more irregular. There was no bleeding from the nose or ear. The ecchymosis in the ocular conjunctiva continued, but in no great quantity. He sank in the evening.

On *post mortem* examination, a linear fracture of the skull was found beneath the right temporal muscle, passing obliquely forwards from the lower part of the temporal fossa to the sphenoidal fissure. In this course, it cut across the groove for the middle meningeal artery, which was filled with blood; and, in connexion with this blood, a considerable clot was found passing forward on the floor of the orbit, and continuous with the blood under the conjunctiva of the lower segment of the eye. There was no appreciable effusion between the dura mater and the bone. The surface of the brain corresponding to the seat of fracture was marked by a superficial effusion of blood in the meshes of the pia mater; and the right lateral ventricle was filled with blood proceeding from superficial laceration of the substance of the brain there. The cerebral substance corresponding to the floor of the ventricle was broken up and softened, but this did not extend more than a very short distance into the cerebrum.

REMARKS. The diagnosis of the existence of fracture of the base of the skull, and of its situation and direction, has received so much attention of late, and has been so fully illustrated by many eminent surgeons, that it has at length reached to a tolerable degree of certainty. Cases, however, do occasionally occur which show that too absolute a reliance should not be placed even on the signs which used to be held as pathognomonic. Thus, in the ASSOCIATION MEDICAL JOURNAL for October 26, 1855, p. 968, is related a case, occurring under the care of Mr. Hawkins in St. George's Hospital, where ecchymosis under the ocular conjunctiva, with symptoms of lesion of the brain, was proved to depend on fracture of the bones of the face; and, in the *Transactions of the Pathological Society*, vol. vi, p. 23, our readers will find the details of a case, also from St. George's Hospital, in which prolonged and copious sero-sanguineous discharge from the ear, after injury of the head, was found to depend upon lesion of the tympanum, only the cranial bones proper being quite uninjured. In these cases, therefore, the diagnosis of the existence even of fracture of the skull would have been erroneous; in the one which we now quote, the error only affected the direction of the fracture, which was confined entirely to the middle fossa of the skull, while the signs rather pointed to a fracture of the anterior fossa. The fact of the fracture traversing the groove for the meningeal artery did not appear in this case to have been of any consequence, as no lesion of that vessel was discovered, and the small amount of blood found in the groove of bone which it occupied, where this groove was crossed by the fracture, was no more than might easily have proceeded from the vessels of the bone; nor was there any amount of blood between the bone and the dura mater, or any symptom of compression during life. This case is worth remembering, therefore, as showing that blood may be effused under the ocular conjunctiva, at the base of the orbit, in connexion with fracture passing from behind into the sphenoidal fissure.

Another point of interest in the case is the blood found in the lateral ventricle. Was this the effect of the accident, or its cause? In the absence of any history of the occurrence, the latter seems, to say the least of it, quite as probable; for, even allowing for the strange effects constantly seen to follow violence done to the brain, it seems unlikely that, while all other parts of this organ were uninjured, one surface of the ventricle should have been so much bruised, the opposite surface remaining entire; nor did the symptoms during life point to laceration of the brain as the cause of death. Cases where injury of the head has been mistaken for apoplexy, and *vice versâ*, are pretty frequently observed: in this instance, it is, at any rate, a reasonable conjecture that the two affections co-existed.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF AMPUTATION.

Under the care of JAMES PAGET, Esq.

[*Reported by* EDGAR BARKER, Esq., *House-Surgeon.*]

CASE I. *Compound comminuted Fracture of the Tibia and Fibula about the Middle: Considerable Hæmorrhage: Gangrene of the Limb: Amputation.* W. J., aged 11, a healthy well nourished boy, was admitted April 14th into Kenton's Ward, on account of the above injury. He stated that, while attempting to get up behind a brewer's dray, a barrel slipped off, and fell against his leg. On admission, the injury above named was discovered; the countenance was anxious; pulse quick, small, and feeble. The limb soon became more swollen and cold, the countenance more anxious; and the lad complained of increasing drowsiness. Accordingly, there was nothing left but to remove the limb, which was performed in the upper third by Mr. Paget, three hours after the receipt of the injury.

Condition of the Limb. There was considerable effusion of blood into the surrounding tissues. The anterial tibial and peroneal vessels were torn across, as also the external saphenous vein and external cutaneous nerve.

He progressed favourably till April 21st, six days after the operation, when, on removing the dressings, it was found that the stump had opened, entirely exposing the bones, covered with lymph; the sutures having yielded, and all the ligatures come away. This was easily accounted for by the patient's constant restlessness, although every attempt was made to keep him quiet.

April 26th. The stump now looks remarkably well, and is healing rapidly, the surface of the bone still showing healthy granulations.

CASE II. *Ankylosis of both Hip and Knee-Joints: Amputation.* John R., aged 24, was admitted into Abernethy's Ward, under the care of Mr. Paget, with his left thigh bent at right angles to the body, and his knee ankylosed. He dated his illness from the 12th of December, twelve years ago, when an abscess formed in the anterior part of the thigh, from which, at different times, pieces of dead bone escaped; and on account of the severe pain caused by it, he placed his thigh at right angles to his body; at the end of twelve months he got up and found his thigh fixed in its present position. Eight years ago, the knee began to swell, and became very painful; it at length suppurated, and several openings formed above the knee-joint, com-

municating with dead bone. For the last seven years he has been able to get about on crutches, but with much inconvenience from the very awkward direction of the limb.

On the 4th of April he was brought into the theatre; chloroform was administered, and an attempt was made to straighten the limb, which, however, was found firmly fixed from bony ankylosis, and the head of the femur dislocated from the acetabulum, partly on the obturator foramen, and partly on the pubes. The knee-joint was also found united by bony ankylosis.

April 18th. Chloroform was administered, and the limb was removed by the circular incision at about the junction of the upper with the middle third of the thigh. Eight vessels requiring it were secured, sutures put in, and oiled lint with cotton wool applied. The man has had some unfavourable symptoms (viz., retention of urine, and a slight attack of jaundice), but these have now left him. The stump is granulating kindly, and he seems in a fair way of recovery.

Remarks. The former of these cases is given as an accompaniment to one reported in the Journal for March 28th, where, in a young child, gangrene occurred as the consequence of laceration of the popliteal vessels without fracture of the bones. The present is a more common occurrence, but one which, as far as our observation serves, is not very usual in childhood, at which age the vessels are so flexible and elastic as generally to resist the force which fractures the limb. The present is a less grave case than the one formerly reported, in consequence of the lower situation of the injury permitting amputation below the knee.

The interest of the second case lies principally in the circumstance of both the great joints of the limb having become ankylosed so firmly as to resist any force which could be applied to them, and in the singular deformity produced by the disadvantageous position in which that ankylosis had occurred—a deformity of which it is hardly possible to give an adequate idea without illustration; but some notion of which may be gained from imagining the extremity projecting as a rigid rod at right angles to the trunk. The limb is to be macerated in order to expose satisfactorily the state of the bones forming the knee. Should this dissection present any matter of interest, our readers may rely that the courtesy of the authorities of this Hospital will enable us to publish it.

ST. MARY'S HOSPITAL.

RETENTION OF URINE: ABSCESS BETWEEN THE BLADDER AND RECTUM: PUNCTURE PER RECTUM.

Under the care of W. Coulson, Esq.

[*From Notes by* E. A. Hart, Esq.]

Francis H., aged 40, a very weak, anæmic-looking man, was admitted under Mr. Coulson's care on January 27th, on account of stricture of the urethra, which had existed for about nine years. He had been treated for it at that time, and the stricture dilated so as to admit No. 6. The symptoms had recurred with severity a few weeks before his admission. At the latter date he had passed no urine for twenty-four hours, and no instrument could be passed into the bladder. After the use of the warm bath and opiates, however, he passed some water, and continued to do so, but in a small stream, and with much difficulty. The urine was albuminous and ammoniacal. During the next few days he had slight shivering occasionally, and on February 3rd suffered from a severe attack of rigors, followed by feverishness and copious perspirations, with much pain in the head. Frequent attempts were made to reach the bladder with every kind of instrument, but without success. There was a very rough and long stricture near the membranous portion of the urethra, through which, on one occasion, a silver catheter (No. 1) was passed, but experienced another obstacle behind the first stricture. Meanwhile, his health was very weak, he suffered much from the constant desire to pass water, and was further reduced by frequent attacks of diarrhœa. There seemed no prospect of introducing a catheter into the bladder, especially as in some of the numerous attempts at catheterisation a false passage had been formed. After more than a month's delay, therefore, it was resolved to puncture the bladder from the rectum. Accordingly, on March 4th, Mr. Coulson proceeded to perform this operation. On the finger being introduced into the bowel a large fluctuating swelling was felt anterior to the situation of the bladder. The trocar introduced into this gave exit to five or six ounces of pus, with great relief to the patient. Next day he had had a good night. Pus had been passed both from the urethra and rectum. The urine (which had been dribbling away for the last few days) now passed in a small stream. From this time he continued to improve, and soon regained the power of retaining his water. Pus continued for several weeks to pass both by the urethra and rectum. The abscess has now healed, an instrument can be made to reach the bladder, and the stricture is in process of cure.

Remarks. The above case is an instance of a stricture complicated by pressure from without, and, in all probability, made more intractable by the irritation which that pressure produced. The question as to the origin of the abscess which so pressed on the urethra, is one which it is difficult to answer. There was no distinct evidence of urinary infiltration; nor was the situation of the abscess such as to render this hypothesis probable. It seems more likely that inflammation of the mucous membrane of the bladder and urethra had been set up by the irritation of the stricture and the contact of diseased urine, and had spread down the ducts of the prostate into the follicles of this gland, thus occasioning abscess in its substance.

UNIVERSITY COLLEGE HOSPITAL.

MR. MARSHALL'S STAFF IN SYME'S OPERATION FOR STRICTURE.

We referred in our last number, while giving a description of a case of Syme's operation for stricture, to "Mr. Marshall's Staff." As this instrument may not have fallen under the notice of many of our readers, and as it appears to combine many indications, and greatly to facilitate the performance of the operation, we propose shortly to explain the invention, and its supposed advantages over the staff in common use—that of Syme. The latter is, as our readers are aware, a solid cylindrical grooved staff, with a shoulder, the groove reaching from the extremity of the staff a very short distance on to the shoulder. Mr. Marshall's instrument consists of a staff of a peculiar form, in two pieces, which are united by a screw. The shaft, instead of being cylindrical, is flattened on its posterior surface, has a larger curve than those in ordinary use, and the groove extends further up the shaft, and ceases further from the point. The lower piece is first introduced through the stricture into the bladder; and on to the upper piece a gum catheter, of corresponding shape, is fixed, having a silver piece at the lower end, which is marked on the back, or flat portion, by a groove, which thus corresponds to the groove on the rest of the staff. This upper piece being thus screwed on to the piece in the bladder, the catheter is pushed down it until it meets with the stricture, when it is, of course, checked. In this position it is fixed by a screw at the top, and then acts as a shoulder to the staff. The stricture is then divided in the ordinary way, and this division having been effected, the catheter is pushed on. If the division have been effectually performed, it will enter the bladder; otherwise its shoulder will be again arrested at the part which requires division, when it can be again fixed by the screw, and the knife used as required. When the catheter has fairly entered the bladder it is withdrawn, and a common catheter (having the end as well as the eye open) passed over the staff into the bladder: the staff is then removed.

The advantages of this plan are: 1. That the shoulder is movable and meets the stricture, wherever the latter may be. 2. That, from the shape of the instrument, the grove in the catheter must always correspond to that in the staff, and be in the median line posteriorly; and the catheter, with its shoulder, is perfectly steady, and does not slip about under the operator's finger. 3. That if any part of the stricture has escaped division, or if another constriction exists behind it, it is immediately discovered, and the shoulder can be at once applied to it. 4. That there can be no difficulty, after the division of the stricture, in introducing the catheter into the bladder, as the steel staff remains all the time to serve as a director. This latter is, perhaps, the most important advantage of this instrument, and one to which several other surgeons have directed their attention, and which they have endeavoured to obtain by inventions of more or less merit. These we do not intend to discuss at present, but will merely mention here, that the late Dr. Mackenzie of Edinburgh, and Mr. Haynes Walton, have proposed modifications of Syme's staff, the principle of which more or less resembles that of Mr. Marshall's instrument. These inventions, however, were never laid before the professional public; and whatever other merit is due to the ingenious apparatus devised by Mr. Marshall, that of originality must also be conceded to him.

Original Communications.

ON THE NATURE AND ORIGIN OF RENAL DISEASE.

By J. Russell, M.D., Lecturer on Pathology at Sydenham College, Birmingham; and formerly Senior Physician to the Birmingham General Dispensary.

[*Read before the Birmingham and Midland Counties Branch, April 9th, 1857.*]

In laying before this Branch a few remarks on the nature and origin of renal disease, I limit myself entirely to that large and important class of diseases of the kidney hitherto known under the collective name of Bright's disease; characterised as a group, though not of necessity as individuals, by the presence of albumen in the urine, by a serious diminution in the daily excretion of urinary salts, and by the passage from the kidney of tubules of certain peculiar casts; together with a tendency to the effusion of anasarcous fluid into the cellular tissue of the limbs and trunk.

Among the many interesting questions which the phenomena of this very heterogeneous class of diseases suggest, obviously the most important is that which relates to their nature and origin; since upon the answer which is given to this question must depend the views we entertain as to treatment, both curative and preventive. I therefore make no apology for introducing a subject, which, but for its practical application, may have rather an abstract appearance.

In discussing this subject, the first inquiry must relate to those morbid changes in the kidneys which constitute the disease. These have been recently described by Dr. George Johnson, in his work on *Diseases of the Kidney*. The *primary* changes vary in the different forms of the disease: in one form, the epithelial cells, which perform the function of secretion, are shrivelled and broken up, and the uriniferous tubules are, in consequence, either shrunk and wasted, or, being bared of their epithelial lining, are dilated to various degrees: in another form of the disease, the place of the cells is occupied by a homogeneous material, apparently of a fibrinous character: and in a third, to which the name of Bright's disease is sometimes restricted, these epithelial cells either remain loaded with fat, or, having been ruptured by excessive distension, fill the tubules with their oily contents. These primary changes are speedily followed by others, both in the tissues of the kidney itself, and in other organs of the body; but such changes, being of a *secondary* nature, do not concern our present inquiry.

The structural changes I have thus briefly indicated have one important character in common, which has a special bearing upon the opinion I shall suggest as to their nature and origin; viz., that they all commence in the *secreting instruments* of the kidney, the glandular epithelial cells which line the convoluted tubules; it is the *cortical portion* of the organ which receives the stress of the disease; the straight tubes which constitute the medullary portion, and which are little besides ducts, are affected to a much less extent, and often escape altogether. Further, it is important to observe that the changes in question are degenerative in their character, and in this respect are directly opposed to that creation of additional secreting tissue which constitutes true hypertrophy of the kidney, and which occurs in the course of the natural effort made by a *healthy* kidney to do double work, when its fellow is disabled by injury or disease; they thus satisfactorily agree with the prominent symptom of the disease—namely, the lessened amount of salts secreted in the urine.

The explanation of these various structural changes, which is given by Dr. Johnson, and to which I now wish to direct the attention of the Branch, is the following. The morbid changes take their origin in alteration of function in the parts diseased, viz., in the epithelial cells. In consequence of exposure to unhealthy influences of various kinds, the nutrition of the blood becomes depraved, and that fluid becomes loaded with unhealthy matters, which must be eliminated from the body; the labour of effecting this is thrown, in great measure, upon the kidneys, and materials of an unhealthy character are thus being continually brought for excretion to the cells of those organs: consequently, the function of the cells becomes perverted; their natural food, the excreta, is changed. As a necessary result their nutrition becomes impaired, and morbid alterations of structure are induced. Such alterations may be effected gradually, almost insensibly, if the corresponding change of function be itself induced gradually; on the other hand, if the work of the organ be suddenly changed, the alteration of kidney structure will be attended by a relative commotion in the organ itself, and secondarily, in the system at large. By what singular modification in the operation of the causes the different forms of the disease are produced, we are just as ignorant as we are of the causes which determine fatty degeneration in an organ at one time, wasting at another, and calcareous transformation at another. Much, no doubt, is due to the original constitution of the patient. Thus, one variety is most frequently met with in the strumous constitution.

Dr. Johnson's explanation of the disease seems to me to be supported by the great pathological law, that in every organ and tissue nutrition follows function, is related to it, and regulated by it; and I think it derives support, not only from the history of the patient's life and habits, and from the nature of the influences which seem to stand to the disease in the relation of cause, but also from the analogy of corresponding changes in other organs of the body. I shall beg leave to submit a few arguments of each class.

First, I will refer to the arguments derived from the analogy of other organs. Until lately, inflammation has been constantly referred to as the one important source in which most of the changes of structure, with which we are familiar, take their rise: and we now most naturally look for traces of this process in explaining any disease which falls under our observation. Late researches, however, have revealed to us a very large number of organic changes, which are entirely independent of inflammation. The large class of hypertrophies, properly so called—those, namely, in which the enlargement is entirely due to increase in the natural tissue of an organ—exhibit to us instances of large increase of dimension and weight, without any inflammation having been concerned in the process. On the other hand, in the class of atrophies, there is equal change in the opposite direction; and, although inflammation, like any other influence which depraves nutrition, may produce atrophy, yet, in a vast majority of instances, the change has been entirely independent of that process.

But it may be said, there is no alteration of structure in the instances cited; nothing but augmented or diminished bulk. Look, then, at the still larger class of degenerations; here are found muscular, arterial, cartilaginous, osseous, fibrous, and other tissues transmuted entirely into fat or earthy matter, or withered into mere fibro-cellular tissue, and yet inflammation has had no part in the matter. Look again at cancerous and tubercular formations, and at the non-malignant tumours; what numberless examples of extensive structural change, independent of inflammation, do they afford. And yet there is hardly one of the changes to which I have alluded which has not afforded, at one time or other, a battle-field for the question of how far inflammation has been concerned in its production:—the contest relating to the origin of tubercle, and of the atheroma of arteries, whether or not it is connected with inflammation, is one of our own day.

Since we have discarded the inflammatory origin of these and similar changes, it is a necessary question, in what do they originate? where is their starting point? I think it will not be doubted that in a large majority of the instances I have quoted, the first step in the process of change is connected with the *function* of the organ itself. In the hypertrophied heart, the first in the series of changes is a demand made upon the organ for increased exertion, in consequence of some obstacle retarding the onward current of the blood; just as conception takes place *before* the natural increase of the womb in pregnancy commences, thereby creating fresh demand on the nutrition of that organ. On the other hand, in the old woman we find the ovaries atrophied, in the palsied limb we find the muscles wasted or degenerated; here again the first step has been a change in the function of the organ affected, an abrogation or serious diminution of that particular function, just as in the womb lessened requirement, consequent upon delivery, precedes the shrinking which follows that event.

Perhaps the most striking exemplification of this waiting of nutrition upon function, is afforded by the changes which are gradually effected in the tissue of every organ during the period of decline from manhood to old age; as the time for mental and bodily activity passes away, the standard of nutrition in the entire body is lowered, and every form of degenerative change may be met with in the various tissues of the

body. The great tendency of our present pathology to explain change of structure by previous alteration of function is exemplified in the hypothesis concerning the nature of cancer, now most in favour:—that the cells of which cancerous tumours are made up are designed to eliminate from the blood, in the way of secretion, some peculiar matter injurious to the system, which generates the well known cancerous cachexia. This, though only a hypothesis, indicates the present course of opinion in pathology.

One more illustration I am tempted to add, as being more immediately connected with the subject in hand; I refer to the deteriorating influence which is exerted upon the nutrition of any organ, by an *unhealthy* demand made upon it for exertion. Let the hypertrophied heart be over taxed, and nutrition fails any longer to answer the demand: let the bodily frame be subjected to a long continued and excessive demand upon its energy, and in place of the healthy increase in nutrition which work in moderation excites, there is actual wasting, a state of cachexia; and similarly, to an over-taxed brain must be referred a long list of serious nervous diseases.

In the various cases I have now cited it is to the function of the organ chiefly concerned, that we direct the largest part of our attention, in endeavouring to cure the disease: in like manner, if the same explanation be correctly applied to the degenerations in the kidney cells which exist in Bright's disease, it must be our business, whether for prevention or for cure, to pay attention first to keeping the function of the organ in a healthy state, by removing those various causes which impose excessive or unnatural labour upon its secreting cells.

But here another question presents itself; it cannot be denied that certain forms of renal disease set in with every symptom of active congestion, if not of acute inflammation, such symptoms being present from the very beginning: this is the case in what is commonly called acute dropsy; and even in the chronic form, acute congestion may be readily excited by very trifling causes. Such being the case, it becomes incumbent upon those who deny the inflammatory origin of these diseases, to explain their relation to this state of vascular excitement. This relation we are in a better position to understand at the present day, when the near connection which undoubtedly exists between inflammation and the ordinary processes of nutrition, is beginning to be perceived. Formerly, when our attention was fixed too exclusively upon the prominent symptoms of inflammation, the vascular turgescence, and the effused fluids, we were in the habit of regarding inflammation as a disease quite *sui generis;* we had neglected to observe that in the perfectly natural course of things, wonderful variations in the degree of vascular activity are being continually produced; we had forgotten that lymph, in no respect distinguishable from the product of inflammation, is poured out in the quiet process of the repair of wounds and fractures. In these and other effects we now perceive how nearly inflammation is related to nutrition, although it must be confessed that very much yet remains to be done before the exact nature of this relation is fully understood.

These remarks will find their application in the active congestions which are not unfrequently associated, at some time or other, with diseases of the kidney. The blood-vessels are the great agents in nutrition: in this respect they are second only to the proper vital action of the tissues themselves; but sound pathology requires it to be remembered that the vessels do hold the second, and not the first place, as was at one time the belief. The whole subject of cell development has placed in its correct position the relation held by the bloodvessels to every process of nutrition; for in watching the healing of a wound, for instance, we find progress effected in the transformation of the cells in the effused lymph, before any vessels have made their appearance; and in the embryo the blood is by no means the earliest tissue developed.

This secondary, but still most intimate relation of the blood-vessels to the tissues, affords means of rendering a satisfactory explanation of many cases of active congestion and inflammation, an explanation, too, which I think may be correctly applied to the case of the kidneys; for it must follow that no change can by possibility be effected in the nutrition of any organ or tissue without inducing, as a necessary consequence, a corresponding change in the circulation of the part. Determination of blood to the womb is set up as soon as the process of increased growth, or natural hypertrophy, which is instituted by conception, commences; determination to the neighbourhood of a wound is established as soon as the process of granulation has fairly begun. So long as the demand, in obedience to which this determination of blood takes place, is within the limits of health, the excitement of the blood-vessels, though often considerable, is in perfect agreement with the normal course of nutrition; but such is not the case when the stimulus is carried beyond this point. When the infant is put to the breast, the distended veins give intimation of the increase which immediately takes place in the rush of blood, with the obvious intent of furnishing matter for the secretion of milk; but if the natural stimulus excited by the contact of the child's lips with the nipple be exaggerated by a crack or excoriation, the determination of blood runs on to inflammation: in the same manner, in any secreting organ, in the mucous membrane of the bowels, for instance, a moderate purgative increases the intestinal secretions, but a drastic purge gives rise to congestion, possibly to inflammation, with transudation of the constituent elements of the blood; or, to bring the analogy still nearer to our present subject, a large dose of a diuretic, and particularly of the stronger ones, will be followed by congestion of the kidney. Now, in all of these cases the organ is stated to have been over-stimulated; speaking more accurately, the congestion is brought on by an excessive amount of the self same stimulus, which, in a moderate degree, had simply produced healthy rush of blood, by quickening the healthy function to a state of greater activity.

There is also another influence in operation in many stages of renal disease, which equally tends to the production of congestion. We know that an intimate relation exists between the blood and the capillary vessels of every organ, although we are not able to explain this relation. Natural variations in the circulation of different organs are entirely inexplicable by the mere impulse of the heart. How otherwise could we account for the necessary determination of blood to the womb only at certain particular periods of the individual's life? How could we explain the rush to a secreting organ to supply the material of secretion? This relation is special to every organ, and upon its maintenance freedom of circulation through each organ mainly depends; therefore, when it is disturbed in any way, stagnation of blood or congestion must follow. The phenomena of asphyxia afford a very good illustration of this fact. The admission of air to the lungs being cut off, the blood in the capillaries of the lungs can no longer be aërated; consequently, the relation which this blood ought to bear to those capillaries is altered, and arrest of the capillary circulation is the consequence, as evidenced by the loaded pulmonary artery and right side of the heart, contrasted with the empty condition of the pulmonary veins.

The same cause which operates in asphyxia, impurity of blood, operates also in disease of the kidney, and must naturally tend to increase the difficulty of the circulation through their substance; and this cause has produced a very interesting secondary change, pointed out by Dr. Johnson—namely, hypertrophy of the small arteries—such hypertrophy constituting as evident a measure of retarded circulation in the particular organ, as hypertrophy of the heart does of the obstacle presented by a narrowed orifice.

From the analogies which I have now submitted to your consideration, I think I am allowed to conclude that alterations of function in any organ have a natural tendency to induce alterations of structure, varying more and more widely, according to the extent to which the function is forced to deviate from the limits of health; also that such alterations of structure may be effected either with or without vascular excitement; but that, when the vascular excitement is present, it very often exists as a secondary result. How far this conclusion extends, we are yet ignorant; we are only just beginning to understand the phenomena of inflammation, and although we can now discover their origin in the cause I have been particularly referring to, this explanation can only apply to a very limited number of cases; it is, however, if true, of the highest value, as affording a safe position from which to start in investigating those forms of inflammation which are yet so little understood.

I must, however, add, that when once this vascular excitement has been established, it may come to play a prominent part in the case; being itself the product of an unnatural state, and being, therefore, in itself unnatural, it may easily proceed to extreme lengths; it may even absorb the principal share of our attention, and require special and active treatment; but still such treatment must be conducted with a constant reference to the function, in the disorder of which the vascular excitement originated. An obvious illustration is afforded by our treatment of acute dropsy, whether after scarlatina, or exposure to cold, or from any other cause; we are often obliged to employ active antiphlogistic treatment, as cupping, leeches, counter-

irritation, etc.; but at the same time we remember the origin of the congestion in disordered function of the kidney, and we immediately endeavour to ease the labouring organ through the medium of the skin and of the bowels; indeed, the latter branch of the treatment may not unfrequently render the former either entirely unnecessary, or required to a much less extent.

It only remains that I justify the assertion, that the condition of the kidneys, in patients who are suffering from the disease in question, is such as to have involved an unnatural state of their function. Such justification must be gained from the history of the patients. I think I may safely assert, that whenever a cause has been fairly made out, it is such as must bear directly upon the function of the kidneys; thus in the forms of acute dropsy, the sudden suppression of the cutaneous, and possibly in some cases, of other secretions, makes a sudden and unnatural demand upon the kidneys. In cases of scarlatina, of cholera, of typhus, we have the element of sudden admixture of poison with the blood, in addition, in many cases at least, to unfavourable influences acting upon the skin; disorder of the urinary functions, active congestion and its attendants, are the result; and a rapid and irregular development of epithelial cells, as manifested by the urine during life, and by the kidney after death, affords visible testimony to the labour in which the organ is engaged. More frequently the cause appears of such a nature as to act gradually, but to maintain its action through a long duration of time; the gouty diathesis and habitual intemperance constitute, perhaps, the most frequent causes of chronic renal disease, of the class we are considering; here the relation to the kidneys is also distinct; the poison of gout is either itself lithic acid, or is closely allied to that substance, and alcohol also has a direct affinity for the kidney, acting as a diuretic, and being actually capable of detection in the urine.

I shall not detain the Branch whilst I enumerate other unfavourable influences which seem to act as causes: various unhealthy modes of life, different forms of cachexia, particularly the strumous, and of blood poisoning, etc.; like those to which I have already alluded, they variously derange the constitution of the blood, either by directly introducing unhealthy matters, or no doubt more frequently by altering its nutritive changes; in some of these instances, we have to depend upon analogy for explaining the operation of the supposed cause.

I ought not to omit to add, that in explaining the operation of these various causes, we have generally to take into the account those various circumstances which predispose the organs to take on disease; without these having existed previously, many of the morbific influences we have alluded to would often fail in effecting so serious a disorder of function.

It is matter of easy observation that the cells of the kidney tubes are exceedingly sensitive to all unhealthy states of the general system; in various forms of cachexia, in chronic disease, in complaints which originate in poisoned blood, such as the fevers, pyæmia, etc., the microscope readily detects very visible changes in the kidney epithelium, even though there have been no signs of disorder in the organs during life. In these appearances, which a small amount of microscopic experience will enable anyone to verify for himself, we see perhaps the very commencement of organic change, and we can readily conceive that if the unfavourable condition, in which these appearances have originated, should act more powerfully at any time, permanent changes in these delicate organs would be the result.

In conclusion, I can only make a passing reference to the analogy presented by the liver in its diseases. In certain of the structural changes to which that organ is subject, we recognise great resemblance to those which take place in the kidney; and this resemblance becomes closer in exact proportion as we discover more of the nature and operation of the causes of liver disease.

ON THE SECOND SOUND AND MURMUR OF THE HEART AND GREAT VESSELS, IN THEIR RELATION TO DIAGNOSIS.

By John Cockle, M.D., Physician to the City Dispensary, and to the Margaret Street Dispensary for Consumption, etc.

[*Continued from page* 338.]

I pass now to the consideration of the second sound and murmur of the pulmonary artery. It has been already mentioned, that any change which places the artery in more immediate contact with the chest wall—contraction of the left lung, for example—allows its pulsation to be both seen and felt, and unequivocally intensifies its sounds; excavations in the superior and middle lobes of the lung; induration of its anterior border, by immediate pressure upon the artery, modifies the sounds.

The following case strikingly illustrates such change from this latter condition. Jane Barnes, aged 30, married, of short stature and florid complexion, was admitted a patient of the City Dispensary on December 11th, 1856. She attributes her illness to sleeping in a damp bed six years ago. Since that time she has suffered from dyspnœa and cough, with yellow expectoration. At present, in addition to these symptoms, she complains of pain in the shoulder blades, the right more particularly; profuse nocturnal perspiration; very slight loss of flesh; she lies most easily upon her right side. She has not menstruated during the last two years. She has never had hæmoptysis. Her mother is still living; but consumption has occurred in some members of her family.

Inspection. The chest is deficient in symmetry. The left scapula is nearer the spine, and not nearly so mobile on inspiration as the right scapula. The apex of the heart is nearly *in situ*. The fingers are clubbed. She has slight lividity of lips.

Palpation. A silvery *fremitus* is felt over the second and third left costal cartilages. Pulse weak; slightly quickened, but quite regular.

Percussion. There is marked dulness and sense of tactile resistance from below the left clavicle to the mamma. A somewhat tubular note is heard under the right clavicle.

Auscultation. Under the right clavicle are heard phenomena of cavern or dilated tubes. Under the left clavicle, bronchial breathing; the respiratory murmur is absent to the mamma. Between the second and third left costal cartilages, both sounds of the heart are entirely replaced by hoarse murmurs of nearly equal length and intensity; loudest during expiration. To the right of the sternum, the sounds gradually acquire the normal character, as also in the carotids and at the apex.

Dr. Elliotson, who examined this case, made the interesting observation that, upon placing the patient in the recumbent position, the first murmur became converted into leather creak sound.

It is stated also, upon the highest authority, that insufficiency of the mitral valve, *par excellence*, induces marked intensification of the second sound of the pulmonary artery. That such result may occasionally obtain, seems admitted by most observers; but, even at the risk of being considered thoroughly in error, I must express my total dissent from the universality of this proposition. Of course, if it be assumed that insufficiency of the left venous valve cannot exist without such accent characterising it, I have no argument to offer; as *post mortem* examinations, made of cases with the observed sign, do not very often present themselves to my notice. I can only say, I have made many examinations after death where the mitral valve had unquestionably allowed free regurgitation, and the sign before death did not exist in any marked degree; and again, in a large number of cases observed upon the living, with all the other physical signs, save increased accent, supposed to characterise such change, we are forced to the conclusion, that such signs always indicate some intraventricular change, other than regurgitation, a consequence, I fancy, opposed to our diagnostic convictions. In support of the views advanced, I think I may cite a high authority, Dr. Walshe.

In extreme *stenosis* of the aortic orifice, as Kurschner has most truly observed, the chambers of the heart and pulmonic system are also kept unnaturally loaded, and would, theoretically, tend equally to a more marked accent of the second sound of the pulmonary artery.

In marked aortic, as in mitral valvular disease, however, it appears to me that we often render ourselves liable to the charge of confounding relative with absolute increase of sound of the semilunar valves of the pulmonary artery. In both instances, the aorta, receiving a diminished supply of blood, would have its valvular sound of closure weakened by want of the requisite distension, leaving that of the pulmonary artery in relative excess.

I would also hazard the passing remark, that I believe slight mitral regurgitant murmur to be extremely common, and that it neither necessarily intensifies the second sound of the pulmonary artery, nor developes dilated hypertrophy of the chambers of the heart.

That congenital malformation of the valvular apparatus of the pulmonary artery, and by inference, a patent condition of the *foramen ovale*, may also cause the second sound to be entirely masked by a prolonged systolic murmur, has, I conceive, a high degree of probability in its favour. I specially refer to a

case published by me in the Association Medical Journal for September 20th, 1856. Both the cases of pulmonary arterial murmur alluded to have been examined by many of the most distinguished observers in this city.

I must, however, leave the subject in other and abler hands, and content myself with expressing the conviction, that, ere long, physical phenomena characterising a transient or persistent alteration of the valvular mechanism of the right side of the heart will be found less rare than has been hitherto imagined; although naturally bearing a very small proportion to those of the left orifices.

In organic changes of the left auriculo-ventricular orifice, the second sound may undergo modifications with regard to its intonation, or be replaced altogether by murmur.

First, with regard to the alteration of the sound in mitral regurgitant disease; it may be either annihilated or intensified at the apex; and how are such opposite conditions to be explained? So far as relates to the occasional extinction of the second sound at the apex, the explanation in some cases is not so difficult. A prolonged (and it may be) harsh systolic murmur, with its maximum near the apex, may entirely replace the first normal sound, and usurp all that period of a revolution of the heart's action which should be filled up by the periods of silence and second sound of the heart, and permit but a barely appreciable cessation before the succeeding systole; indeed, almost the only knowledge we possess that the murmur is not absolutely continuous, is, rather by the distinction between the decrease and increase of the sound; or, at other times, the second sound may, upon very careful auscultation, be faintly heard through the murmur. In such a case, as may be readily shewn by experiment, a blowing sound of intense pitch will mask a sound of lower pitch in its neighbourhood; so, in this instance, the second arterial sound is more or less drowned amid the intense and prolonged whirl of the murmur, but the sound may be frequently again audible at a point remote from the focus of the murmur. Another cause may probably concur in weakening the second arterial sound. Should a murmur be very prolonged, and, it may happen, the regurgitation considerable, we may assume that the left auricle would be kept preternaturally distended. Under these circumstances, the overcharged auricle would press upon the origin of the aorta, and even the pulmonary artery, and by such pressure tend to weaken the natural sounds of closure. At least, this is the only explanation to which I could come when listening for the accented pulmonary sound in some supposed cases of mitral insufficiency with congestion of the pulmonic system, when the second sound was no longer audible at the apex. There is another cause, also, capable of damping sounds, especially the second: and that is, excessive accumu-

lation of fat in the neighbourhood of the base of the heart. When, on the contrary, the second sound is distinctly audible at the apex, I think, generally, the systolic whiff is not prolonged, nor the auricle overcharged; so that the second arterial sound may be transmitted from the base.

But the difficulty is not altogether met even here, for, occasionally, the second sound is heard of different pitch, and louder, at the base, than at the apex; and in these cases the argument is strong for the origin of this sound in the neighbourhood of the mitral orifice. It is clear that the theory of Roger would not apply here; because, if the insufficiency were caused by the valves not approximating, they could engender no sound from actual separation, but still a conceivable source of second sound is obvious: the over-filled auricle would naturally discharge its contents, in part, into the left chamber immediately upon the cessation of the systolic act, and the blood, impinging upon valves more or less thickened and rigid, might give rise to the sound in question.

I now pass to the replacement of the second arterial and ventricular sounds by murmur, over the body and apex of the ventricles.

The occurrence of such murmur, engendered at the right side of the heart, is avowedly so rare, that it scarcely admits even a passing mention. I am not aware that a well detailed case exists, and yet the conditions for the production of murmur undoubtedly occur now and then. The best recorded instances in which such special changes occurred, limited to the right side of the heart, were discovered prior to the invention of the stethoscope; I allude to the remarkable cases of Morgagni, Bertin, etc. With regard to the comparatively common constrictive disease of the mitral orifice, the most extraordinary discrepancy of opinion prevails; indeed, if there be one point in the history of physical cardiac diagnosis, which, even in the present day, requires, more than any other, an exact comparison of the auscultatory phenomena with the *post mortem* change, it is this, beyond all doubt. To illustrate my meaning more particularly, I will quote the opinions of some great authorities. Skoda states, that, in auriculo-ventricular contraction, "the second sound in the left ventricle is replaced by a murmur, often so prolonged as to be interrupted only momentarily during the heart's systole". Barth and Roger, although admitting that a murmur in lieu of the second sound may characterise the lesion in question, yet state that, in some cases, they have heard a *bruit* during systole alone. On the other hand, Fauvel, a highly distinguished observer (*Archives Générales*), after most careful inquiry, challenges the production of a single well recorded example of abnormal bruit replacing the second sound at the heart's apex coinciding with auriculo-ventricular contraction. He has published some well marked cases of such change, the physical signs co-existing with which were most faithfully noted during life, and compared with the physical changes ascertained after death; in all, without exception, the murmur was presystolic or systolic.

Now how are such diametrically opposed statements to be reconciled, each party appealing to a positive experience? So far as my own opportunities permit me to judge, I should say, without denying the counterstatement, that Fauvel's opinion contains most of positive value; at the same time, I am ready to admit, that to distinguish between presystolic and postdiastolic murmur is, practically, of immense difficulty. The important point for us, however, as physical explorers, is to ascertain the time of the murmur in contracted mitral orifice, that is, whether it most commonly attends the systole or diastole, or both. The difficulty is occasionally great, from co-existent lesion of the aortic orifice.

With regard to the differential diagnosis of aortic and mitral valvular disease, both constrictive and regurgitant, it is of importance to ascertain the character of the sounds in the carotid arteries, and to determine, by percussion, whether enlargement of the heart preponderate in the oblique or transverse diameter. The necessity of this latter knowledge has been pointedly enforced of late years by writers, both of the German and French schools; the merit, however, of systematically directing attention to this pathologic change, at least in the dead body, is due to that distinguished pathologist, Dr. Adams, of Dublin. His Essay is a model of investigation, and deserves the most careful study of all who seek a philosophical explanation of the mechanism of the disorders of the circulation.

I have known contracted mitral orifice often to run a fatal course, without other physical evidence than deranged rhythm of the heart, and constant irregularity of the pulse. The heart's sounds in other cases, and perhaps the most numerous class, acquire the character which Skoda designates as "indeterminate", associated with a murmur, faint and circumscribed, extremely difficult to precise, fusing into systole, diastole, and periods of rest. There is one condition which might, on the ordinary theory, be mistaken for auriculo-ventricular insufficiency and contraction; namely, calcification of the aorta. In this affection, double murmur, more or less intense, may be heard, even at the apex. The rhythm of the heart is greatly disturbed; the contractions very unequal; the pulse small, quick, weak, irregular: but the differential diagnosis may, I think, be determined by the fact of the heart's area being generally, in aortic disease, increased in its oblique diameter; by the murmur being more intense, and traceable over and up the aorta, and certainly not lessening in its ascent.

In a case of suspected adhesion of the pericardium to the left costal pleura, I particularly observed that the second sound at the apex was converted into one of a dull, jogging character.

I have, finally, briefly to allude to the reduplication of the second sound of the heart, both at the base and of the apex, in so far as it may subserve our subject of diagnosis. Indeed, I think this very common phenomenon deserving a far greater attention than it has hitherto attracted. In a paper published by me in the Association Medical Journal for May 24 and 31, 1856, I detailed some cases of interest; since then I have met with the following cases, in which the phenomenon was unusually marked.

I recently saw, with Mr. W. B. Whitfield, a patient who was suffering from cardiac and intercurrent pulmonary disease. Mr. Whitfield had been struck with the singular repeat of the second sound at the left apex, and made particular mention of this fact to me before I examined the case. The first and second sounds at the base were more or less masked by a short, hoarse *souffle*, and the rhythm of the heart

was much disturbed. At the left apex the first sound was still somewhat obscure, but the second was loudly reduplicate without a trace of murmur: the phenomenon had persisted some considerable time.

In a second case, the patient, a young woman, was evidently phthisical; she had recently suffered from violent hæmoptysis: at the base, the second sounds were loudly and distinctly reduplicate; while, at the apex, the second sound was heard clear, single, and defined.

The last case I have to mention, and which has been examined by many competent observers, is so unusual, that I think it right to state it in detail.

Case. Alfred Adams, aged 24, a coppersmith by trade, of middle stature, slightly built, of dark brown skin and florid lips, had an attack of hæmoptysis five or six years ago. A second attack occurred eight months ago; he thinks a quart of blood was expectorated altogether in this last attack. It occurred at night, and was preceded by cough.

Present symptoms. He has dyspnœa; cardiac and epigastric pain, of burning character on exertion; pain in the arms; palpitation, which has existed for some years; cough, with slight yellow expectoration; great nervousness; morning sickness; he sleeps in the horizontal posture; he has never had rheumatic fever. There is no evidence of renal disease.

Inspection. The chest is symmetrical; the left nipple slightly highest; there is no marked arterial impulse or venous distension. The heart's impulse is observed at, and two inches to the left of the left nipple; it is slight *in epigastrio;* respiration is tranquil during a state of repose.

Palpation. The cardiac impulse is considerably increased (systolic and diastolic); there is heaving, fine diastolic *fremitus;* the apex of the heart is felt two inches to the left of the left nipple. The pulse is of the same character in both wrists, exceedingly irregular and unequal, a few slow, followed by very rapid beats.

Percussion. The area of cardiac impulse is increased both to the left and the right side, corresponding to the visible and felt impulse.

Auscultation. The impulse is slightly heaving; the first sound of crumpling and rasping character at the base (right and left), the apex, and round the axilla; it is less marked in carotids. The second sound repeats itself four times distinctly. This repetition sound is audible at the right and left base, at the aortic and pulmonic cartilages; indeed, all over the anterior surface of the chest, diminishing in the carotids. It extends also from the apex to the left axilla, and is gradually lost posteriorly. This phenomenon has persisted for some time.

With regard, then, to the repetition sound of the heart, I would remark:—

1. It is a phenomenon subject to variation; in one class of cases at times distinct, at others apparently shading into some modification of murmur.
2. It may be either transient or persistent in character.
3. It is very frequently connected with pulmonary irritation.
4. It generally ceases to be audible while the heart's action is accelerated to become again distinct as the heart resumes its average rate of speed.

Skoda is doubtless correct in assuming that in some cases the divided beat is an element of a murmur; but there are certainly numerous cases in which the reduplication at base or apex is so distinct and unmixed with any quality of murmur, that some more comprehensive explanation of its mechanism has yet to be given.

[Errata. In the former part of this paper, published on April 25th, in page 337, column 2, line 6, *after* "blood streaming from the cavæ", *read* "and pulmonary veins". In page 338, column 2, line 40, *for* "long", *read* "bony".]

SURGICAL OBSERVATIONS AND REFLECTIONS.

By John Sloane, M.D., House-Surgeon to the Leicester Infirmary, etc.

[*Read before the Leicester Medical Society, March 10th*, 1857.]

I. AMPUTATIONS.

Allow me first to direct your attention to amputations. I have for some time entertained the opinion that the common methods of operating in amputations of the thigh, upper part of the leg, arm, and upper part of forearm, and the subsequent treatment usually adopted, are faulty, and may be improved. Flap amputations are now fashionable; and I fear that we, as medical men, are too apt to be influenced in the treatment of disease by the prevailing fashion; too ready to adopt any plan possessing the charm of novelty, recommended by a distinguished professional brother, who, with his mind perhaps imbued with some preconceived notion, may not have rightly interpreted the phenomena he observed. If I endeavour to point out what, in my humble opinion, are fashionable surgical errors, I feel confident that the members of this Society will not blame me because I dare to differ from the recognised authorities; and that, regarding the disputed questions I shall notice, you will return a verdict in accordance with the evidence.

What are the comparative merits of the circular and flap methods of amputating? I shall allow Mr. Erichsen (whose work on *Surgery* is the most recent) to answer. He says: "Educated in the doctrines of Mr. Liston, who invariably amputated by the flap method, and who certainly did this with wonderful precision and rapidity, I have been in the habit of performing this operation in preference to the circular, over which it certainly possesses the special advantages of greater celerity in performance, more perfect coaptation and smoothness of the opposite sides of the wound, and greater tendency to union by the first intention." That an amputation by flaps may be more quickly performed than by the circular plan, is true; and this was a great recommendation in its favour before the introduction of anæsthetics, but it now has lost its force, as two or three minutes more or less under the influence of chloroform matter little.

Picture in your imaginations a healthy patient whose thigh is being amputated by flaps, for an accident sustained a few hours previously. The following is the course usually adopted. The surgeon, with a laudable anxiety to have the end of the bone well covered, makes the flaps of a good size: he finds that the skin and subcutaneous areolar tissue retract much more than the muscles; but, by exercising a little force, he succeeds in bringing the edges together with several points of interrupted suture. As masses of muscle are bulging through the intervening spaces, long strips of adhesive plaster are applied, to complete the closure of the wound; and round the ends of these are applied two or three additional strips, to prevent them from slipping. There is now considerable tension in the stump; but, in a day or two, the swelling consequent on such an extensive wound has caused the tension to increase to an injurious degree, and the very results which we should expect usually occur. Inflammatory action runs high, causing much pain, and requiring the exhibition of opiates. Union by the first intention rarely occurs. Frequently, about the third day, the surgeon perceives a roseate blush in the lower part of the stump; poultices or hot fomentations are applied; the plasters and sutures are removed. Probably, in a few days more, pus has formed at various points in the limb, to which exit is given by incisions; and more or less sloughing of the edges of the wound has occurred. When the inflammation has been subdued, the flaps are again drawn together by plaster, and they unite by granulation. A large proportion of patients, however, do not successfully pass through this ordeal. Do not misunderstand me. I do not say that all these mishaps occur in every case of flap amputation, but in most we have one or more of them.

"Relieve tension," is a good surgical rule, which we act upon with beneficial results; as, for example, in diffuse areolar inflammation of the hand, where we prevent much mischief by early and free incisions: and, in the treatment of stumps which I have described, effectual measures are taken to relieve the tension, which, it is my firm conviction, would never have existed had a more scientific method of operating, and a more rational mode of dressing the wound afterwards, been adopted.

It is well known that the mortality is much greater after amputations for injury than for disease. In 140 cases of flap amputation at University College Hospital, the mortality in cases of injury was 31 per cent., whereas in cases of disease it was only 19 per cent. The majority of the diseases requiring amputation exist in strumous debilitated subjects; and it is surprising that such extensive wounds should heal better in them than in patients in rude health. This fact may be easily explained. In diseased patients, the muscles are usually atrophied, and therefore there is less tension after the operation.

An analysis of cases of amputation in the Radcliffe Infirmary, Oxford, drawn up by Mr. Hussey, and read by him at the Royal Medical and Chirurgical Society in 1856, powerfully

supports my views. Of 124 cases of amputation for diseases, only 13 died, the mortality being at the rate of 10½ per cent.; and of 56 cases for injury, 10 died, the mortality being 18 per cent. It should be observed that, of 8 cases of amputation of the thigh for injury, 5 died, all the latter being very severe cases, attended with circumstances little favourable to recovery. The operations were usually done by double circular incision, the integument being reflected before division of the muscular substance; and very few were done by flaps, in cases where the soft parts were sound, and admitted of circular incision. Compare these results with those mentioned by Erichsen, where the mortality, as I have previously stated, after amputation for injury, was 31 per cent.; and for diseases, 19 per cent. In most if not all of these cases, the flap operation was performed.

Perhaps I shall be told that, after the flap amputation, there is a much better covering for the end of the bone, which forms a soft cushion between it and the artificial limb; but, as you probably all know, after no operation except Syme's or Chopart's can any pressure be borne on the end of the stump, which is usually very sensitive and tender. This rule applies to the wealthy, who can procure the most perfect substitute for the amputated member, as well as to the poor patient, who must hobble about on the common "pin". The pad of muscle must become absorbed in a great measure, as it is well known that muscular tissue, when not functionally active, atrophies. In persons affected with paraplegia, the muscles of the lower extremities not only waste, but their structure alters, and they degenerate in great part into fibrous tissue mixed with fat. The muscles over the end of a stump must be inactive; they cannot have formed new attachments beyond the end of the bone. These views are corroborated by my own observations. I have taken care, for a considerable period, to examine as many stumps as possible, and, in every old stump I have seen, the ends of the bones were only covered with skin and some subcutaneous tissue; and in no instance was there a thick pad. I believe it takes some years for the stump to become conical, as, when patients are discharged from hospital after amputation, I know the bone is usually well covered at the point. I have reason to believe that, when a well formed artificial limb is supplied, this change does not take place to the same extent. In all the cases I have examined, pieces of mechanism of a rude construction had been worn.

The plans of amputation which appear to me to be most rational are the circular, or a modification of the flap. In the circular, the skin and subcutaneous tissues, being divided by one sweep of the knife, should be separated from the fascia to the extent of an inch or an inch and a half, according to the thickness of muscle. Then the muscles should be cut in an oblique direction upwards, so as to leave a sufficient covering for the end of the bone. The edges of the wound should be drawn together by interrupted sutures, and, in the intervals, short strips of adhesive plaster, allowing abundant space for serous or other discharges to escape. The advantages of this method of operating are, that allowance is made for the greater retraction of the cutaneous than of the muscular tissues. There is not a mass of muscle which is useless, as it is afterwards almost completely absorbed, and injurious, as it causes tension; and, to use the language wrongly applied, in my humble opinion, by Mr. Erichsen to the flap amputation, the circular plan possesses the comparative advantages of more perfect coaptation and smoothness of the opposite sides of the wound, and of greater tendency to union by the first intention.

If there be no great tendency to separation of the edges of the wound (and there never should be, if the operation were rightly performed), I cannot see the necessity of long strips of plaster, which cause tension; surely short strips will suffice to keep the edges together. It is important to leave spaces between the plasters for the exit of any discharge. In a hospital to which I was once attached, one of the surgeons (a highly educated and estimable gentleman), anxious to procure union by the first intention, was in the habit of completely covering the end of the bone with strips of isinglass plaster; and, in his cases, sloughing and other untoward results were decidedly more frequent than in those of his colleagues who left some uncovered spaces.

The sutures should be removed on the third day, at the latest. In a patient from whose jaw Mr. Benfield lately removed an epulis, he extracted the pins from the twisted sutures in the wound in the cheek, at the end of forty-eight hours; and, when one was extracted, a little pus followed. There was union by the first intention in every part of the wound. Had this pin, which did not appear to be exciting mischief, been allowed to remain, what would have been the result? That the inflammation which was present, as shown by the formation of pus, would, in all probability, have caused the edges of the wound at that point to have separated. This case shows how soon sutures may begin to act as foreign bodies to excite inflammation, "with which union by the first intention is incompatible"; and union having already taken place, if inflammation did occur, the new structure would, as you know, readily break down. I have had opportunities of comparing the practice of two surgeons attached to the same hospital on this point. One almost always extracted the suture-pins on the third day; and, in his cases, there was almost invariable union by adhesion, the exceptions generally being where there was some delay, and the pins were allowed to remain a day or two longer; but, in one or two of these cases, union was perfect, notwithstanding the delay. The other allowed the sutures to remain undisturbed for five or six days, unless some redness or other sign of inflammation supervened; and union by the first intention was the exception in his patients.

The modification of the flap operation which I should recommend is the following. By cutting from without inwards, make the semicircular incisions of the usual shape through the integuments down to the fascia: these superficial flaps should be separated from the subjacent muscles to a sufficient extent; and then the muscles may be divided by two incisions, so as to form flaps. The methods of operating which I have proposed would be more painful and more tedious than the ordinary plan; and these would have been great objections before the introduction of anæsthetics, when it was considered very important that a surgeon should be a quick operator.

There is another point in the treatment of stumps, after amputation in the thigh especially, which does not always receive the attention it deserves, and the importance of which was first impressed upon my mind by Mr. Paget. This is the advisability of carefully bandaging the stump from above downwards, the soft texture being at the same time drawn by an assistant over the end of the bone. This practice tends much to prevent protrusion of the bone by curbing undue retraction of the soft parts.

I shall next briefly advert to the "places of election" for amputations. Now, when art can do so much to supply the loss of a limb, it is the duty of a surgeon to know to what sort of stumps artificial members can be best and most usefully adapted. His first care, of course, is to save the patient's life; his second should be to leave him such a stump that, by the aid of the surgical mechanist, he shall feel the loss he has sustained as little as possible. As a general rule, the greater the length of the stump, the greater will be the steadiness and the comfort afforded by the artificial limb, and the greater will be the power exercised over it by the patient. In all injuries of the hand, I save as much as possible. I have treated compound fractures and dislocations of the fingers successfully, where they were almost completely separated. In similar accidents to the arm or leg, amputation would have been necessary, as the constitutional irritation and the purulent discharge would otherwise have killed the patients; but, after injuries to such small yet important members as the fingers, these need not be feared. If sloughing do occur, Nature unaided here is competent to effect amputation well. The importance of practising conservative surgery on the hand is shown by the following case.

John Porter, aged 17, a clerk at the Leicester Railway Station, was admitted an out-patient of the Leicester Infirmary on February 13th, 1856, with enlarged tonsils. About eighteen months previously, he sustained a severe injury of the right hand by the wheels of a railway carriage passing over it. Mr. Bullock, then house-surgeon to the infirmary, performed a conservative operation upon his hand, preserving the ring and little fingers only; the thumb, index, and middle fingers, with their metacarpal bones, being removed. The two fingers are very useful to him; he can write well by taking hold of the pen between them; and he states that he can do almost anything with them but lift heavy weights.

Amputation at the wrist-joint is a favourite operation with Mr. Thomas Wright, surgeon to the Nottingham General Hospital; and, during my residence there as a house-surgeon, he performed it twice with very good results. Both the patients had capital stumps, and retained as much power of supination and pronation of the limbs as before they lost their hands. In amputations of the forearm, as much as possible of the limb should be saved; and, to use the language of Mr. Gray, to whose work on *Automatic Mechanism* I am indebted for much

of the information I possess on this subject, "it should never be forgotten that the shortest or worst stump that can be made below the elbow is infinitely more useful to the patient than the best stump above the elbow; for no artificial joint is at all to be compared to the real elbow-joint."

As I have never seen Hey's or Chopart's operation performed, I shall pass on to Syme's amputation at the ankle-joint. This operation I have seen repeatedly done by Syme himself, and occasionally by others. When properly performed, and scientifically dressed afterwards, it is attended with most satisfactory results. The great danger to be dreaded is sloughing of the flaps, which we must guard against—

1. By taking care not to cut any of its vessels: and, with this end in view, the edge of the knife must be directed towards the bone while dissecting off the soft textures which form the flap. No opening should be made into it for the escape of discharges before they have formed, or for the removal of a portion to lessen its size. The latter object is best attained by commencing the lower incision, not at the centre of the malleolar projection of the fibula, but at its posterior border, and carrying the knife across the bone, slightly inclining backwards, and ending, of course, at the corresponding point of the inner malleolus.

2. By taking every precaution not to impede the circulation through the flap: and, with this end in view, it must be handled and sponged as little as possible, so as not to excite inflammation; the edges of the wound should be drawn together by interrupted sutures, with strips of wet lint only superimposed, and no plasters and bandages, which would cause pressure against the ends of the bones, impaired circulation, and sloughing.

The advantages of this operation are manifold. The lower surface of the flap, composed of the textures of the heel, are well accustomed to pressure; there is no troublesome retraction of the flap; the cicatrix is situated in front, and not beneath. Even where the ankle-joint is considerably diseased, this operation may be successfully resorted to; and, finally, the patient is very slightly maimed. A poor patient can have a circular boot, with a well raised heel, made by a common bootmaker, with which he can go about with little or no lameness or inconvenience; a wealthy patient can be supplied, by an ingenious surgical mechanician, with a boot so perfect as to render it difficult to discover, either by the patient's gait, or by looking at his feet, that he is not in full possession of those useful members.

In amputations of the leg, the usual site is about a hand's breadth below the knee, and the patient with the knee-joint flexed bears upon the artificial limb with the patella and upper part of the tibia. This practice is objectionable. It is well to remember that a bad stump below the knee is much inferior to a good stump above that joint, the rule regarding the elbow-joint being precisely opposite. The further from the trunk the safer the operation, is a dogma regarding amputations in which I believe there is much truth, but it is doubtful whether the comparative safety be owing to the removal of a smaller portion of the limb, or to the fact that the wound is smaller, because as the distance from the trunk increases, the size of the extremity decreases. Where practicable, amputation of the leg should always be performed at the upper part of the lower third, because there is sufficient room left for the formation of an ankle-joint in the artificial limb; the stump being long, affords a good lever for moving the artificial leg, and there is less danger to the life of the patient. Where it is impossible to save so much of the limb, we should amputate as near the lower third as possible, and never above the commencement of the upper third. Why never in the upper third? Because a properly constructed artificial leg cannot be advantageously applied. It may be said that poor patients must be satisfied with the common pin, and that amputation in the upper third of the leg leaves them a very useful stump. My answer is, that I have frequently seen poor hospital patients procure expensive and well made artificial limbs from the kind assistance of a master, or of the charitable in the neighbourhood, or of their relatives, or from their own earnings. To beautify ourselves as much as possible is a trait of our common humanity; and is it right or justifiable in a surgeon to inflict permanent deformity on a patient because it may be fancied he has not the means to procure a well formed artificial limb? Such a course, in my opinion, is wrong in all cases, and especially so in the manufacturing districts of the country, where we so frequently see men of wealth and influence who have risen from the poorest grades in the community.

According to Coulson, "amputation of the leg should never be performed upon children, but the lower third of the thigh unhesitatingly selected, for the very important reason that the amputated limb ceases to grow in uniformity with its fellow, and the patient is doomed to the additional inconvenience of having one knee-joint elevated perhaps some inches above the other, and imparting to his gait a peculiarly grotesque appearance."

Amputation at the knee-joint was revived some years ago by Mr. Syme; but the great objection to its performance is that there is no space left for the formation of a joint in the artificial limb. In most cases of disease, and in certain injuries of this joint, amputation is unnecessary, as by excision a most useful member may be preserved, far superior to any artificial substitute.

In amputations of the thigh, we should select a point at least five inches above the knee, so that space may be left for the artificial joint, and for reasons already adduced in all cases the stump is made as long as possible.

II. TREATMENT OF FRACTURES OF THE CLAVICLE.

I hold views somewhat peculiar regarding the treatment of fractures of the clavicle. The following quotation from Mr. Miller's work on surgery will show the orthodox plan. After stating that the sternal end of the broken bone remains *in situ*, owing to the action of the pectoral and sterno-mastoid muscles nearly neutralising each other, the bone being also steadied by the costo-clavicular ligament, and that the acromial portion is dragged downwards by the weight of the arm, and forwards and inwards by the action of the subclavius, the attachment of this muscle to the first rib being then the fixed point, he says: "The indications of treatment are plain, but unfortunately not very easily fulfilled. They are to raise the acromial portion to the same level with the sternal, to retain it there, and at the same time to keep the shoulder removed from the sternum, so as to prevent the displacement inwards, and consequent riding of the ends of the bone. Many and complicated are the means devised for this end." He then goes on to recommend the pad in the axilla, retained there by a shawl or large handkerchief, which is tied over the opposite shoulder tightly; this tends to elevate the shoulder, and consequently the acromial end of the clavicle, and this indication is further contributed to by a short sling well tightened over the elbow. The arm is next bound to the side, the humerus acts as a lever on the pad as a fulcrum, and extension of the clavicle is thus effected, preventing the riding of the ends of the bones. A figure of 8 bandage approximating the scapulæ, tends still further to secure extension.

This is all very well in theory, but when applied practically, what is the result? When there is much displacement, as there usually is when the clavicle is broken towards the middle, I have never been able, by following out these directions, or by any other plan, to brings the ends of the bone into apposition, nor have I ever seen any other medical man more successful. In the great majority of fractures of the clavicle, there is very little displacement.

In treating fractures of the clavicle, whether there exist much displacement or not, I merely loosely apply a figure of 8 bandage, and place the arm in a sling, supporting well the elbow. The bandage I apply as a *placebo* to satisfy the patient; as, if nothing were done, he would most probably place himself under the care of a quack. The bandage must never be applied tightly, because if, as usual, it be passed over the broken clavicle towards its acromial end, it causes or increases displacement; and if applied over the upper extremity of the humerus, it after a few hours slips and is of no service. The sling is useful, inasmuch as it supports the shoulder, and tends to prevent movement in the extremity. When there is much displacement, I enjoin rest in bed in addition to the sling.

I show you an ingenious piece of mechanism invented by the late Mr. Wilkinson, one of my predecessors as house-surgeon to the Infirmary, and used by him in these injuries. By means of its padded and concave shoulder straps, the scapulæ can be safely approximated, pressure being made upon the front of the shoulder joints and none upon the clavicles.*

In a case of fracture of clavicle with much displacement, lately under the care of Mr. Macaulay in the Infirmary, Wilkinson's apparatus was applied in the presence of Messrs. Paget and Macaulay, and after the straps were tightly drawn,

* Wilkinson's apparatus consists of an iron frame well padded, six inches square, with rounded angles, at each of which there is a buckle. The frame is placed on the back over the scapulæ, the shoulder straps attached to the buckles at the superior angles pass in front of the shoulders, where they are well padded and concave to admit the rounded upper extremities of the arms, they then pass under the armpits, and are fastened to the buckles at the lower angles of the frame.

the rising end seemed rather less prominent, but the patient at my evening visit begged me to loosen the straps, as he could no longer bear them so tightly buckled, and I was obliged to keep them so relaxed that I am satisfied he derived no benefit from the application. The method of treatment I adopt is attended with satisfactory results. I learned it from Mr. Wright, senior, of Nottingham, known to many of you as a deservedly eminent surgeon. I have been informed that the late Mr. Vincent, of Bartholomew's Hospital, followed the same simple plan; and Nélaton, the great French surgeon, in this fracture prefers Mayor's handkerchief to any other apparatus, dispensing with the use of Desault's pad, as he believes that where deformity exists, it is impossible to remove it by any treatment, and the only indication answered appears to consist in keeping the fragments motionless.

III. EXTRACTION OF CATARACT.

When both eyes are cataractous and equally affected, ought both to be operated on at the same time? To this question, says Mackenzie, "my experience leads me to answer in the affirmative, if division of the cataract is the operation to be performed; but if we mean to extract, I regard it as better to operate on one only, and watch the result before touching the other. Double extraction decidedly exposes the eyes to greater risk of inflammation. If we operate only on one eye and allow it to recover, we may possibly observe in the course of the operation and recovery some particulars which will be essentially useful to us in conducting the second operation, or will even lead us to select a different and more suitable mode of operating for the second eye. The patient, however, who has recovered from a first operation either well, or indifferently, or ill, is often unwilling to submit to a second. The confinement, abstinence and depletion, used after a fresh operation, sometimes cause the eye not operated on to fall so much back in the orbit that it is difficult to perform extraction on it."

I attach great value to any statement of Mackenzie's regarding ophthalmic surgery; but I believe, and I hope to be able to prove to you, that his opinions concerning the double extraction are erroneous. Every one who has seen many cases of disease of the eyes, must be aware of the great sympathy that exists between them, and I was taught to consider the extraction of both lenses at one sitting a most hazardous proceeding, inasmuch as if inflammation came on in one eye, the other would most probably become affected by sympathy, and that it was therefore advisable to allow some months to elapse between each operation. Being a firm believer in this doctrine, I was astonished and instructed by the following cases.

John Wood, aged 59, a framework knitter, had double extraction performed by Mr. Paget, on the 18th of January, 1856. One eye became violently inflamed and vision in it was lost, but in the other no unfavourable symptom appeared, and on the 4th of March he was discharged, able to read pretty well with the assistance of a proper glass. This case is published in detail at page 246 of the Association Medical Journal for 1856.

The next was an aged female inmate of the Leicestershire Lunatic Asylum, who had double cataract, and whose mental aberration was believed by Dr. Shaw and Mr. Buck to depend in a great measure upon the loss of sight. Mr. Buck, after a consultation with Mr. Paget, and assisted by him and myself, extracted both lenses by the double operation. I do not possess notes of the case, but I learned from Mr. Buck that one eye inflamed suppurated and vision in it was lost, but that the other progressed favourably, and she could see with it satisfactorily.

According to the views I formerly held, vision should have been lost in both eyes in each of these patients. It cannot be doubted that after a single operation inflammation would as readily have arisen, and loss of vision been the result in the the eyes which did badly, as after the double extraction; and as the untoward symptoms were confined in each case to one eye, the other not being sympathetically affected, no mischief was caused; on the contrary, it was fortunate for these patients, at least for the sane one, that the double operation was performed; because, had one eye been operated on in the orthodox mode, and that one happened to do badly, the man probably would never have consented to a second operation; and at this moment, instead of enjoying the power to read pretty well, he would have been helplessly blind.

My observations upon these two cases alone did not induce me to renounce my old notions. I learned from Mr. Paget that his father, whom he succeeded in the office of surgeon to the Infirmary, always performed double extraction; that he himself has always followed the same plan; and their combined experience extends over a period of sixty years. I have been told that his late colleague, Mr. Nedham, did, and I know that his present colleagues, Messrs. Macaulay and Benfield do, extract cataractous lenses by the double operation. These gentlemen are convinced that the greater risk of inflammation after double extraction is a myth—a plausible hypothesis not founded on facts; and the truth of which I believe has not been previously questioned in this country. In no other Hospital in the United Kingdom, as far as I have been able to ascertain, except at the Leicester Infirmary, and at the Birmingham Eye Institution since its foundation in 1823 by Mr. Hodgson, is it the rule to resort to double extraction. I know that it has been adopted occasionally by surgeons elsewhere; and it may be argued that if it had been found to be safe it would have become the usual practice long since. But this argument would be unjust; because, if this plan has not succeeded in patients under the care of other medical men, it must be on account of some difference in the mode of operating or in the after treatment, and it only shows the necessity for them to discover and to remove this difference, and then there can be no reason why they should not obtain results as satisfactory as have been obtained at the Leicester Infirmary. I should state that the late M. Roux always performed double extraction.

"That we should only operate on one eye and allow it to recover; as we may possibly observe, in the course of the operation and recovery, some particulars which will be essentially useful to us in conducting the second operation, or will even lead us to select a different and more suitable mode of operating for the second eye," is a reason assigned by Mackenzie for preferring the single operation. Are we not more likely to remember and be prepared to meet any peculiarities or difficulties encountered in operating on the first eye, if we proceed to operate on the second after a few minutes, instead of delaying for some months? We are not obliged to extract the lens from the second eye in the double operation, if after operating on the first, any other procedure be considered preferable; and I cannot see the propriety of watching the progress towards recovery of one before the other is touched, as, according to my observations, these cases do not take an unusually erratic or uncertain course, but the sequence of events in one patient closely resembles that in another, and we cannot be certain that the progress of the second eye will be similar to that of the first; on the contrary, it is more likely to be different, because after some months the patient's general health is likely to be somewhat changed, and the state of the second eye is occasionally altered materially.

I have now considered all Mackenzie's objections to double extraction. I confess I am unable to assign any reason why he should recommend the double operation for solution, as inflammation is one of the complications to be dreaded, and the wisdom of waiting some months to remember the particulars of the first operation, which will aid us in the second, will apply equally well to division as to extraction. It appears to me that if it be right to perform a double operation for solution, it is equally right to perform double extraction. Double and single extraction being equally free from danger, what are the special advantages of the double operation? The patient is only for half the time confined to his bed and to his room, and stinted in his diet; there is not the same risk of his remaining with imperfect or without vision, because if the first operation succeed well, or even indifferently, he will not unlikely be satisfied with what he has gained, and fearing the risk, refuse to submit to a second; or if extraction on the first eye fail, he would probably refuse to have the second operated upon; and we must not forget, as already stated, that "the confinement, abstinence and depletion, used after a first operation, sometimes cause the eye not operated on to fall so much back in the orbit, that it is difficult to perform extraction on it."

Railway Diseases. A curious series of facts has been published by Dr. Duchesne of Paris, to show that, as the result of railway travelling, engineers, stokers, etc., are subject, as a class, to weak sight, loss of hearing, rheumatic pains, especially in the right side of the body, numbness, or anæsthesia, etc. A good deal of such want of health is due to the sameness of their food and other bad hygienic conditions, added to a molecular change in various parts of the brain from the constant and oft-repeated minute concussions to which the brain is subject in the excessive speed of express trains, etc.—as in a speed of fifty or sixty miles per hour.

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

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Lecture III.

Mr. President and Gentlemen,—Towards the close of my last lecture, I endeavoured to bring under your notice the principal theories which have been advanced in explanation of the real nature of saccharine diabetes, and gave the various arguments which have been employed in support of and in opposition to each. I likewise endeavoured to present a short sketch of the important researches of M. Bernard upon the subject of glycogenesis: I showed you that sugar was constantly generated in the animal economy, and that the *liver* was the organ destined to perform this function; that this sugar-formation was entirely independent of the *nature* of the food, and even, for a time, irrespective of its exhibition. The experiments I then mentioned were, I believe, quite sufficient for the demonstration of this fact. I also stated that the function of the liver was completely under the influence of the nervous system; and that, when the latter was cut off, it entirely ceased, and sugar could no longer be detected in the organ. I likewise mentioned that irritation of certain portions of the nervous system, as the floor of the fourth ventricle, by exalting this influence for a time, led to an increased formation of sugar by the liver, and the consequent impregnation of the whole of the blood with this principle, thus causing its subsequent elimination by the kidneys; or that, in fact, artificial diabetes could be thus induced in any animal, even in one living on a purely azotised diet.

Before proceeding with this part of the subject, I should state that, in health, sugar is always found in the blood of the hepatic veins, and in that portion of the inferior vena cava between the entrance of these veins and the auricle, also in the right side of the heart, and in the pulmonary arteries; that, in the intervals of digestion, the remainder of the blood is free from this principle; but that, during full digestion, the amount of hepatic sugar is so much increased that the blood, even after it has passed through the lungs, still contains a notable quantity, yet insufficient to cause its excretion by the renal organs (for it has been shown experimentally that a certain amount is necessary in order that this should ensue). In diabetes, however, the case is altered, and sugar can be distinctly detected in the blood from the arterial and venous systems, although sometimes it exists in most minute quantities when digestion is not going on; and my friend Dr. Parkes has in one instance found it altogether absent under these circumstances.

From the experiments of Dr. Pavy, it would seem that the liver sugar is chiefly destroyed or converted into some other body (possibly lactic acid) in the *pulmonary* organs; but that that which escapes into the arterial and venous systems gradually undergoes change, which in the portal system becomes rapidly completed; and that the presence of oxygen is not essential for the transformation, as it is found to occur when an animal is made to respire hydrogen gas in place of atmospheric air.

M. Bernard has, within the last few days, proceeded a step further in his investigations upon this subject, and has obtained from the livers of animals a substance which, by a species of fermentation, is convertible into sugar; and this glycogenic principle possesses properties which give it peculiar interest both to chemists and to physiologists.

It will be remembered that, when a liver is thoroughly washed, so as to remove all traces of sugar from it, saccharine matter is again formed after a short time, simply by exposure to the air, and totally independent, therefore, of the influence of vitality. It has now been shown *how* this occurs; that it is from the presence of a peculiar matter in the substance of the liver, which is not removed by washing with *cold* water, and which, under the influence of the animal ferment in the organ, gives rise to the production of sugar; and that it is this ferment, and not the peculiar sugar-forming principle, which becomes injured or destroyed by heat; the latter being simply dissolved by the agency of boiling water, which can be made use of for the purpose of extracting it.

The following is a sketch of the mode of proceeding in order to obtain this sugar-forming substance. The liver should be perfectly fresh, and still warm and bleeding, and taken from a healthy animal immediately after death. It is of no moment whether the animal has been fed on an exclusively animal diet or not: in fact, the nature of the food does not influence the result. The organ should be cut into thin slices, and immediately thrown into water which is kept constantly boiling, in order that the tissue may be at once coagulated, and the sugar-forming substance therefore not left in contact with an active ferment for a sufficient time to cause its change into sugar. The pieces of liver should be afterwards bruised in a mortar, and the whole kept boiling for about three-quarters of an hour or an hour; the quantity of water being just sufficient to cover the substance. By this means, a concentrated decoction of the glycogenic principle is obtained. By afterwards straining through a linen cloth, and pressing the boiled tissue, and then passing the whole through a filter, an opaline-looking liquid is obtained, which, on the addition of four or five times its volume of strong alcohol, gives rise to an abundant flocculent precipitate, of a yellowish white colour, consisting of the glycogenic substance, with traces of sugar, bile, and some unknown nitrogenous matters. This precipitate, when thrown upon a filter, frequently washed with alcohol, to separate the above mentioned impurities, and afterwards dried, has the appearance of a greyish gummy substance, possessing the property of redissolving in water, and of being again entirely precipitated by strong alcohol. This matter can be further purified by being dissolved in a boiling concentrated solution of potash for a quarter or half an hour; afterwards thrown down by the addition of a large quantity of alcohol, and subsequently washed with cold water; and the trace of adhering carbonate of potash can be got rid of by redissolving in hot water, saturating the carbonate of potash with acetic acid, and again precipitating with alcohol, and drying.

The properties of this substance are the following:—It is starchy in appearance; without odour or taste; impressing the tongue with a sensation similar to that produced by starch; it is neutral in reaction; it dissolves or becomes suspended in water, to which it imparts an opaline appearance; it gives, with iodine, a tint varying from a dark violet to maroon red, seldom quite blue; under the microscope, it exhibits nothing characteristic; heated with soda-lime, it emits no ammoniacal fumes, showing the absence of nitrogen; its solution does not affect the copper tests, nor does it undergo the vinous fermentation with yeast; it is precipitated from its watery solutions by subacetate of lead, by animal charcoal, and by alcohol, in the latter of which it is completely insoluble. The substance has been found to possess other properties which closely ally it to hydrated starch, as all the circumstances which operate in converting this latter into dextrine and glucose sugar are able to produce the same change in the former; such as prolonged boiling with weak mineral acids, the action of vegetable diastase and analogous animal ferments, as the pancreatic juice, saliva, or blood. After such change, the solution is readily acted upon by the copper tests, and also by yeast. The modification in the principle produced also by torrefaction, and by the limited action of ferments and mineral acids, resembles in all respects the dextrine obtained from starch, being insoluble in alcohol, not affected by iodine, incapable of reducing the salts of copper, and of fermentation with yeast, and turning to the right the plane of polarisation of a beam of polarised light.

From these experiments of M. Bernard, it appears perfectly established that the livers of all animals, even those of dogs, fed *exclusively* on meat, possess the power of forming a substance analogous to vegetable starch, which is capable of being afterwards changed into dextrine and sugar. The *formation* of this substance would seem to be a vital act, slow but constant in its operation, as is the phenomenon of nutrition. The *change* into dextrine and sugar appears a purely chemical act, and able to be accomplished quite independently of vitality.

Having given a short account of the principal facts recently brought to light, as far as they pertain to our subject, I will now endeavour to show what, if any, support they receive from morbid anatomy and clinical observation.

The liver has often been noticed, at the *post mortem* examinations of diabetic patients, to be full of blood; the congestion hepatic in character. Sometimes the weight of the organ is much above the average: for example, M. Bernard relates one case in the practice of M. Rayer, in which the liver was found

much hypertrophied, almost twice the average normal weight. I am not aware, however, that any constant and characteristic change in this organ has been observed; for it is not uncommon to discover the alterations I have now mentioned in subjects who have died of other diseases, unattended with saccharine urine.

The amount of sugar in the livers of diabetic patients who have died suddenly has not been found greater than after similar deaths occurring to previously healthy subjects. I allude to the percentage amount: of course, where the organ is hypertrophied, the total quantity will be increased.

With regard to the existence of this principle in other tissues and fluids, I may remark that, after sudden death, all the tissues and fluids of the body give evidence of the presence of sugar, and not unfrequently in large quantities. I have obtained it from the brain, and from the fluid of the ventricles, also from the blood, as well as from the liver. When, however, death takes place slowly, we may be unable to discover its presence in any of these organs or fluids.

Since the remarkable experiment of the artificial production of saccharine urine by irritating the floor of the fourth ventricle has been made known, many observers have sought in their *post mortem* examinations of diabetic subjects to ascertain whether this portion of the nervous system exhibits any morbid appearance. In two or three instances, I have been unable to detect any; but I have heard of others being more successful. In one case related to me, there was increased vascularity of the floor of the ventricle, but not corresponding to the supposed root of the eighth pair of nerves; in a second, there was likewise a similar condition. We have, however, as yet far too few reliable data to offer any opinion on this point; but I think we may fairly conclude that, although morbid anatomy has shown nothing which would appear to militate against M. Bernard's view of the origin of diabetes, still, at the same time, it has not elicited any facts which can be looked upon as strongly in its favour.

Is there any evidence in support of this view derived from clinical observation? Diabetic patients often suffer from some hepatic derangement, as indicated by the want of biliary colouring matter in the fæces, and also by some fulness over the right hypochondrium, with tenderness, and sometimes pain; not unfrequently distinct enlargement of the liver can be ascertained to exist; but these symptoms are by no means constant, and, in fact, are not unfrequently absent during the whole course of the disease. The same may certainly be said with regard to such phenomena as are referrible to the nervous system, with the exception of the condition of the mental faculties referred to in my first lecture, and which I consider to be secondary to the morbid condition of the blood, and to the general exhaustion produced by the affection.

The chief arguments in favour of Bernard's view are derived from the investigation of some of the causes of the disease, and more especially from the physiological researches we have already detailed. That *injuries* of portions of the nervous system will produce saccharine urine I have already stated; and in support of the opinion that diabetes appears to be occasionally caused by mental influence, I have also brought some evidence. Dr. Prout laid stress on this point; for, in alluding to the immunity which the lower animals are supposed to enjoy, he remarks: "Can the exemption be referred to the absence of that fertile cause of bodily disorder in human beings, the influence of *mind?*" If the influences which I have classed under the third head in the etiology of this affection can really be proved to be exciting causes of the disease, it would be much in favour of the opinion that it is, at least sometimes, due to an over-exalted sugar formation in the liver; but, as yet, there is no very great amount of proof of their real efficiency, though the probability that they are at times operative is very great. I have already mentioned that a gentleman has assured me that he can produce saccharine urine at will, by inducing a fit of indigestion; and I may also remark, that my friend Dr. Harley, several years since, when residing in France, published a short paper, demonstrating that saccharine impregnation of the urine occurred in animals when irritating substances were injected into the vena portæ. The substances employed by this gentleman were irritants, such as alcohol, ether, chloroform, and ammonia; with all, the effect was the same. From the results of his experiments, Dr. Harley is led to believe, that diabetes may be produced artificially by the introduction of stimulants into the vena portæ, and that they act by irritating the branches of the pneumogastric nerves, whence the impression is transmitted to the nervous centres, and again to the liver through the splanchnic nerves. More recently, I believe, M. Bernard has produced a similar result by injecting these matters into the duodenum itself.

If we regard diabetes as depending simply upon an increase of the glycogenic function of the liver, then it becomes easy to understand why a diabetic patient, even on a purely animal diet, may still pass a considerable quantity of sugar in the urine; a fact we shall soon prove to be well established, but difficult to explain on most of the other hypotheses which have been offered. But if M. Bernard's idea of the liver possessing the power of converting all the saccharine matters received by the portal blood into fat, be correct, then a simple increase of the sugar-forming property of the liver would not account for the great increase of this principle when a diabetic patient is allowed amylaceous substances in his food.

Lastly, on carefully examining all the facts which have been brought forward, we may, I think, be able to form some idea of what diabetes really is, and assuredly of what it certainly is not. In the first place, we have abundant evidence to prove that it is not a *renal* affection, and that any alterations found in the *kidneys* are simply secondary to the great increase of their function which the morbid state of the blood calls forth. The same applies, in an equal degree, to the opinion of diabetes being primarily an affection of the stomach; for we have had complete demonstration that the liver in health is the great sugar-forming organ of the body, a fact *unknown* at the time when the disease was referred directly to the stomach.

As to diabetes being dependent, not upon any increased formation of saccharine matter, but on an imperfect destructive power existing in the blood, although most of the phenomena are explainable on this hypothesis, still it is by no means satisfactory, as at present there is no proof of this absence of power to effect the ulterior changes. And certain facts, besides those which I have already brought forward, appear to militate against the existence of this deficiency; for there is no marked difference in temperature between diabetic and other subjects; and, in certain experiments made some years since by Professor Graham, no peculiarity was discovered in the amount of carbonic acid which they expire. Upon the whole, I should be disposed, at present, to regard diabetes as due, in the first place, to an increased formation of sugar by the liver, produced by some alteration of function in the organ; and at the same time that its glycogenic power becomes abnormally increased, I should consider that it loses the property, which exists in health, of arresting and changing into new principles (as fatty substances, etc.) those saccharine matters which are brought to it by means of the portal blood. If we view diabetes in this light, we shall, I believe, be able to explain all the phenomena which the disease presents, at the same time I am aware of no facts which can be brought forward in opposition to it. It explains, for example, why sugar can generally be detected in the urine of diabetic patients, when subjected to the most rigorous animal diet, and, at the same time, why amylaceous matters usually so greatly augment this saccharine impregnation.

THERAPEUTICS OF DIABETES.

We have now to treat of the last division of our subject; namely, the therapeutics of diabetes.

As the nature of the disease was but ill understood till within the last century, the treatment was necessarily very indefinite. Dr. Mason Good thus sums up: "The intentions in the early plans was to invigorate the debilitated organs, whether local or general, and to give firmness and coagulability to the blood. This was the practice of all the Greek physicians, and it regulated the practice to a very late period in the history of the disease." "The vital intention," says Dr. Willis, "is performed by an incrassating and moderately cooling diet; by refreshing cordials, and by proper and seasonable hypnotics." Hence agglutinants of all kinds were called into use; as tragacanth, gum arabic, and the albumen of eggs; and these were united with astringents, as rhubarb, cinnamon, and lime water, with or without an anodyne draught at evening as might be thought prudent. Sydenham carried the tonic and cardiac part of this plan considerably further than Willis; for while the latter chiefly limited his patients to milk or a farinaceous diet, the former allowed them an animal food with vinous beverage. "Let the patient," he says, "eat food of easy digestion, such as veal, mutton, and the like, and abstain from all sorts of fruits and garden stuff, and at his meals drink Spanish wine." This plan continued in force until within a comparatively recent date; the principal drugs made use of being the various bitters and stimulants, as bark, simaruba, myrrh, assafœtida, valerian, camphor, cantharides, and vege-

table and mineral astringents, as kino and catechu, opium, chalybeates, copper salts, and alum.

To attempt to detail the various plans of treatment founded upon the many opinions which have, from time to time, been held as to the nature of diabetes, would occupy the space of many lectures, and be, I fear, not only uninteresting, but unprofitable. I shall, therefore, confine my remarks to the most important methods which have been advocated, and more particularly to such to the real value of which I can personally bear testimony.

Those who have had experience in the treatment of diabetes at the present day must allow that the *diet* is the most important point to which attention should be directed; and that, when this is neglected, all our efforts may prove ineffectual even to relieve the sufferer. Before, and for a long time after, the discovery of the saccharine condition of the urine in cases of diabetes, no particular regard was paid to the composition of the diet, no knowledge existing of the easy conversion of one principle into another; hence we find even Willis recommending to his patients a milk or a *farinaceous* diet. It was only at the commencement of the present century that the dietetics of diabetes were at all insisted upon. For some years Dr. Francis Home had shown the value of an *animal diet* in this affection: but it is to Dr. Rollo that the medical profession is especially indebted for fully pointing out and insisting upon its importance; and since the publication of his treatise the plan of treatment by an animal diet, more or less exclusive, has been followed both in this country and abroad. After Rollo, the chief advocates who have published their opinions have been Drs. Bardsley and Christison, in this country, and on the continent Nicolas and Gueudeville, MM. Dupuytren and Thénard, and M. Bouchardat.

I shall at once proceed to point out the value of a strict dietetic plan of treatment, and show the amelioration of the subjective symptoms which the patient then experiences, as also the improvement which it effects in the condition of the renal secretion.

The reason why a strictly animal diet has been proposed and advocated is very simple; namely, that by such the patient is made to abstain from all substances which can *readily* be converted in saccharine matter; and, although we have seen that the liver most certainly possesses the power of forming sugar from azotised principles, yet it is only within the last ten years that chemists have allowed the possibility of such conversion. Notwithstanding that the principle upon which this plan is founded may not be altogether quite correct, still the practical result has been in the highest degree satisfactory. As far as my experience enables me to speak, I can state that the good effects which have resulted from following this treatment have always been of the most marked character, and far beyond the possibility of being attributed to mere chance or accidental circumstances. I say always; for I believe I can positively assert that in no one case have I found a patient who did not derive considerable benefit, although he may have subsequently succumbed from the occurrence of secondary diseases. The amelioration usually takes place within the first few days, and is manifested by the diminution of the thirst, usually of the appetite also, if previously voracious; the tongue assumes a more healthy character, the skin becomes less harsh, the strength and weight of the patient augmented, and the urine very much diminished in quantity. I have many notes which most forcibly illustrate the truth of this statement; and at the risk of being thought somewhat tedious, I must bring a few of these under your notice.

I may remark that these results have been obtained from cases under my charge within the wards of the Hospital, and that the greatest care has always been exercised in order to obtain accuracy.

In the first case, the patient, P. C., a man aged 32 years, before change of diet, exhibited the following symptoms: Dry and harsh skin; intense thirst; sweet and sometimes acid taste in mouth; tongue brown, furred at the back, and covered with a tenacious mucus; appetite often ravenous; uneasiness at epigastrium, with some little tenderness over that region; bowels confined, and fæces hard and dry in character; great fatigue on exertion; pulse 84, small, and easily compressed; weight eight stone four pounds; no cough. After he had remained in the Hospital several days, on the ordinary extra-full diet and a pint of porter, with other bread, etc., procured from different patients, and taking no medicine, saving a little camphor mixture, the quantity, specific gravity, and weight of sugar passed for five days were such as I enumerated in my first lecture, the average of the five days (there being no great differences between the mean and extremes) being as follows:—

Average daily quantity of urine, 354 fluidounces.
Specific gravity of ditto, 1032·5.
Daily weight of sugar thrown out, 11953 grains, or 1lb. 11oz., 140 grains, avoirdupois.

The patient was then somewhat restricted as to amylaceous matters, being allowed meat, eggs, captain's biscuit (about three ounces), and a large bunch of greens, with a little whiskey. He was found, however, to procure some bread, although none was allowed. At the end of a week the note was: Some slight perspiration, less thirst, appetite not so ravenous, tongue cleaner, pulse 84.

Average urine of the last five days, 172 fluidounces.
Specific gravity of ditto, 1033.
Daily average of sugar, 4644 grains, or 10oz., 269 grains.

The patient was then placed nominally on a purely animal diet, and in a private ward: but being suspected of stealing small quantities of bread and vegetables, he was allowed two ounces of crust. The next four days gave the following averages:

Average quantity of urine, 191 fluidounces.
Specific gravity 1033.
Daily average of sugar 5484 grains, or 12oz., 234 grains.

The patient being next voluntarily placed under lock and key, as it was evident from the last result that he did not keep strictly to his diet (which, in fact, he himself confessed), and the two ounces of bread absolutely the only vegetable food allowed, the result was,

Quantity of urine 110 fluidounces.
Specific gravity of ditto, 1035.
Quantity of sugar, 2673 grains, or 6 oz., 48 grains.

The next five days, he being still under lock and key, and every one searched who entered the ward; and the diet being *purely* animal, consisting of meat, eggs, milk, beef tea, tea, and a little brandy, the result was,

Average quantity of urine, 114 fluidounces.
Specific gravity of ditto, 1029.
Quantity of sugar, 1901 grains, or 4 oz., 151 grains.

For the three following days after, he being released from his prison, but strictly enjoined to adhere to the prescribed diet, the average results were nearly the same; viz.,

Quantity of urine, 100 fluidounces.
Specific gravity of ditto, 1032·9.
Quantity of sugar, 1679 grains, or 3 oz., 367 grains.

In this individual, therefore, we observe that, within a few days, simply by means of dietetic treatment, we were able to diminish the quantity of urine from 354 fluidounces, to about 100 fluidounces, and the daily amount of sugar from 26 ounces to rather less than 4 ounces avoirdupois. We observe, however, that the specific gravity was not much altered, but on the whole a little decreased. Can anything be more conclusive than this result? Yet it is, I believe, one which can generally be obtained; and did time allow I could, from my note books, bring before you other evidence equally convincing, obtained from numerous patients, in whom I have made observations more or less similar to those just detailed. The note of the general state of the patient at the time when the last results were obtained, is as follows: Much improved in appearance; tongue clean, less red; not much thirst; perspires pretty freely; pulse 80: he can now lift up a hundred weight; not long since he could scarcely move a quarter.

To be more convinced that diet, and diet only, produces these results, let us look at the effect of a speedy return to mixed aliments in another case of this disease, where I purposely made the change.

G. B., aged 25, a man who had suffered from well marked symptoms of diabetes for about seven months, when taking the ordinary diet of the hospital, consisting of meat, bread, potatoes and milk, passed, as the average quantity of his urine, for seven days, 267 fluidounces, of specific gravity 1042. During another five days, with meat diet and bran cakes, taking also some cod liver oil and very small doses of tincture of opium, the average quantity of urine was 91·5 fluidounces, of specific gravity 1038. On a return, however, to the ordinary diet of the hospital, the oil and tincture of opium remaining the same, the average of seven days was as high as 216 ounces, of specific gravity 1036. In this patient the symptoms kept pace with the alteration in the urinary secretion; for at the end of the first period, the tongue was red and covered with viscid mucous, and the thirst intense. At the termination of the second period, the thirst was much diminished, the tongue more natural, and the appetite less ravenous, there was also a

distinct improvement in strength; but a few days after again partaking of the bread and potatoes, all the characteristic diabetic symptoms returned.

[*To be continued.*]

Reviews and Notices.

The Sanitary Review and Journal of Public Health: including the Transactions of the Epidemiological Society of London. Edited by Benjamin W. Richardson, M.D., L.R.C.P. London: Richards. April 1857.

This is a continuation of the *Journal of Public Health;* the title having been altered in consequence of mistakes having sometimes arisen, from another periodical, of a different character, bearing a very similar name. The number before us is by no means inferior to any of its predecessors in interest.

The first article is on Medical Scientific Reform; in which the writer—the editor, we presume—points out the reforms needed (especially in the way of simplification) in our nosologies, in our physiology, in descriptive anatomy, in the *Pharmacopœia*, in therapeutics, and in pathology.

Mr. Alfred Haviland gives an interesting article on the Plague at Dunster, in Somersetshire, in 1645. During the prevalence of the disease, the inhabitants of a long street "made an attempt to shut the enemy out by making all their houses communicate, so as to avoid the necessity of going into the street." Doors were made between the different houses, some of which still remain. The readers of Sydenham will remember that it was at Dunster that the cases occurred which are recorded by that writer as illustrating the good effects of copious bleeding in plague.

Three writers, Dr. Ayres, Dr. Hawksley, and Mr. Nicholas, expound their views as to the best method of solving the question—What is to be done with the sewerage of London? Dr. Ayres is for returning to a properly regulated system of cesspools; Dr. Hawksley proposes a plan for receiving the contents of water-closets into a receptacle from which the fluids should be drawn off, while the solids are retained and deodorised; and Mr. Nicholas is of opinion that a continuous and sufficient water-flow is what is wanted for the proper drainage of London.

The Report of Dr. Waller Lewis, on the Health of the London Postmen, has already been referred to in this Journal. The remaining original communications are, Notes on Vegetable Poisons (Hemlock), by Dr. Pickells of Cork; the completion of Mr. W. I. Cox's paper on the Diseases of Colliery Operatives; a collection, by Dr. Winn, of Notes from Evelyn's Diary on the Meteorology and Epidemics of the seventeenth century; and the Graveyard Statistics of Warwick and Leamington, by Dr. John Webster.

In the department of Sanitary and Social Science is commenced an able and elaborate report on the sanitary condition of Huddersfield. The points here described in regard to this town are: its geographical and geological features; water supply; increase of population; and pauperism.

The occurrence of epidemic and endemic diseases in thirty-nine towns and districts is chronicled for the months of December, January, and February. It is satisfactory to notice that the number of observers goes on increasing, and that nearly all the original staff have continued their labours steadily. Much valuable information is contained in this part of the *Sanitary Review;* and, if they are continued as at present, the reports will hereafter serve as the basis of some important deductions.

The Epidemiological Society publishes this quarter an excellent paper by Dr. W. R. E. Smart, of the Royal Navy, on the Principal Features of the Climate of the Crimea, and its Effects on Health, as observed during the First Year of the Occupation by the Allied Forces.

This is a mere outline of the principal contents of the *Sanitary Review:* those who wish for further information on the various subjects must "inquire within", where they will find much that will repay them for their trouble, and that will, we think, lead them to agree with us that this valuable periodical is not only keeping its ground well, but is steadily advancing in merit.

The Change of Life in Health and Disease. A Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. By Edward John Tilt, M.D., Senior Physician to the Farringdon General Dispensary and Lying-in Charity; etc. pp. 307. London: Churchill. 1857.

This is an expansion of a small work on the *Diseases of the Change of Life*, published some years ago by Dr. Tilt. Having devoted his special attention to the subject, and having moreover enjoyed much experience, he now comes again before the profession with a work which is likely to be of some value. But, while we thus give a general verdict in favour of Dr. Tilt, we must say that in one of the phases in which he appears, he shines with a very obscure light. We allude to the physiological portions of his work. The science of physiology is already hampered enough with incorrect observations, and illogical deductions; and Dr. Tilt certainly goes farther than many will be disposed to follow him. For instance, he "takes it for granted that the solar ganglia are an important centre of nervous power, capable of reacting on the various parts of the body by some subtle invisible fluid analogous to electricity, which I shall speak of as ganglionic nervous fluid or aura"? and in describing a phenomenon which he calls "nervous heat" (as exemplified by blushing), and referring it to the operation of the ganglionic nervous system, he considers his observations to "confirm the assertion of the older physiologists; for Hippocrates noted shivering and an unusual development of caloric to be a sign of conception, Galen considered the reproductive organs to be a source of caloric for the system, and Brongniart discovered that even in plants reproduction is attended by an appreciable increase of their usual temperature"!

This is questionable physiology; but, beyond it, there is much to commend in Dr. Tilt. He is a laborious collector of the statistics of his subject; and hence his book is enriched with numerous tables relating to the periods of commencement and termination, and the duration of menstrual function, and to the relative frequency of various diseases in women at the change of life. In his description of the symptoms and treatment of the diseases occurring at the change of life, Dr. Tilt has judiciously commented on the observations made by other British and by continental physicians, so that his work may be regarded as an epitome of all our knowledge on the subject—the author's original observations forming the basis. The value of the work is increased by the carefully reported histories of above fifty cases.

Advising our readers to turn over rapidly the few pages containing Dr. Tilt's physiological fancies, we recommend the rest of the book to their careful perusal, as well calculated to afford them guidance in regard to a class of cases which are frequently troublesome to the practitioner.

A Dictionary of Practical Medicine: comprising General Pathology, the Nature and Treatment of Disease, Morbid Structures, etc. Part xviii, being Part ix of Volume iii. By James Copland, M.D., F.R.S. London: Longmans. 1857.

The recently issued part of Dr. Copland's *Dictionary* contains the termination of the article Tubercular Consumption, the articles Tympanitis, Urinary Bladder, Urine and its Deposits, Urticaria, Uterus and Appendages, Vaccination, and Vagina and Vulva (in part). We observe with much satisfaction an

announcement that the concluding part is in the press; and that it will contain an arranged Table of Contents, with an Index of the individual topics. The profession may therefore look forward with hope to a speedy completion of this *magnum opus*.

The Asylum Journal of Mental Science.

This interesting journal, which is confined strictly to the speciality of which it treats, performs a somewhat analogous function to the Association of Medical Officers of Asylums and Hospitals for the Insane, that this Journal does to the British Association. As a means of communication between a very important body of specialists, it must prove invaluable, isolated as those gentlemen are, and possessing few means of otherwise communicating with each other. Dr. Bucknill, the editor, contributes an elaborate and able article on the Pathology of Insanity; and also a very sensible paper on a subject but ill understood—Asylum Architecture and Arrangements. Dr. Bucknill is a decided opponent of overgrown asylums, and justly advocates their restriction to two stories in height—a limitation once favoured by the commissioners, but, for reasons unknown to us, no longer enforced by them. The Lectures of Dr. Daniel H. Tuke, on the Various Forms of Mental Pathology, delivered in the York School of Medicine, and now publishing in the *Asylum Journal*, are admirable contributions to mental psychology; and we only regret that similar lectures are not delivered in every school of medicine in the kingdom.

British Medical Journal.

SATURDAY, MAY 2nd, 1857.

SUPERSTITION, WHERE DOES IT END?

It is clear, from the dropping fire kept up in the *Times* by country correspondents, that the public wish to know more about what it would seem to think the resurrection of an old and long buried superstition. "Are we in the age of King James, or in that of Queen Victoria?" exclaims the believer in the progress of the nineteenth century. And truly a town-bred man can scarcely credit the fact, that "a wise man" dwells in nearly every village, and that witches and wizards are still, in the belief of the country folk, as plentiful as blackberries. The letters which appear from day to day in the *Times*, describing the bewitching of farm stock, the carrying off of wives through the air on broomsticks by the agents of the Prince of Darkness, and a thousand other vagaries of this nature, startle the reader, and seem as much out of place beside ordinary humdrum ideas, as a piece of old tapestry would round the silks and tabarets of our drawing-rooms. Those who know the country are startled by no such revelations; the peasant-mind, they are well aware, is not much advanced from the condition it was during the Middle Ages: what they may justly be astonished at, and which all psychologists must agree is a singular and portentous phenomenon of the present century, is the monstrous gullibility of the higher classes of the country, and the general prevalence of a desire to follow new lights among all classes, quite regardless of all consequences. Can educated men forget, without mingled shame and indignation, that the breath of fashion has scarcely grown cold upon table-turning and spirit-rapping? Can the clergy—that class which prides itself upon being the best educated portion of the community—obliterate the fact that two of their body, highly respected among their respective flocks, printed and published pamphlets, in which they endeavoured to prove that the devil actually possessed *tables*, and gave responses to the questions of any idle rapper, with the purpose, of course, of destroying immortal souls?

These things are but matters of yesterday, but they seem to be already forgotten in the ever changing kaleidoscope of the world. We thought that, perhaps, this fever was over, and that the fashionable world was about to return to its senses; but a little paragraph, which has been going the round of the Parisian papers, convinces us that the evil lies deeper at the root of the mind-movement of the age, if we may use the term, than we had imagined. The Empress Eugenie has been so profoundly moved, it appears, by the manipulations of a certain Mr. Hume (who has the power, it is asserted, of showing distant events and persons in a *large mirror*), that the Emperor has banished him from the capital. Here, then, is a fresh ball set a rolling, and we may expect ere long to find the place of all effete Mesmerists and electro-biologists taken by a new set of impostors, each with his magic mirror. Well may the philosopher, peeping for the loopholes of retreat, inquire what advantages the favoured of the land possess over the simple peasant, and scornfully ask if station, birth, and opportunities are of no more avail than to plunge their possessors into a darkness only different in kind to that which possesses the clodhoppers of the fields. The lady who believes that some spiritual essence, beyond earthly comprehension, streams at the ends of the languishing young curate's fingers, as he makes his mesmeric passes, would laugh immoderately at the idea, that old Gammer Gurton could make the colt go home, or that she could track, with a fiery dog, the object of her dislike. Yet, what is there more absurd in the one belief than in the other? Why should we condemn Betty Smith because she pretended that she had seen Old Dame Switchem talking to her familiars in the shape of mice (*vide Times*), whilst we have nothing but interest and sympathy for a crowned head, who pretends—or, at least whose hysterical folly leads her to believe—that the future is to her unveiled, and that she can look into futurity through the instrumentality of a magic mirror?

Truly, if we try the social scale from top to bottom, we shall find that the love of the marvellous is confined to no degree or station of life. If we may claim any exemption at all, it must be for scientific men. It is rarely that we find that those well, but not exclusively versed in the physical sciences, fall dupes to the enormous impostures which we see every day prostrating the ill trained intellects of fashionable society. Before the simple scientific rebuke of Faraday, table-turning fell dead at once. In every circle we find the scientific man, and that scientific man generally the medical attendant, raising his voice against every new delusion which, like swallows at the coming of spring, seem to be thronging of late years upon us.

The conclusion we draw from this fact is, that, in any new scheme of education which may be promulgated for the benefit of the people, and for the especial punishment of quacks of all kinds,—witches, spirit-rappers, and magic mirror workers included,—a large share of physical science should be insisted

upon. We know nothing so destructive to ghosts and spirits of all kinds as a knowledge of chemistry. At present, of all educated persons, the clergy are most liable to be imposed upon by spiritual quackeries, and for precisely the reason that the physical sciences have not been studied by them; and consequently they are entirely, and in most cases irremediably, one-sided men, living in a spiritual world of their own, entirely unchecked by that storehouse of positive knowledge given to us by the inductive philosophy.

THE WEEK.

Dr. Shapter of Exeter has published a letter, addressed to Sir John Duckworth, President of the Devon and Exeter Hospital, on the exclusion, by the statutes of the hospital, of practising medical men, being donors and subscribers, from the committee of the institution. We were not aware that such a regulation existed in any of our country hospitals; but it does exist in *three;* and here is the rule in the Devon and Exeter Hospital: "No practising Physician, Surgeon, or Apothecary shall be a member of the Committee, unless he be an Honorary Governor." The exception in the latter part of the rule admits to a seat in the committee the physicians and surgeons to the hospital of twenty years standing, who, on resignation, have been elected consulting physicians and surgeons, and who may, under certain conditions, be appointed honorary governors. But all other medical men, who may contribute subscriptions or donations to the funds of the hospital, must not be members of committee; while this body may consist of persons following any other trade, profession, or calling whatever. Really the wisdom of the managers of the Devon and Exeter Hospital can scarcely be surpassed. The prudence which dictates the exclusion of the visiting physicians and surgeons from the committee of a hospital, is not to be compared with the profound sagacity which excludes *all* members of the medical profession.

Dr. Shapter says, that the practice of the Devon and Exeter Hospital is not supported by analogy.

"It would strike one as sufficiently absurd, if a prominent statute of a legal institution were to be, that practising lawyers should be excluded from all regulation of its affairs; or if that of a church institution should declare officiating clergymen to be incompetent to sit upon its committees; and yet this course has been pursued in the case of a medical institution, as against medical men."

Looking to the question also as a matter of policy, Dr. Shapter asks:—

"By thus enacting a law whereby medical men are deprived of the privileges common to their neighbours, do not the Governors deny themselves the opportunity of occasionally associating with the committee those who may be useful to it? And do they not, moreover, hazard the risk of detaching from feeling an interest in their institution, a whole class of persons whose professional tendencies lead them to entertain it?"

The answer to the first question is obvious enough. To the second, Dr. Shapter gives a practical reply, from instances which have come within his knowledge.

It is fair to state, that the Governors of the hospital are not, as far as Dr. Shapter has been able to ascertain, really aware of the nature of the obnoxious regulation; and hence there is a hope that, before a long time, it will have become a matter of history. Dr. Shapter has found by inquiry that two other hospitals in England possess a similar rule: the sooner the Governors of these institutions abrogate it, the sooner will they show their good sense.

Mr. Griffin has, by his indomitable perseverance, gained a point in favour of the Poor-Law Surgeons. The Weymouth Board of Guardians have paid him certain fees to which he laid claim, but to the payment of which they at first demurred. The particulars of the case will be found in Mr. Griffin's letter in this day's Journal, and in one published by him in the Association Journal of December 12th. The sum is trifling; but it is the *principle* which is the chief point; and we rejoice that Mr. Griffin has been able to establish it. It is now, as he says, fairly established; and it rests only with the profession to carry it out.

Mr. Taylor will have nothing to do with Mr. Fox, with his communications to the Journals, or with any editorial remarks. It is therefore hopeless for us to attempt to make any impression on him. Our readers will be able to form their own opinions from the correspondence published in this day's Journal.

We were beginning to fear that the design of erecting a statue in honour of the discoverer of vaccination had become defunct, or at least that it was in a state of nearly hopeless asphyxia. It is, therefore, highly gratifying to us to find that our fears have been premature. A paragraph in our news department of this day announces that the Piedmontese Committee for collecting subscriptions have recently remitted to England nearly £100; and that, the statue being finished, steps will be soon taken for procuring a site for its erection. The project has been about six years in hand; and we trust that, before long, our metropolis will be adorned by the statue of one who well deserved such an honour, if ever man deserved it.

The *Times*, quoting from a blue-book of Despatches relative to Immigration into the Australian Colonies, represents the superintendent surgeon of an Australian emigrant ship as a man of extensive authority. Not only is he a medical officer of health, with duties hard enough to perform at the best, but infinitely more difficult if he allow his authority to sleep for the first two or three days; but he is also a superintendent of the morals of the passengers—a *magister morum.*

"He has to keep a vigilant eye over the rising flirtations between the classes denominated, in the stern language of the logbook, 'single men' and 'single women.' No sentiment is allowed on board the emigrant ship; a man may select the future partner of his labours in the new world to which he is bound, but he must keep the selection a profound secret till the end of the voyage, and trust to the operation of a magnetic sympathy for the revelation of his choice to the object of it. The 'Immigration Board' at Adelaide sat upon the conduct of an officer of the ship who had 'paid attentions' to one of the single girls. It was proved that his intentions were quite honourable, and that the parents, who were also emigrants on board, accepted him as their future son-in-law; but 'the Board was of opinion that such intimacies should not be allowed to exist on board ship, as they tended to show a bad example to the crew, and were otherwise calculated to undermine discipline and interfere with the authority of the surgeon superintendent.'"

Periscope.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

THE CLIMATE OF TORQUAY: ITS EFFECTS ON INVALIDS.

Dr. Radclyffe Hall's instructive work on *Torquay in its Medical Aspect* contains an account of the effects which the climate of that town exerts on patients suffering from various forms of disease. The information given does not, so far as we remember, elsewhere exist in so clear and concise a form.

Consumption. "When a consumptive invalid, who has suffered from hurried breathing, hot cheeks and hands, and restless wakefulness at night, has been at Torquay for two or three days, he usually finds that his breathing is easier, his restlessness less, and his skin softer and cooler in the evening. He sleeps at night, and in place of his customary restless excitability he experiences a gentle languor throughout the day. If he had suffered from night-perspirations, these gradually diminish or cease. At the Consumption Hospital here, the question is often answered thus: 'I used to have perspirations every night, but I have scarcely had any since coming to Torquay.' The cough becomes softer and less frequent, and is not now excited as previously it may have been by taking in a deep breath. In fact, the patient is more particularly struck by two things,—the greater ease with which he can fill his chest with air, and a certain approach to sleepiness which he had not used to experience. So much the invalid usually notices for himself. His physician observes, in addition, that the pulse becomes slower and less thready; the respirations more ample and less frequent; the tongue soft, moist, and, if red before, less red. Thirst, if previously present, subsides; the peculiar gleaming brightness of eye becomes less striking; and the carmine patch on the cheek less defined and brilliant. The appetite improves, but the feeling of debility at first does not. It is very common for a new-comer to say, 'I do not know how it is; I eat better, and sleep better, and cough less, and yet I feel no stronger! Indeed, of the two, I feel less energy than before I came to Torquay.' After a time, however, as the soothing influence of the climate continues to exert its beneficial power over the lungs, the patient grows stouter and begins to feel his strength augment. He grows stronger without that morbid excitability which he formerly experienced, and called energy;—energy for the moment it certainly was, but energy without any power of endurance. On first coming to Torquay the bowels act with regularity; in some few persons they have a tendency to act rather oftener than is habitual, but not to the extent of diarrhœa. In a week or two, very generally, the bowels become sluggish, the appetite flags, the invalid feels a certain amount of malaise, and says he is 'bilious.' He feels suddenly very weak, and, as he not uncommonly remarks, 'as if his knees did not belong to him.' His tongue is now rather flabby, moist, and slightly coated with white. This state of matters, which depends upon defective excretion from the liver and the intestinal mucous membrane, is truly enough what is conventionally understood by the term 'biliousness.' The medical attendant finds no difficulty in removing it; and the patient is surprised at his increased feeling of strength and lightness of spirits after the load which temporarily oppressed him has been removed. This 'biliousness' has no tendency, like the 'bilious attack' of August and September, so common everywhere, has, to cure itself by a spontaneous attack of diarrhœa. On the contrary, if neglected, the bowels are apt to be confined, the whites of the eyes become muddy and yellowish, and, in persons who are not consumptive, jaundice may arise. I do not remember to have ever seen a patient, in whom consumption was advancing, become completely jaundiced."

Pneumonia and Pleurisy. "An invalid who is suffering from an attack of inflammation of the lungs, or from severe pleurisy without tubercles, experiences very similar effects from Torquay to those above stated. A gradual lessening of evening feverishness, and increased freedom of breathing, are among the earliest signs of benefit."

Bronchitis. "In the sensitive condition of the respiratory organs which is left by an attack of bronchitis, and in cases of chronic bronchitis, the climate of Torquay is remarkably serviceable. In those protracted cases in which more or less of dilatation of the bronchial tubes has arisen, attended with morning expectoration, and with many of the symptoms of consumption but without the presence of tubercles, on coming here the pulmonary irritation abates by degrees, and the general health correspondingly improves."

Asthma. "An asthmatic invalid, meaning by this a person affected with the pure spasmodic form, is either exactly suited by Torquay, or not at all. The trial is the only test. Another form of so-called asthma, which depends upon an emphysematous state of the lungs (that is, ruptured air-cells—the disease which, in horses, constitutes "broken wind"), in which the difficulty of breathing to some extent is permanent, is relieved by Torquay in proportion to the relief afforded by the climate to the bronchial irritation, which, to a greater or less extent, habitually accompanies this disease."

Diseases of the Heart. "In most forms of affection of the heart, a residence at Torquay is conducive to comfort, and to the avoidance of those mischances to which a patient thus afflicted is peculiarly liable. In some instances, however, it proves unsuitable. The distinction is not difficult to make beforehand. When the patient suffers from over-impulse of the heart and difficulty of breathing on slight exertion, and a sense of obstructive oppression in the chest, particularly if the complexion be florid, and the skin harsh and dry, Torquay will agree. But when the patient is pallid and flabby; frequently faintish, and always feeble; the skin soft, cool, and often moist with cool perspiration; when, in short, the heart is constantly too weak, without any active irritation existing in the lungs, and with a low state of the general vital power, as a rule, Torquay will not agree."

Dyspepsia. "In chronic affections of the digestive mucous membrane, Torquay proves either exceedingly beneficial, or quite the reverse, according to the nature of the case. It is not unusual to hear one person say, "Speak of Torquay producing indigestion! why living here has completely cured me of indigestion"; whilst another complains that his appetite is keener anywhere else than at Torquay.

"When the tongue is too red, inclined to dryness on first waking, with some amount of thirst, a sense of sinking when the stomach is empty, and of uneasiness after taking food, occasional nausea and headache, we have a form of indigestion which Torquay will generally cure. The tongue gradually loses its extra redness, becomes moister and more healthy-looking; the patient is no longer disabled from exertion of both mind and body by a moderate dinner, and the multitude of symptoms which are sympathetic with an over-irritable stomach gradually disappear. Delicate children suffering from that irritable condition of the mucous membrane of the digestive organs which occasions what is called infantile remittent fever (frequently mistaken by nursery attendants for vermination), derive great advantage from this climate. Such cutaneous eruptions about the face as depend upon a state of chronic irritation of the stomach also improve here.

"On the other hand, pure atonic dyspepsia is made worse by residence in most parts of Torquay, unless during the accidental prevalence of the north wind. When the patient is habitually pale and flabby, the tongue large, moist, pale, and indented on the sides by the teeth, the skin cold and damp, the lining of the lower eyelids pale, the pulse slow, feeble, and arrested by very slight pressure, the muscular and mental energy small, and the symptoms of indigestion rather those which proceed from habitual flatulent distension than from periodical pain; when the patient is much relieved by such stimulants as port wine, cayenne pepper, etc.; *provided this state of indisposition be not connected with obstructed circulation from disease of the lungs;* with such a form of indigestion Torquay does not agree."

Chronic Liver Disease. "Persons who have resided in India for a few years only are generally very well suited by this climate. And some who have spent the greater part of their lives in hot climates, also select Torquay, with advantage, as their winter residence. A few, however, in whom the enlarged and torpid liver seems to refuse its work, find, if they try it, that Torquay does not suit them. They lose their appetite, become thinner, yellower, and miserable in their feelings; and they improve after leaving Torquay. These cases are exceptional, but so marked when they do occur, that I have no hesitation in deciding that this place is positively injurious to them."

Neuralgia, "when it depends upon chronic irritation of some mucous surface, is benefited by Torquay. When, on the other hand, it is the relic of former malarial agency, this climate appears sometimes to awaken the old susceptibility of

the faulty nerve. The attacks, however, are scarcely, perhaps, so intensely severe as we see them to be elsewhere.

"Periodical nervous headache, when not kept up by gastric or other form of irritation, is not benefited by Torquay. The same may be said of hypochondriasis when it occurs in persons of languid circulation."

Pure rheumatism, "whether acute or chronic, is benefited by Torquay."

Gout, "when it occurs in a person of sanguine temperament, with an active habit of body and mind, is suited by this climate. The atonic forms of chronic gout, and of rheumatic gout, occurring in persons of feeble habit, deficient energy of the digestive organs, and languid circulation, are not."

Amenorrhœa. "There are certain forms of functional derangement for which a residence here proves very advantageous; and this is frequently one of the great advantages of the climate for females in the earlier stages of pulmonary consumption. Alluding to cases of functional suspension, Dr. West observes, 'In cases where general debility characterises the patient's condition, tonics in the widest sense of the term are indicated; and by them I understand not merely tonic medicines or preparations of iron, though they will almost always be appropriate, but the tonic influence of pure air, healthful pursuits, and exercise short of fatigue. In these cases, too, the one great danger to watch against is that of the supervention of phthisis; and a winter's residence at Torquay or Ventnor is useful in many instances, not only as a means of guarding the delicate lungs from the cold of many inland places, but also because the warm climate and the sea air appear of themselves to have a beneficial influence in favouring the healthy development of the reproductive system.'

"From this brief sketch of the effect of the climate of Torquay upon several forms of disease, it will be inferred that the modes in which it exerts its influence are due to its power of soothing the organs of respiration, circulation, and the nervous system. Its tendency is, to allay irritation of all the mucous membranes, to lessen inflammatory action in general, and consequently to relieve all the feverishness which is dependent on local inflammation; to promote a gentle action of the skin; to render the pulse slower and fuller; and to favour sleep."

Diseases occurring in Torquay. "A town of 14,000 inhabitants cannot be expected to be exempt from any of the ordinary diseases; but a special climate usually stamps its impress upon each disease as it occurs. This is the case at Torquay. Acute inflammations of any kind are rare. The common diseases of children, such as hooping-cough and measles, are usually mild. Scarlet fever has occasionally proved severe. When continued fevers occur, they early require, and quickly improve under, a stimulating mode of treatment. Amongst the young, chilblains are very common; hæmorrhoids amongst the middle-aged. Both affections indicate a tardy circulation of the blood. On this account it is, I believe, that the latter affection, when it occurs in a consumptive invalid, provided it do not lead to large losses of blood, is of good import rather than otherwise."

Is any part of the world absolutely free from pulmonary consumption? Dr. Hall has some remarks bearing on this interesting question, which we transcribe nearly entire.

"Amongst the natives of Torquay, consumption is less common than in many other parts of Great Britain, but it is seen sufficiently often to deprive the place of any character that might be claimed for it of immunity in this respect. There is, indeed, no part of the world in which, if carefully sought for, pulmonary consumption would not be found.

"It is a fallacy not uncommonly received, to infer that a place in which such a disease as consumption arises spontaneously cannot therefore be of any especial service to persons from a distance who are affected with the same disease. As consumption depends upon lowered vital power, it may and does arise in any and every climate; and to remain in the same identical climate affords, of course, no fresh stimulus to the vital energies of the patient. It is the change from what was before habitual to something fresh and suitable that is useful. Hence, when a native of the shore becomes consumptive at the sea side, he is benefited by moving inland, notwithstanding that the sea air to a landsman is so renovating. Hence, too, the advantages to those consumptive invalids who can bear it, of mountain air during the summer, after spending the winter at the sea coast. The natives of the coast towns in Peru, when they become consumptive, are sometimes cured by removing to one of the high mountain towns on the Andes, situated from about 5,000 to 10,000 feet above the level of the Pacific."

This assertion is supported by the observations of Dr. Smith in a paper on the *Diseases of Peru*, in the *Edinburgh Medical and Surgical Journal* for 1840.

"In Mexico, the Rocky Mountains are resorted to with advantage. In India, pulmonary invalids are sent to the Hill Sanatoria, or to the Cape, or home to England. Dr. Hegewisch, of Vera Cruz, informs me that consumptive patients there, when in the first or second stage of the disease, obtain much relief from removal to a cooler climate on the high ground, 'and often the progress of the disease is checked for years.' Vera Cruz is excessively hot and humid, having an annual rain-fall of 185 inches. Here we have an example in which removal from the coast, and a change from excessive heat and moisture, to a more temperate and dry climate, proves salutary. I now adduce a converse fact in which removal from a hot and dry inland region to the more humid but warm sea coast, acts beneficially on the consumptive. The English vice-consul at Tripoli writes me, 'Consumption is of very rare occurrence here; it is, however, sometimes very prevalent amongst the slaves who are brought from Central Africa, and it is an odd and striking circumstance, that even those who arrive here in an apparently incurable state, mostly recover very quickly, and appear to thrive very well afterwards.'

"We may take it as a rule that, for a consumptive patient, it is not so much the absolute scale of temperature that should be considered, as the change to a climate milder and more equable than the one to which he has been accustomed. And this is consolatory, for on any other terms a resort for the consumptive would seem to be an Utopia. Consumption is least common amongst the inhabitants of the severest countries—the Arctic regions, Siberia, Iceland, and the Hebrides. One reason may be, that as none but persons of hard constitution can live here, those children who would ultimately prove consumptive die during infancy. As a result of this, as none attain maturity but such as are extra hardy, the race soon becomes unusually hardy as a matter of hereditary descent. But putting consumption aside, the longevity of the inhabitants of these severe countries is not great, and the infant mortality is enormous. In a part of Iceland, 'the average mortality for the last twenty years during the first twelve days of infantile life has been no less than 64 per cent., or nearly *two out of three*.' In the island of St. Kilda, one of the Western Hebrides, it was stated by Mr. Maclean, in 1838, 'that four out of five of all infants born died from trismus nascentium (infant's lock-jaw) between the eighth and twelfth days of their existence.'

"'Tubercular consumption,' says the eminent geographer, Mr. Keith Johnston, 'cannot be said to be a disease peculiar to any one portion of the globe, or to be dependent on climate in any appreciable degree, unless it can be shown that it does not prevail in the excessive climates of the north. It originates in all latitudes from the equator, where the mean temperature is 80°, with slight variations, to the higher portion of the temperate zone, where the mean temperature is 40°, with sudden and violent changes. The opinion long entertained, that it is peculiar to cold and humid climates, is founded in error. Far from this being the case, the tables of mortality of the army and navy of this and other countries, as well as those of the civil population, warrant the conclusion that consumption is more prevalent in tropical than in temperate countries.' This last conclusion is, perhaps, too general. It should only apply to the class of persons of whom the returns are made up. It will, probably, prove true that, other things being equal, consumption is less frequent in tropical climates than in temperate ones. All, however, that I here contend for is, that the fact of consumption arising in an inhabitant of a given locality is no reason whatever why that locality should not prove most suitable for those consumptive invalids in whom the disease commenced whilst residing elsewhere. The question is not, where may a hardy man live and feel the hardiest? but where may a delicate person continue to live at all? And the practical reply may be given in the form of another question. Where is an invalid *with consumptive disease already commenced* likely to live the longest, at Torquay or in Siberia?"

THE CATTLE MURRAIN.

A Vienna correspondent of the *Times* has recently addressed to that paper a communication on the symptoms and treatment of the diseases commonly comprehended under the designation of *Vieh-seuche*, or cattle plague. The article appeared in the *Times* of April 21 and 22; and the care and accuracy with which it appears to have been drawn up, lead us to transfer the greater portion of it to the pages of the Journal.

There are three complaints which, on the Continent, are popularly called *Vieh-seuche* (cattle plagues). The first is a catarrhal affection of the lungs; the second, a pulmonary complaint with typhoid symptoms; and the third, a highly contagious typhus (*typhus bovum contagiosus*).

I. *Simple Pulmonary Catarrh.* The principal symptoms of simple catarrhal affection of the lungs are—first, shivering at the commencement of the malady; second, sadness and prostration of strength; third, the pulse is quicker than usual, and there is fever; fourth, the skin feels dry; fifth, the cough, which is at first dry and hollow, and comes by fits and starts. After a lapse of four or five days the cough gets "loose," and there is a discharge of phlegm; a rattling noise is heard when the animal draws its breath, and a frothy mucus escapes from its nostrils when it allows its head to droop. It is only under unfavourable circumstances, such as immoderate excitement, a naturally bad constitution, or injudicious treatment, that the catarrhal inflammation of the lungs ends fatally; but a chronic secretion of phlegm and asthmatic cough often remains for a considerable time after the animal is convalescent. In the first stage of the disease, the flesh of the animal is regarded as innocuous; at the beginning of the second, the sale of the meat is not prohibited; but no one is allowed to kill and sell the flesh of cattle which have reached the third, or malignant stage of the malady. The medical police in Austria does not consider this disease as contagious.

II. *Lung disease combined with Typhus.* This disease may be divided into three periods. The symptoms of the first period, during which there is no fever, are—1. Sadness and prostration of strength; 2. Drooping head and pendulous ears; 3. Eyes fixed, without loss either of lustre or of colour (in vigorous animals the eyes are often red and fiery, but dry); 4. The skin of the nostrils pale and the inside of the mouth "slimy;" 5. The temperature of the body low, with horns, ears, and feet cool; 6. The skin dry and tense, the hair lustreless, rough, and bristly, and erected along the spine; 7. Breathing difficult. The first period sometimes lasts a fortnight or three weeks; the second, or feverish period, lasts three or four days. The symptoms are those above described, with feverish movements. The diseased animal has fits of shivering, considerable exacerbation in the evening, and remission of fever towards the middle of the day. After the cold or aguish fits are over, the reaction is much less violent than in other inflammatory complaints. Each paroxysm of fever is accompanied by an acceleration of the respiration, which is audible, and often accompanied by a moaning sound. The weakness and exhaustion of the animal are very great; the temperature of the ears, horns, and legs changes continually—now warm now cold; the skin is dry and rough, and looks as if dust was strewn on it; the hair is erect, and the eyes, which are opened wide, are projecting, dry, shining, and fixed: the pupil is dilated. The nostrils are covered with a slimy secretion, which the suffering animal frequently removes with its tongue; the teeth are loose; the loins are so sensitive that the pressure of the hand cannot be borne without shrinking, and the pain in the chest increases. The animal lies down but seldom, and when it does so, it is on the side on which the lung is affected. If both lungs are diseased, the animal rests on its breastbone, with its legs under its body and its head and neck stretched out. The alvine secretion is often either entirely suppressed or very scanty. The urine is dark in colour and pungent in smell. During the third period, which commonly ends in death, the uneasiness and agitation of the animal are extreme. It continually changes its position, and draws back from the crib to the length of its tether. The eyes sink and become glazed, and the lids fall as if the animal were about to sleep. The horns, ears, and nose, are cold; the mouth is filled with offensive phlegm and slaver, and an ill-coloured secretion flows from the nostrils. The animal gnashes its teeth, which are loose and shaky, the hair becomes more and more bristly, and the emaciation is rapid. At this period of the disease the pulse is often above 100 a minute.

The "lung disease" combined with typhus is not only a more fatal complaint than that above mentioned, but it is sometimes contagious. If it is to be cured, it must be attacked while the animal has its full strength and vigour. Early repeated bleedings, counterirritation, and purgatives by mouth and in enemata, are the chief remedies. But if difficult respiration, violent cough, increasing emaciation, etc., continue for some time, the best thing that the agriculturist or grazier can do is to go to no further expense either for medicine or food.

The sanitary measures taken by the Austrian medical police in this disease are the following: The herd or farm is strictly examined, and all those animals that cough are put on the sick list, and must be kept apart. As the lung disease is believed to be contagious, not only the herd in which it prevails, but also the men who tend it are kept from communication with the surrounding farms, hamlets, etc. Instead of being driven out to graze, the cattle are fed on the premises; and it has been observed, that a change from green to dry food always produces a good effect on the animals which are still healthy. The sick cattle have their own attendants, who are not allowed to go near the other stalls; and a healthy animal is never allowed to drink out of a pail which has been used by one that is unwell. The carcases of the cattle which die must be buried in a very deep pit, with the straw on which they had lain. If the cattle are skinned, the skins are for a time to be put into a lime pit. If the disease assumes a very malignant form in any place, a cordon is drawn round it, which is not raised until six weeks from the time of the last death. The stalls or stables in which sick cattle have been kept are always scrupulously scoured, the various implements cleaned with strong lye, and the cribs, mangers, etc., washed with a solution of chloride of lime. Some time must elapse before the convalescent animals can safely be allowed to join their fellows.

III. *The Real Cattle Plague* (*Löser-Dürre*). This has four periods. During the first period, which begins about five days after the infection has been taken, the following symptoms are observable: 1. The animal is generally languid, its movements are heavy, its gait is tottering, and it is less sensible than usual to outward impressions; in other cases it bellows and beats the ground with its hoofs, and is unusually unruly and vicious. 2. The appetite is often much greater than usual; but after the animal has swallowed its food, it appears inattentive to what is passing around it, and hangs its head and ears. 3. When the animal rises from the earth it does not stretch itself as healthy animals usually do, and instead of sinking its back it arches it. 4. The eye has more lustre than usual, and its vessels are slightly reddened. 5. Tremulous movements are perceptible in the skin, and the hair on some parts of it becomes rough. 6. After the fourth or fifth day, the animal coughs at intervals, and often groans. 7. The animal licks its chaps less than usual. 8. No strong pressure with the hand can be borne, and the back immediately sinks if the loins are squeezed. 9. The "droppings" are drier and less furrowed than is usual.

On the eighth day after the infection, the plague is regularly declared. The symptoms are: 1. Aguish paroxysms, and often a twitching of the whole skin. 2. Bristling of the hair. 3. Trembling of the limbs, and particularly of the hind quarters. 4. During the paroxysm the animal is generally very uneasy; it stamps, holds up its head, and shakes it continually. The vigorous cattle are very violent in their movements, have a wild eye, snort and bellow, and devour their food greedily. The weak and aged beasts, which are less wild and unruly, shake their heads and grind their teeth. 5. The roots of the horns and the hanging ears are sometimes very hot and sometimes cool. 6. The chaps and muzzle are dry, the interior of the mouth is of a light red and "steaming hot", the gums swollen and spongy, and the incisors somewhat loose. The gums have frequently spots of a deep red. 7. The sensitiveness of the loins increases. 8. The skin is extremely tense. 9. The pulsation is accelerated. 10. A single (not continuous) violent, hollow, and convulsive cough, which is totally different from any other. 11. The rumination is incomplete and interrupted. 12. The alvine excretion is scanty, dark, sometimes almost black, parched, and deeply furrowed. The discharge takes place very frequently. 13. The tail is either extended in a horizontal line, or used to strike the sides of the animal, which continually looks round to its hind quarters. 14. The urine is of a high red colour. 15. It is frequently the case that air bladders can be felt under the skin on the back and loins. 16. The fever increases in the evening, and becomes less violent in the morning. 17. The milk in cows diminishes, and in some cases is altogether dried up.

During the third period, which begins on the ninth or tenth day from the infection, all the above-mentioned symptoms increase in violence. The animal is excessively weak and sad, stands at a distance from the crib, and hangs its head almost down to the ground. If the lungs are much affected it lies down a great deal, but if not it remains on its legs. The emaciation is extreme. The eyes begin to run, and a clear white, viscous fluid flows from the nose. By degrees the tears thicken and form a crust which half covers the eye, the discharge from the nose becomes cloudy and "glandery," the

tongue is flaccid, and the breath has a peculiar and almost putrid smell. The rumination ceases entirely. The alvine secretions are now watery, and are ejected or rather squirted out with violence. The animal suffers greatly from tenesmus. If there is no diarrhœa, which is sometimes the case, the hind part of the body is greatly swollen.

On the thirteenth or fourteenth day, when the complaint has reached the highest pitch, the fourth period begins. The animal can hardly keep on its legs, a thick ash-gray fluid runs from its glazed eyes, a corrosive secretion escapes from its nose, a thick phlegm fills its mouth, and the putrid exhalation becomes almost unbearable. The skin of the mouth and the gums is dried up, "and the tallow-like skin of the animal peels off in great flakes." The serous and even bloody alvine secretion is discharged almost without interruption; the head of the suffering animal is continually twisted round to its hind quarters. Death generally ensues on or about the seventeenth day after the infection.

The *Löser Dürre* has invariably been brought into Austria by cattle coming from Podolia, Bessarabia, or the Danubian Principalities, and the importation of beasts from those provinces is frequently prohibited. As soon as it is known that the plague is raging on the other side of the frontier a cordon is drawn, which is not raised until the disease has entirely ceased. If this government finds it necessary to have a number of beasts killed in order to put an end to a contagious disease, the proprietor receives £5 a-head from the state; but the sum is so ridiculously small that many sick cattle are driven away and sold before the authorities are aware that the murrain has made its appearance. If a butcher on killing an animal finds it to be diseased, and does not inform the police of the fact, he is liable to be fined £4 for each offence. If he announces his discovery he receives only £5 as an indemnification for his loss. The "*löser*," or third stomach of cattle which die of the real or steppe murrain is invariably diseased. On the outside it is generally covered with livid spots, and in the inside is found ruminated food, not in a pulpy mass, as it ought to be, but in the form of a dry, dark green, coarse powder, which is pressed in between the "leaves" of the *löser*. The fourth stomach is always either highly inflamed or gangrenous.

During the Russo-Turkish war in 1827 and 1828 Russian herds driven into Silesia brought the murrain with them, which carried off 30,000 head of cattle in Hungary, 12,000 in Gallicia, and 9,000 in Moravia. According to a very moderate estimate made by M. Faust, the steppe murrain had at the end of the last century carried off 28,000,000 head of cattle in Germany.

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

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(*Continued from p.* 658 *of* Association Medical Journal *for August* 2, 1856.)

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Letters regarding the business department of the JOURNAL, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROP. COUNTIES. [Ordinary Meeting.]	37, Soho Square, London.	Tues., May 12, 4 P.M.
SOUTH MIDLAND. [Annual Meeting.]	George Hotel, Northampton.	Thurs., May 21, 2 P.M.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

SATURDAY, FEBRUARY 14TH, 1857.

W. D. CHOWNE, M.D., President, in the Chair.

EXCISION OF THE HEAD OF THE FEMUR AND FLOOR OF THE ACETABULUM, FOR CARIES COMBINED WITH PELVIC ABSCESS. BY HENRY HANCOCK, ESQ.

EXCISION of the head of the femur had been performed for gun-shot wounds and other injuries of the part, and also for caries; but the case related by Mr. HANCOCK was the first in which the operation had been undertaken with the avowed object of excising the head of the femur and floor of the acetabulum, and relieving pelvic abscess. The operation of excision of the head of the femur in cases of injury did not appear to have excited any difference of opinion as to the propriety of its performance. But in regard to caries, some surgeons, as Mr. Syme and Mr. Skey, condemned the proceeding altogether; others, whilst advocating and performing the operation, restricted its employment to a certain class of cases, to the exclusion of others in which it appears to Mr. Hancock to offer equal, if not superior, advantages. The operation was thus partially advocated by Messrs. White, Fergusson, Knox, Smith, Walton, Dr. Bonino, and others. The opinions of surgeons on excision of the head of the femur, from its resuscitation in 1844 to the present time, might be thus summed up. Some condemn the

operation; while others assert that it should only be performed —1, in the last stage of hip-disease; 2, when the head of the bone is dislocated; 3, when the cotyloid cavity is free from disease; 4, when the amount of pelvic disease is but trivial. Dr. Knox asserts "that the pelvic portion of the hip-joint is beyond the reach of excision". Other objections had also been raised; namely, the possibility of mistaking disease of the sacro-iliac synchondrosis, or of the pelvis itself, for hip-joint disease; and another, to which Mr. Coulson attaches great importance, that in this disease it is not the articular symptoms which generally produce death, but the exhaustion of the frame and strength. After stating at length his objections to the limitations laid down, Mr. Hancock related the following case:—Timothy D., aged 14, was admitted, under Mr. Hancock's care, into Charing Cross Hospital, in July 1856, with disease of the hip-joint. Five years before, observing a swelling in the groin, he attended at the Middlesex Hospital, where he was made an in-patient, and remained five months. Two years afterwards, abscesses formed around the joint; and, eighteen months ago, he came into Charing Cross Hospital, where he remained three months, when he left apparently cured. He continued able to walk for ten months, when he was attacked with severe pain in the knee, and was again admitted into the hospital. Shortly afterwards, abscesses formed around the hip-joint, opening behind the trochanter, and also low down on the back of the thigh; and, subsequently, an abscess burst in the groin; and a probe introduced into this opening passed readily into the pelvis. He, in the course of time, became so emaciated and worn out with the profuse discharge, night sweats, loss of appetite, etc., that it was evident he could not long survive if something were not done for him. Great prostration and cough supervened, and his sputa became streaked with blood. Dr. Willshire examined his lungs, and pronounced them free from any cause contraindicating an operation. Having as far as possible ascertained that the disease was confined to the hip-joint and pelvis, Mr. Hancock examined the inside of the latter with a probe through the opening in the groin, and then discovered perforation of the acetabulum. Under these circumstances, he concluded that the pelvic abscess, and the boy's condition generally, were due to hip-disease; and that by removing the head of the femur, and the floor of the acetabulum, not only might the diseased bone be removed, but also by affording a free and depending opening for the discharge of the matter, the pelvic abscess might be approximated to the condition of an ordinary abscess. On the 6th of December, 1856, the patient having been submitted to the influence of chloroform, and placed upon his left side on the table, Mr. Hancock commenced the operation by making a crucial incision over the great trochanter, extending about three inches beyond in all directions. The flaps having been reflected, a circular incision was carried round the head of the bone, which remained in its cavity, cutting through the glutæi, the muscles inserted into the digital fossa, the pectineus, etc., and opening the capsular ligament. Upon examination by the finger, the neck of the femur was discovered to be so much diseased that Mr. Hancock cut through the bone immediately below the great trochanter; after which, the head of the bone was removed without difficulty. When this was done, the acetabulum was found to communicate by two openings at its deepest part with the pelvic abscess. Mr. Hancock endeavoured to excise the floor of the acetabulum with the bone-nippers, but could not; and therefore with a metacarpal saw he cut round the acetabulum, removing the whole of the diseased bone, exposing the thickened pelvic fascia, and leaving a large opening for the escape of the matter from the pelvic abscess. The flaps were then brought together, and united by sutures, except opposite and below the opening in the acetabulum, where they were kept separated by lint. A splint, extending from the armpit to the foot, was next applied, as the leg could now be straightened without difficulty, and the patient returned to his bed. Very little blood was lost during the operation, and no vessels required tying. The operation was followed by almost instant relief of his constitutional symptoms. The patient was a little sick for the first forty-eight hours from the chloroform, but otherwise his course was one of uninterrupted improvement. His countenance soon became cheerful and free from anxiety; his night-sweats ceased in two days from the operation. On the third day, the wound in the groin was entirely healed. The discharge from the wound made at the operation, which for the first few days was very abundant, gradually became thicker and diminished in quantity. He was able to sit up in bed for the first time for nearly a year with his knee straight fourteen days after the operation. In three weeks, he dressed himself, and sat in a chair by the fire. In five weeks, he was able to walk with a crutch and a stick; at the end of eight weeks, however, he imprudently dispensed with both crutch and stick; inflammation ensued, followed by abscess external to the pelvis. This subsided; and the patient is gaining flesh and strength, and able to walk out daily.

Saturday, February 21st, 1857.

W. D. Chowne, M.D., President, in the Chair.

Treatment of certain diseases of the knee-joint by the operation of resection. By P. C. Price, Esq.

Nearly seven years had elapsed since the revival of the operation by Mr. Fergusson. During this interval the subject had excited the greatest attention, and many opinions had been offered regarding its value and its right to be admitted as a recognised operation in surgery. Many errors had been committed, and the intentions of the operation had on more than one occasion been overstrained; yet in the limited number of cases recorded, a success had been achieved, which forcibly disposed of all theoretical objections which had been offered, and fully warranted a more extended trial. Mr. Price eulogised Mr. Butcher's labours in connexion with the subject of resection. Twenty cases of the operation had fallen under the author's immediate notice—one-fifth of the entire number which had been recorded since it was adopted by Park in 1781. Three of these operations had been performed by himself; in the remainder he had been either an assistant or an interested spectator, and had enjoyed opportunities of watching the subsequent treatment, so as to accumulate a mass of information and facts. The principal affections of the knee-joint, which are more or less amenable to the operation of resection, were classed under the following heads:—1. Inflammation of the synovial membrane, acute and chronic. 2. That class of affections which Sir B. Brodie includes under the title of "where the synovial membrane has undergone a morbid alteration of structure". 3. Where ulceration of the articular cartilages had arisen as a primary affection. 4. Scrofulous disease of the cancellated ends of the bones entering into the formation of the joint. Discarding all very acute cases of these affections, with their various complications, few surgeons probably would venture, on practical grounds, to dispute that these diseases are frequently amenable to resection. In cases of acute inflammation of the synovial membrane demanding prompt removal of the source of irritation, the author believed resection was, as a general rule, unwise. The acute nature of the symptoms, the sympathy of neighbouring structures, and of the entire system, and the unfavourable condition in general of the patient, were sufficient reasons for preferring amputation. The danger following resection in such cases was the liability of the ends of the bones to take on an unhealthy action. Pyæmia had carried patients rapidly away, and acute necrosis had also quickly terminated in death, or demanded immediate amputation, provided a limitation of the inflammation, and subsequent exfoliation of the part, could not be expected. In the more chronic forms of synovial disease, not uncommon amongst the poorer classes, resection had been frequently resorted to with much benefit. During the last six years, the statement of Sir B. Brodie, that here an accurate diagnosis was of no great importance, as it could lead to no essential difference in the surgical treatment of the case, had been disproved, for amputation had been superseded by the more humane operation of resection. The author, however, was by no means inclined to admit that such cases were the most favourable for the operation; but they could be treated in this way much to the advantage of the patient and to the credit of surgery. The value of the operation the author believed to be exemplified in the treatment of cases "where the synovial membrane has undergone a morbid change of structure." There was seldom seen any extensive and acute inflammation breaking down fibrous, cartilaginous, and bony structures; very often no emaciation, and long suffering inducing hectic and irritative fever. The patients were for the most part otherwise healthy, and, perchance, submitted to an operation more for the sake of convenience and comfort than as an escape from suffering and death. These, and other features, would pre-eminently recommend resection for affections of this class. In acute ulceration of cartilages, occurring as a primary affection, the author was led to take an unfavourable view of resection, provided the symptoms were extreme, and especially if evidence existed of the participation of the bones in the disturbance. In more chronic or subacute cases the operation must be

looked upon as highly advantageous, as experience has attested the good effects of its adoption. It was, however, to the employment of resection in scrofulous disease of the knee-joint, commencing in the cancellated tissue of the bones, tibia and femur, that the author particularly wished to direct attention. Great stress was placed upon a right appreciation of an operation more or less applicable on many occasions. The pathological changes that take place in the meshes of the ends of the bones, and their cartilaginous coverings, were illustrated by drawings from the pencil of Dr. Westmacott, from cases which had been treated by Mr. Fergusson and by the author. Resection was an operation highly useful in the treatment of joints extensively destroyed by strumous disease, and extensive destruction of the cancellated ends of the bones was of little consequence, provided all the disease were removed from contact with the healthy parts. The extent to which parts so diseased might be removed, was illustrated by a remarkable case, under the care of Mr. Jones, of Jersey, in which the upper half of the tibia, as well as the entire articulation, was removed with success. The author next proceeded to inquire how it was that, considering the apparent advantages of resection, so much dispute regarding its employment had arisen? This was attributed, in a great measure, to the general ignorance that existed regarding it, and also to the lethargy and unwillingness that prevailed amongst many surgeons to adopt a new proceeding, or one which, having been adopted on one occasion, and signally failing through want of due skill and judgment, had not been repeated, the ill success being unfairly attributed to the operation. The operation had been denounced by Mr. Syme as "bloody and formidable;" and yet he had distinctly taught and written that "there is not much bleeding, but one or two of the articular branches may require to be tied." (*Excision of Diseased Joints*, 1831.) If, then, the former expression has reference *solely* to the subject of hæmorrhage, occurring at the performance of the operation, Mr. Syme would appear to have contradicted himself. A comparison between the results of resection and modern amputation of the thigh was shown to be unfair. If comparisons were to be drawn between resection and another operation or injury, the author would feel more inclined to liken it to a severe compound fracture. With regard to the performance of the operation, the advantage gained by not removing the entire epiphyses was advantageous in two ways; first, osseous union would be more likely to take place, and the new product would be in many ways better adapted as a bond of union; and, secondly, should unhealthy inflammation of the ends of the bones destroy the bony structure, provided the epiphyses had not been removed, the mischief might be entirely confined to this portion of the bone. Such an unfortunate occurrence was apt to arise from two causes: damage inflicted on the ends of the bones at the time of the operation, or during the after-management. Both these mishaps the author had seen, on more than one occasion, to prove fatal. He called attention to the importance of correct after-treatment, and strongly recommended the splint described on a former occasion by himself. Division of the hamstring tendons had been devised, "as all tendency to after-mismanagement is checked." Such a statement had been made partly on supposition, for hideous deformity had more than once arisen from so doing; it was therefore necessary duly to consider the propriety of this proceeding.

Many excellent water-colour drawings and casts of limbs after the operation were exhibited, showing the condition of various diseased joints which had been treated by resection.

Mr. Henry Smith exhibited a little boy, whose knee-joint he had removed. The operation had been performed on account of a strumous abscess in the head of the tibia.

Mr. Walton believed that all surgeons were not acquainted with the great fatality of cases of amputation. One hospital surgeon had told him that the operation of amputation of the thigh, performed at the institution with which he was connected, proved fatal in almost every second case. With a knowledge of this fact, he quite agreed with the author in strongly recommending resection to the consideration of the profession. The extreme rapidity in which reparation was brought about in strumous cases he had noticed particularly in one of his cases of resection of the head of the thigh-bone. The subject of the operation was decidedly tuberculous, and although he died three months after the operation with tubercle in every organ of the body, with extreme emaciation, repair had to a great extent taken place between the upper portion of the femur and the wing of the pelvis.

Mr. Gay had some years ago condemned resections of joints; but now he had altered his views, and was fully prepared to recant the expressions which he had made use of, and which, unfortunately, had been chronicled against him. He was gratified to find that the author had considered, at so much length, the selection of suitable cases for the operation; a great deal of success of course would depend upon this. The author, from his considerable experience in diseases of the joints, was entitled to be heard regarding this somewhat new operation; and what he (Mr. Gay) had heard this evening had impressed him with the value of the operation on certain occasions.

Mr. Henry Smith congratulated the author upon the success which had attended his cases. It was a great point for a single surgeon to have had three successful consecutive cases. It was, in his opinion, the care with which the cases had been selected, and the manner in which the after-treatment had been conducted, that had led to this favourable result. He (Mr. Smith) had seen much of this operation, and he agreed with the remarks that had been made regarding the more frequent employment of resection in cases of strumous disease of the joints. He referred the Society to the able memoirs of Mr. Butcher, of Dublin. A success had been obtained that was most gratifying; for out of eighty-two cases recorded, only *twelve* deaths had taken place. Comparing these results with amputation, it must be admitted that resection is not such a fatal operation. Mr. Phillips had, in a paper read before the Medico-Chirurgical Society, proved that the fatality of amputation of the thigh was seldom less than one in four. It was much to be regretted that the cause of resection had been injured by the opinions of many surgeons. Mr. Syme had spoken of the operation in a manner which was incorrect. Mr. Jones, of Jersey, had operated on nine occasions, and he had not had occasion, in any instance, to place a ligature on a single vessel. Mr. Fergusson had likewise but occasionally to place a thread on one or two of the articular branches. As far as he was aware, no good argument had ever been used against the more general adoption of the operation.

Dr. Brinton said that it was evident, from the statistics adduced, that the operation was worthy of much consideration. He agreed with the author in his remarks upon the importance of paying due attention to the union of the epiphyses with the shaft of the bone.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, March 3rd, 1857.

Thomas Watson, M.D., President, in the Chair.

ATROPHIED KIDNEY. BY SIDNEY JONES, ESQ.

The specimen was taken from a boy, aged 15, who died of peritonitis. With the exception of a mild attack of measles at an early age, he had always enjoyed good health. On making the *post mortem* examination, the right kidney was found from two to three times its normal size, but its structure was healthy, and it occupied its normal position. In the place of the left kidney was a mass weighing about one drachm, containing a number of cysts, some few of which were occupied by fluid, but the greater number of them were collapsed, and had corrugated walls. The microscope showed its structure to be made up of fibrous tissue, white and elastic, amongst which were found microscopic cysts, atrophied Malpighian bodies, and altered renal tubes, in such abundance as to leave no doubt of the nature of the specimen. In the situation of the pelvis, three vessels were traced—viz., artery, vein, and ureter. The vein was pervious; the others formed thick ligamentous cords.

CYSTIC DEGENERATION WITH GRANULAR DISEASE AND ATROPHY OF THE KIDNEYS. BY C. J. HARE, M.D.

The kidneys were removed from a female, Anne W., aged 69, who died suddenly on February 5th. She was intemperate in her habits; had suffered from rheumatic gout, and occasionally from fits, or "convulsions," which from the description given appear to have been epileptic. Mr. H. C. Stewart, who made the *post mortem* examination, found much congestion of the cerebral membranes, and an effusion of watery fluid in the cavity of the arachnoid. Both lateral ventricles contained some serous fluid, but in the anterior part of the right one there was, in addition, a large clot of blood which extended into the third and fourth ventricles, and to the base of the brain. The left kidney was small. The capsule, on removal, brought away with it some portions of the kidney substance. The surface of the organ was rough, granular, and mottled, and presented a large number of cysts, which were also abun-

dant throughout the substance of the kidney; they varied from a size just visible to three-eighths of an inch in diameter, and were filled with a thin slightly yellowish-brown fluid, which varied in tint in the different cysts. The right kidney was yet smaller than the left one, but the cysts in it were more numerous and larger. The kidneys presented very good specimens of granular disease combined with cystic degeneration of the organs.

FIBROUS TUMOUR OF THE UTERUS. BY T. W. NUNN, ESQ. REPORT BY W. BRINTON, M.D., AND C. WEST, M.D.

Dr. Brinton read a report, by Dr. West and himself, on the tumour exhibited by Mr. Nunn at a previous meeting (see page 262). This report confirmed that of Dr. Bristowe and Mr. Hutchinson. It regarded the disappearance of the uterus from the cervix upwards, the coincidence of an ordinary uterine fibroid, and the structure of the mass in question, as together deciding its uterine nature and origin. The ovary, they thought, was probably involved in the mass: indeed, Dr. Brinton could trace what was possibly a relic of it.

Mr. Nunn mentioned that Dr. Engel, of Prague, in speaking of this case, had stated that he had never seen a uterine tumour ossified in this peripheric manner.

Dr. Brinton reminded the Society that Mr. Hutchinson had settled this objection by discovering such a tumour in the museum of St. Bartholomew's Hospital. Speaking without book, it was his (Dr. Brinton's) impression that he had seen records of several. Meckel (*Pathologische Anatomie*) regards the ossification of the periphery as the commonest commencement of the change; and specifies two tumours (of one and four inches diameter respectively) with an envelope or shell of brownish-yellow bone, like the specimen in question.

POLYPUS EJECTED FROM THE STOMACH. BY AMOS BEARDSLEY, ESQ.

The details of the case were related by Dr. Quain.

H. C., a female, aged 19, of robust appearance, had enjoyed good health till about twelve months ago, when she had an attack of herpes zoster on the left side. This yielded to the usual treatment, and in about a week after the attack she regained her usual state of health. Menstruation has always been regular. A short time after the attack of herpes she began to suffer from distension of the stomach, chiefly after meals, which was attributed to flatulence. This was subsequently followed by pain, which was always increased after eating. The pain at first only presented slightly and occasionally through the day, except after meals; became very bad during the night, and her sleep was disturbed. For the last three months she has lost much weight, during six weeks as much as a stone and a half. The bowels have always been regular; but the urine has been turbid on cooling since the attack of shingles, sometimes plentiful in quantity, and sometimes scanty. She has frequently felt faint with the pain at the stomach, which latterly has also extended to the left side. No sense of soreness or tenderness externally. About a month ago Mr. Beardsley prescribed an alkali and bitter infusion, which relieved her pain somewhat, and the flatulence, etc. The case being considered merely as the derangement of the stomach, he heard no more of it. On Tuesday last, when on going to her usual employment, she felt suddenly faint, and vomited the tumour laid before the Society. At the time of its ejection she felt what appeared to be another rising in her throat, but she swallowed it again. She felt very faint and poorly all the subsequent day, with a great deal of soreness at the pit of the stomach, extending to the left side. Her appetite has failed her during this week; but she now feels as well as before she vomited, though she has at intervals ejected a little blood, etc., which has risen in her mouth. The pulse is 84. Her appearance is now somewhat sallow and pale. She often feels her hands and fingers numb, and she suffers from a constant creepy feeling of the flesh. For the last twelve months she has had much flatulence, and her appetite has varied, sometimes rather voracious, and at others the contrary. The bowels have always been quite regular, and she has never suffered from diarrhœa. The tumour, which is about the size of a small chesnut, appears to have been attached by a very small pedicle to the mucous coats of the stomach. It was very firm when vomited, and like an unshelled egg. It appeared to be very vascular, and the anastomoses of the bloodvessels on its surface were well discerned by reflected light, and indeed by the unaided eye. The cut surface of the tumour presented small foramina or cells, and the specimen, when examined by the microscope, was found to consist of a mass of connective tissue, bloodvessels, and granular cells, and granular particles, apparently fatty, covered by a layer of mucous membrane. The membrane consisted as usual of a basement layer, the surface of which was covered by a layer of columnar epithelium. The tumour was of a simple character, corresponding to that known as the gastric polypus. It is a rare form of disease, not often reaching the size of the present specimen. Mr. Beardsley assigned the presence of the gastric symptoms to the existence of this or similar tumours, some of which probably still remain, as the symptoms, though mitigated, have not disappeared. He also recognised a connection between the occurrence of the shingles and the presence of this tumour.

SMALL CRETACEOUS MASSES, EXPECTORATED BY A PERSON WHO WAS OTHERWISE IN GOOD HEALTH. BY T. B. PEACOCK, M,D.

The patient was a middle aged female. She stated that about four years before she had expectorated two similar bodies, and had been quite well since that time. The pieces exhibited were eight in number, and were expectorated at two different times; they varied from the size of a pea to one-fourth of that size. At the time the patient had a hard cough, and the feeling as of something in the throat; but there was no material amount of mucus expectorated with them, but only a few streaks of blood. After the pieces had been voided, the cough soon ceased entirely, and the patient, on careful examination, presented no evidence of pulmonary or other disease. Dr. Peacock mentioned that most generally, when cretaceous masses were expectorated, it was in patients who had laboured under phthisical symptoms, and had recovered to a more or less marked degree, and then relapsed. In the present instance—and it was the only one of the kind he had seen—there was no reason to suppose that the lungs were affected, and he was therefore led to believe that the cretaceous bodies were extruded from bronchial glands which had been tuberculous in early life.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

Sir,—By the accompanying letter to the Poor-Law Board, you will perceive the Weymouth Board of Guardians have paid me all the fees to which I laid claim. The amount, £4 : 14 : 6, was not in itself the object so much sought as to establish the principle that medical officers are entitled to receive fees when called in consultation out of their own districts; to render the claim legal, it is necessary to have an order from the relieving officer; in a case of emergency, the overseer has also power to give an order. Three of the cases for which the fees are now paid are narrated in my pamphlet addressed to Lord Palmerston (see letter, Dec. 12th); the fourth was for a consultation out of my district, by order of the relieving officer, to decide on the permanency of a pauper's complaint prior to removal to his own parish.

One of my colleagues has also been paid £2 for a difficult case of midwifery, which he attended in consultation out of his own district by order of the relieving officer. The principle is, therefore, now fairly established, and it rests with my medical brethren to carry it out.

I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, April 18th, 1857.

I. *Mr. Griffin to the Poor-Law Board.*

"12, Royal Terrace, Weymouth, 15th April, 1857.

"My Lords and Gentlemen,—In my letter to your Honourable Board, dated April 4th, I stated—'The Board of Guardians have not paid me the fee to which you said I was entitled (see your letter of Jan. 28th).' I now beg to inform you that I have this day received all the fees due to me. I trust the other parts of my letter will receive your serious and early attention. "I have the honour to be,

"My lords and gentlemen, your obedient servant,

"RICHARD GRIFFIN.

"The Poor-Law Board."

II. *The Secretary of the Poor-Law Board to Mr. Griffin.*

"Poor-Law Board, Whitehall, 18th April, 1857.

"Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of your letters of the 4th and 15th instant, in reference to the remuneration which you receive for your

services as the medical officer of the Weymouth district of the Weymouth Union. "I am, sir, your obedient servant,

"N. W. Grey, *Secretary*.

"To Richard Griffin, Esq."

ON SOME ALLEGED ILL EFFECTS OF AMYLENE.

Letter from John Snow, M.D.

Sir,—I shall be obliged if you will allow me to make a few remarks on the case of operation for stricture by Mr. Syme's method, reported at page 331 of your last number. The operation was followed by some severe symptoms which the reporter of the case attributes to the amylene which had been inhaled. The symptoms, however, were such as are occasionally produced by operations on the urethra, more especially by the operation in question, and are not such as amylene, or any analogous substance has been known, or would be likely, to produce. I have seen very similar symptoms to those which occurred to Mr. Erichsen's patient follow the introduction of bougies, with some bleeding from the urethra—the convulsions only were wanting. I should wish, however, to call particular attention to the following passage in a paper by Mr. Syme on the treatment of strictures of the urethra by external incision. (*Medico-Chirurgical Transactions*, vol. 36, p. 260.) "A curious train of nervous symptoms sometimes present themselves, to the great consternation of all who have not previously witnessed them, or are unaware of their nature. They occur most frequently soon after the catheter is withdrawn, and appear to depend on the urine resuming its natural course, but have also been observed at an earlier period. They have never, so far as I know, lasted more than thirty hours, and seldom continue above half this time. They consist of rigors, bilious vomiting, coldness of the extremities, suppression of urine, and delirium. They require no treatment, and do not seem to admit of being alleviated or curtailed by opiates, stimulants, or other means of remedy, requiring merely a little time for their disappearance, so that the only cordial of any service is a confident assurance on the part of the surgeon that there is no ground whatever for the slightest alarm or uneasiness."

I have administered amylene in 146 cases without ever meeting with any of the symptoms which occurred in Mr. Erichsen's case, except simple vomiting without depression, and that not a quarter so often as happens after chloroform. Amylene has also been largely used in France without producing any such symptoms as those which Mr. Syme describes, and which occurred after the operation in question. Amylene resembles chloroform very closely in its effects—more closely, indeed, in one respect, than could be desired—that of its power to cause sudden accidents; but chloroform, so extensively as it has been used, has not been known to occasion suppression of urine, or the train of symptoms connected with, and caused by, the congestion of the kidneys and suppression of urine which occurred in Mr. Erichsen's case. Amylene bears a great resemblance to nitrous oxide gas, both in the symptoms it produces, and in the promptitude with which its effects come on and pass off; but although this gas has been breathed for amusement, during almost sixty years, it is not recorded to have produced such a train of symptoms in any case as were met with after the operation under consideration.

Apart from all the experience above alluded to, it would be extremely unlikely that a medicine, whose physical properties compel it to pass away in the breath, with the exception of a minute trace, in a few minutes, should produce a fresh set of serious symptoms hours afterwards, the patient having been well in the mean time. It would be as if the effects of alcohol or opium should return after a few weeks. With regard to the term poisoning of the blood which occurs in the report to which I have referred, the blood may be said to be poisoned as long as any trace of a medicine or condiment remains in it; but a few hours after a patient has inhaled amylene his blood is not more poisoned by it than that of the surgeon and his assistants was at the time of the operation. The important poisoning of the blood in Mr. Erichsen's patient arose from the retention of excrementitious materials which the kidneys failed to eliminate, and the convulsions seem to indicate that the urea was decomposed into carbonate of ammonia. Sufficient particulars are not related, with regard to the vomiting which followed the previous operations, to enable one to form an opinion as to whether it was caused by the chloroform or not; but it is not improbable that it was due in a great measure to the operation. Vomiting is a symptom which used to occur after operations, now and then, before chloroform was used; and this agent, besides the vomiting which it undoubtedly occasions, has often to take the blame of that produced by other causes, such as a dose of opium, loss of blood, morbid poisons, and derangement of the renal and other functions occasioned by an operation. I am, etc. John Snow.

18, Sackville Street, April 1857.

MR. FOX AND MR. TAYLOR.

Letter from L. O. Fox, Esq.

Sir,—I have at length made Mr. Francis Taylor "break cover", but he "ran very short", as sportsmen have it, and is "gone to earth". "He dies, and makes no sign," etc., etc.

Will you be so good as to insert the following notes? I could not ask to occupy your pages with comment. I do not think, however, that you will withhold *your* opinion on this matter. I am, etc., L. Owen Fox.

April 28th, 1857.

"*To Mr. Francis Taylor.*

"Sir,—Lest my public appeal to you should escape your notice, I forward a copy of one of the journals of this day's date, containing my letter addressed to you. I trust you will lose no time in replying thereto. Should you persist in being silent, I shall take such other steps in the matter as I may be advised.

"I may mention, that this note will probably be published.

"I am your obedient servant,

"L. Owen Fox.

"April 25th, 1857."

"*To L. Owen Fox, Esq.*

"Sir,—I have studiously avoided reading, and therefore answering, any of your correspondence in the medical journals, and I intend to continue to do so. I therefore return the periodical you sent me unopened, and decline all further correspondence on the subject to which your letter refers.

"I am, sir, yours faithfully,

"Francis Taylor.

"Romsey, April 27th."

UNQUALIFIED PRACTITIONERS.

Sir,—As a member of the British Medical Association, will you be kind enough to give this a place in the Journal, and give me or your numerous readers a reply to the following questions?

You are aware that a host of unqualified practitioners abound in every neighbourhood throughout the length and breadth of the land; and such is the bold license they now take, that they stop at nothing to carry on their nefarious schemes. The Apothecaries' Act of 1815 was to have effected wonders—and it certainly has; but it has of late lain dormant, while the framers, and those who ought to carry out its powers, are every week eager enough to pocket the gold for a useless piece of paper, because they do not grant us that protection which they are enabled to give. I can only say, rather than they should have received my *six guineas*, I would have paid £30 for a more honourable diploma.

I have been induced to make these remarks, because, in my own vicinity alone, there are parties practising as general practitioners in the *three branches* who have no qualification whatever. One or two instances have been fully reported to the Society at Rhubarb Hall; but they refuse to enforce their powers, making every frivolous excuse; and then say "their funds will not allow" them to carry out a prosecution! Pray what becomes of the funds which are weekly received?

Can A, only a druggist, but practising generally in the three branches, be put down? Can B, holding only a College diploma (London) since 1830, be prosecuted, although he holds a union practice? Can C, of late only holding a diploma from the Edinburgh College of Surgeons, be allowed to practise without the Apothecaries' license? Is it lawful, under the Act of 1815, for a person to practise in the *three branches* with only a St. Andrew's diploma? Lastly, can B, C, and D, recover any charges for *medical* cases purely?

Your attention, at your convenience, to the above will oblige, sir, yours, etc., Delta.

April 28, 1857.

STOP THIEF! STOP THIEF! STOP THIEF!—ADVENTURE OF A SURGICAL POCKET-CASE.

Letter from Henry Hanks, Esq.

Sir,—The facility with which the rapacious obtain entrance into the dwellings of medical men, either by a frivolous excuse, or by an apparently correct narrative of a feigned complaint, as pain, headache, etc. (the existence of which, although the physiognomy of the narrator render the truth of the assertion dubious, cannot safely be contradicted), subjects our habitations to be occasionally infested with those pseudo-patients, who pursue their dishonest avocations with a degree of success, the vigilance of the practitioner not being aroused until the treachery is detected contemporaneously with the loss of property. To thwart the stratagem of our obnoxious visitors, to forewarn others against the courage of an expert thief, is the object of this letter.

I. On Friday evening last, a female was shown into my waiting-room, and, when I was disengaged by the departure of a patient of a different character, she was removed into my consulting-room. Meeting me with a mien of extraordinary civility, she said that she required a few pills to relieve pain in her back; and that if I considered other medicine necessary, her mistress, Mrs. Kerby, with whom she lived fourteen years in Finsbury, and ten months at 24, Beaumont Square, would pay for it in a fortnight, as she caused the pain. I left her alone to prepare the pills. On my return, she was standing (a common attitude for patients of this description, who cannot be prevailed upon to sit), and instantly inquired what would be my charge for medicine if her mistress was desirious that she should have it. She was to be careful to go to the doctor's with the private house; and to convince her mistress that she made no mistake, she wished me to furnish her with a card. On leaving, she asked whether I should be at home within half an hour. Shortly after, I wanted my surgical pocket-case. Seeking for it, where I usually place it in my book case, I could not find it. My wife had overheard the noise, familiar to her ear, occasioned by the falling of the door together. I sent to the house in the square, where the thief stated she was in service. No person of the name mentioned resided there. I gave information at the police station, and supplied an account of the contents of the pocket-case. On Monday morning, a police messenger apprised me that my lost case was discovered. The thief attempted to pawn it near Finsbury, asserting that it belonged to a surgeon in that neighbourhood; my name and residence while a pupil, having eluded her observation. The case was retained without any loan upon it. I rejoice to add that it is again in my possession.

The thief was about twenty-eight years old, short, stout, with a fresh colour, smiling during conversation, and at the time her voice resembled that of a person with a cold. She wore a light brown bonnet, and a woollen shawl of the same colour, with red margins.

If she endeavours to plunder the house of any of the readers of this letter, and be arrested in her nefarious pursuit, I would, if an opportunity of identifying her be afforded me, promote the punishment which she deserves.

II. Early one morning, a man, aged about fifty, visited me to ascertain my fee for writing a certificate, that an infirm relative may obtain her pension. His manner was hurried: "he would call for it". This he neglected; but he did not omit to take a penknife with a pearl handle, embellished with silver.

III. A middle aged man, with round features, was an occasional visitor of mine. He always offered some article for sale: test-papers, gallipots, etc. If I refused to purchase, he begged, generally "in order to procure lodging for the night, until he went in the morning to a situation promised him by Mr. ——." With a slate in my hand, I said: "Pray, what is your name?" (Recording it.) "And where do you live?" "That I could not exactly tell you", was his reply. I have not been troubled by him since.

These are examples of the schemes contrived by thieves for effecting their purpose. The exposure I have given may enlighten others, unsuspecting like myself, and may guard their instruments from the adventure attached to the surgical pocket-case of Henry Hanks, M.R.C.S.Eng.

9, Beaumont Street, Mile End, April 25th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Creasy. On April 22nd, at Carshalton, Surrey, the wife of William Everard Creasy, Esq., Surgeon, of a son.

Dixon. On April 25th, at Lansdowne Terrace, Brighton, the wife of Joseph Dixon, Esq., Surgeon, of a daughter.

*Harwood. On April 25th, at Derby, the wife of Charles Harwood, M.D., of a daughter, stillborn.

Scott. On April 22nd, at Whittlesea, Cambridgeshire, the wife of Robert Charles Scott, Esq., Surgeon H.M.S. *Fury*, of a son.

Wordsworth. On April 27th, at 41, Finsbury Square, the wife of John Cawood Wordsworth, Esq., Assistant-Surgeon to the London Hospital, of a son.

MARRIAGES.

*Brown—Cooper. Brown, George Dransfield, Esq., Surgeon, of Henley-on-Thames, to Eliza, eldest daughter of the late James Cooper, Esq., of Caversham Hill, at Caversham, on April 23rd.

Macrorie—Boutflower. Macrorie, D., jun., Esq., youngest son of *David Macrorie, M.D., of Liverpool, to Marianne, third daughter of the Rev. H. C. Boutflower, incumbent of Bury, at Bury, Lancashire, on April 23rd.

*Terry—Thorp. Terry, George, Esq., Surgeon, of Mells, Somerset, third son of *Henry Terry, Esq., of Northampton, to Frances, eldest daughter of the late Rev. Thomas Thorp, rector of Burton Overy, Leicestershire, at the parish church, Ribbesford, Worcestershire, on April 23rd.

Toms—Read. Toms, Francis Yeates, Esq., Surgeon R.N., to Marianne, youngest daughter of R. Read, Esq., of St. George's Square, Belgravia, at St. George's, Hanover Square, on April 30th.

DEATHS.

Blair. On April 27th, Mary, widow of the late Thomas Blair, M.D., of Brighton, aged 72.

Dampier, Nathaniel John, Esq., Surgeon, after a long illness, on April 26th.

Waugh. On April 23rd, at 38, Hertford Street, May Fair, Mary, eldest daughter of the late Robert Waugh, Esq., formerly Staff-Surgeon Royal Army.

APPOINTMENTS.

Radcliffe, Charles Bland, M.D., elected Physician to the Westminster Hospital.

Reynolds, J. Russell, M.D., elected Assistant-Physician to the Westminster Hospital.

HEALTH OF LONDON:—WEEK ENDING APRIL 25th, 1857.

[From the Registrar-General's Report.]

In the week that ended on Saturday, 1065 deaths were registered in London, a number which differs only in a small degree from those of the two previous weeks. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1048. But as the deaths of last week occurred in an increased population, the average, to admit of comparison, should be raised in proportion to the increase, in which case it will become 1153. The result is, that the number now returned is less by 88 than the deaths that would have occurred if the average rate of mortality had prevailed.

The births registered last week were 1788; they were numerous enough to supply the vacancies caused by deaths, and to contribute, moreover, 723 lives to the increase of population.

Although the weather has lately been changeable, and on some days of an ungenial character, it does not appear as yet to have fatally aggravated those complaints which are most subject to its influence. The deaths caused by diseases of the respiratory organs were last week 205, having been in the two previous weeks 222 and 200. The corrected average for last

week is 200. From bronchitis and pneumonia together, 179 persons died last week; of these, 83 were children less than three years old. Hooping-cough continues to be the most fatal of the diseases of the zymotic class; it numbers 57. One death from small-pox occurred in the West districts, and two in the North; there were none in any other part of the metropolis. The deaths from typhus (and common fever) declined to 29, of which 14 occurred in the East districts. The West districts return none from fever. A case of bronchitis and typhoid fever which proved fatal in Somers Town is stated by the medical attendant to have arisen from the opening of a foul drain in the house. Scarlatina was fatal in 20 cases, 3 of which occurred in the sub-district of Kennington (first part), in houses that are situated not a hundred yards from each other. In one of these houses six persons have been attacked with scarlatina, and two of them have died. Four nonagenarians, all women, died in the week; the oldest, a widow, in the Hornsey Road, had attained the age of 96 years. Two cases of intemperance are recorded in the present return.

Last week the births of 904 boys and 884 girls, in all 1788 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1583.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·882 in. The mean readings on Monday and Tuesday were above 30 in. The highest reading was 30·14 in. on Monday. The mean temperature of the week was 46·6°, which is 0·6° below the average of the same week in forty-three years. On Sunday the mean temperature was 56·4°, which is 9·9° *above* the average of the same day; it continued above the average till Wednesday; and on the last three days it was from 7° to 9° *below* it. The *highest* reading was obtained on Sunday, and was 69°; the *lowest* was on Friday, viz., 28·2°, showing a range of temperature equal to 40·8° in the week. The mean dew-point temperature was 40·1°, and the difference between this and the mean temperature of the air was 6·5°. The wind in the beginning of the week was for the most part in the south-west; on the last three days it was generally in the north-east. Rain fell to the amount of 0·32 in., most of which fell on Wednesday. Hail fell on Friday. The last three days are described as very cold and bleak.

The Jenner Monument. The Piedmontese Committee, consisting of Professor Berutti, *President;* Commendatore Dr. Frompeo, *Treasurer;* Professor Buniva, *Secretary;* Professor Demaria; Dr. Parola; have transmitted, through the Sardinian Ambassador, to the London Committee, the sum of £93 : 1 : 8, being the amount of subscriptions collected by them. The statue of Dr. Jenner is now finished, and we understand that the Committee will shortly put themselves into communication with the Government as to the site for its erection.

TO CORRESPONDENTS.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Diseases of Special Occupations. Dr. J. C. Hall's Article on the Diseases of the Sheffield File Cutters will appear next week.

The Memorial of the Manchester Medico-Ethical Association shall be inserted next week.

Communications have been received from:—Dr. Cockle; Mr. T. Holmes; Dr. Garrod; Dr. J. Sloane; Dr. J. Russell; Mr. Henry Hanks; Mr. Richard Griffin; Dr. J. C. Hall; Dr. Charles Harwood; Dr. Roulston: Mr. L. Owen Fox; Dr. Snow; Dr. Edward Smith; Mr. Webber; Mr. Moullin; Vox et præterea nihil; Delta; Mr. Obre; Mr. Joseph Stone; Mr. J. Wilson; Mr. James Yearsley; Sir James L. Bardsley; Dr. Clay; Dr. Shapter; B. A. J.; The Lecturers of St. George's Hospital; Dr. Handfield Jones; Dr. Hillier; The Secretaries of the Western Medical and Surgical Society; Dr. John Webster; Mr. H. Terry; Dr. P. H. Williams; Mr. Irving; The Chancellor, Vice-Chancellor, and Fellows of the University of London; Mr. John Roberton; and Dr. Thomas Radford.

ADVERTISEMENTS.

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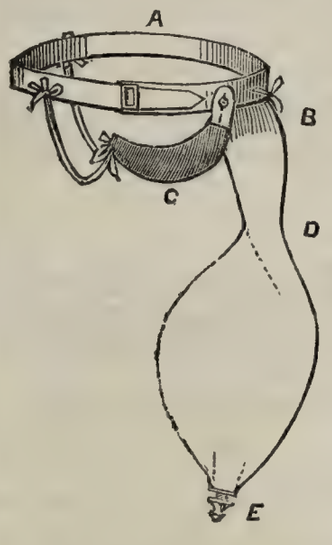
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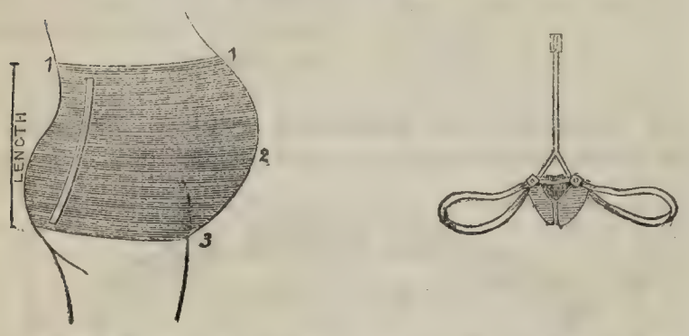
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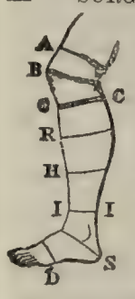
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XIX.] LONDON: SATURDAY, MAY 9, 1857. [NEW SERIES.

Diseases OF SPECIAL OCCUPATIONS.

No. II.

THE SHEFFIELD FILE-CUTTERS.

By JOHN CHARLES HALL, M.D., Fellow of the Royal College of Physicians, Edinburgh; Physician to the Sheffield Public Dispensary, etc.

IT is my intention to pursue the same course with the file-cutters as with the Sheffield grinders, and to consider only the disease which arises in consequence of the peculiar occupation of cutting files.

A file goes through several processes before it is completed. It is first forged, then ground, then cut, and, lastly, it is hardened.

My present remarks will be confined to the disease which is the result of cutting files, and which is known as the file-cutters' disease.

Files vary in size and in weight. Some files are only an inch long; others are at the least forty inches.

Excluding from our present consideration the "file-grinders" and "file-hardeners", I find from returns kindly supplied to me by Mr. John Warren, the intelligent secretary of the file trade, that at present about two thousand eight hundred men, women, boys, and girls, are engaged in Sheffield in the manufacture of files; and of these, two thousand are employed in cutting files. Boys frequently commence their trade at nine and ten years of age.

During the process of cutting, the file is placed upon a bed of lead, which rests upon an anvil. The quantity of lead consumed varies with the size of the file. In cutting "rasps", the workman will use about three quarters of a pound of lead in a week; in cutting the large three-square files, more than a pound will be used in the same period. The lead may be collected from the bed on which the files are cut in considerable quantities; it is then in the form of a very fine black powder. The files are cut with a small chisel; and the hammers which are employed will vary in weight from one ounce to eight or nine pounds.

A. NATURE AND SYMPTOMS OF THE FILE-CUTTERS' DISEASE.

The *File-Cutters' Disease*, resulting, as it does, from the absorption of a portion of the lead employed in their trade, demands our most attentive consideration. Colic and paralysis from the poison of lead exhibit a form of disease peculiar in a great degree to the industrious artisans of this and other countries, and, therefore, the whole subject is well worthy the most serious notice of the guardians of the public health.

I think I shall be correct in stating that this disease manifests itself among all who are engaged in the manufacture or use of the compounds of lead; and that it is observed among file-cutters, painters, lead-smelters, shot manufacturers, sheet-lead rollers, sugar-of-lead, red-lead, white-lead, and litharge workers; compositors, plumbers, potters, sealing-wax makers; enamellers of German cards, colour grinders, lead miners, etc. It may also be added, that the other causes of lead poisoning are the use of food or drink impregnated with this metal; and so high an authority as Dr. Letheby has pointed out that the lead pigments so frequently employed for colouring Cayenne pepper, cheese, lozenges, and snuff, are calculated to produce the disease in question. It is certain that lead may be rendered soluble by any of the secretions of the body; and that, consequently, it may be introduced into the system by the lungs, by the alimentary canal, the vagina, the skin, and even by the conjunctiva. Dr. Alderson is of opinion (*Lumleian Lectures*, delivered at the Royal College of Physicians, 1852) "that absorption by the lungs is more productive of deleterious consequences than any other mode of receiving the metal into the system."

The following cases, selected out of a very large number of file-cutters that have been under my care, exhibit many of the well known symptoms of poisoning by lead.

CASE I. W. Jenkinson, aged 26, March 3rd, 1857. He states that he has worked as a file-cutter since the age of 13. His father died at the age of 66, and his mother at the age of 53. He stands five feet two inches; his chest is well formed, and expands freely on taking a deep inspiration. His complexion is of a peculiar yellowish hue. He was tolerably well, with the exception of suffering from indigestion, till two years ago, when he was attacked with violent pain at the umbilicus, and vomiting. His bowels are always more or less constipated; he has cut large files, using a hammer of about five pounds in weight. The gums are spongy, and bleed if touched. The blue line is very well marked, both around the upper and lower teeth; there is also partial "wrist drop" on the left side.

CASE II. McQuinn, aged 15, February 24th, 1857. He states that "he began to cut files when ten years old, and that he has worked at the trade ever since", and now cuts large files; uses a good deal of lead. His complexion is sallow, and the bowels are costive; he has violent "twisting pains in his abdomen, which are rendered more easy if he presses with his hands as hard as he can over the seat of pain." His "hands go numb", so much so, that for some time past, he has hardly been able to hold the chisel. The fingers which rest on the lead first began to feel queer. The blue line is very marked, both on the upper and lower gums.

CASE III. George Langdon, file-cutter, aged 32, was admitted a patient at the Sheffield Public Dispensary under my care, on December 16th, 1854. He stated that he first felt seriously ill about two months previously. He was then suddenly seized with violent pains in his abdomen and cramps, to which succeeded complete paralysis of the right hand. He has the peculiar lead cachexia. The blue line is very strongly marked.

CASE IV. Joseph Kay, aged 53, file-cutter, was admitted at the Sheffield Public Dispensary on April 20th, 1854. He has frequently suffered from violent attacks of lead colic. The lead cachexia is exhibited by this man in a remarkable degree. Both wrists are very feeble, and the blue line visible both in the upper and lower gums.

CASE V. Samuel Wheatley, file-cutter, aged 17, was admitted at the Sheffield Public Dispensary on May 4th, 1854. He has had frequent attacks of severe pain in the abdomen; his fingers have often felt numb; and his wrists are weak. The blue line is marked round several of the teeth in the lower jaw. Six weeks ago he was attacked with epilepsy. He says: "I have had a fit every day; they often attack me in my sleep. I have had as many as three in one night." He walks badly, and articulates very indistinctly.

CASE VI. Thomas Maxfield, aged 36, a file-cutter, was admitted at the Sheffield Public Dispensary on July 27th, 1855, with the usual symptoms of this peculiar disease. He has been for many years dyspeptic, and troubled with constipation, which has been partially relieved by purgatives. He has got worse of late, and has had several violent attacks of colic. He complains of weakness of the left wrist, and numbness of the fingers of the same hand. His sight is somewhat impaired. He has often an aching pain at the lower part of the spine, which radiates into the thighs. The countenance is anxious, and indicative of suffering; and the skin is of a dirty yellowish hue. The blue line is very distinct around several of the teeth, both in the upper and lower jaw.

It would be occupying the space of this JOURNAL to little purpose were I to go on detailing case after case of poisoning by lead in the scores of file-cutters that have been under my care. On examining a great many of those men in the different work-

shops, I have found the blue line in a great many of them, even when they have complained as yet of no indisposition beyond constipated bowels and trifling dyspepsia.

The symptoms present in these men, no doubt, vary a good deal with peculiarity of constitution. One man is seen suffering from colic; another file-cutter complains of curious aches and pains in the legs, arms, along the spine, and in the body; others are the victims of epilepsy, convulsions, paralysis; and, again, a modification of the paralysis is now and then seen in the forms of deafness or of amaurosis. Without entering into the vexed question, that colic is the acute, and paralysis the chronic form of this disease, it may be observed that, in the more partial influences of the poison, there is a disinclination to act; rather would I say, a want of power to act, the result of the pain which is often present; and, as the influence becomes more completely established, the patient is obnoxious to the more severe forms of paralysis.

The earliest symptom of the influence of lead that I have noticed in the Sheffield file-cutters has been the blue line surrounding the edges of the gums, which have a tendency to bleed. To this succeeds habitual constipation, pain after food, loss of energy both of mind and of body, aching of the legs and arms. The cause of these symptoms is often not even guessed at; and, on opening the mouth, and saying to a man who comes to the Dispensary complaining of those symptoms, "You are a file-cutter," the physician is often met by a stare of astonishment that the information afforded by the blue line fringing the edges of the gums has supplied the evidence of the nature of the employment and the cause of the disease, of which the patient till that moment has not had the remotest idea.

These earlier symptoms generally yield to purgatives, warm baths, and a removal for a week or two from the workshop into the country. He then returns to his trade, and, after a time, you see him again with probably a train of symptoms indicative of the chronic effects of lead. The complexion is of a dirty yellow cast; the margins of the gums are stained of a deeper blue. He will generally tell us that he has had many attacks of violent colic; and in colic we have probably the results of the peculiar action of lead in the large intestine, the circular fibres of which have been first contracted and then paralysed by its action; the astringent properties of the lead prevent the muscular fibre from exercising its natural functions; and, consequently, I agree with Dr. Alderson in thinking that the colic is the result of an approach to the specific paralysis of lead, developed in the muscular coat of the intestine.

As the system becomes more and more impregnated with the poison, the symptoms are more aggravated; the patient has a shuffling gait; the arms become weak; there is then often complete *wrist-drop;* the constipation is more difficult to remove; violent colic attacks him; the pain becomes more and more severe; he rolls about the bed in excruciating agony; everything he swallows is immediately vomited; and he vainly seeks, by friction and pressure on the abdomen, to mitigate his sufferings. When, in the more chronic cases, the paralysis becomes complete, and there is an actual change in the structure of the muscles, the prognosis should always be unfavourable rather than favourable; for, when you see a man who has had repeated attacks of disease resulting from the poisonous effects of lead; when you see the lead cachexia exhibited in his countenance; when you mark the impaired muscular power; when you observe that the paralysed muscles are attenuated,—there are abundant evidences that the constitution is broken up and enfeebled to a degree from which recovery must be difficult.

It has been suggested that, when the lead enters the system through the lungs, the result will probably be paralysis of an acute kind; and that, when it gains admission into the body through the alimentary canal, it most frequently produces colic. The intimate communication existing between the nerves of respiration and those of the axillary plexus should not be lost sight of in investigating what may be the manner in which the poison has paralysed the muscles of the forearm.

B. PREVENTION OF THE FILE-CUTTERS' DISEASE.

One of the most simple and at the same time one of the most effectual means for preventing the attacks of poisoning from the employment of lead is the daily use of the bath, so as thoroughly to purify the skin, and to remove from the surface of the body the particles of lead which have been collected during the day. If the file-cutters object to the daily use of the bath, then, on leaving work, the neck, face, hands, arms, and arm-pits, should be well washed with soap and warm water, and the shirt and clothes be changed, keeping one set for the house, and another for the workshop.

It was pointed out by the late Dr. Pereira, that the addition of four ounces of sulphate of potassium to thirty gallons of water much increases the efficiency of the warm bath; the sulphur of the alkaline salt combining with the lead which is present on the skin, or just below its surface, forms a dark discoloration. This is more particularly observed in the axilla, the abdomen, the inside of the thighs, the hands, and on the back. Such facts as these speak loudly in favour of the more general establishment of baths in every large town, for the use of the artisans who may be employed in it. Such public baths in Sheffield, to which our file-cutters could resort, and where they could have baths in which the sulphate of potassium had been mixed, would, I am certain, confer most important benefits on hundreds of these men, prolonging, as it could not fail to do, their lives, by removing in some degree at least the cause of lingering disease, attended as it often is for years by much discomfort and suffering.

The habitual costiveness to which the file-cutters are liable I have found best relieved by attention to diet, by the frequent use of injections, by the warm bath, by doses of sulphate of magnesia in the infusion of roses, and by taking now and then a pill consisting of the compound extract of colocynth and croton oil. Of the use of the iodide of potassium I shall speak in the next section.

C. TREATMENT OF THE FILE-CUTTERS' DISEASE.

I know of scarcely any subject in the whole range of medical science of greater interest, or one more deserving the most serious attention of the profession, than the examination of the chronic effects of lead on the human frame, and of which so remarkable an example is furnished in the file-cutters of Sheffield. In the treatment of this disease, our first efforts are to be directed to the expulsion of the poisonous metal from the system, and happily (since the publication of the memoir of M. Melsens, in which he has shown most clearly, by numerous experiments, that the iodide of potassium is not only a safe, certain, and radical cure for the common forms of saturnine and mercurial poisoning, but an equally sure preventive of the injurious effects so frequently produced by emanations from lead and mercury) we have the means at our command; for I have no hesitation in stating that the iodide of potassium exerts far greater influence over the effects which arise from the poison of lead, and does more to the restoration of the body to a healthy condition than any other remedy, or combination of remedies, with which we are acquainted.

In the treatment of lead poisoning, we shall do well to keep in view the aphorism of M. Melsens, and to consider only two things, "the disease from the presence of the poison in the system, and the cure by the expulsion of this poison out of the system"; and the principle of treatment by the iodide of potassium is to render soluble any metallic compounds which have become fixed in the living body, and to facilitate their elimination by uniting them with a substance most readily cast out of the system. Melsens assumes that in all cases of *mercurial* and *saturnine* poisoning, that the metallic substance is in actual union with the affected part or parts, and that it is retained there in the form of some insoluble compound. He considers that the iodide of potassium, after its absorption into the blood, combines with the metallic poison, and forms with it a new and soluble salt, freeing the poison from its union with the injured part; thus, as it seems, separating it from the damaged fibre, and once more setting it afloat in the circulation. M. Melsens having shown that the compounds formed by the union of mercury and its salts with certain of the tissues can be destroyed, and that the metal, on being dissolved by the iodide of potassium, can be eliminated through the kidneys, as proved by actual chemical evidence of the presence of mercury in the urine, goes on to speculate that the elimination of lead in the same way is rendered highly probable by the solubility of the saturnine salts and compounds in the iodide of potassium; and, by the undoubted prophylactic and curative powers of the iodide of potassium in cases of impending or actual lead poisoning. It remained, however, for Dr. Parkes, in the first instance, and more recently for Dr. Sieveking, to demonstrate that in cases of saturnine paralysis the iodide of potassium does cause the elimination of lead. That it possesses this power, any of the readers of this Journal may satisfy themselves by giving it in the next cases of paralysis from lead that may be under treatment. To demonstrate its effects, the urine must be first evaporated to dryness; the residue should then be boiled with nitro-hydrochloric acid

and filtered. The filtered portion, on the addition either of sulphuretted hydrogen, or of sulphide of ammonium, will give a precipitate of the sulphuret of lead, if this metal be present.

In order to obtain the full advantages of the remedy, I think it most desirable first to give a brisk purgative and a large enema. When the iodide of potassium is administered, it is important that it should be taken fasting, in order to prevent decomposition by acids, and also that it should be given *largely diluted*. I have never given it in such large doses as M. Melsens suggests. Ten grains three times a day is the largest quantity I have yet employed. From the able translation of his memoir, by Dr. W. Budd, it will be seen that M. Melsens is of opinion that there is no evidence to show that sulphuric acid is an antidote to slow lead poisoning, but that sulphate of magnesia may be properly given in cases of poisoning by a soluble salt of lead, to act on the portion yet unabsorbed.

Although our efforts are to be directed to remove, as speedily as possible, the poison from the system, in treating the disease to which the file-cutters are so liable, certain complications will arise, requiring that means should at once be adopted for the relief of urgent sufferings; and it will often happen that in violent attacks of lead colic, opium, in some form or other, is indispensable, either alone or combined with calomel; frictions, with an opiate embrocation and injections of warm water also, are frequently useful in affording temporary relief. Obstinate constipation more generally yields to croton oil than to any other purgative. The warm bath is always of essential service.

In cases of paralysis and "wrist drop", some adequate support must be afforded to the hand and arm, and electricity or galvanism may be applied to the paralysed limbs. I find, however, in actual practice, that in the different phases of the *file-cutter's disease* all other means yield in importance to full doses of the iodide of potassium, administered in the way which I have already pointed out.

The subject of *lead service pipes*, in connection with the supply of water to the houses of all classes of the community, is one of no little interest and importance; and one on which, did my present limits permit, a few remarks might not be out of place. That the day is not far distant when *lead*, as a means for the general distribution of water, will be abandoned, I feel certain. For my own part, being of opinion that it is, as a general rule, highly dangerous to bring water into contact with this metal, I hope that lead pipes will fall into general disuse; for why employ so dangerous a metal in any portion of the transit of water to our houses, when there exist in gutta-percha, porcelain, slate, zinc, and iron, substitutes which combine the advantages of durability and cheapness with perfect freedom from danger? The best means of purifying water from the contamination of lead is by filtering it through sand and animal charcoal.

Surrey House, Sheffield, May 5th, 1857.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HOSPITAL FOR SICK CHILDREN.

CASE OF SPONTANEOUS GANGRENE IN A CHILD.

Under the care of W. Jenner, M.D.

[*From Notes by* Dr. Harris, *House-Surgeon.*]

We are indebted to the courtesy of Dr. Jenner for the following very interesting case, which occurred lately under his care at the Children's Hospital. The case appeared to have some analogy to those of cancrum oris and noma, occurring as they do sometimes without visible cause in debilitated children; but it differed from any such case that has fallen under our notice in the extreme rapidity with which the disease developed itself and advanced to its fatal termination, and was remarkable besides as occurring at a time when the child's health appeared improved rather than deteriorated. *Post mortem* examination, it will be seen, failed to throw any light upon the cause of this singular affection; nor, indeed, would organic disease of any viscus, if it had been found, much facilitate the explanation of so rapid and entire a failure of the circulation. The case must stand as one of those rare instances that occasionally occur, in which the most extensive effects of disease are produced by a cause which our present knowledge does not allow us to discover, far less obviate, but which are worth putting on record as materials for study and reflection, and which may be further useful in a more advanced condition of the sciences of physiology and practical medicine.

As a contrast rather than an accompaniment to this case, we shall cite one that occurred a short time since in the wards of St. George's Hospital, and which illustrates the rapidity with which inflammations arise, and their rapidly fatal course in patients affected with disease of the kidneys. This latter case also terminated in gangrene, and the patient sank very rapidly after the development of this condition, if indeed the gangrene which showed itself on the last day of her life were not rather a symptom than a cause of the failure of the vital power. In this, however, there were many points of contrast to the gangrene occurring in Dr. Jenner's little patient. There was a manifest local cause for the inflammation, inadequate indeed to have produced any such result in a patient in sound health, but sufficient to originate formidable symptoms in one whose constitution was impaired by latent disease of the depurating organs; and this inflammation, again, would have a natural tendency to terminate in gangrene. This affection sometimes (though rarely since the improved practice in diffuse inflammation originated by Mr. Lawrence) leads to mortification of the skin from strangulation of the vessels which supply it. In Mr. Pollock's patient, such an event had been obviated by early incision; and the failure of the circulation from excessive debility was the obvious direct cause of the death of the skin. We hope to be able, on an early occasion, to illustrate, from the records of this and other hospitals, the frequency with which these low inflammations follow on disease of the kidneys and other viscera.

Case. John Collard, aged 16 months, was admitted on January 8th. An attack of measles, ten days before admission, had reduced him to a very weak condition. An abscess had formed behind the right ear, and the conjunctiva of the left eye was intensely inflamed. It was afterwards discovered that his mother had suckled him up to the time when she left him in the hospital. He was placed on a tonic plan of treatment, and gradually recovered his strength, and was able to run about. The sinus formed by the abscess behind the ear led down to exposed bone; but, as his health improved, the discharge lessened, and ultimately the sinus closed. He had so much improved that, on March 28th, Dr. Jenner thought it advisable that he should leave the hospital, and accordingly discharged him. On the same afternoon, when the nurse undressed him to put him to bed (about 5 p.m.), she noticed that the toes on both his feet had become black, and that there were patches of a similar colour about the feet. She had changed his stockings at 2 p.m., and at that time his feet appeared quite natural. The child was seen about 5.30, and it was found that each foot, and about the lower third of each leg, were of a dark claret colour; this darker portion terminated suddenly in a well defined line, the skin above this appearing perfectly natural, not red, nor in any way altered. The temperature of both feet was considerably lower than of the other parts of his body. This change of colour rapidly extended itself up the leg, almost visibly, and by 8 p.m. reached nearly half way up the leg. At that time, a similarly coloured patch was found on the left elbow, and another on the hand. The child was evidently in no pain, but appeared restless and feeble. Stimulants were freely given.

March 29th. The gangrene had not extended further up the legs. There were several large bullæ about the feet, containing a dark sanious fluid; the patches on the arm and hand had spread a little, and a small patch had appeared on the side of the face.

The child rapidly beame more feeble, and died on March 29th.

On *post mortem* examination, it was found that the disease affected only the skin and subcutaneous tissue. The muscles appeared healthy, and there was no manifest disease in any internal organ, or in the blood-vessels.

ST. GEORGE'S HOSPITAL.

DIFFUSE INFLAMMATION AND GANGRENE FOLLOWING THE INTRODUCTION OF A SETON: DISEASE (INCIPIENT) OF THE KIDNEYS.

Under the care of G. D. Pollock, Esq.

Eliza H., aged 23, had been an out-patient for some time under Mr. Pollock's care, for a cyst connected with the thyroid body; and, as this continued to enlarge, a small seton was introduced

into it, for the purpose of producing inflammation of its walls, and the consequent obliteration of the cyst. As she was apparently in perfect health, no hesitation was felt in performing this trifling operation. Next day, however (Dec. 6th), she presented herself with erysipelatous inflammation of the skin of the part. She was admitted into the house, and the usual remedies were given. On the following day (Dec. 7th), the inflammation had much extended, spreading down the neck on to the chest. The tension in the neighbourhood of the part where the threads had been introduced rendered an incision necessary; and her state of weakness indicated the administration of large quantities of stimulants. On the third day of the attack, the inflammation had still further extended; the incision looked sloughy; and she was considerably reduced in strength. Next day the inflammation was still extending, but the amount of œdema was not such as to indicate the necessity of further incisions. The patient's general state was threatening, from her extreme weakness, but did not seem hopeless, when, on December 10th, superficial gangrene of the parietes of the chest appeared, and spread with great rapidity; and she died in the course of the day, five days only after the introduction of the seton.

Post mortem examination showed gangrene, with extensive dark coloured vesications over the front of the chest. There was infiltration of sero-purulent fluid into the areolar tissue of the neck, extending also into the subcutaneous areolar tissue over the whole of the front of the chest, and into the substance of the left mamma. On removing the superficial structures from the neck, a large cyst was exposed, connected with the upper part of the right lobe of the thyroid gland (which was hypertrophied). It was about the size of a hen's egg, and its walls were thick and of a fibrous character. On cutting into it, a large quantity of yellowish brown grumous fluid escaped, mixed with flakes of lymph and pus. The inner surface of the cyst was lined here and there with a layer of recently effused fibrine, and projecting from it in many parts were numerous bony spicula. The remainder of the thyroid gland was healthy. The thyroid veins were healthy. There was recent pleurisy of both sides, and the two layers of the pericardium were adherent from recently effused lymph. Both kidneys were embedded in fat, and were much enlarged, the two weighing 16 oz. Their surfaces were smooth and mottled; the capsules thin, and easily removed. The tubuli were full of a granular and apparently oleaginous substance. The urine in the bladder was albuminous.

WESTMINSTER HOSPITAL.

TWO CASES OF RAPID DILATATION OF THE URETHRA IN STRICTURE.

Under the care of Barnard Holt, Esq.

[*From notes by* G. Nayler, Esq., *House-Surgeon.*]

The following two cases are cited as instances of the success of a treatment still *sub judice*—that of the rapid dilatation of strictures of the urethra by means of catheters successively increasing in size, passed on a staff previously introduced into the bladder. The principal advocates of this treatment in London at the present time are, we believe, Mr. Holt and Mr. T. Wakley, whose instruments, differing in other respects, have this principle in common. We shall give a more full description of Mr. Holt's apparatus in an early number.

Case I. John Jewell, aged 38, a strong healthy man, was admitted April 17th, having had stricture for upwards of nine years. Three years ago he was under treatment at St. Bartholomew's Hospital, and twenty-eight months ago at the Marylebone Infirmary. On admission, a No. 2 silver catheter was with difficulty introduced. The day after, Mr. Holt succeeded in passing his dilator, and then immediately introduced on this instrument catheters from No. 2 to No. 10. The catheters which belong to Mr. Holt's apparatus are as large as the ordinary silver catheters. The introduction of them was effected with only slight pain to the patient; who was ordered, after the passage of the last, twenty drops of tincture of opium in a little water.

April 20th. The patient has had no symptom, and Mr. Holt this day passed No. 9 silver catheter, without much difficulty. His urine flows in a better stream.

April 22nd. A No. 10 silver catheter was passed easily.

April 25th and 28th. A No. 10 catheter was again passed on each of these days.

May 1st and 4th. A No. 12 catheter was introduced on the dilator.

May 5th. The patient was discharged by Mr. Holt cured.

Case II. J. Hamblin, aged 38, has had stricture from his own account for the last sixteen years. He underwent no treatment until three years ago, when he was under Mr. Holt's care for abscess in the perinæum, as well as stricture. The abscess was followed by a fistula, which has never completely closed, and some portion of urine has always flowed from it. He applied to Mr. Holt on April 3rd, on account of his stricture. The stream of urine was very small, and only No. 1 silver catheter could be introduced. The day before his admission, April 24th, no instrument was able to be passed.

April 27th. The patient having been confined to his bed, and kept perfectly quiet, Mr. Holt introduced his dilator, and upon it No. 4, 6, and 8 catheters. The last caused some pain, and could only be partially introduced. Twenty drops of tincture of opium were ordered.

April 29th. Urine does not pass so freely through the fistula *in perinæo*; the dilator was introduced, and Nos. 6, 8, and 12 catheters. Then No. 10 ordinary silver catheter was passed and kept in the bladder for half an hour.

April 30th. There are no symptoms. The urine flows in a fair stream.

May 1st. A No. 10 silver catheter was passed with no difficulty. He feels pretty well.

May 4th. A No. 10 catheter was passed.

ST. MARY'S HOSPITAL.

I. CASE OF PROLAPSUS AND GELATINOUS POLYPUS OF THE UTERUS.

Under the care of I. B. Brown, Esq.

Mr. Brown operated on April 22nd on a case of prolapsus uteri of five years standing, in which both walls of the vagina were much relaxed, and which presented the additional and interesting complication of a gelatinous polypus attached to the os uteri. The latter is described as consisting of a bunch of gelatinous cysts attached by a pedicle to the inner part of the os. Portions of this tumour would occasionally soften and break down. The operation consisted in passing a strong ligature through the base of the tumour, which was then excised; and the operation for prolapsus was performed in the manner usual in Mr. Brown's practice. After thirteen days the result appeared completely successful, the ligatures having come away, the uterus being retained in its proper position, and the bowels having acted healthily.

II. CASE OF GLOSSITIS FROM EXCESSIVE SMOKING.

[*From Notes by* E. A. Hart, Esq., *House Surgeon.*]

John B., able-bodied sailor, H.M.S. *Bellerophon*, on leave of absence for three days, indulged in a heavy bout of smoking and drinking. He had not been drinking to excess, confining himself to beer chiefly; and his comrades and himself asserted that he had not at any time been drunk. He had been smoking without intermission. On the afternoon of the third day he felt suddenly an acute pain in his tongue, which became highly inflamed, and rapidly swelled. At the end of three hours it had assumed such formidable dimensions, that he was unable to close his mouth or to articulate. He applied to a surgeon in the neighbourhood, who freely cauterised the right side of the tongue with lunar caustic. Failing to obtain the expected relief from this measure, he applied the following morning at the Hospital, as an out patient. His tongue protruded slightly. He could not close his teeth nor articulate a syllable. The tongue was scarlet in colour and shining; it formed a round indurated mass, in which surface markings were obliterated. The constitutional symptoms were not strongly marked. The under surface of the tongue was freely incised and allowed to bleed to six ounces. He could now articulate imperfectly, and spoke of the pain which he suffered as being very acute, but much lessened by the abstraction of blood. He was provided with four of the following pills:

℞ Calomelanos gr. ij.; antimon. potassio-tartrat. gr. 1-6; opii gr. ¼. M.

A cooling gargle of muriate of ammonia and tincture of catechu was also given. This was followed, after he had again been seen, by six doses of a grain of calomel. Next morning the tongue had nearly regained its natural size, and he could articulate with facility. The gums were slightly touched by the calomel; this was discontinued, and he was supplied with a draught containing antimony, nitric ether, and acetate of ammonia. On the following morning all was well with him; and he called to return thanks before rejoining his ship.

Remarks. This case will doubtless be of interest to those engaged in "the great Tobacco Controversy." To those who argue against the use of this luxury from its abuse it will present a tolerably well marked instance (better marked, we believe, than most which have been alleged on that side) of the ill effects which sometimes occur from excessive smoking. The purely local character of the affection—for the patient, a fine healthy sailor, presented, notwithstanding his acute sufferings, no evidence of constitutional disturbance—left no doubt of its origin in the local irritant of which he had made so free use, and the success of the treatment directed to it confirmed this idea. The use of mercury was indicated by the great induration of the part, and the combination of opium and tartar emetic was useful in allaying vascular action and subduing the extreme pain. Without trenching upon the domain of those whose "mission" it may be to conduct this "controversy", we would only desire them to bear in mind the old adage, "*Non tollit abusus usum.*"

Original Communications.

CASE OF PROLONGED RETENTION OF THE PLACENTA AFTER ABORTION.

By John Roulston, M.D., Low Harrogate, Yorkshire.

Mrs. W., a robust woman, aged 41 years, having been long married, but without family, sent an urgent message for me to visit her on November 10th, 1856. I went immediately, and found her suffering from profuse uterine hæmorrhage, which had arisen in this wise. She was pregnant, though of this fact she had no suspicion; and on November 8th, she had been attacked by severe abdominal pains, which she attributed to colic or commencing diarrhœa, and for the relief of which she took tincture of rhubarb. After making frequent visits to the water-closet, and using considerable expulsive efforts, a fœtus (which, from the description, I should judge to have been of about the fourth month) fell suddenly upon the floor, snapping asunder the funis at the same time. A neighbour ran in on hearing her cries of alarm, and, finding there was no hæmorrhage nor yet pain, told her that medical aid was unnecessary, as the afterbirth would soon come if she continued to move about, which she accordingly did, but without effect.

Two days after this event, on my arrival, I found that hæmorrhage had been going on for some hours. She was in bed, the clothes were saturated with fluid blood, and the chamber utensil was half full of coagula. There was considerable faintness, and the flow was now abated in some degree. On examination *per vaginam*, I could barely reach the os uteri with the finger; and, in consequence of the contracted state of pelvis which existed, as well as the rigidity of the soft parts, I found it impossible to introduce the hand. The cervix uteri appeared flaccid, and the os merely admitted the tip of the finger. I could thus gain no decisive evidence of the contents of the womb; and my patient was unable to say whether the placenta or only coagula had been expelled previous to her retiring to bed. There was no perceptible uterine action; I therefore carefully applied the tampon, put on a well adjusted bandage and compress over the abdomen, and administered alternate doses of infusion of roses with gallic acid, and ergot of rye every three hours. By these means the hæmorrhage was arrested, but there was not any pain produced. I discontinued the ergot at the end of four days; and the lochia having ceased, I gradually allowed my patient to resume the erect position, and return to her avocations, paying her an occasional visit, until November 26th, when she expressed herself perfectly well, and I discontinued my attendance. The quantity of ergot given was two ounces.

December 22nd. Mrs. W. was again seized with flooding to an alarming extent; and I found her on the bed pale and faint, with fluttering pulse, and covered with clammy perspiration. On making a vaginal examination, and clearing out the coagula which filled that canal, I found the placenta just protruding through the os uteri, and by means of a little manipulation with a curved probe, I was enabled to remove it. It came away without force in two portions, condensed into a firm fleshy substance, and presenting no sign of putrefaction; nor had there ever been the least offensive odour during the progress of the case. The hæmorrhage immediately subsided, and there was no relapse, the recovery being very rapid.

The period of time which elapsed between the expulsion of the fœtus and the removal of the placenta was forty-four days.

Remarks. I am induced to report this case as an example of the state of inertia the uterus may maintain for a length of time when containing a foreign body, the slight constitutional disturbance, and the absence of putridity. The fact of her having gone to the water-closet several times after the birth of the fœtus, and being conscious of one or two substances passing *per vaginam*, together with the circumstances detailed, and the failure of all the means used to excite uterine action, rendered an expectant treatment the only resource.

LECTURE ON MORAL INSANITY.

By John Kitching, Esq., Medical Superintendent of the Retreat, near York.

[*Continued from page* 336.]

There is another mode in which original differences of mind are exhibited, to which I must devote a few sentences before passing to the consideration of the results from the foregoing principles to which it has been my great object to lead you. This is the singular and striking difference in the sensibility to impressions, or in the emotions with which different individuals are affected. The varieties of temperament are considered to afford some explanation of these phenomena. But there is something more than temperament concerned in them, because the same peculiarity attaches to all the temperaments. The violence, excitability, or mobility of the emotions, are, to a great extent, irrespective of temperament.

But we will leave temperament out of the question, and simply attend to the fact of the great difference we may observe in men with regard to their emotions. We observe that one man is excited to tears and intense sympathy by a tale of distress, whilst another is scarcely moved at all. An appeal to one man's feelings succeeds in stirring up an active exertion for the relief of want, which leaves the other in the enjoyment of cool and dispassionate indifference. A humorous story or incident moves one to violent laughter, whilst another, still capable of thoroughly enjoying it, does not stir a muscle of his face. An insult stings one to the quick which scarcely rouses another from his equanimity. I have read somewhere of a person who died in his chair from the chagrin of being called a liar. At the enunciation of the insult, he turned pale, simply uttered the words, "He called me a liar", and died. Dr. Aiken mentions a respectable foreigner, who, being once laughed at on some trifling account, was so much hurt and humiliated, that ever afterwards he was fully persuaded that all the ballad singers in the streets were engaged in turning him into ridicule; and when their songs were purchased and brought to him by his companions, in order to convince him of his mistake, he eluded the force of the evidence by saying, that what they sold was not what they sung. In other points, no man could talk or behave more rationally. In the same way, we may trace through all the modes in which feelings are called into action as much difference in their vividness and intensity, as we can perceive in the power of any other mental attributes. Men under the same circumstances of suffering or of pleasure, manifest their feelings in the most diverse degrees. The restraints of education impose a decorous self-control upon the expression of the emotion; but, independently of these, the natural differences in the vividness and excitability with which we are impressed, break out, and assert the inherent differences that exist in our mental constitution in this respect.

Children, however, afford the best field for studying these original differences of mental constitution, both because they are less changed and modified by the effects of education, and because they are less influenced by the operation of the intellect and the will, in the expression of their emotions. Let a father announce to a family of children that he has some unexpected pleasure prepared for them, and watch the effect of the communication upon each. Whilst one claps his hands and loudly exults in the exuberance of his joy, another, with quiet gravity, prepares himself for the enjoyment, as for an ordinary duty. Let the parent administer a reproof to them, how soon is one melted into tears of contrition, and of grief for the temporary withdrawal of parental favour, whilst another betrays little, if any, feeling; and we satisfy ourselves with the observation that one child is more susceptible than another—more sensitive, more tender, or impressible. Now, what is the reason of these differences? Clearly the reason does not reside in any conditions external to the child—or in any in-

fluences which have been brought to bear upon him—for his education is scarcely begun. His mind is yet almost in its natural state. The suggestions of prudence, of decorum, or of policy, do not arise in his untrained mind, and what he betrays is the spontaneous result of his unsophisticated nature. He is the creature of his organisation, and it is to the study of his organisation, therefore, that we must look for the solution to our inquiry for the reason of these differences.

We know very well, and I shall take it for granted that you have no doubt of it, that the brain is the organ in which the intellectual functions are carried on—that all the faculties of the intellect reside in the brain; and that whether the details of phrenology be true or not, it is clear that the various powers of the mind are connected with some portion or other of the great mass of nervous substance contained within the cavity of the skull, and called the brain; and that the relative excellence or deficiency of these various powers or faculties is in immediate relation with some condition of size or quality of certain portions of the brain. We cannot measure the exact relations which subsist between the possession of a particular mental power, and a particular cerebral development; but that some such relation does exist, we cannot entertain a doubt. We see that men's heads differ greatly both in size and shape, and we recognise these differences in our every day conversation. We speak of large heads, and small heads, of well shaped heads, and of irregularly shaped heads, and we notice also great departures from a uniform shape in the breadth and height of the forehead, in the outline of the upper part of the head, and in the relative bulk of its hinder part to the fore part; we observe some heads to be round, some to be long, some wide, and some narrow, besides a great multitude of minor differences. And, coincidently with these differences of size and shape in the head, we observe differences of mental capacity and power characterising their owners. There is no need to be learned in the details of anatomy, or of phrenology, to take cognisance of these relations and harmonies. They are open to the common observation of all intelligent persons. No good observer can mistake the fact, and the researches of philosophy confirm it, that our mental faculties, both as a whole and severally, are directly dependent, for their relative superiority or feebleness, upon some condition of size or quality in the material organ, the brain, or some of its parts. For the extent to which persons are prepared to go in reference to the details of the application of a doctrine like this, great diversity exists. Whilst some affirm that they have found the key to all the varieties of mental constitution, and the nice differences of intellectual capacity, in the relative development of particular parts of the cerebral mass, others think that we have only, hitherto, obtained certain broad features of correspondence between organisation and mental manifestation, in the aggregate. Whichever be right, all unite in attributing to the anterior portions of the brain a direct relation with the intelligent principle—with the manifestation of the intellectual faculties. The same kind of reasoning, however, which leads to this conclusion, leads us still further; the same observations which establish a connection between the manifestation of intellectual power, and the condition of the physical organ contained within the skull, point also to an intimate relation between some portion of the same organ, and the manifestation of the emotions, sentiments, instincts, and propensities. If we grant the relation in the one case, we cannot deny it in the other. Do not all these faculties belong equally to one mind? are they not all equally constituents, inseparably linked together and intertwined, of the one single conscious I? How can we suppose that one part of man's spiritual nature is wedded, by an indissoluble bond, to the conditions of his organisation, whilst another part of it exists in a totally different mode?

The brain, which is the physical medium through which man's intellectual functions are manifested, is equally the medium through which his instinctive and moral faculties operate. When disease invades this essential organ of the intellectual function, when effusion takes place within his skull, and compresses the delicate tissues of his cerebral structure, or when a blow on the head stuns and suspends his mental faculties, does any part of his spiritual composition escape the general ruin? Do not his moral and instinctive faculties participate in the wreck and extinction of his intellect? If apoplexy overtake and prostrate his intelligence, does not his whole mental manifestation lie procumbent in the same annihilation? We cannot separate the two great orders of psychic manifestations from the same bondage and intimate relation to the organic structure. In this respect they must stand or fall together. Either one order of spiritual faculties is dependent upon structural conditions, or both are independent of it. Analogy and reason both point alike to the inseparable, inevitable association of mind and matter, in every possible phase of its intellectual, moral, or emotional phenomena.

Sir Henry Holland, in speaking of the phrenologists, says that "they rightly regard it as probable, or even as proved, that there is a certain plurality of parts in the total structure of the brain corresponding to, and having connection with, the the different intellectual and moral faculties. The undoubted natural diversity of these faculties makes this probable, seeing that we must regard a certain organisation as ministering in the present life even to the higher powers of our nature."

Testimony like this is the concurrent language of all rational authors, who have written on the subject at all; and though I wish in the present lecture to deal with the subject in a strictly scientific manner, it seems to me that an unanswerable argument to the same effect is supplied to us by our religion. We find that when disease invades the general structure of the brain, all the faculties, mental, moral, and instinctive, succumb to the devastating plague.

With the inability to reason and to judge, the faculty of distinguishing right from wrong may be lessened or destroyed; the nicety of moral perception may be obscured, the control of the emotions and the instincts may be more or less lost, and the whole psychical life enervated.

Now, without going into the details of phrenology, it is pretty well agreed on all hands, that the functions of the intellect are performed chiefly by the anterior parts of the brain, those parts which are situated just behind the forehead—a broad and high forehead has been by universal consent associated with the possession of great intellectual powers; and a contracted and low forehead with the opposite condition of mind. Taking this conclusion as indisputable, and bearing in mind two other important facts, that the moral and instinctive faculties bear no necessary relation to the extent or vigour of the intellectual powers; and also that the summit and back part of the head sustain infinite modifications of form and development, relatively to the anterior parts, we are led to assign the upper and hinder parts of the head as the seat of the moral faculties and the passions, just as we assign the forehead as the seat of the intellect.

"The coronal region of the brain," says George Combe, "is the seat of the moral sentiments, and its size may be estimated by the extent of elevation and expansion of the head above the organs of causality in the forehead and of cautiousness in the middle of the parietal bones. When the whole region of the brain rising above these organs is shallow and narrow, the moral feelings will be weakly manifested; when high and expanded, they will be vigorously displayed." (Combe's *System of Phrenology*, vol. i, p. 112.)

I shall enter into no further discussion at present with a view of proving this position. It would lead us beyond the scope of my present argument. But it was necessary to mention it, because it is in such beautiful accordance with the result of our observations in the phenomena of psychology; and if it be so, it affords so striking a corroboration of the view I am about to lay before you. We do observe, that a man may possess an intellect of one grade, whilst his moral faculties and his instinctive propensities may be of a widely different order. He may have a calm and placid temper, or he may be irritable, fiery, and impetuous; he may be a benevolent man, or he may be a misanthrope; he may be a well-regulated and creditable citizen, or he may be a drunkard, a swindler, a liar, a thief, or a murderer; he may be any one of these, and in whichever phase of character he may display himself, he may be, independently of that, possessed of the wits of a Sheridan or a Burke, or he may be as destitute of talent as a Bavius or a Mævius. There is evidently no inseparable or commensurate relation between the one set of faculties and the other. The only connection between them is that they exist in the same mind, and are connected with the same organism, and so exert that mutual influence upon each other, and maintain that degree of sympathy with each other, which the various members or organs of the same individual system do in all animal constitutions. They are constituents of the same aggregate system, and therefore cannot be so independent of each other as if they were parts of different individuals.

Horace told us long ago, that if a painter represented a woman with a horse's neck and a fish's tail, the result would be an unnatural monster at which all the world would laugh; that in the physical world, no such anomaly or incongruity could have a real existence. In the moral world, however, the representa-

tion would be much less monstrous. Whilst a man's intellectual faculties may be calculated to give him a respectable place in the ranks as a rational being, by his moral faculties he may approach the level of the animals that have no reason. The picture may also be reversed; and these two extremes may meet through every gradation in the relative excellence of the duplicate powers.

Now we have seen that the intellectual faculties may undergo a change from health without very conspicuously implicating the moral powers in the disorder. I do not say that the intellect can be very largely destroyed by disease, and the moral powers of the mind left unimpaired; there is that amount of connection and sympathy between them which involves the one, to a greater or less extent, in any violent injury which may befall the other. But observation shows that the integrity of the intellect can be invaded by disease, whilst the moral powers remain possessed of a large share of soundness, and the residence of the latter faculties in a distinct division or region of the brain, would afford a satisfactory explanation of this phenomenon. Then let me ask, if this be so, can any reason be imagined why the moral powers themselves should not be liable to the invasion of disease, to an equal extent, without involving the intellectual powers? If we grant the localisation of the different orders of faculties in different regions of the brain, and allow that disease may have its principal seat in that part of the brain assigned to the intellectual faculties, what hinders us from the converse conclusion, that the chief seat of the disease may be in that region of the brain which performs the moral and instinctive functions? Nay, I think the inference is inevitable, that such may be the case, and I think further, that unprejudiced observation conclusively establishes the fact that such is the case. Here, then, we get to the rationale of moral insanity, to the very *fons et origo* of those moral, affective and instinctive perversions which show themselves in such a vast variety of forms, producing eccentricities of character of every conceivable and possible kind, evincing themselves in otherwise unaccountable modes, sometimes leading to unmistakable insanity, and sometimes to such manifestations of character as lay the foundation for legal investigation into the person's accountability, and at others merely occasioning the resemblance to an intractable, vicious, and ill-conditioned mind. Here, however, we have the explanation of all these difficulties. How simple it appears, when thus stated! but how complicated in its practical application. The infinite diversities in the moral character of different individuals, produced by the various degrees of force in the separate faculties relatively to each other, all acted upon by the singularly diversified agencies of outward circumstances, the improving or vitiating influences of education, and of subjective training, result in phenomena so complex, that the satisfactory application of the simplest doctrine is often extremely difficult. The difficulty is also further increased by the two conditions under which moral insanity is exhibited—either as it may be congenital, or as it may supervene in after life.

[*To be continued.*]

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture III (*continued*).

I have been careful to give you the absolute numbers obtained in some of my experiments upon the influence of diet upon the quantity and quality of the urine in cases of diabetes, because I consider the subject one of great importance, especially in reference to the treatment of the disease; and although, I believe, at the present day most practitioners recommend an animal diet to their patients, yet I am sure that many are inclined not to lay sufficient stress upon it. Dr. Prout gives the following as his reasons for not adhering to such a plan, chiefly founded, you will observe, upon an hypothesis as to the assimilation of saccharine principles which at present would scarcely be considered as well established. He remarks: "For some years past, a diet exclusively animal has been much insisted upon. I do not, however, approve of a diet exclusively animal; but consider a certain proportion of *farinaceous* matters proper. The recommendation of this admixture of farinaceous matters is founded upon a fact apparently well established; viz., that the assimilation of the saccharine principle is one of the last functions which becomes extinct in animals. The proportions of these two forms of aliment must be varied according to the circumstances of the patient, and particularly according to the degree in which he is able to assimilate albuminous, in preference to farinaceous matters—a point not difficult to be determined by a little attention."

Other physicians have supposed that the total abstraction of amylaceous matters may produce a shock on the patient's system.

In opposition to these views, I may remark, first, that patients *are able* to bear a strictly animal diet, without the production of any shock to the system, or injury to their health; secondly, that those who have had the greatest success in the treatment of these patients have most exclusively adhered to and strongly recommended such a plan; and lastly, that, as most diabetics, even when not partaking of amylaceous matters, still pass sugar in their urine, and as the amount of this substance, together with the diabetic symptoms in many cases, increases in the direct ratio with the quantity of such taken by the individuals, it follows that, in such patients, any amylaceous or saccharine matters in the food do *not* become assimilated, but act only as irritants, and should therefore be avoided as far as possible.

I have said that, in *many cases*, the sugar in the urine bears a strict relation to the amount of amylaceous matters in the food. This does not hold good in some, or at least in certain stages of the disease; and I am of opinion that the power of assimilating or converting such principles into fatty or other substances, which I have regarded as existing in the healthy liver, but injured or destroyed in diabetes, may be restored, and still the urine may remain saccharine under a rigid animal diet, from the persistence of the over sugar-forming function of the organ. I could bring forward examples illustrating this point, which is one of very considerable importance in the treatment of the disease, as by it we may be safely guided as to the propriety of allowing a return to the use of bread and vegetables.

Then comes the difficulty, How can a strict diet be devised? After a very short time, patients become disgusted with meat, eggs, etc., unless there is some admixture of bread or vegetable matter. Again, it is desirable to have substances more bulky, and containing less nutritive matter than meat, in order to satisfy the appetite; and this applies especially to a disease in which the cravings of hunger are often very great. Many suggestions have been made. M. Bouchardat proposed, some years since, the use of a species of bread called *pain de gluten*, or gluten bread, which is made by washing flour in order to deprive it of the chief portion of the starch, and then forming it into bread or cakes. As made in this country, as far as my experience goes, it is not very palatable, and often contains a very considerable proportion of fecula; and, lastly, it is very costly—a most important item in an article of daily consumption. Many, I find, would much rather simply limit considerably the quantity of amylaceous matters, than take this gluten bread. I have met with some practitioners who have entertained the idea that gluten has peculiar virtues in this disease, and, therefore, that the advantage would be in proportion to the amount taken; but of course this is erroneous, and the *pain de gluten* is of use only in proportion as it enables the patient to abstain from amylaceous matters. In Paris, gluten is prepared in several forms; much more attention is paid to its manufacture, and a very superior article is produced—one, in fact, by no means unpalatable.

Many other substitutes have been proposed; all, however, with the exception of the one of which I will now speak, have been received with little or no favour, and have either scarcely been employed at all, or have soon fallen into disuse. This substitute for bread—by far the best with which I am acquainted—is made from bran, and has been brought under the notice of the profession by Mr. Camplin, a medical gentleman of this metropolis, who has himself been a sufferer from diabetes for more than twelve years, but who, I am pleased to add, has been enabled to keep himself in good health, and able to undergo the fatigues of an arduous profession to the present time; and this has been due, in his opinion (in which I would fully coincide), to his being able to keep to a rigid diet, during the time that symptoms have required it, by the use of this

article of food. Mr. Camplin, in his paper published in the thirty-eighth volume of the *Medico-Chirurgical Transactions*, and entitled "On the Juvantia and Lædentia of Diabetes," which I would recommend strongly to your perusal, as containing many valuable hints and experiences, states that the first suggestion was due to Dr. Prout, but that, when made according to the directions there given, it could not be continued, chiefly on account of the irritation which it produced on the bowels. Mr. Camplin has been able to overcome this difficulty by reducing the bran to a very fine powder by means of a mill specially adapted for the purpose. The mode of making his cake or bread is as follows:—Bran, after being washed thoroughly, to free it from any adhering flour, is dried, and reduced to an impalpable powder; it is then made into cakes by means of butter, eggs, and milk, and baked in little pans. For the details of the process I must refer you to his paper. Recently Mr. Camplin has somewhat altered his formula, and, in place of forming cakes, causes the evolution of carbonic acid in the mass by means of carbonate of soda and hydrochloric acid, and thus a light form of bran bread is produced. Through the kindness of Mr. Camplin, I am now enabled to exhibit this bread, and also the bran reduced to its proper degree of fineness.

Dr. Prout was inclined to think that amylaceous or saccharine substances were not all equally injurious; that arrow-root, potatoes, and such like bodies, named by him *low* farinaceous substances, were converted into a species of sugar more difficult of assimilation than the farina of wheat. I very much question whether any proof exists of such differences, and should be disposed to think that, if the absolute amounts of starch or grape-sugar taken in the different amylaceous substance be the same, the effect on the urine would be so also. Direct experiment on this point is, however, still a desideratum.

Fatty and oleaginous substances are usually considered to be advantageous when introduced into a diabetic diet: from my own experience, I am inclined to think very favourably of them when they are easily assimilated by the stomach; and I generally employ cod-liver oil, in order to ensure the patient's taking a sufficiency of these principles. In many cases in which I have administered this substance for some months, and in doses of many ounces per diem, I have estimated its effect on the urine, but cannot say that any very marked diminution of the quantity of this fluid, or of the saccharine matter, occurred. The patients, however, seemed to derive advantage from it, as evidenced by the improvement in their general health; and, after a time, this would be certain to be shown in the condition of the renal secretion.

In the dietetics of diabetes, the liquid portion of the food must not be neglected. Fluids should be taken in as small amounts as the comfort of the patient will allow; but the reduction of the quantity should not take place suddenly, as serious symptoms have been known to arise from this cause. The ingestion of a large quantity of fluid is injurious in more than one way. In the first place, it distends the stomach, and thus produces great discomfort; and, secondly, it seems a well established fact that, the solid diet remaining the same, any increase of liquid taken into the stomach is followed by an augmentation of the saccharine matter excreted by the kidneys—a fact formerly difficult to account for, but now easily explainable on the assumption of the sugar being formed from portal blood; for, when a large amount of liquid is taken, it becomes absorbed by the veins of the portal system, and thus necessarily increases the glycogenic function of the liver by furnishing it with a greater amount of the appropriate pabulum.

Some physicians have been in the habit of advocating the use of alcoholic liquors, from an idea of their acting as respiratory agents. Their exhibition is of very questionable value, and I should be inclined to regard them as rather injurious than otherwise; they doubtless tend to stimulate the liver; and we have seen that, when injected into the portal veins, will themselves produce a saccharine state of the urine.

After a patient has, by means of a properly regulated diet, been brought to a comparatively comfortable state of health, and the quantity of urine reduced within very moderate limits, I have reason to believe that a still greater improvement may often be produced by the administration of small doses of opium; and this more especially when, previous to its administration, the patient has exhibited symptoms indicating an unusually irritable condition of the nervous system. I can bring forward many observations clearly showing this to have been the case; and the occurrences have been too frequent to allow of their being considered merely *post hoc* effects. In one instance under my notice, the numbers obtained by analysis were as follows:—

On diet only, during three days, the averages were—

Quantity of urine, 110 fluidounces.

Specific gravity of ditto, 1031·9.

Quantity of sugar, 1679 grains, or 3 oz. 367 grains.

For seven days, twelve minims of tincture of opium were given three times a day: the amounts were—

Quantity of urine, 105 fluidounces.

Specific gravity of ditto, 1027.

Quantity of sugar, 1237 grains, or 2 oz. 363 grains.

I have generally found *small* doses of opium quite sufficient, and that, beyond the amount necessary to allay nervous excitement, a further administration of the drug has produced no beneficial effect; and, even when patients have been brought fully under its influence, the quantity of sugar has not been further diminished. Sometimes I have given it in the form of tincture of opium, sometimes as the solid drug, and not unfrequently in the form of the hydrochlorate or acetate of morphia, but without observing any appreciable difference in the effects produced.

In accordance with the various hypotheses which have been held by different physicians as to the intimate nature of diabetes, a great variety of drugs have been proposed as remedies, and not a few have had advocates who have attributed to them curative powers of the highest order. I have felt it my duty, as opportunities have from time to time presented themselves, to give a fair trial to many of these; for, although my anticipations of their value might not have been great, still accurate observations have at least the advantage of determining the real utility, and of preventing the further administration, of unnecessary or even injurious medicines.

Among these various drugs I will first select *yeast*. Why this substance has been proposed, it is difficult to imagine, except that it possesses the power of converting sugar into carbonic acid and alcohol; and perhaps it might have been supposed to be able to effect this not very desirable change in the stomach. Cases are related, I believe, by Dr. Herapath, of the disappearance of sugar from the urine of diabetic patients when this ferment has been administered. In my trials, which, I am sure, have been carefully conducted, I fear I can show no such advantage. It was stated by Mr. McGregor, that, when yeast was given to a diabetic patient, uncomfortable distension of the stomach ensued. I have not observed this effect, although questions have been put for the purpose of ascertaining the point.

In one case—a diabetic man—the yeast was administered for nearly a month, commencing with half-ounce doses three times a day, and then increasing it, first to an ounce three times, and afterwards the same quantity was given six times a day, The urine was not at all improved; it was slightly less in quantity, but higher in specific gravity. No diminution in the amount of sugar occurred.

In another case, also a male, the yeast was given for about a month, in doses of from three to six ounces daily, and with the same result, the daily average of sugar varying from two to three thousand grains, both before and at the time of taking the yeast. In both the cases the diet remained the same throughout the whole course of the treatment. Yeast appears to me to be almost inert when administered in this disease; it certainly produced no injurious effects: a virtue which cannot be claimed by many of the proposed so-called remedies. I find that a case has been recently published in a French medical journal, showing, by analysis, the inefficiency of yeast in diminution of the sugar in the urine, or in the improvement in the health of diabetic patients.

It would occupy the time of many lectures to attempt giving numbers showing the results which I have obtained in the use of so many substances. I will therefore group the different drugs in classes, and show the general deduction.

1. Medicines prescribed with the idea that the stomach is in fault in this disease, and therefore that such might remedy the morbid state, in addition to the yeast already alluded to, have consisted of creasote; nitrate of silver; stomachic bitters; nitric, hydrochloric, nitro-hydrochloric, and phosphoric acids; bark, quinine, cinchonine; and the various preparations of iron. No decided effects could be observed. Sometimes, if the appetite was very ravenous, it might be checked by some of these drugs; sometimes, if bad, increased; if anæmia were present, it was relieved: but no decided diminution took place in the amount of urine, and no marked improvement in the character of that secretion.

2. Medicines, the action of which appears to be directed particularly to the nervous centres, have likewise been tried, on

the supposition that some morbid state of such system might exist. I have already spoken of the use of opium, and considered it of frequent advantage; but, besides this, belladonna, strychnia, phosphorus, and hydrosulphuret of ammonia, have been prescribed, but with no decided effect, either for good or harm, and certainly no amelioration of the urinary secretion. Dr. Rollo frequently used the hydrosulphuret of ammonia; but, as he combined its use with a very rigid adherence to an animal diet, it is difficult in his cases to appreciate its real efficacy.

3. The permanganate of potash has been highly extolled, on the supposition that in diabetes there is a deficient oxidation going on; and cases have been related of wonderful cures effected by this agent. When, however, I made trial of this salt, I found that in small doses, such as could be readily tolerated, it produced a most *marked* increase in the daily amount of sugar; and a patient, who had previously been throwing out between three and four ounces per diem, discharged as much as eight and ten ounces when taking the drug. Dr. Parkes has informed me that in the only case in which he administered the permanganate, the quantity of urine was so notably increased that the drug had to be discontinued. I believe that Dr. Basham has also found a similar effect to follow its employment. I have found, as a rule, that under the influence of many salts, when given in large doses, the urine has always been decidedly increased in quantity; and at the same time the amount of sugar has been augmented; this has been proved in the case of the acetate of potash, the sulphite of soda, phosphate of soda, and many others, to which we shall presently allude.

4. Some years since, at the time when diabetes was regarded as depending on a want of nitrogenised matters in the system, as was supposed to be shown by the deficiency of urea in the urine, the administration of *ammonia salts* was strongly advocated, and great benefit said to result from their employment. I cannot say that in my experience I have found any difference in the amount of sugar eliminated when patients have been placed, for a few days only, under their influence; but it by no means follows that they are therefore without service, because their continued use may call into activity certain functions, especially that of the skin, which are very imperfectly performed in most cases of this disease.

The idea, however, of highly azotised principles, as urea, ammonia, caffeine, and theine being serviceable, as affording nitrogen to the system, is completely fallacious, and need not at the present day be discussed; some of these drugs, however, may possibly exert other influences, especially on the nervous system. In two diabetic cases I administered a decoction of unroasted coffee in very considerable doses; the only effect observed was restlessness and inability to sleep, but it had no effects upon the excretion of the sugar by the kidneys.

[*To be continued.*]

Reviews and Notices.

Adulterations Detected; or Plain Instructions for the Discovery of Frauds in Food and Medicine. By Arthur Hill Hassall, M.D.London; Analyst of "the *Lancet* Sanitary Commission", etc. pp. 712. London: Longman and Co. 1857.

Some time ago, Dr. Hassall, whose labours in the exposure of adulterations have gained for him a well deserved reputation, published a large volume, the objects of which were, to demonstrate the existence of extensive adulteration in all the more important articles of daily consumption; to show that adulteration largely affected the pecuniary interests of the consumer and of the revenue; and that it was a question most seriously affecting the public health. In the present smaller work, his object is, "to furnish plain instructions, microscopical and chemical, embodying the results of extended practice and experience, for the discovery of adulterations in food and medicine". Of the competency of Dr. Hassall for the performance of such a task, it is needless to give proofs, when such ample and extensively known evidence already exists.

Preceding the details relating to the several articles are some excellent introductory remarks, bearing on the subject of adulteration in general. In the course of these the author discusses the pecuniary, the sanitary, and the moral bearings of adulteration; and gives his opinion as to the remedial measures demanded for the discovery and for the punishment of the fraud. He examines the report of the Parliamentary Committee, and expresses his dissent from several of the recommendations therein contained; while he acknowledges the report to be a highly important document, and the grateful thanks of the public to be due to the members of the Committee for their unremitting labour, during two sessions, in eliciting a mass of most valuable evidence.

The requirements of the case are summed up by the author in the following words:—

"Restrictive measures, beyond those already in existence, calculated either to impede the freedom of trade or to curtail the liberty of the trader or the subject, are not required for the suppression of adulteration. What is needed is an effective scientific organisation for the discovery of adulteration, and an adequate punishment of the offence."

The work is enriched with two hundred and twenty-five woodcuts, illustrative of the microscopical appearances of the various articles described; and is rendered easy of reference by a copious index. Further, it is of portable size, and is published at a moderate price. When to these recommendations is added the fact of its being a sound practical treatise, it is evident that it must soon command an extensive circulation.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Midwifery, in the University of New York. Fourth edition, carefully revised and enlarged. pp. 602. New York: S. S. and W. Wood. London: Sampson Low, Sons, and Co. 1856.

On the Diseases of Women: including those of Pregnancy and Childbed. By Fleetwood Churchill, M.D.T.C.D., M.R.I.A., Vice-President and Fellow of the King and Queen's College of Physicians in Ireland. Fourth edition. pp. 827. Dublin: Fannin and Co. London: Longman and Co. 1857.

Dr. Bedford's work consists of thirty-one lectures, each containing the histories of and remarks on several cases, thrown together apparently without the least attempt at classification, but published just as they were delivered before his class, as the cases were presented from day to day. The style of the author is very graphic, and he adopts the system of recording actual dialogues with his patients—a plan which, although it may seem peculiar, is often a most efficient mode of impressing a fact on the mind of the hearer or of the reader. The practical merits of the work are sufficiently shown, if by nothing else, by the fact of its having reached a fourth edition in less than two years: and not only does the book prove the author to be a sound physician and an excellent clinical teacher, but it gives evidence of an extensive acquaintance on his part with the literature of his subject on this side of the Atlantic.

Dr. Fleetwood Churchill's work consists of three Books; of which Book I treats of Diseases of the External and of the Internal Genital Organs; Book II of Diseases of Pregnancy; and Book III of Diseases of Childbed. This edition has been enlarged and improved, and is for the most part brought down to the present state of knowledge. We notice, however, that the author does not seem aware that Dr. Trask, of whose valuable statistical memoir on Rupture of the Uterus, published in the *American Journal of the Medical Sciences* in 1848, he speaks with high commendation, published a completion of the essay in the same periodical for July 1856: an abstract of which was given in the Association Medical Journal on October 4th. This we mention, not to disparage the general merit of Dr. Churchill's work but merely to point out an oversight, which no doubt will remedied before long, when another edition is called for.

Periscope.

PSYCHOLOGY.

THE LUNATIC COLONY OF GHEEL.

As many of our associates are interested in the question of lunatic asylums, and especially those devoted to the treatment of the pauper poor, we quote the following from an article on Lunatic Asylums, which appears in the current number of the *Quarterly Review*.

"The lunatic colony of Gheel, situated twelve miles south of Turnhout in Belgium, amidst a vast uncultivated plateau consisting of heath and sand, called the Campine, affords an extraordinary example of the pre-eminent advantages of the present mode of managing lunatics. Until the era of railroads this spot was so out of the ordinary track of the world, that but few persons even of those who were interested in the treatment of the insane were aware of its existence. Here we discover, like a fly in amber, a state of things which has lasted with little change for twelve hundred years. Here we see the last remnants of the priestly treatment of insanity, coupled with a system of non-restraint which certainly existed long before the term was ever heard of in England and France. Gheel owes its origin to a miracle. Saint Dympna, the daughter of an Irish king, suffered martyrdom in this place from the hand of her father in the sixth century. So great was her fame as the patron-saint of lunatics, that her shrine, erected in the church dedicated to her, speedily became the resort of pilgrims, who journeyed hither in the hope of being cured of their madness or of preventing its advent. Her elegantly sculptured tomb contains among other bassi-relievi one in which the devil is observed issuing from the head of a female lunatic, while prayers are being offered up by some priests and nuns, and close at hand another chained maniac seems anxiously awaiting his turn to be delivered from the demon. The idea, carefully inculcated by the priests, that lunacy meant nothing more than a possession by the devil, has long been banished from other lands. Here, however, it has flourished for many centuries, and the ceremony of crawling beneath the tomb has existed so long, that the hands and knees of devotees have worn away the pavement. The act is still occasionally performed amid a scene in which superstition and terror are combined in a manner calculated to cure any lunatic if deep mental impressions were alone required to purge away his malady. But what is far more interesting and astonishing to those accustomed to the bolts and bars, the locks, wards, and high walls of crowded European asylums, is the almost entire liberty accorded to the lunatics resident in the town of Gheel and its neighbouring hamlets, to the number of 800, or one-tenth of the whole district. No palatial building, such as we encounter in nearly every county in England, is to be seen. The little army of pauper and other patients gathered from the whole superficies of Belgium, instead of being stowed away in one gigantic establishment, in which all ideas of life are merged in the iron routine of an enormous workhouse, are distributed over five hundred different dwellings, three hundred of which are cottages, or small farm-houses, in which the more violent and poorer classes are dispersed, and the remaining two hundred are situated in the town of Gheel, and are appropriated to quieter lunatics, and those who are able to pay more liberally for their treatment. In these habitations the sufferers are placed under the care of the host and hostess, more than three patients never being domiciled under one roof, and generally not more than one. The lunatic shares in the usual life of the family; his occupations and employment are theirs, his little cares and enjoyments are the same as theirs. He goes forth to the fields to labour as in ordinary life; no stern walls perpetually imprison him and make him desire to overleap them, as Rasselas desired to escape even from the Happy Valley. If it is not thought fit for him to labour with plough or spade, he remains at home, and takes care of the children, prunes the trees in the garden, and attends to the potage on the fire; or if a female, busies herself in the ordinary domestic duties of the house. The lunatics, as may be supposed, are not left to the discretionary mercies of the host and hostess. A strict system of supervision prevails, somewhat analogous to that of the Lunacy Commissioners and Visiting Justices of England. The entire country is divided into four districts, each having a head guardian and a physician, to whom is entrusted the medical care of every inmate belonging to that section. There are in addition one consulting surgeon and one inspecting physician for the whole community. The general government of the colony is vested in the hands of eight persons, who dispense a code of laws especially devised for it. The Burgomaster of Gheel presides over this managing committee, whose duties are to distribute the patients among the different dwellings, to watch over their treatment, and to admit or discharge them. A Visiting Commissioner is annually appointed, who inspects the dwellings of the different hosts, and sees that the patients are properly cared for. The oversight of the lunatics falls almost wholly upon the hostess, the men rarely interfering, unless called upon to control a disorderly patient. The people of Gheel, from having been engaged for ages in the treatment of the insane, are said to have acquired extraordinary tact in their management, which, Dr. Webster remarks, may be considered to exhibit a most judicious mixture of 'mildness and force'. Although instruments of restraint, such as the strait waistcoat and the long leathern thong below the leg, to prevent patients from running away, are occasionally resorted to, the sectional physician must be instantly informed of their imposition, and their use cannot be continued without his sanction. So little are they required, that Dr. Webster found less restraint in this colony, unconfined by walls, than in the asylum at Mareville in France, containing a similar number of lunatics. Yet there were fewer escapes than from the strictly guarded restraint-abounding prison, only eleven persons having fled from Gheel in the course of last year, and nineteen from Mareville. Here also, it will be observed, there is no separation of the sexes. The lunatics live the life of the other inhabitants, and males and females associate in the same household. If we compare the effects of this simple treatment with that of the most expensive of our own asylums, we are compelled to admit that the balance is in favour of Gheel, where, notwithstanding the free admission of chronic cases, upwards of twenty-two per cent. of cures take place annually, while at Hanwell and Colney Hatch the cures never exceed fifteen per cent. No fair comparison can be instituted between the expense per head at Gheel and in our English establishments, inasmuch as living is much cheaper in Belgium; but we may state, that the average cost of board and lodging for each pauper in the colony is ten pounds per annum, or exactly the sum charged for lodging alone in our county asylums.*

"A plan, towards which we have been slowly advancing during the last half century, will speedily, we hope, be more closely followed. A trial is already to some extent being made of it in the neighbourhood of existing asylums, and might supplant, with immense advantage, the prevailing custom of building new wings and over-populating old wards. The present system of enormous buildings, which destroys the individuality of the inmates, and suppresses all their old habits and modes of life, is evidently disapproved by the Commissioners, as appears from the language they hold in their Tenth Annual Report:—

"'We have the best reason for believing that the patients derive a direct benefit, in many ways, from residing in cheerful, airy apartments detached from the main building, and associated with officials engaged in conducting industrial pursuits. A consciousness that he is useful, and thought worthy of confidence, is necessarily induced in the mind of every patient, by removal from the ordinary wards where certain restrictions are enforced, into a department where he enjoys a comparative degree of freedom; and this necessarily promotes self-respect and self-control, and proves highly salutary in forwarding the patient's restoration. As a means of treatment, we consider this species of separate residence of the utmost importance, constituting, in fact, a probationary system for patients who are convalescing; giving them greater liberty of action, extended exercise, with facilities for occupation; and thus generating self-confidence, and becoming not only excellent tests

* "These particulars respecting the pauper lunatic colony of Gheel are taken from an article by Dr. Webster in the 'Psychological Journal of Medicine'. This Review, which originated with and from the first has been under the able editorship of Dr. Forbes Winslow, has given an immense impulse to the study of psychology. It has enlarged the views of the physician of the insane, and by extending his horizon has given him a far better knowledge of the special department to which he formerly confined his studies. It is as impossible to understand the workings of a morbid mind without possessing a knowledge of its ordinary action, as it is to interpret the sounds of a diseased lung without being first acquainted with those of a healthy one. The great service which Dr. Forbes Winslow has rendered by unravelling the phenomena of mind in its normal as well as in its disturbed state, entitles him to a very high meed of praise, and has deservedly ranked him among the first psychologists of the present day."

of the sanity of the patient, but operating powerfully to promote a satisfactory cure. The want of such an intermediate place of residence is always much felt; and it often happens, that a patient just recovered from an attack of insanity, and sent into the world direct from a large asylum, is found so unprepared to meet the trials he has to undergo, by any previous use of his mental faculties, that he soon relapses, and is under the necessity of being again returned within its walls. Commodious rooms contiguous to the farm-buildings are now in the course of construction at the Somerset County Asylum; and there is every reason to believe that the patients will derive benefit by residing in these apartments, which at once possess a domestic character, and afford every facility to carry on agricultural pursuits.'

"It strikes us forcibly that the Commissioners have tended to create the evil they deprecate in not protesting against the erection of gigantic asylums; but it is cheering to find that the idea of supplemental buildings possessing a 'domestic character' has taken possession of their minds, and that they are now enforcing it on the minds of others with their well-known zeal and ability. The Devon Asylum, among others, has adopted the plan; and its accomplished physician, Dr. Bucknill, the editor of the *Asylum Journal*, bears important testimony to the great advantages to be derived from it.

"'I have recommended the erection of an inexpensive building, detached from, but within the grounds of the present asylum, in preference to an extension of the asylum itself. My reasons for this recommendation are, that such a building will afford an useful and important change for patients for whom a change from the wards is desirable. The system of placing patients in detached buildings, resembling in their construction and arrangements an ordinary English house, has been found to afford beneficial results in the so-called cottages which this institution at present possesses. *These cottages are much preferred to the wards by the patients themselves, and permission to reside in them is much coveted.* I am also convinced that such auxiliary buildings can be erected at much less expense than would be incurred by the enlargement and alteration of the asylum itself. I propose that in the new building the patients shall cook and wash for themselves.'

"'These cottages are much preferred to the wards by the patients themselves, and permission to reside in them in much coveted.' In these few lines we read the condemnation of huge structures like Colney Hatch, built externally on the model of a palace, and internally on that of a workhouse, in which the poor lunatic but rarely finds any object of human interest, where his free will is reduced to the level of that of the convict, and the very air of heaven necessary to his health is doled out at intervals, when, with infinite lockings and unlockings, the attendants order a batch of persons into the stagnant and tiresome airing courts. Infinitely better for the lunatics would be the freedom and homeliness of the smallest cottage to the formal monotony of cheerless wards; better far that they should, as Dr. Bucknill suggests, cook and wash for themselves, than that these offices should be performed wholesale in the steam laundry and the steam kitchen. A patient would undoubtedly feel a far greater interest in peeling his own potatoes for the pot, and in cooking his own bit of bacon, than in receiving them ready cooked. It is the duty of the physician to interest the patient in his daily work, and no more effectual method of accomplishing this could be suggested than in putting him to work for himself.

"Wherever large asylums are already erected, no better plan could perhaps be suggested than the building of satellite cottages, which would form a kind of supplementary Gheel to the central establishment; but we should like to see the experiment tried, in some new district, of reproducing in its integrity the Belgian system. The colony of Gheel was once a desert, like the country which surrounds it; it is now, through the happy application of pauper lunatic labour, one of the most productive districts of the Low Countries. Have we no unoccupied Dartmoors on which we could erect cottages, and train the cottagers to receive the insane as members of the family? The performance of domestic offices, the society of the goodwife and goodman, and the influence of the children, would do far more to restore the disordered brain of the lunatic—pauper or otherwise—than all the organisation of the asylum, with its daily routine, proceeding with the inexorable monotonous motion of a machine, and treating its inmates rather as senseless atoms than as sentient beings, capable, though mad, of taking an interest in things around them, and especially awake to the pleasure of being dealt with as individuals rather than as undistinguishable parts of a crowd. The children are of particular moment. Lunatics are singularly gentle to them, and are interested in all their actions. At Gheel it is customary to send the bairns into the fields to conduct the patients home from their labour in the evening: and we learn from Dr. Webster that a violent madman, who will not stir upon the command of his host, will suffer himself to be led, without a murmur, by an urchin scarcely higher than his knee. The presence of the young in the ward of an asylum seems to light it up like a sunbeam. The love of children does indeed lie at the very foundation of the human heart, and we cannot estimate too highly their beneficial influence upon the brain which is recovering from the horrors of insanity.

"One of the most important points in reference to insane paupers, as we have already intimated, is the bringing them as speedily as possible under treatment. The reluctance of the lunatic himself to be removed is usually extreme, and it is marvellous what ingenuity he will often employ to thwart the design. Southey relates that a madman who was being conveyed from Rye to Bedlam slept in the Borough. He suspected whither he was going, and, having contrived by rising early to elude his attendant, he went to Bedlam, and told the keepers that he was about to bring them a patient. 'But', said he, 'in order to lead him willingly, he has been persuaded that I am mad, and accordingly I shall come as the madman. He will be very outrageous when you seize him, but you must clap on a strait-waistcoat.' The device completely succeeded. The lunatic returned home, the sane man was shut up, and until he was exchanged at the end of four days, remained in his strait-waistcoat, having doubtless exhibited a violence which amply justified its use. The aversion of the sufferer himself to be taken away coincides with an equal aversion on the part of his relatives and friends to send him from home, nor do they take the step till the madness grows intolerable. Precious time is thus lost at the outset, and when the removal occurs it is mostly to the workhouse. Here the patient is usually kept during the remainder of the curable stage of his malady. The parochial authorities are generally guided by an immediate consideration for the pockets of the ratepayers, rather than by any care for the welfare of the lunatic; and, as they can maintain him in the 'house' at three shillings a-week—when they would have to pay nine if they transferred him to the county asylum—in the workhouse he remains until he becomes so dirty or troublesome in his habits that the guardians are willing to pay the difference to get rid of him. The first few months of the disease, within the narrow limits of which full 60 per cent. of the recoveries take place, are thus allowed to run to waste. Months fly by, and the victim subsides into the class of incurables. This produces a second evil. As the drafts of incurables are perpetually flowing into the asylums, they become 'blocked up' in the course of a few years, and are converted into houses for the detention of hopeless cases. To this condition three fourths of the asylums are already reduced, and the efforts of philanthropic medicine are brought to a dead lock by the short-sightedness of the parish authorities, who do not consider that for the sake of saving a few shillings in the board of Betty Smith in the first weeks of her craziness, they are converting her into a chronic burthen, seeing that she will probably live on to a good old age in the asylum, and cause them an ultimate expenditure of hundreds of pounds. To the swifter removal after the outbreak of the disorder we must look for a permanent remedy; but in the mean time something must be done to disembarrass the public asylums of the dead-weight of hopeless cases, if we seriously intend to take advantage of the curative appliances we already possess. The commissioners seem inclined to favour the erection of separate asylums for those who are beyond the reach of medical art. To us it seems that the more economical plan would be to apportion certain wards in the various workhouses for the reception of chronic cases, and to draft off the idiots alone to special establishments. By this means our water-logged asylums would speedily right themselves, and again become what they should never have ceased to be—hospitals for the *cure* of the insane. At present we encourage an elaborate system for the manufacture of live-long lunatics. It is well known that the cures of early cases of insanity throughout England amount to 45 per cent., and at Bethlehem and St. Luke's, where no others are received, the cures have amounted to 62 per cent. and 72 per cent. respectively; whereas, at Colney Hatch, Hanwell, and the Surrey County Asylum, the three great receptacles for the sweepings of the metropolitan workhouses, the average cures do not exceed 15 per cent. If we take the lowest averages of cures, there is still a difference of 30 per cent. of human creatures

who sink down into the cheerless night of chronic dementia and idiotcy, or who dream away the remainder of their lives in hopeless childishness. Another ground of complaint is that a degree of clerk's work is imposed upon the medical superintendents of large asylums which is quite inconsistent with a proper discharge of their chief duty—the recovery of their patients. Irrespective of the routine-labour of making daily and quarterly and yearly reports, which is very considerable, they have far more to do in their strictly professional capacity than they can possibly accomplish. The three great asylums near the metropolis contain upwards of 3,000 patients, or the population of a good-sized country town; and their moral and physical training is confided to exactly six medical men, or as many as will be found in a hospital of a hundred beds! It is needless to observe how little attention can be paid to each individual, and that the more promising patients must be inevitably swamped in the sea of hopeless lunatics. As long as out asylums remain mere houses of detention, the want of medical superintendence is not so apparent; but immediately these establishments are restored to their proper functions, we predict that the evil will become too glaring to last."

British Medical Journal.

SATURDAY, MAY 9TH, 1857.

OUR APPROACHING ANNUAL MEETINGS.

In a few days will commence that series of gatherings which form such interesting features in the history of the British Medical Association—the annual meetings of the Branches, culminating in the general assembly of the Association, which will take place this year at Nottingham, on July 28th, 29th, and 30th. In Northampton, Sheffield, Leicester, Birmingham, Preston, Peterborough, Plymouth, and other towns, the busy practitioners of the surrounding districts will have opportunities of meeting each other in friendly intercourse, of intercommunicating the results of their professional labours, and of enjoying—not by any means an unimportant attraction to a hard worked man—each other's company at the social banquets which commonly terminate the proceedings of the day. The benefits, social, scientific, and political, of these assemblies, have been so often pointed out, and so often and warmly expressed by those who have assisted at them, that to give a long description of them would only be to undertake the idle task of describing to the majority of our members that which they already know and feel. In these meetings, old friendships are strengthened; new ones are formed; and, if perchance there be any asperities roughening the contact of one man with another, the opportunity is given of proving that these are but epidermic growths, easily and rapidly smoothed off by mutual explanation and concession. Is a medical man in difficulty as to the course which he should follow in regard to any event occurring in his practice, so that he may at once uphold the honour of his profession, and act in accordance with the highest requirements of the moral code? He will here meet friends, men of experience and of fixed character, to whom he may declare his difficulty, and from whom he may receive advice which he may safely and honourably follow. Does any one wish to be guided by the advice of his brethren in the solution of any perplexing problem which may have occurred in the practice of his profession? in the diagnosis or treatment of an obscure case? Here he probably meets with those whose previous experience may have led them already to arrive at a definite conclusion on a similar matter; or at least he has the opportunity of receiving suggestions which would not have occurred to him reflecting in his own study, but which will guide him, if not to a fully satisfactory result, at least to a far better one than he had hoped.

Such are a few examples—illustrative rather than exhaustive—of the benefit of our Branch meetings to the busy general practitioner. And surely those men who enjoy these opportunities — especially those who once were destitute of them—must bless the day when our Association was founded, and honour the happy thought which first conceived the establishment of its sections, in which those members who cannot afford the time to leave their homes for the great meeting of the mother body, might yet enjoy opportunities inferior in little more than in name to those which it presents.

If, then, the social and professional advantages of our meetings, in regard to the individual members, were all that is to be expected from them, their occurrence would be not a small gain to the members of the medical profession. But these meetings also give the profession opportunities of expressing its opinion on matters affecting its honour and welfare as a collective body. Under this head, there are constantly questions to be brought forward for consideration; and this year there are several which we hope to see occupying a due share of attention, and, what is even more important, in regard to which we trust to find cordial unanimity expressed as to the course to be followed.

The first of these questions is the long agitated subject of Medical Reform; a subject of which many are no doubt heartily tired, but which can only be settled by a general application of all shoulders to the wheel, and a hearty and unanimous push in one direction. Our associates already know—or at least will be able to ascertain by reference to the back numbers of this Journal—the state in which medical reform was left on the recent dissolution of Parliament. We have lately been informed, on good authority, that it is intended by Mr. Headlam to apply for leave to bring in the Bill on an early day; so that probably many of the Branches will have an opportunity of discussing its provisions. At present we will say nothing more on the subject than this:—Remember always that there are several and conflicting interests to be considered; and, while you support in general the principles for which this Association has always contended, be prepared to concede or to modify certain of them, to meet the advances which have been or may be made towards your views by those whose notions are different from yours, and who in the abstract have as much right to their opinions as you have to yours.

Poor-Law Medical Reform is another matter on which the Branches must speak out. And they must speak out vigorously, and act too, if they mean to do any good. It is not enough to merely pass a formal resolution that "the meeting approves of the attempt made by Mr. Griffin to improve the condition of the union medical officers". More than this must be done: a strong expression of opinion must be uttered; petitions to Parliament must be signed and forwarded; the purse must be opened if necessary; and there must be a firm determination to endeavour by all legitimate means to obtain an improved status for the most overworked and ill remunerated body of men in the profession. Some may fear to speak or act because the eyes of their masters—the Guardians—are on them and their doings. But though it is to be regretted that

agitation may affect an individual injuriously for the time, yet it must be also remembered that the present injustice is a general one. We trust that professional patriotism will show itself vigorous in our Branch meetings. The medical students have been speaking and acting with all their heart and might: the members of this Association must not do less.

There are other matters, too, which may well receive attention, and in regard to which the Branches of this Association should not lose the opportunity of making their opinions known to the legislature. Prominent among these are all questions relating to the preservation of life and health. The means of removing the facility for the perpetration of his deed which is now given to the secret murderer by the indiscriminate sale of poisons; the best method of extending the benefits of vaccination; and the most effective plans of obviating all influences which act injuriously on the public health—are subjects which may well be considered by the members present at the Branch meetings.

It is true, that the topics we have named as fitted to be brought under the notice of the Branches are of a character which, in the eyes of many, render them not the most agreeable subjects for discussion at meetings where friendly intercourse and good fellowship are the order of the day. It may be said, that the meetings would be more pleasantly and more profitably employed in the reading of papers bearing on medical science, and in the discussion and elucidation of obscure points of practice. None can feel the truth of this more than ourselves; and we are not without hopes of seeing the day when the meetings, both of the Association and of its Branches, will be mainly, if not altogether, devoted to the improvement of the science and practice of medicine. But in the mean time there is much to be done. The British Medical Association is the only free and unfettered combination of the profession which we have; and from it much is expected, because it has voluntarily undertaken the task of doing its best to indicate and remove the various evils under which the profession has long laboured. And from the performance of this task it must not shrink. It would be a heavy blow to the progress of all reform in our profession, if the Association should fail in this duty. It were better that it had undertaken nothing, than that, having proceeded, however little, it should stop short, or even advance with hesitating step.

One word more. We have spoken of the Association, and of its Branches, as of something having power. But the power which this Association possesses—great as it would prove to be if put into action at once—is not nearly so great as it might be, if more active measures were taken to recruit our numerical strength. On this point we cannot now enlarge; but if each member of the two thousand and upwards on our roll would persuade a friend to join us, in a little time our numbers would be at least doubled. But it is especially the Branches that are the main source of increase to our numbers. The history of all the Branches teaches this. In their outset, they bring large accessions; but still they do not gain over to us all the practitioners in their districts. We trust, therefore, that their officers—energetic men as they generally are—will take the opportunity afforded by the approaching meetings, of adding many new members to our ranks, so that the Association may be more and more truly said to speak the free voice of the medical profession in the United Kingdom.

THE WEEK.

It would appear, from the following official account in the public papers, that the strong remonstrances of the medical press have had the effect of procuring one Victoria Cross for the profession. We are, however, at a loss to know why Assistant-Surgeon Thomas Egerton Hale should be the only medical officer of the Crimea selected for this much coveted honour, when it is well known that so many of our profession performed daring deeds in the presence of the enemy.

7th Regiment.—Assistant-Surgeon Thomas Egerton Hale, M.D.; date of act of bravery, 8th September, 1855.—First, for remaining with an officer who was dangerously wounded (Captain H. M. Jones, 7th Regiment) in the fifth parallel, on the 8th of September, 1855, when all the men in the immediate neighbourhood retreated, excepting Lieutenant W. Hope and Dr. Hale; and for endeavouring to rally the men in conjunction with Lieutenant W. Hope, 7th Royal Fusiliers. Secondly, for having, on the 8th of September, 1855, after the regiments had retired into the trenches, cleared the most advanced sap of the wounded, and carried into the sap, under a heavy fire, several wounded men from the open ground, being assisted by Sergeant Charles Fisher, 7th Royal Fusiliers.

The alleged attempt by the Chinese to poison with arsenic the British residents at Hongkong has received a decisive proof at the hands of Baron Liebig. Two loaves having been forwarded, hermetically enclosed in a tin case, for examination by that distinguished chemist, it has been found by him that arsenic in large quantities was mixed with the bread. By one analysis, from 38 to 39 grains of arsenic, by another 42 grains, were found in each pound of bread. The proportion was amply sufficient to cause death, supposing the whole of the poison introduced into the stomach to become at once active: but the recipients of it were probably preserved by the circumstance that the arsenic was only gradually brought into contact with the stomach, and that the irritation thereby produced caused the ejection of the remainder by vomiting.

The annual festival of the Royal Medical Benevolent College has been, in consequence of the death of Her Royal Highness the Duchess of Gloucester, postponed from Wednesday last May 6th, to Thursday May 28th, when it will take place as indicated in our advertising columns. The Council of the College have recently resolved to make an allowance of £10 a year to each of the pensioners, including those who are to be elected by the governors on the 21st instant.

The Spirit-Rappers have come out in full literary organisation. The have now a periodical devoted to the exposition of their creed, under the title of the *Yorkshire Spiritual Telegraph and British Harmonial Advocate*. What a pity it was that journalism was not more advanced in the days of King James and Doctor Dee! There might have been preserved some valuable records which are irrevocably lost. But enlightened seers of the nineteenth century need not fear that their names will be buried in oblivion, if their periodical meets with due encouragement from the numerous highly advanced intellects which grace this land and age.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Ordinary Meeting.]	37, Soho Square, London.	Tues., May 12, 4 P.M.
South Midland. [Annual Meeting.]	George Hotel, Northampton.	Thurs., May 21, 2 P.M.
East Anglian. [Annual Meeting.]	Norfolk Hotel, Norwich.	Friday, June 12, 1 P.M.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

Editor's Letter Box.

DISEASES OF FILE-CUTTERS.

Letter from T. H. Jackson, M.D.

Sir,—In November last, I had the honour of corresponding with Dr. J. Law, of Sheffield, on the subject of plumbism. A portion of his excellent remarks I think worthy of a place in your Journal. I am, etc.,

Thomas Hayes Jackson.

Darlington, April 13th, 1857.

Dr. Law states:—

"My experience in this matter is derived chiefly from the treatment of file-cutters, who use lead in their trade—a piece of this metal being interposed between the anvil and the file. At every stroke of the hammer, a little dust is seen to arise; which, on chemical examination, is found to consist of metallic lead and lead in the state of oxide.

"The file-cutters have occasionally, but only very seldom, *colica plumbariorum;* but they suffer from very partial paralysis, chiefly of the fingers, wrist, and sometimes of one arm. The condition of plumbism in these artisans is almost always indicated by the dirty-blue line on the free edge of the gums, which show a tendency to leave the teeth. They are generally cured, and always much benefited by ceasing for a time to work, by blisters, and tonics, particularly the sulphuric acid.

"The men employed at our lead-works are obnoxious to fearful paroxysms of colic, which is relieved by large doses of opium; but is always aggravated and apt to be associated with mania, if, unhappily, venesection be employed. Even the constipation, depending, as it does, on spasms, is best treated with opium.

"The best prophylactic treatment consists, I think, in the strictest observance of cleanliness, always eating with clean hands, and in drinking, ordinarily, water, to each gallon of which two or three drops of sulphuric acid have been added."

PROXY VOTES IN THE ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from Edward Barber, Esq.

Sir,—The approach of the annual election of pensioners and scholars to the Royal Medical Benevolent College offers an opportunity to direct the attention of the subscribers to the practice of transferring votes on the day of election by means of proxies.

For instance, A having promises of votes more than sufficient to ensure his own success, a negociation is commenced with the friends of C, and as many proxy votes as possible are obtained, and placed in the hands of a friend who attends the election. As soon as it is quite certain that A is safe, the superfluous votes are handed over to C, whose election is perhaps thus gained, to the exclusion of B, who, but for this kind of traffic, might have been successful. I think it will be generally admitted that such a practice is subversive of a fair and open election by the subscribers at large; and places in the hands of a few of those who are able to attend on the day of election a power which is likely to be prejudicial to the interests of those candidates especially whose friends are few and uninfluential—those, in fact, who have the greatest claim upon the sympathy and care of the society. I think the remedy is not difficult.

Proxy votes only can be dealt with in this way. Why not require 'that every balloting-paper shall be returned by post directly to the secretary, or be delivered *personally* by the voter on or before the day of election?' This would allow the attendance of all who might wish to be present at the election, and would prevent the undue influencing of the elections to which I refer. For ladies, proxies are quite unnecessary, where the voting is by balloting-papers.

We all know how soon abuses are established in all charitable institutions, and how they are strengthened by age. If the practice is not checked, proxy votes will be more and more sought after, all fair competition will soon be at an end, and the chances of success of the comparatively friendless will be diminished from year to year, and finally extinguished.

I am, etc. Edward Barber.

Stamford, May 1st, 1857.

THE PRETUBERCULAR STAGE OF PHTHISIS.

Letter from Edward Smith, M.D., LL.B.

Sir,—I fear that your readers will think that there is "something wrong" both "here" and "there" when I state that the very case which Dr. Markham adduced at the Pathological Society, as opposed to the theory of a pretubercular stage of phthisis, was diagnosed by Dr. Markham himself to be one of phthisis. This was not stated by him at the Pathological Society, as I think, in fairness, it should have been; neither does it appear in the abstracts furnished (by himself, I presume) to the journals; but it is distinctly stated in the detailed statement of the case in your number of April 4th. He there writes that, "taking into consideration the general condition of the child, the peculiar situation of the *bruit*, the absence of all symptoms of cardiac disease, and the possible presence of a left clavicular dull percussion-sound, *I formed the diagnosis*

that the child was suffering from tubercular disease of the lungs; though, at the same time, on account of the absence of other signs and symptoms of pulmonary disease, I placed a query by the side of the diagnosis entered on the paper." Thus, although Dr. Markham diagnosed the case as one of tubercular disease of the lung thirteen days before death, it proves that "the absence of physical signs is no proof of the absence of tubercle in the lungs", because he found "nothing whatever abnormal in the respiratory sounds" seventeen hours before death! As to what and where is the "something wrong", I may venture to refer to Dr. Markham and your readers; but I venture also to affirm that it does not prove that there is "*something wrong there*—in Dr. Smith's logic."

I do not gather from Dr. Markham's letter in your Journal of April 25th anything in support of his objection to a pretubercular stage, except the strange argument above mentioned; but I do find that which proves that Dr. Markham himself, as so enlightened and candid a physician must do, not only believes in, but affirms, the existence of a pretubercular stage of phthisis! He writes: "Let me not be misunderstood. *That there is a morbid condition of the body existing anterior to the deposition of tubercle is certain; and equally certain that the tubercle is not the disease, but only the external and tangible manifestation of that condition;* and that treatment is directed not to the local tubercle, but to the arresting of that *anterior morbid condition which precedes the deposit of tubercle:* all this is clear enough." Surely Dr. Markham is a friend in disguise, and is "poking his fun" at us, under the semblance of a scientific conflict. If "there is a morbid condition of the body existing anterior to the deposit of tubercle", and "an anterior morbid condition which precedes the deposit of tubercle", surely it is *pretubercular!* and, if "treatment is directed" "to the arresting of that anterior morbid condition", surely, as the treatment is for phthisis, this anterior morbid condition must be a *stage* of phthisis; and hence Dr. Markham himself proves and affirms as certain a *pretubercular stage* of phthisis. This is from one who ridicules the existence of "so called" pretubercular stages of phthisis, who designates them as "hypothetical and unwarrantable", and who objects to them because we cannot prove in any case that tubercle does not exist! Well may Dr. Markham write, "Writers (and not merely Dr. E. Smith) speak of a pretubercular stage of phthisis."

Hence we may, without further controversy, assume that there is a pretubercular stage; but what is its nature? and what are its evidences? Dr. Markham objects to my description of it and its evidences, but he fails to give any himself: and perhaps it is more easy to find fault than to mend. I assume, however, that Dr. Markham has an opinion as to the nature of this pretubercular stage, and as to its evidences; for he states that "*treatment is directed,* not to the local tubercle, but to the arresting of that anterior morbid condition which precedes the deposit of tubercle:" and Dr. Markham must treat this anterior condition on philosophical, and not on empirical principles. Although he takes such pains to repudiate all connexion with (the very bugbear of true progress in medicine) a "medical theory", I do not think that he applies treatment in this early stage at random, but on a theory, and that, "odious" as it may appear, a "medical theory". Will Dr. Markham do us the favour to give us "this very bugbear of true progress in medicine"?

I affirm that in this pretubercular stage there is a lessened action of the lungs, and therefore of their essential parts—the air-vesicles; and I challenge Dr. Markham to deny that in this stage—that is, in the stage of "predisposition" to phthisis as popularly understood, or the "pretubercular stage" as affirmed by Dr. Markham—characteristic features are the short breathing, feeble breathing, lessened breath-motion, flattened chest, feeble and short vesicular sounds, and a lessened quantity of tidal air at each inspiration. Are these, or are they not, admitted both by the profession and the public to be the main features of such a condition? The diminution in the depth of inspiration, as proved by the quantity of tidal air, and the intensity of the *vesicular* sounds, are matters of observation falling within the province of medical men alone; and I call upon Dr. Markham to affirm that they do not exist in that condition.

Dr. Markham objects to my belief in slight degrees of change in the percussion sound. He cannot deny that the term dulness is a relative one, and expresses very many degrees of intensity. He cannot deny that the degree varies in the healthy chest, and even with the amount of expansion of the chest; and that if from any cause a part of the lung receive a smaller quantity of air than it ought to receive, or those other parts receive, its percussion sound ought to be duller. He does not, I presume, mean to affirm that the percussion sound is duller only in cases of deposition of matter within the chest; or how does he account for, or will he deny, the existence of a duller percussion sound on the clavicle in cases of chronic bronchitis?

I affirm that it is our duty to make ourselves most carefully acquainted with the various degrees of dulness; and that such is not "over refinement." When, in "the pretubercular stage of phthisis", affirmed to exist by Dr. Markham, the lessened breath motion and vesicular action have progressed to a certain degree, and before tubercle is yet deposited, there must be a change in the percussion sound, and such as we ought to be able to detect.

Thus Dr. Markham has given the weight of his testimony in favour of assertions which I have made, and which I am strenuously endeavouring to prove; viz., 1. That there is a pretubercular stage; 2. That tubercle is but the essence of phthisis; and 3, That treatment should be directed to the arresting of the first or pretubercular stage.

Dr. Markham has elsewhere promised to discuss this question at length, and to criticise the plan of treatment which I have advised. I trust he will do so, as nothing can more conduce to the establishment of this doctrine than discussion, and especially by one who candidly confirms the views which he opposes. I am, etc., Edward Smith.

63, Grosvenor Street.

LIGATURE BEFORE AMPUTATION.

"Caution" and *pre*caution—
Which is first?

Letter from W. Webber, Esq.

Sir,—In the *Medical Times and Gazette* of the 7th March, under the head of "Hospital Notes", as illustrative of the "London Practice of Medicine and Surgery", there is a paragraph commencing with "Amputations in very feeble patients—ligature of the femoral artery in the commencement (?) of the operation". In this article, it is stated "that, blood being of the utmost value, Mr. Stanley had recourse to a measure of caution which must be most highly approved." And so say I, sir, "who (as people oft have said when speaking of the merit of their own offspring) ought not perhaps to say it"; yet I say it, not only because I shall be able to show that the measure did not originate in London, where the practice was in a degree only carried out, but for the weightier reason that there is involved in the expedient far greater gain than seems to have occurred to my early and respected tutor (of nearly forty years ago).

As an advocate for openness and independence in our profession, I trust that any apparent freedom of expression, which I may perchance discover, may be excused, and ascribed rather to the force of habit (I had almost said example) than to any undue desire or intention on my part to do more than earnestly urge that to begin at the beginning is the way to make sure as we go along.

It appears, then, that "the artery was cut through in the first incision" (but *before* being tied), "without *any* loss whatever of *arterial* blood." This shows unquestionably the admirable and efficient exercise of care by the assistant in compressing the vessel prior to its division (whether, however, by tourniquet, thumb, or other appliance—a material point—is not mentioned): nevertheless, his services and solicitude might have been more quickly terminated, had the ligature of the artery *preceded* its severance.

The loss of venous blood, of all sanguineous fluid the most valuable, as containing (in my humble opinion, as I long ago ventured to affirm) the principal elements of all reproductive processes, as well as of the maintenance of life, does not appear to have been regarded as a matter of any moment; for the fate of the veins, whether they shared in the compression, or were divided at the same instant, is not noted. Time will yet, and at no distant period, if I be not much mistaken, show these vessels and their bearings to be of infinitely greater import than mere tubes of transit, as they have generally been deemed. But of this more anon.

The paragraph concludes with a very significant, opportune, and commendable remark; namely, "It is to be wished that surgeons were more often willing to sacrifice the *éclat* of an operation by attention to such details, which not infrequently are of extreme importance to the patient's chance of recovery." In this also I agree, because *duty* is before choice, and *life* more than display is to be regarded in the means had recourse

to, it is presumed, for its *security;* with "chance", too, occupying so considerable a weight in the balance! Moreover, hurry commonly ends in bad speed. It is surely the more reprehensible, where "feeble" life is in the scale, to make haste for *éclat* paramount to safety, and unquestionably the more senseless and uncalled for in these days of insensibility. Besides, surgery as a science, where the motive for the appliance of a sound principle in the shape of an operation is the removal of an evil otherwise irremediable; and surgery as a stratagem, where an operation is made subservient to a reputation for dexterity,—level respectively pretty much with surgery as a science, and surgery as a sorrow to suffering humanity.

Now, to my text, sir. Of "caution" I approve; but *pre*-caution I prefer: hence this trespass upon your valuable space and time, which I must beg of you to excuse, and further to bear with me while I, following in the path of my highly esteemed and gratefully remembered instructor, Mr. Abernethy, "tell you a case" in illustration of my views, and, as I conceive, of the evolvement of an important physiological fact; viz., that *the veins have a power of returning blood to the heart, independently of the vis a tergo of arterial impulse.* The case is recorded in the printed Annual Report of the Norwich Free Hospital for Incurables of 1853; and, in order to attract the attention of the profession to the matters involved in the expedient which I, for the first time,* had recourse to in that year, I mentioned it at the College of Surgeons, St. Bartholomew's Hospital, and elsewhere. Further, having had but little leisure, and not being much given to reading books, save Nature's volume at the bedside, I was desirous of ascertaining how far my views and practice in this instance were novel.

Case. William Baldwin, a single man between 25 and 30 years of age, had for a long time been labouring under extensive and uncontrollable disease of the knee-joint, in connection, as was supposed, with considerable pulmonary mischief. He had been for many weeks in the Norfolk and Norwich Hospital, whence he was discharged, very properly under such impression, as unfit for operation. In this unpromising condition he was received into the Hospital for Incurables (or for the Hopeless, it was afterwards called), where he remained under treatment for several months. At length, the pectoral ailment (the effect of disturbance of the digestive and assimilating organs from the long-continued wearing of the local disease), having subsided, it became a consideration with me, weak as was the patient, and unable to raise his head even a few inches from the pillow without fainting, whether the system, if freed from the local irritation and copious discharge going on from the disorganised joint, might not rally? I then, being the sole medical officer of the institution, thought it better to place the matter in that light before some of my country medical brethren who were in the habit of subscribing and coming to the Hospital. They concurring in my views, I determined to afford the poor fellow, by amputation, a chance for life against no chance at all of his system being otherwise relieved from its moribund incubus. To put him upon the operating table, with a fatal fainting staring us in the face, was a step quite out of the question. Therefore, having first given him a smart dose of Squire's solution of the bimeconate of morphia; and after the lapse of a quarter of an hour, when he had become calm and tolerably free from pain, some brandy and water; and subsequently subjecting him to chloroform, I began the operation with the preliminary of first cutting down upon and tying the femoral artery at the spot which I had fixed upon as the point or base from which to commence my flaps and to saw through the bone.

After waiting ten minutes with the heel elevated a little above the level of the pelvis, and the diminished temperature of the leg, together with its blanched appearance, indicating that the circulation in it had become almost a dead letter, I proceeded, under the influence of a further dose of chloroform, to complete as speedily as possible the removal of the limb. This done, the profunda and three other muscular branches of tolerably large size, were pinched by my antiligature forceps, and so left. The wound being carefully cleansed with a *warm* sponge, and the surface afterwards gently blown upon by a pair of bellows till the serum began to flow, the flaps were then lightly brought together, and secured by a broad strap of plaster, and the patient was cautiously drawn back to his position in the bed. As soon as he had fairly recovered from the effect of the chloroform, I gave him another dose of morphia and aromatic spirit of ammonia in brandy and water, which procured him several hours of comfortable sleep; after which, I finished the dressing of the stump. No vomiting occurred. At bedtime the dose of morphia, ammonia and brandy, was repeated. During the night, "the best he had known for months", he took some veal broth "with a relish", and the next morning ate a good breakfast.

No secondary hæmorrhage took place. The ligature came away on the ninth day; on the twelfth, the wound was healed throughout; and on the eighteenth day he resumed his crutches, and went out for exercise. He remains in good health, and walks well with the aid of a wooden leg.

Scarcely an ounce of blood was lost either during or after the operation.

The leg, as soon as it was removed, was placed (inverted) in a soup plate, but not more than two drachms of blood and serum drained from it, nor was any found in it by the son a late eminent surgeon at Norwich, to whom I gave it for dissection. The veins had the appearance of having been long empty. These vessels, then, possessing in themselves the power of returning their blood to the heart, an obvious objection arises to the use of tourniquets, even to that paragon of all such appliances, invented by Mr. Frank Skey, one of the very able house-surgeons, at this time, of St. Bartholomew's Hospital.

I have for a long time discarded these instruments; compression of arteries and veins simultaneously, being calculated to augment, rather than to control, the outpouring of their contents when divided. In "feeble" patients, therefore, where "blood is of the utmost value", pressure by the thumb upon the artery *alone*, and ligature of it, ought to precede its division; and the severance of the limb should be deferred for a few minutes, in order to allow time for the blood in the veins, favoured by position, to be transferred to the general exchequer of the circulation threatened with failure. Reference to the relative position of the principal artery and vein will enable the assisting surgeon in ordinary cases to render with his thumb all the aid of a tourniquet, without incurring its objectionable effects.

Drawings of the "antiligature forceps" and "intercisor", and a description of the manner of applying them, and of their *modus operandi*, I must defer for awhile: I will now only further remark, that I have used them upon nearly two hundred arteries, including the brachial, profunda, the external maxillary, radial, ulnar, anterior and posterior tibial, and other arteries of considerable size. without a single failure in the shape of subsequent hæmorrhage. Besides this, I have thereby prevented the supervention of a large amount of irritation commonly produced by ligatures acting as foreign bodies, like "thorns in the flesh"; and avoided the possibility of including a nervous filament in the ligature (often a prolific source of pain, inflammation, and suppuration), to say nothing of doing away with the unornamental appendage of a grumous tassel of silk springing from the infested wound, to the great discouragement of the reparative process. I am, etc.,

W. Webber.

London, April 20th, 1857.

* The tying of the artery, long since practised in amputation at the hip-joint, bears not upon the question in issue; the difficulty of applying a tourniquet in such case having led to the adoption of that alternative.

LIGATURE OF VEINS.

Letter from T. H. Jackson, M.D.

Sir,—In your last week's Journal, appeared an account of a rapidly fatal case of pyæmia following amputation, under the care of Mr. H. C. Johnson. What attracted my attention was the fact, that two veins had been tied, which at the *post mortem* examination were found uninflamed and free from pus, while the short saphenous vein, not being so treated, was patulous and contained pus.

My opinion is, that, had all the veins been tied, no pyæmia would have occurred. I myself have tied the external jugular vein with impunity; and the late lamented R. Mackenzie has stated that during his early practice he never had a case of pyæmia in amputation when the veins were tied, though he lost many cases in which he did not do so; and that hence he came to the determination of tying the veins in all succeeding amputations. This opinion, emanating from a surgeon so eminent and gifted—known probably to many of your readers—is surely well worthy of the earnest and practical attention of the profession. I am, etc.,

Thomas Hayes Jackson.

Darlington, May 1st, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Mackay. On May 4th, at Hertford, the wife of Allan Douglas Mackay, M.B.Oxon., of a daughter.

MARRIAGES.

Crocker—Delamain. Crocker, Alfred, Esq., Surgeon 2nd Battalion Royal Regiment, Malta, to Mary, eldest daughter of Edward Delamain, Esq., of St. Saviour's, Jersey, at St. Paul's Church, Malta, on April 16th.

De Lisle—Drew. De Lisle, Richard V., Esq., Surgeon 4th Regiment, to Clara Ella, only daughter of John Drew, Ph.D., of Southampton, at Surbiton, on May 5th.

Place—Adcock. Place, Jabez George, Esq., of Wangford Hall, Suffolk, to Fanny Susannah, eldest daughter of Christopher Adcock, Esq., Surgeon, of Great Charlotte Street, Blackfriars Road, at Christ Church, Blackfriars Road, on April 30th.

Sarell—Wilkin. Sarell, Richard, M.D., of Constantinople, to Anna Maria, only daughter of Charles J. Wilkin, Esq., of Paris, at the Chapel of the British Embassy, Constantinople, on April 16th.

Stretton—Birch. Stretton, Samuel, Esq., of Kidderminster, to Kate, third daughter of *William Birch, Esq., Surgeon, of Barton-under-Needwood, on April 28th.

Todd—Dettmar. Todd, George M., M.D., to Frances, second daughter of the late John Henry Dettmar, Esq., at St. Mary's, Wanstead, on April 30th.

DEATHS.

Bell. On April 27th, at Packolet, county Down, Charlotte, widow of the late George W. Bell, Esq., Surgeon, aged 61.

Bushnan. On April 11th, drowned at St. Thomas's, with three of his crew, from his boat being swamped, and in consequence of giving up an oar to one of his men who could not swim, Joseph Bushnan, Esq., of the Royal West Indian Mail Service, aged 24, eldest son of J. Stevenson Bushnan, M.D.

Marshall. On May 1st, of scarlet fever, Joseph Hewett, eldest child of Joseph Marshall, M.D., of Southampton, aged 6 years and 5 months.

Neville, William Henry, Esq., Surgeon, at Esher, Surrey, aged 68, on April 30th.

Patterson. On March 8th, at Waterbeach, Cambridgeshire, Henrietta Barnsley, wife of Mervyn Patterson, M.D.

Wright, Francis, M.D., at Leicester, aged 41, on May 4th.

*Wynter. On May 7th, at Coleherne Court, Old Brompton, Andrew, the infant son of Andrew Wynter, M.D.

APPOINTMENTS.

Hulme, Edward C., Esq., F.R.C.S., elected Surgeon to the Central Ophthalmic Hospital.

Scurrah, J. D., M.B., elected Resident Medical Officer to the London Fever Hospital.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners on Friday, April 24th, 1857:—

Bott, Thomas Bridge, Bury, Lancashire
Broadbent, John, Cheetham Hill, Manchester
Buckley, James, Cheetham Hill, Manchester
Cornish, Kenneth Henry, Oxford
Day, Edwin Edmund, Acton
Furse, Robert, South Molton, Devon
Harris, Arthur Ben, Mevagessy, Cornwall
Houston, James Macdonald, Edinburgh
Jones, William Goodall, Birmingham
Langley, Noah Beldom, Harrow Weald, Stanmore, Middlesex
Merryweather, Henry, Sheffield
Metcalfe, Robert Ives, Tydd St. Mary, Lincolnshire
Smith, William, Preston, Lancashire
Williamson, John Edwin, Nantwich, Cheshire

Wednesday, April 29th:—

Balmforth, Joseph, Wakefield, Yorkshire
Bayley, Joseph, Odiham, Hants
L'Estrange, Edward, Parsonstown, King's co., Ireland
MacDougal, Alexander Mason, Wynford, near Glasgow
Maugham, William, Carnarvon
Owens, Thomas Owen, Anglesey

Friday, May 1st:—

Currie, Thomas Henry, Bridgeham, Norfolk
Hunt, Alfred, Hammersmith
Ives, Robert, Chertsey
Jeaffreson, George Edwardes, Framlingham, Suffolk
Jones, William Allen, Oswestry
Peirce, Thomas David, Abergavenny
Prytherch, John, Llanerchymedd, Anglesey
Swain, William Paul, Devonport
Walker, Thomas James, Peterborough
Whishaw, John Charles, London
Winstanley, Robert, Wigan, Lancashire
Wood, Nathaniel Clement, Wainfleet, near Boston, Lincolnshire

Monday, May 4th:—

Barrington, Nicholas William, Douglas, Isle of Man
Birtwhistle, William, Beverley, Yorkshire
Bonavia, Emanuel, Malta
Chapman, Charles Edward, Preston, Lancashire
Cole, Edward Henchman, Great Plumstead, Norwich
Day, Henry Arundell, Hambrook, near Bristol
Edwardes, Robert, Liverpool
Ferguson, George, St. Bartholomew's Hospital
Hunter, Robert Charles, Royal Navy
King, Knowles, Caius College, Cambridge
Wright, Frederick Thos., Assembly Row, Mile End Road
Yorath, Lewis Williams, Newport, Monmouthshire

Licentiates in Midwifery admitted at a meeting of the Board, on May 6th:—

Day, Edwin Edmund, Acton: diploma of membership dated April 24th, 1857
Goodall, Ralph, Seabridge, Newcastle, Staffordshire
Gray, William, Camberwell: April 13th, 1855
Harris, Lewis, Broadhempstone, Totnes, Devon; April 3rd, 1857
Hooker, Edward Miles Coverdale, Sheerness: April 20th, 1857
Jepson, George Theophilus, Hampton, Middlesex: May 23rd, 1856
King, Knowles, Caius College, Cambridge: May 4th, 1857
Macauley, Thomas, Leicester: April 17th, 1857
Matthews, William Clarence, Longsight, near Manchester: July 12th, 1852
Payne, George Brown, Knutsford, Cheshire: April 6, 1857
Ruttledge, Thomas Edward, London Hospital: April 6th, 1857
Smith, Samuel Wagstaff, Carnarvon: December 12th, 1856
Teevan, James, Killeshandra, co. Cavan: April 20th, 1857
Thorniley, Joseph, Heaton Mersey, Lancashire: April 17th, 1857

Apothecaries' Hall. Members admitted on Thursday, April 30th, 1857:—

Barnett, Lysander Hooker, Limehouse
Barr, William Alexander, Lewes, Sussex
Kelland, Charles Theophilus
Matthews, William Clarence, Longsight, near Manchester
Maughan, William, Carnarvon
Payne, George Brown, Knutsford
Smith, Josiah Sydney, Tiverton, Devon
Smith, Samuel Wagstaff
Watts, Robert George, Clifton, Bristol
Wilson, Frederick William

HEALTH OF LONDON:—WEEK ENDING MAY 2ND, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which in three previous weeks of April were on the average 1069, declined in the week that ended on Saturday to 1038. The present return furnishes very clear indication that the public health is unusually good. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1046; but as the

deaths of last week occurred in an increased population, the average with a view to comparison must be raised in proportion to the increase, in which case it will become 1151. The deaths now returned were, therefore, less by 113 than the number which the average rate of mortality at this season in previous years would have produced.

The weather has lately been very cold; the mean daily temperature was constantly below the average during eleven days after the 21st ultimo, and frequently to the extent of eight degrees or more below it, while at several times the thermometer fell near to or even below the freezing point of water. It does not appear, however, that this circumstance has operated so far as to cause any serious aggravation of pulmonary complaints; for the deaths from diseases of the respiratory organs, exclusive of phthisis, which had been previously above 200, fell last week to 177; and those from bronchitis, which had been above 100, fell to 84. The deaths from phthisis (or consumption) were 150 last week, a number which nearly agrees with the corrected average of corresponding weeks.

Sixty children, all of whom, except three, were under four years of age, died of hooping-cough; the average of weekly numbers is 54. Four fatal cases occurred in the sub-district of Kensington; also four in that of St. John, Westminster. Not a single case of small-pox was registered, although a child died of "varicella" in Mile End. The deaths from measles rose to 36, which occurred principally in the central and east districts: except four, in the district of Lambeth, there were none on the south side of the river. Typhus was fatal in 36 cases, nearly half of which occurred in the south districts. Five persons are recorded as the victims of intemperance, besides two who died from delirium tremens. Three nonagenarians are returned, the oldest a man, 93 years old, who died in the Shoreditch Workhouse.

Last week the births of 896 boys and 849 girls, in all 1745 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1565.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·912 in. The barometer rose to 30 in. on Saturday. The mean temperature of the week was 41·5°, which is 7·5° below the average of the same week in 43 years (as determined by Mr. Glaisher). On Sunday, the 26th, the mean temperature was only 37°, which is 10·6° below the average. The lowest temperature occurred on Wednesday, and was 29·1°; the highest on Saturday, and was 59°. The range of the week was 29·9°. The mean dew-point temperature was 35·0°, and the difference between this and the mean temperature of the air was 6·5°. The wind blew on every day from the north-east, till Saturday. No appreciable amount of rain fell in the week, though there were slight showers on several days. Every day is described by the observer as "cold", "very cold", or "intensely cold".

MEDICAL WITNESSES IN ASSIZE COURTS.

The following memorial has been drawn up by the Manchester Medico-Ethical Association:—

"*To the Honourable the Commissioners for inquiring into the expediency of altering the Circuits of the Judges in England and Wales.*

"The memorial of the Manchester Medico-Ethical Association

"Respectfully Sheweth—

"That the medical profession in this district has long complained of the serious inconvenience that attends the holding of assizes for the hundred of Salford, in Liverpool; a distance so great from Manchester as to preclude medical men from returning home daily to attend to their patients, however urgent and serious their cases may be.

"That the appointment of a substitute, in the place of the ordinary medical attendant, in cases of severe or complicated sickness, is often fraught with incalculable risk and danger.

"That medical men are consequently, and unavoidably, drawn into most painful positions, not only affecting the moral obligations that subsist in relation to their patients, but seriously involving their professional interests.

"That the profession entertains a strong sense of the injustice committed on the part of the authorities who regulate the scale of fees as applied to medical witnesses.

"That the fee allowed is not supposed to be a remuneration for the evidence of a *scientific* witness, but simply to meet the incidental expenses of the day.

"That medical men would urge the validity of their claim to be regarded as giving *scientific evidence* in the exercise of their profession; and that, as a consequence, the fee should be proportionate to their value and importance as *scientific witnesses*.

"That in the event of assizes being held in the city of Manchester, the fee would become a subordinate question; and the equitable claims of the profession, in this respect, must be considerably modified by the greater convenience that would result; and by the removal of injuries that now press so heavily upon all medical men residing in the district.

"Your memorialists therefore pray that you will be pleased to take their representations into your consideration; and your memorialists venture to express their confident hope that you will recommend that assizes for the hundred of Salford be holden at Manchester.

"And your memorialists will ever pray, etc.

"Signed on behalf of the Manchester Medico-Ethical Association.

"James L. Bardsley, knt., M.D., *President.*

John Roberton, Thomas Radford, M.D. } *Vice-Presidents,*

Joseph Stone, M.D. Jonathan Wilson, } *Hon. Secretaries.*

"17th April, 1857."

Liquor Law in New York. The New York State Legislature has passed an Act to regulate the Sale of Intoxicating Liquors, of a stringent character. It contains the following clauses:—"No inn, tavern, or hotel keeper who shall trust any person other than those who may be lodgers in his house for any sort of strong or spirituous liquors or wines shall be capable of recovering the same by any suit. Licenses that may be granted (excepting to inn, tavern, or hotel keepers) to sell strong or spirituous liquors or wines in quantities less than five gallons shall not be deemed to authorise the sale of any strong or spirituous liquor or wine to be drunk in the house or shop, outhouse, yard, or garden." [The sale of liquors "to be drunk on the premises" is therefore entirely prohibited.] Another section says:—"It shall not be lawful to sell intoxicating liquors to any person guilty of habitual drunkenness, nor to any person against whom the seller may have been notified by parent, guardian, husband, or wife from selling intoxicating liquors. It shall be the duty of magistrates and overseers of the poor in any town or city, on complaint and satisfactory proof by a wife that her husband is an habitual drinker of intoxicating liquors, to issue written notices to all dealers in intoxicating liquors forbidding the sale or giving of such liquor to such husband for the term of six months from the date of the notice, under a penalty of fifty dollars."

Strychnine. Some weeks ago, a curious instance of the deadly power of that vegetable poison *nux vomica*, or strychnine, took place at Wollaton, near Nottingham. Rats infested the premises occupied by one of the gamekeepers in the employ of Lord Middleton to such an extent, that the keeper deemed it advisable to have recourse to the poison above named, which, of course, had the desired effect. The dead bodies of the rats were thrown upon a heap of manure, and when in a state of decomposition were partly consumed by the keeper's poultry, which immediately fell a prey to the power of the poison, and died. This instance of the strength of the poison remaining in the dead bodies of its victims for so long a time ought to be a warning to the public, since it shows that the dangers incident to its continuance in the body after death should be guarded against with the utmost care.

Sapphires by a Chemical Process. M. A. Gaudin lately communicated to the Academy of Sciences a process for obtaining alumina in transparent crystals, which therefore present the same chemical composition as sapphire. To obtain them, he lines a common crucible with a coating of lamp-black, and introduces into it equal portions of alum and sulphate of potash reduced to powder and calcined. He then exposes it for a quarter of an hour to the fire of a common forge. The crucible is then allowed to cool, and, on breaking it, the surface of the lamp-black coating is found covered with numerous brilliant points composed of sulphuret of potassium, enveloping the crystals of alumina obtained, or, in other words, real sapphires or corundum. The size of the crystals is large in proportion to the mass operated upon; those obtained by M. Gaudin are about a *millimètre* (nearly one-twenty-fifth of an inch) in diameter, and half a *millimètre* in height. They are so hard that they have been found to be preferable to rubies for the purposes of watch-making.

Testimonial to D. Hodgson, M.D. At the termination of the winter session in Glasgow University, on the 24th ult., the students of practical anatomy held a meeting in the class-room, for the purpose of presenting a testimonial to the demonstrator of anatomy: this, which consisted of two cases of surgical instruments, bore the following inscription:—"Presented to Decimus Hodgson, Esq., M.D., M.R.C.S.E., Demonstrator of Anatomy, Glasgow University, by the Students of Practical Anatomy, under his charge during the sessions 1856-7, as a token of their respect for his professional and personal qualities. Glasgow, 23rd April, 1857."

Garioch Medical Association. This association held a quarterly meeting in Armand's Hotel, Inverury, Aberdeenshire, on May 1st. The retiring president, Samuel Davidson, Esq., proposed as his successor, Dr. William Keith, senior surgeon to the Aberdeen Royal Infirmary, who has been a warm friend and working member of the association since its commencement. His nomination was sustained unanimously and cordially. The association is rapidly increasing its members, and widening its field; and as it already contains in its ranks several members of the British Medical Association, we entertain the hope that at no distant date it may join itself with that Association, so that we may all muster under one banner. [The sooner the better. Editor.]

Medical Society of London. A paper will be read here this (Saturday) evening, by Dr. Edward Smith, "On the Throat in Chronic Phthisis and Chronic Bronchitis, illustrated by patients."

Singular Case of Poisoning. An inquest was held on Saturday evening at the residence of Mr. Thompson, a retired tradesman living in Rhodes-street, Halifax, on the body of Mr. James Thompson, aged 30, son of Mr. Thompson, who had died in consequence of taking a large dose of ammonia. The deceased had been in a low desponding state for two years previous to his death, and he had refused to take any medicine save what was given to him by Dr. Garlick, the medical attendant of the family. About three weeks since some ammonia was purchased by Mrs. Thompson, who intended mixing it with water and then bathing her temples with it. The deceased got hold of the bottle, and, expressing a belief that that was just the medicine that would cure him, he was about to drink off a wineglassful of the poison, when the servant came into the room and took it from him. The ammonia has since then been locked up in the cellar, but on Saturday morning the servant inadvertently left the key in the cellar door, and the deceased seeing it, and knowing the drug to be kept in the cellar, procured the bottle, from which he drank a large draught. He expired in a quarter of an hour afterwards. The jury returned a verdict to the effect that the deceased had drunk the poison under a singular belief that it would do him good. (*Manchester Guardian.*)

TO CORRESPONDENTS.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from:—Dr. P. H. Williams; Dr. Ranking; Mr. A. G. Walter; Mr. T. L. Pridham; Dr. Ballard Pitt; Mr. John Hatton; Dr. Markham; Dr. Thomas Williams; Mr. E. MacDermot; Mr. Stone; Mr. T. Holmes; Dr. J. G. Swayne; Dr. Hayes Jackson; Mr. Edward Barber; Dr. J. C. Hall; Dr. George Mackie; Dr. Brinton; Mr. Rumsey; Dr. Garrod; Dr. Edward Smith; Dr. Roulston; Mr. John Kitching; Mr. Robert L. Bowles; Mr. W. Webber; Mr. R. Freeman; Dr. McWilliam; Mr. A. Cooper; Mr. G. M. Humphry; Dr. G. G. Rogers; and Mr. John Harrison.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. On Stricture of the Urethra. By Henry Smith, F.R.C.S. London: Churchill. 1857.
2. Vocal Gymnastics: or a Guide for Stammerers and for Public Speakers, and others who suffer from Certain Minor Peculiarities of Utterance. By G. F. Urling. London: John Churchill. 1857.
3. Is Ovariotomy Justifiable or not? By J. M. Duncan, M.D., F.R.C.P.E. Pamphlet. Edinburgh: 1857.

ADVERTISEMENTS.

Wanted immediately, by a Medical Practitioner in Denbighshire, a DISPENSING ASSISTANT of unexceptionable character.—Apply to E. W., Post Office, Wrexham.

The Microscope and its Use in CLINICAL MEDICINE.—Dr. BEALE'S Course of Twelve Demonstrations will commence on Monday, May 11th, at Eight P.M., at 27, Carey Street, Lincoln's Inn. Fee, £3 : 3.

Resident Clinical Assistant. — A VACANCY is about to occur in the HOSPITAL for CONSUMPTION and DISEASES of the CHEST. Those Gentlemen who are desirous of becoming Candidates for the vacant Office are requested to send in their Applications, with Testimonials, on or before Monday, the 1st of June, and to attend the Medical Committee on the following day at Four o'Clock. Testimonials as to moral character, as well as to medical qualifications, are required. Further particulars may be obtained at the Hospital.

PHILIP ROSE, Hon. Secretary.
Brompton, May 6th. OSBORN P. CROSS, Secretary.

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The Festival will be held on Thursday, the 28th of May, at the Freemasons' Tavern, the Right Hon. the EARL GRANVILLE in the Chair.

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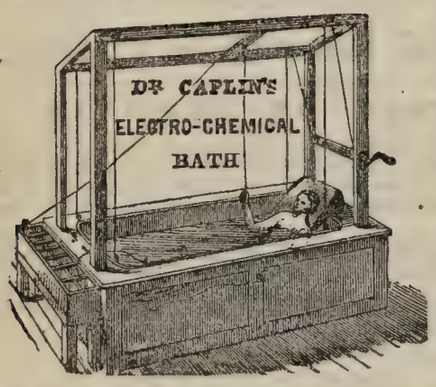
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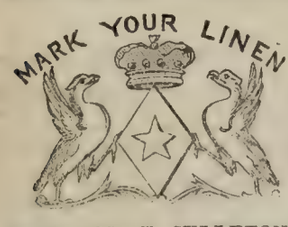
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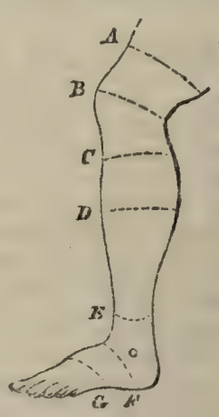
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XX.] LONDON: SATURDAY, MAY 16, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

STRICTURE OF THE RECTUM: AMUSSAT'S OPERATION.

Under the care of GEO. BUDD, M.D., and R. PARTRIDGE, Esq.

[*From Notes by* A. MEADOWS, Esq.]

EBENEZER C. was admitted March 2nd, under the care of Dr. Budd, on account of constipation of twelve days standing. He had had, about Christmas, on two occasions, similar attacks, which had passed off spontaneously, lasting eight days and five days respectively. On admission, the whole abdomen was found very tense and greatly distended; it was tender all over, especially at a point to the left of the umbilicus. He had been complaining of vomiting since February 25th, and could keep nothing on his stomach. The countenance was anxious; the tongue was covered with brown fur; the skin hot and dry. He was treated with various remedies; that which produced most relief was immersion in a warm bath, and the injection of a quantity of the warm water. On a repetition of this next day, three copious evacuations were produced; and, for the next few days, the same measure continued to produce scanty evacuations daily. He still complained much of the discomfort occasioned by flatulence: the vomiting, however, was relieved. Tobacco injections were now (March 10th and 13th) tried, but only a very little lumpy fæces came away. On March 18th and 22nd, attempts were made by Mr. Partridge to pass a bougie. The obstruction was situated almost within reach of the finger. He experienced relief after the use of the instrument; and it seemed to pass the stricture, but only a little wind came away. Various medicines were prescribed, among which strychnia appeared to produce some benefit to the general health; and on March 27th, after he had taken this drug for ten days, the bowels acted freely with purgatives. He was of course much relieved; and for the next fortnight this improvement continued. He was still, however, very weak, and suffered from œdema of the lower extremities. On April 13th, the constipation recurred; and for the next week only trifling evacuations were procured by means of purgatives. From the 24th of April, the constipation became complete; and on the 29th, as he was suffering much pain, and must evidently sink under the disease if unrelieved, it was determined to open the bowel.

This operation was accordingly performed by Mr. Partridge on April 29th, by Amussat's method, in the left loin. No great amount of fæcal matter was evacuated at the time of the operation, but large quantities continued to flow from the wound during the four days the patient survived. His death appeared the result of exhaustion, which proved fatal on May 1st, notwithstanding the free exhibition of stimulants and nourishment.

On *post mortem* examination, some evidence of peritoneal inflammation was found to exist on the intestines, near the seat of the operation. There was a small quantity of fluid in the peritoneal cavity. The lower part of the descending colon and the sigmoid flexure were enormously distended, to as much as four times their normal calibre. The colon above where the opening had been made was somewhat, though much less, distended, and its muscular coat considerably hypertrophied. The small intestines were perfectly healthy. At the upper part of the rectum, about eight inches from the anal orifice, was a stricture so complete as scarcely to admit a quill; this extended for about two inches, and was caused by a deposit of cancerous matter, which had undergone ulceration. There was some little thickening both above and below the stricture. No union had taken place about the site of operation; the orifice in the gut was quite open; and no fæcal matter had escaped into the peritoneal cavity. No secondary malignant deposits were found in any other organ.

REMARKS. We quote this case of obstruction of the lower bowel from malignant disease, as a good example of the difficulties which beset the surgeon in the treatment of affections of this kind. It will be observed that the obstruction, though very great, had never become complete till some few days before death; so that it was hardly justifiable to resort to the extreme measure of making an artificial anus. Yet most other means of treatment were, in one way or other, contraindicated; bougies, by the ulceration which existed in the malignant mass, and which could not fail to be increased by mechanical irritation; purgatives, by the distension and flatulence, which could only be increased by augmenting the bulk of the contents of the gut above the seat of stricture; etc. The medicinal agents which gave most relief seemed to be the copious injection of warm water, which probably acted mechanically upon the contracted part; and the administration of strychnia, which appears to have acted as a tonic to the muscular fibres of the gut.

In company with this case of obstruction we shall give another, which was under observation the other day at St. George's Hospital, and which is worth recording as an instance of a very singular form of disease; although, as it was beyond the reach of treatment, it does not possess the practical interest which attaches to all cases of obstruction in which the aid of the surgeon is called in. In Dr. Pitman's case, also, the symptoms of obstruction were so complicated by those due to the peritoneal and intestinal inflammation, that it was impossible to form any clear idea of the seat of obstruction, still less of its cause. The conjecture formed at this time was, that it was an invagination of the lower end of the small intestine, and the *post mortem* examination went nearly to confirm this; for the twisting of the gut had, no doubt, produced much the same condition as an intussusception would have done—*i. e.*, had stopped its peristaltic action, without obliterating its cavity. This twisting had been produced, apparently, by the traction of the cystic tumour, which was gradually slipping down into the pelvis. The nature of the latter must still remain a matter of some doubt. The probability, however, is, that it was a congenital cyst. This opinion is arrived at rather by the method of "exclusion", as the tumour presented none of the characters of an enlarged gland (nor were the other glands enlarged); its contents did not resemble strumous matter, nor were there any other strumous deposits in the body; and neither the structure nor connexions of the cyst were compatible with the hypothesis of its having been a diverticulum, whose communication with the gut had become obliterated.

ST. GEORGE'S HOSPITAL.

I. CYSTIC TUMOUR ATTACHED TO THE SMALL INTESTINE: TWISTING OF THE GUT: OBSTRUCTION OF THE BOWELS: PERITONITIS.

Under the care of H. A. PITMAN, M.D.

ELIZABETH W., aged 23, a married woman, who had been confined four months before her admission, and was then suckling, was admitted under Dr. Pitman's care on May 2nd, on account of peritonitis. It seemed that, a week before her admission, she had been seized with violent pain over the abdomen and constant vomiting. Her general aspect was that of a patient affected with colic rather than peritonitis, though the pulse was of the small wiry character. Her tongue was red at the edges, and coated in the centre with brown fir. The bowels had not acted for three days; the belly was somewhat distended, but not hard. She was ordered four grains of calomel at once, and a mixture containing carbonate of soda and sulphate of magnesia every four hours. No action of the bowels being obtained, an injec-

tion was given on the following day, but produced no result. Full doses of calomel and opium every four hours were given, but she got no rest, and was continually rubbing the abdomen and complaining of the pain. Next day she was much more feeble; the sickness persisted, and she sank in the evening of May 5th, the constipation having lasted a week.

On *post mortem* examination, it was found that the different layers of the peritoneum were smeared over with recent lymph, and the cavity of this membrane also contained a large quantity of serous fluid. The small intestines were much distended, and their vessels greatly injected, giving a chocolate colour to the gut. On looking to the lower end of the small intestine, it was seen to be twisted, corkscrew fashion, round a stem formed by the mesentery. There were four coils of intestine thus wound round this stem; the first, which was only a few inches from the ileo-cæcal valve, was greatly compressed against the stem; but fluid injected into the gut passed readily; so that, though its peristaltic action might have been stopped, its tube was not obliterated. Dropping down into the pelvis, at the situation of the right sacro-iliac joint, was a large tumour, contained in the mesentery, and situated at the distance of about an inch from the margin of the coil of intestine which formed the second turn of the screw above described. This had, at first sight, exactly the appearance of a mass of soft cancer, being of a milky-white colour, lobulated on the surface, and very soft. On section, however, it was found to be a simple cyst, filled with a semi-solid matter, something like putty, and containing also a thinner milky fluid. The pultaceous matter consisted in great part of fat, with much granular matter. The cyst itself was formed by a membrane, apparently of a fibrous nature, lying immediately below the peritoneum. It was carefully examined in the microscope, but no fibres of involuntary muscle were seen. There was no pedicle to the tumour. The glands of the mesentery (some of which lay in immediate contact with the cyst) were perfectly healthy. The mucous membrane of the uterus was very deeply congested; and the peritoneal surfaces of both ovaries were covered, in almost their whole extent, by patches of ecchymosed blood. This blood lay immediately beneath the peritoneum. The stroma of the ovaries seemed healthy.

II. DEPOSITS OF FIBRINE IN VARIOUS PARTS.

Under the care of R. Nairne, M.D.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar to the Hospital.*]

J. W., aged 16, was admitted September 10th, 1856. His friends stated that, on September 7th, he was quite well, and walked from London to Putney. The following day he complained of pain in his head, and was very sick after eating his supper. On the morning of the 9th, he was found in bed quite unconscious, and in this state he had remained up to the time of his admission. His aspect was that of a person suffering from continued fever; the pulse was 140, and very feeble; the bowels were freely open. A blister was put on the neck; senna mixture was given; and nitrate of potass draughts every six hours. He passed a very restless night, moaning and crying out; but had no sickness, shivering, or diarrhœa. The pupils acted somewhat slowly, but they were not at all dilated. An examination of the urine discovered plenty of albumen, but no casts were seen under the microscope. In the forenoon of September 11th, his pulse was less frequent, but weaker; his lips dry. Sordes formed on the teeth and gums; and before 1 P.M. he sank.

The body was examined twenty-four hours after death. The cranial bones were natural, and the brain was of the usual consistence; but its vessels were congested, and much clear fluid existed beneath the arachnoid and within the ventricles. One of the branches of the right posterior cerebellar artery contained a plug of fibrine, and the surface of the cerebellum in connexion with this branch had blood extravasated into its texture. The other cranial contents were natural. The pleuræ and lungs were healthy. The pericardial sac contained a small amount of reddish fluid. The heart was of normal size, but there was much bloody discoloration, and slight swelling at the part of its surface in relation with the anterior coronary artery, which was found to be owing to a mass of fibrine within the vessel. A considerable quantity of partially softened fibrine was found in connexion with the tendinous cords of the left ventricle close to the mitral valve-flap; and a mass was adherent to the inner surface of the left auricle, at a very little distance from the valves. The peritoneum and intestinal tracts were natural, except at the commencement of the colon, where, in one or two places, small masses of soft recent fibrine were found adherent to the mucous surface. These were easily removed, and no ulceration existed beneath them; but some of the intestinal glands were much enlarged. The liver was natural; the spleen was enlarged and very firm, with a thickened capsule. It was very congested, and contained three or four masses of light yellow fibrine in its substance. The splenic vessels seemed healthy. The kidneys were very congested, and contained several fibrinous deposits of various sizes. In one place, the deposit had become converted into pus. The surfaces of the kidneys were smooth, and marked in places by ecchymosis corresponding to fibrinous deposit. In one or two small branches of the renal arteries, plugs of fibrine were found. The other viscera and vessels were natural.

III. ENLARGEMENT OF SPLEEN, AND OF THE LYMPHATIC GLANDS THROUGHOUT MOST PART OF THE BODY.

Under the care of W. E. Page, M.D.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar to the Hospital.*]

M. B., a housemaid, aged 39, who generally enjoyed good health, was admitted on February 9th, 1856. A month before admission, she had a smart attack of fever, and, during her convalescence, perceived an enlargement in the left hypochondrium, for which blisters were applied. On February 7th, œdema of the legs came on. When first seen, the abdomen was very tense, and indistinct fluctuation could be felt. She complained of burning pain in the splenic region; and here there was greatly extended dulness on percussion. There was no vomiting; the bowels were costive; the tongue dry and brown; pulse 108, full, and easily compressed. Her appetite was indifferent, and she slept badly. The face was sallow, and her general appearance cachectic. Fomentations were applied to the abdomen; five grains of blue pill given at night; and a saline draught every six hours. The urine was examined on the following day, and found to contain beautifully perfect and very large crystals of uric acid.

February 13th. She had an attack of erysipelas, confined to the neighbourhood of the right temple. At this time there was more pain and distension of the abdomen, dependent chiefly on flatulence and constipation.

Three days later, all the erysipelatous inflammation had vanished; her bowels were open; the skin moist; and she seemed improving; but there was remarkable feebleness of the pulse, for which port wine was ordered.

February 21st. The abdominal swelling had increased, and there was more distinct fluctuation, and a depression just below the ensiform cartilage. The allowance of wine was augmented, and quinine given three times a day.

She went on much the same up to February 27th, when she was attacked with dyspnœa and acute pain in the back. Both legs, but especially the right one, were very anasarcous. The urine contained a small quantity of albumen.

February 29th. The pain in the left side of the abdomen was so severe that nothing but constant friction by an attendant gave the least relief. The glands in the neck and groin were noticed as large and hard, but there was no tenderness in any of them.

March 2nd. Delirium came on; her features were more pinched and sallow; and by the evening of the 3rd she was moribund.

An examination of the body was made thirty hours after death. The pectoral muscles were small and pale. The pericardial sac contained a little clear yellow fluid. The heart was small, with a white patch on its surface. The valves and orifices were natural. The lymphatic glands about the root of the heart were very much enlarged and very solid. The anterior mediastinal glands were not affected. The left pleura contained a large amount of turbid fluid; the right pleura was about a third full of clear yellow serum. The base of the right lung was consolidated to a very slight extent; and, with this exception, the lungs and bronchial glands were healthy. The peritoneal cavity contained three pints of clear yellow fluid. The mesenteric glands were enlarged. The kidneys were very granular in one or two places, their capsules being adherent; they were of an uniform yellow colour, their surfaces being marked by stellate vessels. In the pelvis of the left kidney, a considerable amount of bright clear uric acid was found. The liver was very large, with sharp well defined edges; its surfaces, both outer and sectional, were marked by light coloured spots of various sizes, but none exceeding that of a pea. The spleen was of a dark blue colour, and very large, reaching down as far as the anterior superior spinous process of the ilium; the

upper and smaller end being flattened against the diaphragm, and bent on itself. It weighed four pounds. On section, it showed several light wedge-shaped patches, which a microscopic examination discovered to be of the same kind as those observed in the liver. The pelvic, dorsal, and lumbar glands, and those about the pancreas and the small omentum, were all very large and firm, some of a light flesh colour, others dark and somewhat softer. The whole chain of glands along the iliac and femoral vessels, on both sides, was affected in a similar way. The thyroid gland was also large; and the deep cervical glands were firm, large, and dark coloured. The cranial bones were natural. The dura mater was very adherent to the vault of the skull, and its inner surface was lined at the vertex, with an exceedingly thin layer of soft fibrine, discoloured by specks of bloody colouring matter. In other respects the brain was natural.

Dr. Ogle, the pathological curator, made a careful microscopical examination of the enlarged glands, and of the diseased patches in the spleen and liver. Immense numbers of white corpuscles were found; and bodies like pus-globules, with occasional large cells or vesicles, with large nuclei, the number in each cell varying from one to four. In the splenic blood, besides the above elements, large cells, with seven or eight nuclei of great size, were seen; and similar bodies were found in the inferior vena cava and azygos vein. The blood in the cranial sinuses was natural.

ST. BARTHOLOMEW'S HOSPITAL.

I. FRACTURE OF THE SKULL, UNACCOMPANIED BY HISTORY OR EXTERNAL MARKS OF VIOLENCE, SIMULATING APOPLEXY: SOLITARY KIDNEY.

[*From Notes by* E. Barker, Esq.]

A man, name unknown, was admitted April 26th with well-marked symptoms of apoplexy. The complexion was dark, the eyes closed, the pupils dilated and fixed; the breathing hurried and slightly stertorous; the pulse 58, small and irregular. The left side was discovered, by the application of galvanism, to be paralysed. His head was carefully examined, but no marks of violence were to be seen. The man was admitted late in the evening. He had been brought from a brothel, and the woman who accompanied him gave no history of his condition, except that he had remained in that condition since the morning without any known cause; that she had at first supposed him to be asleep, but finding it impossible to rouse him had called in a surgeon, who pronounced the case to be one of apoplexy, and sent him to the Hospital. Purgatives, sinapisms, etc., were ordered; but he did not rally, and died early the next morning.

The external surface of the body was inspected after death, and the absence of any marks of violence again ascertained. The scalp was congested; there was a small patch of ecchymosis beneath the occipito-frontalis muscle on the left side; the left temporal muscle contained a good deal of extravasated blood. On removing the skull-cap an immense clot was found between the dura mater and the skull, forming a deep depression on the brain. A fracture was found extending through the squamous portion of the left temporal bone, the anterior inferior angle of the parietal, and the great wing of the sphenoid. This fracture ran through the groove for the middle meningeal artery, which vessel was torn across, and had given rise to the hæmorrhage. The right kidney was found to be absent, as was also the suprarenal body and the corresponding vessels on that side. The left kidney weighed 11 ounces.

Remarks. We had occasion the other day (see this Journal for May 2, p. 357) to remark on the difficulty which there sometimes is in deciding between the symptoms of apoplexy and those of effusion within the skull from injury. The above case is a more complete example of this than is often met with. Here some criminal motive for concealing the circumstances of the injury very probably existed; but the same ambiguity is constantly arising from the fact of the patient being found in a condition in which he can give no account of himself. The paralysis, it will be observed, in this case was on the same side as the injury.

II. THREE CASES OF RARE INJURIES.

It was an old surgical maxim, which has passed into a literary commonplace, that a bone never breaks again at the seat of fracture. Among numerous exceptions to this rule which are continually occurring, we may mention the case of a patient, at present in the accident ward at St. Bartholomew's, who has fractured each thigh no fewer than three times; and always, as well as can be ascertained, at the same spot. He has been a patient at St. George's Hospital three times, and has recovered each time with a useful limb and apparently sound union. The fracture was originally the result of accident on each side, and there seems no reason to suspect disease of the bones.

A very unusual accident is at present in the same Hospital, under Mr. Stanley's care, viz., a comminuted fracture of the patella, the result of muscular action only. The patient's account of the accident is clear enough, and there seems no reason to doubt its correctness. The bone is found to be splintered into four pieces. Union appears to be progressing naturally.

Another singular injury to be seen in the same Hospital is the case of a man who was examining a Russian blunderbuss which had been sent over as a curiosity; while he was holding the muzzle near his eye, he happened to press a spring which projected a bayonet point out of the barrel. This struck him on the right cornea, without touching the lids or wounding any other part of the eye, causing a clean incised wound of this structure, and evacuating the lens almost as neatly as by a surgical operation. When seen, the wound in the cornea was granulating healthily, the inflammation was not excessive, and there seemed every reason to hope that he would preserve a good amount of sight. Unfortunately the wound is across the horizon of the eye, and the scar will of course interfere with clear vision.

WESTMINSTER HOSPITAL.

MR. HOLT'S TREATMENT OF STRICTURE.

We omitted in our last to describe the instrument employed by Mr. Holt for the rapid dilatation of stricture. It consists of a hollow shaft, made in the form of a catheter, with a very slight curve, only occupying about one inch and a half of the lower end. This shaft is fitted with an ivory handle, and both the handle and the shaft are split down to within half an inch of the end of the latter, by a division running horizontally. The two pieces are brought into firm apposition by a screw fixed on just below the handle. A stilet runs through the shaft and handle, and is fixed to the lower end of the instrument. The apparatus is provided with a series of straight catheters which travel over the stylet, reaching down as far as to the curve at the end of the shaft, and terminating in a conical extremity. The use of this instrument is obvious. When once the shaft (the calibre of which altogether when closed is about that of a common No. 1 catheter) has been passed into the bladder, the stylet serves as a guide upon which the ascending series of catheters can be passed.

Both the principle and construction of these and similar instruments have been the subject of warm discussion, and many objections have been urged against them on both accounts. These objections it is not our province here to discuss; but merely, in registering two cases in which rapid benefit has been produced (an object sometimes of very great importance in the treatment of stricture in private practice) to describe the means by which it has been effected.

UNIVERSITY COLLEGE HOSPITAL.

AMYLENE.

In reference to a case of Syme's operation for stricture, performed here under the influence of amylene, about our report of which Dr. Snow made some observations in our number for May 2nd, we owe our apologies to him for having neglected hitherto to examine into the previous history of the patient under former operations. This, by the permission of the Hospital authorities, we hope to do in time to make some further observations on the case in our next.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

POLYPUS UTERI REMOVED BY THE ÉCRASEUR.

Under the care of G. M. Humphry, Esq., Surgeon to the Hospital.

Frances Harper, aged 52, a much blanched but not unhealthy woman, of light complexion, was admitted on March 27th, 1857. Her tongue was whitish; her appetite and digestion indifferent; pulse 100, weak. She was very weak, and was unable to stand alone. She suffered frequent, almost constant, reddish discharge from the vagina, which had continued nearly two

years. Sometimes there was an interval, varying from a week to a month, in which there was no discharge, either white or red: lately, however, the discharge had been constant. It appeared that there was no interval between the cessation of the catamenia and the appearance of this discharge: the duration of this latter must, therefore, be uncertain. No enlargement of the uterus was perceptible above the pubes. In the vagina, a softish leathery-feeling mass, larger than a walnut, was felt hanging through the os uteri. The circle of the latter could be felt clearly on the right side and fore part, the finger not reaching it well in other directions. There was blood in the vagina; and the speculum showed the surface of the polypus to be superficially ulcerated.

April 3rd. When she was under the influence of chloroform, and laid upon her stomach upon the operation table, with the legs hanging down, the vagina was dilated by means of suitable speculum and spatulæ. Mr. Humphry then seized the polypus with the vulsellum, and pulled it down so as to bring its neck through the os uteri, and enable him to pass the chain of the *écraseur* round it, some distance above the expanded portion which projected through the os. It was easily divided by the instrument, with scarcely any hæmorrhage; and was brought away. It consisted of the ordinary fibrous structure, covered by a thick layer formed, apparently, by a prolongation of the lining membrane of the uterus. This, which had furnished the blood, was, at the extremity of the polypus, vascular and ulcerated.

April 23rd. No unfavourable symptoms followed. On examination, the os uteri was found natural; there was no trace of polypus. A week after the operation, there was some discharge, of a red colour; but this soon ceased, and there has been no return of it.

Remarks. There is perhaps no class of affections in which the *écraseur* is likely to prove of more real value than polypus uteri, provided the chain can be applied sufficiently high upon the neck of the tumour. By it would be avoided, to a great extent, the dangers incidental to the ordinary plan of ligaturing the polypus by means of Gooch's canula, such as inflammation of the veins, secondary abscesses, etc., which have so often proved fatal, that the operation of tying a polypus is, with reason, regarded as one of great danger. The risk of hæmorrhage, which has constituted the objection to the more speedy removal of the growth by the knife or scissors, as practised by Dupuytren, is also avoided.

The difficulty of passing the chain high enough round the neck of the polypus, which will prove the objection to this new method, may be often, in great measure, overcome by seizing the polypus with hooks, and dragging it lower down, as was done in this instance. It was a peculiarly favourable case, from the fact of the tumour having already, in part, passed through the os uteri.

It should also be borne in mind that it is not always necessary to remove the whole of a polypus; for, when the expanded portion has been taken away, the part of the neck remaining in the uterus commonly wastes, or, at any rate, gives no further trouble.

Original Communications.

CASES OF STHENIC PNEUMONIA AND ASTHENIC PLEURISY.

By C. Handfield Jones, M.B., Assistant-Physician to St. Mary's Hospital.

Case I. *Sthenic Pneumonia.* J. F., aged 27, a carter, a healthy man, was admitted on March 9th. He had been ill five days: at first he had shivering, which continued up to his admission; at times he was "like a furnace". On admission, his face was flushed; skin warm; pulse weak, rather frequent; tongue coated; lips livid. He had pains flying all over him, most felt about the lower part of the loins. He had a bad cough all night long; the expectoration had been like blood for several days. There was some dulness in the lower part of the right back, perhaps also in the left: nowhere else. There was good breathing in the left front, with prolonged expiration; fair breathing in the upper part of the left back; and small crepitation and harsh breath-sound in the lower part. There was loud breathing in the upper part of the right lung; in the lower part, both in front and behind, there was inspiratory crepitation (not fine), with prolonged expiration. There was more vocal fremitus on the right side than on the left. A turpentine stupe was ordered to be applied over the whole dorsal surface of the chest, and to be kept on as long as possible; and the following medicine was prescribed:—

℞ Antimon. potassio-tart. gr. ss; liquoris opii sedativi ♏v; infusi calumbæ ℥i. M. Fiat haustus tertiis horis sumendus.

March 10th. I visited him at his own residence, and found that he had not coughed nearly so much. He felt much relieved; had not vomited, and had been very little nauseated. The pulse was 100, large; the tongue white; he had copious perspiration. The expectoration was free from visible blood, very adhesive, scanty, and transparent. The urine was loaded with lithates; its quantity was not more than half a pint in twenty-four hours. The respirations were 46, chiefly abdominal; the movement of the lower ribs was diminished, that of the upper increased. Dulness, not absolute, existed in all the right back; bronchial breathing was heard at the upper part, at the middle a moist middling sized *râle*, at the lower part the same, with fine crepitation. In the left chest, there was more vesicular sound, but very imperfect, with moist bronchial *râle*. In both fronts there were loud snoring and semi-moist bronchial sounds, with very little vesicular. A senna purge was ordered; and he was ordered to take two drachms of bicarbonate of potash daily in his ordinary drink.

Repetantur mistura, et fotus terebinthinæ.

March 11th. Pulse 105; respirations 46. The expectoration is very small in quantity, very tenacious, clear, and transparent: it contains but few mucus-corpuscles, and those delicately granulous, some much larger than others, and a good many red blood-corpuscles, with a few flat scales, and some oil-drops; with here and there a few fibrinous films—quasi-membranes—of fibro-homogeneous aspect. The quantity of urine in the last twenty-four hours was 44 ounces; it is very high coloured, almost as if bloody, clear at first, but, after standing a night, precipitating an abundance of lithates; specific gravity, 1026; acidity of about the normal degree, as measured by a test solution. The total amount of urea was 499.84 grains; of uric acid, 19·8 grains.

March 12th. His bowels were open this morning. Pulse 93; respirations 40. The expectoration is the same. The left lung is clearer. In the right lung, there is fine crepitation at the upper part of the back; and absence of breathing, with coarse moist *râle*, at the lower two-thirds.

℞ Antimon. potassio-tart. gr. i; liquoris opii sedativi ♏v; misturæ camphoræ ℥i. M. Fiat haustus tertiis horis sumendus.

March 13th. Pulse 75, quiet; respirations 27. Pain felt yesterday in the right side has been much easier since the application last night of a sinapism, followed by a linseed-meal poultice. The expectoration is the same. The left lung is nearly free; the right lung has some vesicular breathing at the upper third, with short, weak, moist *râle* in the lower two-thirds. The tongue is coated at the back. He has slept better, and has had no sickness. The mixture and the bicarbonate of potass were continued.

Sumat pro re natâ pilulæ hydrargyri cum colocynthide gr. v.

March 14th. Pulse 70, small and weak; respirations 30. The expectoration is frothy, less tenacious, and clear. Resonance is fairly good in all the right back, and in the left, except at the lowest part; air enters freely at the upper half of the right on deep inspiration, not in the lower half. There is much *râle* in all this back; fine with vesicular sound above, coarser without vesicular sound below, and very brief. Clear and healthy breath sound, without *râle*, is heard in all the left back, except the very lowest part, where it is null. Full and clear breathing is heard in both fronts. In the lower left lateral region, the breath-sound is null, and is replaced by some fine crepitus: no pain is felt here. The sputa of yesterday contained a strikingly small amount of cell-growth, a few fibrinous films, and numerous torulæ in groups or linear series; it was still transparent, very tenacious, and scanty. The quantity of urine in the last twenty-four hours was 30 ounces, of lighter colour than the former specimen. The acidity was much less than on the 11th; each ounce was then neutralised by sixty-five drops of the test solution, now by fifteen. Specific gravity 1026. It is full of glistening prisms of triple phosphate. The total amount of urea is 334·56 grains; of uric acid, 17·550 grains.

Pergat in usu misturæ quater die.

March 16th. Respirations 29; pulse 70. Much perspiration still continues, as has been the case throughout. The tongue

is quite clean; the urine is thick, of high colour, and sedimentary. Expectoration is muco-watery, not sticky. Air enters freely with vesicular sound into the lower half of the right back. The patient is now continually nauseated by the medicine, and has vomited once.

℞ Potassæ nitratis gr. viij; infusi calumbæ ʒi. M. Fiat haustus ter die sumendus.

March 18th. Respirations 28; pulse 66. The tongue is clean; appetite good. He is sitting up. There is good resonance in both backs, and good breathing; a trace of fine *râle* is heard here and there at the end of a deep inspiration. There is good full breathing in both fronts. The expectoration still contains very few corpuscles; here and there some largish groups of glomeruli; in some parts there are numerous corpuscles like small torulæ. The quantity of urine of twenty-four hours has been 31 oz.; turbid, with lithates; specific gravity, 1025; the acidity is represented by sixty-five drops of test solution per ounce. Lithic acid is deposited spontaneously. The total amount of urea is 320·168 grains; of uric acid, 6·51 grains.

March 23rd. He coughs very little: there are no sputa. Pulse weak; skin cool. Full and clear breath-sound is heard all through both backs; there is fair breathing in the left lateral region, with a trace of *râle*. The urine is quite clear. He has gained strength.

℞ Infusi calumbæ ʒi; tincturæ cinchonæ ʒss. M. Fiat haustus bis die sumendus.

March 26th. He was quite well, and was discharged.

Remarks. That this case was one of sthenic pneumonia in a healthy system, is sufficiently clear. Such instances in the present day, I believe, are somewhat rare. I have reminiscences of such in my student days; but latterly I had begun to doubt whether they were again to be met with. This impression was confirmed by reading Dr. Hughes Bennett's able paper in the *Edinburgh Medical Journal* for March 1857. To his rejection of blood-letting I make but little demur, though not by any means agreeing with his views, especially as set forth in propositions 3 and 4. I think blood-letting seldom necessary or useful, because we can usually accomplish all that we need by antimony. But Dr. Bennett denies that antimonials in large doses, such as "weaken the heart and the force of the pulse", are serviceable. Such a view is by no means corroborated by the result of the above case. Immediate relief was afforded by the tartar emetic; the bloody expectoration ceased after a few doses, and the cough was diminished. Afterwards, on March 12th, when improvement was not proceeding so fast as I could wish, and it was clear that the drug was well borne, doubling the dose evidently accelerated the decline of the inflammation and the reabsorption of the exudation. The effect of the increased dose was to bring down the pulse from 93 to 75, and the respirations from 40 to 27. On the fourth day from the time of his commencing the larger doses, the inflammation was at an end. It is curious to observe that now, when the remedy had done its work on the disease, it was no longer tolerated, and nausea and vomiting occurred. It can hardly be objected, that the turpentine stupes or the alkaline drink were of any such power in modifying the morbid action, that it is uncertain whether the main remedial effect was due to the antimony.

Dr. Bennett states the average duration of double uncomplicated pneumonia at twenty-one days. In the foregoing case, the total duration was twelve days, of which five had elapsed before treatment was commenced. The pneumonia was certainly double, though the left lung was much less severely affected than the other. Towards the close there was decided engorgement and semi-hepatisation of the base and lateral part. The condition of the sputa was carefully observed in this case, and appeared simply to indicate the decline of the inflammatory *nisus*. It was always poor in cell-growth, and gave scarce any indication that the exudation was at all removed by its means from the lung. Dr. Graves mentions cases in which there was an absence of expectoration altogether, or at least after the first few days. Examination of the urine indicated very strongly that destructive metamorphosis was proceeding actively during the height of the inflammation. The colour of the urine was a deep red, evidencing that a large amount of hæmatine was being eliminated from the system. The total daily amount of urea was 179·672 grains above the amount excreted when the inflammation was at an end; and the amount of uric acid was 13·29 grains greater at the former period than at the latter.

I am of course well aware that the evidence of one case is not worth much; and yet it seems reasonable enough to suppose that, if I meet with one of this kind (though I might perhaps cite more) in a field of observation peculiarly unsuitable for such an inquiry, others, who are more favoured, would find them more numerous. I think it quite impossible that the improvement observed in this case coincidently with the administration and increase of the antimonial was an accidental coincidence. Antimony is no *placebo;* and I am quite sure that, had it not done good, it would have done exceeding harm. In the *Lancet* of April 25th, 1857, there are records of some cases of pneumonia treated (most properly) in a very different manner. The difference between these cases and the one above is as great as can be; they are not *really* the same disease, though they affect the same tissue, and have the same name. Herein, as Trousseau so well observes, lies the falsity of statistics,—that things are put together, and presumed to be alike, which are in essentials most widely diverse. The vital endowments of the system, on which our remedies operate, are not to be directly observed, weighed, or measured; they differ in different individuals, and at different epochs. From the impossibility of adequately estimating these, it results that medicine never can be an exact science.

Case II. *Asthenic Pleurisy.* The following case is one of an opposite type, and may be well contrasted with the preceding. D. A., aged 45, a labourer, was admitted January 29th. He has been ill fourteen days; he complains of catarrh and oppression of breathing; the cough is dry; the skin cool; the pulse weak; bowels rather costive; urine free, rather dark. There is good resonance, and fair breathing, with some *râle*, in all the right back. In the left there is marked dulness, and deficiency of breath-sound in the lower half, also in the lateral region, and in the front up to the third or fourth rib. Vocal fremitus is null in the left back, well marked in the right. Vocal resonance is not increased in the left back; there is no ægophony. There is loud breathing in the right front, rather weak in the upper part of the left. The heart is manifestly displaced; the sounds are normal.

Applicetur emplastrum lyttæ 4 X 6 lateri sinistro.

℞ Tincturæ ferri sesquichlor. ♏x; tincturæ digitalis ♏x; spiritûs ætheris nitrosi ʒj; aquæ ʒi. M. Fiat haustus ter die sumendus.

February 2nd. The blister was repeated.

February 9th. The breathing has been shorter during the last two days; he appears very trembling and weak; pulse very feeble. There is more breathing in the left back, more bronchitis in the right.

℞ Ammoniæ sesquicarbon. gr. iv; spiritûs ætheris sulphurici comp. ʒss; infusi cascarillæ ʒi. M. Fiat haustus ter die sumendus.

February 12th. Imponatur emplastrum lyttæ 4 X 6 lateri dextro.

Pergat in usu misturæ.

Sumat olei morrhuæ ʒi ter die.

Omni nocte sumat morphiæ acetatis gr. ½.

February 16th. He is decidedly better. The treatment was continued.

February 19th. He is better. The vocal fremitus is null in the left back, distinct in the right. Breath-sound is distinct in the right back, and free from *râle;* it is bronchial and weak in the left, though of better quality in its upper third. The left side is flattened, and dull to percussion. The left shoulder is lowered. The heart is nearly in its normal site. Pulse very compressible, weak, 80.

Pergat in usu misturæ.

Ter die sumat ferri et manganesii carbonatis saccharatæ ℈i.

February 26th. He is considerably better.

March 5th. The breathing is still short; otherwise he improves.

Pergat in usu olei et pulveris.

℞ Potassii iodidi gr. i; ammoniæ sesquicarbon. gr. iv; infusi calumbæ ʒi. M. Fiat haustus ter die sumendus.

Lateri sinistro infricetur linimentum ammoniæ.

This treatment produced no notable change in the state of the left lung, and was omitted on March 16th.

March 26th. He felt well; and was discharged; it being evident that any further improvement in the former seat of the effusion must be the work of time and the *vis medicatrix naturæ*. There was still flat percussion-sound and weak respiration in the left lower back, good breathing and resonance in the right.

The only remark I shall make on this case is, that if, on the strength of the manifest pleurisy and effusion, I had treated it with mercurials and salines, the result would have been very lamentable. The disease was asthenic, and its treatment behoved to be directed accordingly.

CONTRIBUTION TO THE PATHOLOGY OF HEART DISEASES.

By W. O. Markham, M.D., Fellow of the Royal College of Physicians, Assistant-Physician to St. Mary's Hospital.

CASE OF DISEASE OF THE AORTIC VALVES: ITS ETIOLOGY.

This case of diseased aortic valves, which was presented to the Pathological Society, is interesting, because it illustrates, as I believe, one of the modes of origin of valvular diseases, not frequently observed. The aortic valves are all incompetent. Two of them are partially destroyed by ulceration; the eroded edges presenting appearances as though the ulceration were still progressing at the time of the patient's death. Two of the valves, again, are fused together at their adjoining angles, and much puckered; a calcareous nodule, the size of a pea, projecting from the upper surface of one of them. The heart is much hypertrophied and dilated on the left side; but the muscular tissue is perfectly healthy. The hypertrophy is manifestly a secondary fact, resulting simply from the diseased condition of the aortic valves. The aorta itself, the lining membrane of the heart, and its mitral and tricuspid valves, are in a perfectly healthy condition.

The original disease of the heart, therefore, appears in this case to have been limited to the aortic valves. What was its nature? During life, I had considered that the aortic disease (indicated by a double bruit over the sternum) resulted from atheromatous degeneration; inasmuch as the patient had never suffered during his life from rheumatism or kidney disease, or from any other disorder with which we occasionally find valvular diseases associated. The *post mortem* examination, however, rendered this explanation unsatisfactory, for the diseased condition of the valves was clearly not of an atheromatous nature. I consequently made a more strict inquiry of the patient's wife, as to his state of health previous to the time when he first presented symptoms of heart disease; and I thereby obtained the following particulars, which appear to throw some light on the origin of the valvular affection.

The patient was 44 years of age at the time of his death. Ten years previously, he had been in the London Hospital for some affection of the elbow-joint, and left with the arm slightly, but permanently, contracted. Four years later, a piece of bone was removed from his jaw in St. George's Hospital. Since that period, he seems to have been generally somewhat ailing, losing his appetite, and becoming thinner. But he was, withal, very active, being an excellent walker and runner, and accustomed to take strong exercise; and would often brag of his good wind. His breath up to this time, therefore, was unaffected.

About eight months before his death, he was suddenly seized, while running quickly on a message, with a violent pain in his left side, and in consequence with difficulty regained his home. The pain, however, gradually left him after he had reposed himself for a time; but from this moment his breathing became affected. It seems, therefore, not unreasonable to date the injury of the heart's valves from this period; inasmuch as hitherto the patient had never experienced anything wrong in his respiratory or circulating organs.

From this date, however, his health gradually became worse; and he sought advice, for the first time, about four months after the accident referred to; and on the occasion, it would appear, of his being seized with violent spasms, resembling angina in severity. About a month later, I saw him for the first time. He was then suffering under confirmed symptoms of heart disease. A double bruit was heard over the sternum, clearly indicating serious injury of the aortic valves. There were also the ordinary signs present of hypertrophy of the heart. He gradually sank; the angina-like attacks, accompanied with rending pain at the epigastrium, becoming more frequent and severe.

Is it not fair to assume from the history here given, and from the nature of the pathological changes of the aortic valves, that the original injury of the valves dates from the moment of the sudden pain which followed the exertion? The injury, in such case, would probably be rupture, partial or complete, of one of the valves, resulting from the inordinate pressure to which the valves were exposed by the increased rapidity of the circulation. The puckerings and adhesions and ulcerations of the valves may be supposed to have resulted from the inflammatory action, and from the attempts at reparation, consequent upon the injury. Cases of this kind have been recorded by Dr. Latham and Dr. Peacock. Dr. Watson remarked: that he had frequently met with instances of disease of the heart where the patients had attributed the first signs of the affection to some violent exercise of the respiratory and circulating organs.

We may perhaps reasonably suppose, that the aortic valves, in a state of perfect health, would hardly suffer rupture, however great might be the distension of the aorta, and consequently the pressure of the blood upon them during the ventricular diastole. And it is possible, that in the present case some congenital or acquired weakness of the valves may have existed; there being manifestly a scrofulous taint of the constitution, indicated by the disease of the elbow-joint and the jaw-bone.

CASE OF PECULIAR AND FATAL HÆMORRHAGE FROM THE MUCOUS LINING OF THE VAGINA: WITH REMARKS.

By Henry Obré, Esq.

[*Read before the Harveian Society, April 16th*, 1857.]

Miss T., an only child, aged 14 years and three months, tall, with fair hair and complexion, of general good health, had not had any severe illness since childhood: she had constantly been under the domestic care of her mother, and was never absent from home, and had had few or no companions of her own age to associate with. In the beginning of June 1852, she was seized with a discharge of blood from the vagina, which continued a few days, and was considered by her mother to be the first catamenial flow (having herself began to menstruate at the daughter's age). It was, however, unaccompanied by pain. Ten days subsequently two or three spots of blood were observed on the girl's dress, and she resumed her usual good health and spirits. On Saturday, June 27th, the supposed catamenial discharge recurred; and although the loss was profuse, it caused no anxiety to the parents until the morning of Thursday, July 10th, when I was first consulted. I found her in bed with the face and hands pale, and the general aspect of a person who had lost a considerable quantity of blood. She complained of no pain or uneasiness except slight headache. There had been a large amount of bleeding during the night, accompanied with darks clots of blood of varied size. The hæmorrhage had for the last few hours been to such an extent as at times to saturate the sheets which were used to receive the blood; but at my visit, though the attendants stated it to have been much lessened, it was very considerable, requiring a change of applications every half hour. She was much anæmiated; the tongue and lips were blanched; the pulse above 100, weak and compressible. There was no pain on pressure over the uterus or abdomen, which was flat; the mammæ were small and undeveloped. The bowels had been relieved immediately before my visit. I considered it at first to be an extreme case of menorrhagia, and prescribed sulphuric acid in the infusion of roses to be administered every hour. Iced acidulated drinks were also ordered.

July 11. She had been very restless during the last twenty-four hours. The bleeding was not so considerable, but still very alarming, and demanded continual changes of linen. Small clots of blood were continually passed from the vagina. The facial pallor was extreme; the tongue soft and trembling; the pulse more frequent and feeble. The stomach had become irritable, and there had been vomiting. The mother and nurse had, by my directions, examined the external parts of generation, and no peculiar appearance was detected by them. I passed my little finger into the vagina, but could not reach the os tincæ. Half a drachm of the tincture of matico was added to each dose of the acid mixture; and napkins soaked in iced water were applied externally to the pubes and the vulva. In the evening, the bleeding not having subsided, I introduced, with some difficulty (the hymen being perfect), my fore finger into the vagina, and distinctly perceived the os uteri to be of a natural size and closed. The uterus felt normal; but I was unable to make a satisfactory examination. The vagina contained some clotted blood, which I did not remove, so that it might promote further coagulation.

July 12th. The bleeding had been very materially diminished. The blood had lost its bright colour, and had become pale and serous. She was much exhausted; the anæmic whiteness of the body was increased; the pulse 130 to 140, feeble and fluttering. There was occasional nausea with vomiting; and she complained of pain in the lumbar region and down the thighs. The intestines were distended with flatus, and

there had not been a dejection from the bowels for three days. Effervescing medicine with hydrocyanic acid, and a castor oil draught, were prescribed; and water ices, and brandy occasionally taken.

July 13th. The exhaustion had increased. She threw herself about with her arms extended. The sickness was greater. The bowels had been relieved; during the effort she fainted, and a large clot of blood passed from the vagina, but the continued stream had quite stopped since yesterday. The stomach was unable to bear nutriment. Cold beef tea, thickened with arrowroot, was injected into the lower bowel, and a teaspoonful of brandy in water was frequently administered.

Evening. Depression was not so extreme as in the morning. The blood effused was brighter in colour, but still not of an arterial character; more clots had passed, and a great pulsation was felt along the course of the abdominal aorta; it was strong and jerking, and raised the hand placed on the abdomen. No bruit was to be heard. The pulsation of the arteries of the head and extremities was feeble; at the wrist 160. I proposed, as the bleeding had recurred, that the vagina should be plugged by a sponge wetted with the tincture of matico; but, before doing so, I had the advice of Dr. Murphy. On examination, he found the os uteri slightly open, but not sufficiently to induce him to believe that the bleeding came from the uterine cavity. The vagina was now plugged with pieces of sponge moistened with the matico tincture, and an ether mixture was prescribed.

July 14th, 8 a.m. The patient had objected to taking the ether, disliking the smell. Early in the morning the bleeding had returned, and the prostration had been extreme. Large quantities of brandy and other stimulants had been used during the night to keep her from sinking. I removed the vaginal sponges, which were covered with clotted blood and had a slightly putrid fœtor, and replugged the passage to such an extent that the patient complained of a desire to evacuate the bowels.

11 a.m. Dr. Murphy again visited the patient, and we decided upon applying pressure over the abdominal aorta, and the last resort of transfusion was agreed on. On the operation being explained to the parents, they expressed a desire that Dr. Ashburner should be called in consultation. At 12 o'clock he arrived; the previous as well as the present state of the patient was described to him, and he named some drugs that might be beneficial in such a case. We now entered the patient's room, and Dr. Ashburner immediately sat on the bed and commenced Mesmerising her by pressing the last phalanx of his thumbs tightly against hers, and looking steadfastly into her face. He continued in this attitude a few minutes, and then made perpendicular passes with his hand before her face. The exhausted sufferer tossed herself from side to side with the arms extended and cast about in a listless and unconscious manner. Her contracted features, the blanched face, the dilated pupils, and her general restlessness, were too indicative of her dangerous state. I immediately considered it right to request Dr. Ashburner to retire into another room where we might discuss the proper measures. Dr. Ashburner said if we were hurried we might leave him for an hour; but on our declining to do so he acquiesced in withdrawing with us. Dr. Murphy and myself of course objected in the most decided manner to sanction Mesmeric treatment. Dr. Ashburner expressed the greatest confidence as to the favourable result to be derived from a continuance of it; and doubtless with sincerity. There being no chance of any reconciliation of our opinions, it was deemed best to explain fully to the parents our different views, and leave it to them to decide which mode of treatment was to be adopted under the circumstances. Dr. Ashburner had spoken so decidedly of the effect he anticipated from Mesmerism, that the parents were anxious he should be permitted a few hours for his treatment, Dr. Murphy and I asserting our readiness to resume the charge of the patient when called on.

At three o'clock in the afternoon, when the time expired which Dr. Ashburner requested for his treatment, the family expressed themselves perfectly satisfied with it. At a quarter past 5 I was sent for by Dr. Ashburner, who was anxious that I should be convinced by my own observation of the improvement he conceived had taken place. The pulse was hardly to be felt; the jactitation continued; the features more sunken and paler if possible; the pupils were dilated to the utmost; and the intellect was wandering;—in fact, all the appearances were presented of pending death, which I (to the astonishment of Dr. Ashburner and the friends) declared to be fast approaching. In the strength of his hopes the doctor replied, "All that is now required is a continuance of manual labour to complete the recovery." I left the patient with the conviction that she was sinking fast, attributing the cerebral phenomena wholly to the loss of blood. She breathed her last at half past six o'clock.

At 8 o'clock on the morning of July 16th I made a *post mortem* examination in the presence of Dr. Murphy. I had previously sent word to Dr. Ashburner of the proposed inspection, but unfortunately he was unable to attend. The surface of the body was anæmic to the last degree, apparently as if all its blood had drained away. The abdomen and pelvis were the only cavities examined. The intestines were distended with flatus; all the abdominal organs were of healthy structure. The liver, kidneys, spleen, and remaining viscera were empty of blood. The uterus with its appendages and vagina were removed. The uterus was not enlarged, but of a natural size; its cavity was empty and unstained with blood, as were also the Fallopian tubes. The os uteri was closed; and the vagina was filled with the sponge that had been introduced during life. It was saturated with blood, and many clots were in the passage. On removing the contents there was presented a general softened state of the mucous lining; in some parts it was quite removed from the adjacent muscular coat, and this structure was pale and easily separable by the edge of the knife; ecchymosed spots of blood were seen under it in many parts. There was no appearance of vascular erosion or of injury from violence; indeed, the diseased state of the lining of the vagina, which was general, negatived such a presumption. The abdominal aorta and vena cava were nearly empty; their coats were healthy.

Remarks. I should have laid the details of this remarkable case before the Society and recorded it earlier, if it had not been so much opposed to my general experience, and to the notice of authors, as to induce me to wait for a further illustration and explanation of it in practice or the observations of others. But I have as yet failed to meet with any exemplification of it by my friends or in books, and I am disposed therefore, as at its close, to regard it as an unique case, both as relates to the cachexia or blood disorder, which must have favoured such a profuse and irremediable hæmorrhage, and the limitation of it to the mucous surface of the vagina; for though we cannot but consider the approach of puberty as the determining cause of the seat of hæmorrhage, it assuredly did not come from the uterine cavity or the Fallopian tubes, nor was it the result of ovulation. What the exact change be of the nutrition, or structure of the vaginal lining that was clearly indicated by the inspection, and of its circulation and capillaries which caused the great exudation of blood from these, and what the peculiarity of the blood itself which prevented the arrest of bleeding in the usual way that nature provides, must be left to the demonstration of future observers, and of such as may be afforded the opportunity of establishing the conditions by the aid of the microscope and of chemistry. Certainly no recognised state of purpura, or of the hæmorrhagic diathesis, or of mere menorrhagia, can suffice to explain the phenomena of this very interesting, anomalous, and melancholy case. The antecedents of the child's history and appearance are not in accordance with any common or usual causes of a bleeding that was altogether rare and peculiar.

Gulstonian Lectures:

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

By Alfred B. Garrod, M.D., Fellow of the Royal College of Physicians; Professor of Materia Medica, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

Lecture III (*concluded*).

5. Much has been said within the last few years of the value of the alkaline plan of treatment in diabetes, and of the influence of certain alkaline mineral waters, more especially those of Vichy. Many patients suffering from this affection flock there annually during the summer months both from this country and from the continent; so that I trust it may not be considered

altogether unprofitable to lay before you certain results which I have obtained from this treatment, as well as my own experience of the utility of the Vichy waters, when taken at the spot or as imported into this country.

M. Mialhe considers that glucose sugar undergoes changes in the blood in health by reason of the *alkalinity* of that fluid, and that when this is not *sufficient*, as he imagines to be the case in diabetes, the transformation cannot be effected, and consequently sugar must be thrown out by the kidneys; he therefore proposes to *administer alkalies*, to induce the patients to *avoid the causes* which previously diminished the alkalinity of the blood, and in this manner cure the disease.

M. Mialhe details a case in which he appears to have observed a remarkable and sudden disappearance of sugar from the urine, and of which the following is a short summary.

M. Garafollini, an Italian professor of music, had resided in Paris for several years; he formerly enjoyed excellent health, but latterly had been suffering from pain in the renal regions and from colic, causing frequent desire to pass urine, and likewise some tenesmus. He occasionally took Vichy water, which rapidly removed the symptoms, and within a month his health *appeared* to be re-established. He remained well for two years; but after that time, during the intense heat of the summer, he was tormented with great thirst, to allay which he drank a very large quantity of acid drinks and partook of acid fruits, but without relief to the thirst or the constant dryness of the mouth. The desire to pass water became more frequent, and the urine much larger in quantity, appearing even more in bulk than the liquids taken during the same period of time; there were also a feeling of general illness and great muscular debility, progressive emaciation, feebleness of vision, loss of virile power, and obstinate constipation; he then came under the cognisance of M. Mialhe. The urine was at once examined, and found to have a density of 1040; heated with potash, it gave a dark brown coloration, indicating the presence of a large amount of sugar. He was ordered to abstain entirely from acidulated drinks, and to take during the twenty-four hours, 20 *grammes* (308 grains) of bicarbonate of soda, and 5 *grammes* (77 grains) of calcined magnesia; also two bottles and a half of Vichy water. The next day, the urine had only a density of 1026, in place of 1040, and did not show a trace of sugar. Under the influence of the alkaline treatment, not only did the sugar not reappear in the urine, but the vision improved, and within two days became perfect. In four or five days, the bowels ceased to be constipated, and some diarrhœa and bilious vomitings ensued, which recurred for a few hours: in each following day there was a marked improvement, the thirst became appeased, the urine less copious, the strength and virile power were restored, and after this time the patient was re-established in health, nor did the urine on several examinations give any trace of sugar. He was able to support all kinds of fatigue, and did not restrict himself to diet, but partook equally of animal and vegetable substances, avoiding only all acid drinks. M. Mialhe considers that in this patient the exciting cause was the excess of these acid drinks, and thinks that when it so happens, the disease is more easy of cure, than when it arises from suppressed perspiration.

The above case, quoted from M. Mialhe, was published by him in 1849. In 1856, a new work was published by the same author, entitled *Chimie appliquée à la Physiologie et à la Thérapeutique*, but no more recent cure is announced; although the plan of treatment proposed is said to have furnished practical results of the most satisfactory character.

A few years since, feeling desirous to ascertain whether there was any truth in M. Mialhe's theory, I gave the alkaline treatment a fair trial; the result of which I will now lay before you.

In a patient under a certain diet, chiefly animal, and taking a small quantity of opium, the average of seven days urine was as follows:

Quantity of urine, 105 fluidounces.
Specific gravity of ditto, 1027.
Quantity of sugar, 1237 grains, or 2 oz. 362 grains avoirdupois.

When, in addition, he took bicarbonate of potass in one drachm doses six times a day for four days, the averages were:

Quantity of urine, 138 fluidounces.
Specific gravity of ditto, 1030.
Quantity of sugar, 2049 grains, or 4 oz., 300 grains.

For the next three days, a drachm of bicarbonate of soda was substituted for the same quantity of the potash salt, with the following results:

Quantity of urine, 148 fluidounces.
Specific gravity of ditto, 1030·7.
Amount of sugar, 2255 grains, or 5 oz., 67 grains.

During the following eight days, the bicarbonate of soda was administered as before, but, in addition, half a drachm of burnt magnesia was added to each dose, that is, six times a day, and the daily average was:

Quantity of urine, 135 fluidounces.
Specific gravity of ditto, 1029·8.
Amount of sugar, 1662 grains, or 3 oz. 350 grains.

Every care was taken in this case to ensure accurate results, and the numbers cannot be looked upon as in the slightest degree favourable to the alkaline plan of treatment when pursued in this manner. In fact, it would appear that its effects were, to increase the amount of urine to some considerable extent; to augment the density—though this might, to some degree, be owing to the presence of the salts of soda or potash; and also to cause a notable rise in the quantity of sugar passed in the twenty-four hours, for, in place of 1237 grains, the average under the diet and opium, we find 2049 grains, 2255 grains, and 1662 grains, as the daily amounts under the potash, soda, and soda and magnesia treatments.

I believe that almost any saline given in large doses would act in a similar manner, as I shall have occasion to show in a few minutes; but in order more clearly to demonstrate that this increase arose from the effect of the drugs, and was not due to any change in the condition of the patient, I will point your attention to the state of the urine after they were discontinued, an interval of a few days being allowed to intervene. The average of three days was:

Quantity of urine, 98 fluidounces.
Specific gravity of ditto, 1032·5.
Amount of sugar, 1520 grains, or 3 oz., 208 grains.

Quantities much smaller than when the patient was under the influence of the potash or soda.

I do not wish it to be understood for a moment, that because I found no good effects follow M. Mialhe's plan, therefore I consider the administration of these drugs altogether useless; on the contrary, I believe that they are often of advantage when given in *small* doses, either in the form of weak artificial solutions, or as the Vichy waters; the good effects, however, are then not *simply*, if *at all*, due to the increased alkalinity in the blood thus produced; but possibly, if M. Bernard's hypothesis be correct, they may act as sedatives, and diminish the excessive glycogenic function of the liver. Those who have had most experience of the effects of Vichy waters, and who have published the results of their practice, certainly do not consider them in the light of direct curative agents. Thus, for example, if we examine carefully the work of Dr. Charles Petit, we do not find proof of any positive cures, although some of his patients appear to have lost the sugar from their urine for a time, a result not unfrequently occurring independently of any treatment; and Dr. Durand Fardel, inspecting physician of the Hauterive sources of Vichy, remarks, that although the thermal treatment usually diminishes the amount of sugar in the urine, yet this is not persistent; and in cases where the sugar has entirely disappeared at Vichy, it always shows itself again, but in most cases, not in such large amounts, sometimes indeed not till several months after the patient has quitted the place. Dr. Fardel leads us to think that other mineral waters, not containing the alkaline bicarbonates, possess an equal power of relieving the affection; and he gives successful results obtained by the use of the sulphur waters of Allevard, and of the waters of Balarue.

The waters of Vichy are doubtless potent agents either for good or harm; and this holds good when they are either taken internally or used in the form of bath. Under their use, the system soon becomes impregnated with the salts, and the urine alkaline in reaction, and this is the case when the waters are drank, and also when they are employed as a bath. At the end of last summer, I tried at Vichy the effect of a bath under half an hour in duration, and at a time very remote from the influence of food; before immersion the urine was distinctly acid, but on coming out of the bath it was *strongly alkaline*, but again became acid after about two or three hours. I cannot say I have ever seen a diabetic patient lose the sugar from the urine when at Vichy; and in one case in which it was stated to have been absent, I was able to detect sugar readily the day after the patient quitted the place. From my own experience, I should consider these waters as worthy of a trial in certain cases of diabetes, especially when the disease attacks robust subjects, and where evidence exists of disturbance in the portal circulation; but where much emaciation and debility are present, I should

fear that their employment might be injurious, or even dangerous. I believe that the thirst, which forms so troublesome a symptom, is often much relieved by weak alkaline solutions, and the Vichy waters are then a convenient form for administration; the source of Hauterive, and also the source des Dames, and source de Lardy, are sometimes particularly indicated as containing, in addition to the alkaline bicarbonate, very notable proportions of iron; this is more especially the case with the source des Dames and source de Lardy.

Lastly, there is one point in connexion with Vichy to which I would wish to direct your attention, in case any of you should be induced to try the plan at home: it is this, that the salts which are sold under the name of the *Vichy salts*, and either added to ordinary baths or made into lozenges, etc., are composed *simply* of bicarbonate of soda, and have no further relation to the Vichy waters than this—they are prepared *from* the waters; but the process is such that every other ingredient is carefully removed. Any effect, therefore, produced by them, can certainly be obtained from the use of bicarbonate of soda, made equally pure, and sold at a much lower rate in this country. Having seen every step of their preparation at Vichy, I can vouch for the correctness of my statement.

Before bringing to a conclusion my observations on the influence of drugs in the treatment of diabetes, I would wish to allude to the action of pepsine—a substance at present occupying the attention of the medical profession, and extolled as a remedy for diabetes, amongst numerous other diseases. I have myself as yet had no opportunity of trying its effects; but my friend Dr. Parkes, a few days since, made trial of it upon a boy affected with the disease, with the following result:—

Daily average of sugar for thirty-three days, under a prescribed diet and warm bath, 1281 grains.

Under a similar diet and warm bath, and pepsine given three times a day, the average of sugar for six days was 1667 grains.

So that, in this case, the drug, to say the least, produced no beneficial influence.

To sum up in few words my opinion of the effects of treatment in diabetes, I may remark, that I consider attention to *diet* of the utmost importance; and, without this, I believe that other means are almost if not entirely useless. In certain stages of the disease, the diet is advantageous in proportion to its freedom from amylaceous or saccharine matters; the nearer it can be obtained free from these, the greater is the benefit likely to accrue to the patient. The nitrogenised matters should not be excessive in quantity, at the same time that due allowance must be made for the inability of the patient to assimilate amylaceous principles. In consequence of the appetite being generally above the healthy standard, and also to prevent the disgust which a rich animal diet is apt to produce, it is most desirable to introduce certain non-nutritive materials into the diet, which give bulk to the aliment, satisfy the hunger, and at the same time make the azotised and fatty matters more palatable and acceptable to the patient. To effect this, I know of nothing equal to the bran bread I have shown you to-day. In addition to the bran or gluten bread, I consider that certain green vegetables, as water-cress, greens, and lettuces, may be advantageously allowed in small quantities; as a diet quite free from vegetables, if continued for any length of time, will inevitably lead to the production of scorbutic symptoms.

The liquid portion of the diet should also be kept as low as possible; and diabetic patients often derive much comfort from holding small pieces of ice in their mouths, instead of drinking copious draughts of water. The washing out of the mouth also with cold water sometimes effects the same object. Alcoholic liquors should be used sparingly; perhaps the best is a little good bitter ale, or small quantities of pale brandy freely diluted.

With regard to the administration of drugs, I believe that in many cases but little advantage is derived from them; if, however, the nervous system is irritable, small quantities of opium may be useful; if there is any anæmia, iron preparations, as the metallic iron in the form of the *fer reduit*, or the ammonio-citrate or phosphate of iron should be administered; and if the skin remains harsh, ammonia salts in small doses, combined or not with other remedies, as the warm bath. If the emaciation be great, or phthisis threaten, cod liver may likewise be used; for, although I have shown you that these drugs, when given in large doses, and for a limited period only, produce no sensible diminution of the saccharine secretion, yet we may regard it as a fact, that everything which leads to an improvement in the health, by removing any other abnormal state that may be present, tends, in the long run, to ameliorate the diabetic condition; hence great advantage is derived from change of air and scenery, relaxation from business, and other such hygienic means, especially the avoiding of cold east winds, the use of the flesh brush, and warm clothing. I have said that in certain cases I believed that weak alkaline drinks, as the Vichy waters, or alkalies given in other forms, are occasionally of advantage, especially if the functions of the liver be disturbed or any amount of irritation of the stomach be present.

In conclusion, Mr. President, I must observe, that although I fear your patience must have been somewhat taxed by listening to the numerous details and familiar facts which have been brought under notice, still the subject has by no means been exhausted; and, had time permitted, I could have drawn your attention to many other interesting and important topics in connection with the pathology and treatment of diabetes.

In the present lectures, there are certain points upon which I have treated, and to which I trust I have been enabled to add somewhat to the previously existing knowledge. I more particularly allude to the determination of the relative amounts of urea and uric acid in the urine of diabetic patients, and the total quantities of the eliminated sugar; the occurrence of certain symptoms in cases where the urinary secretion, although saccharine in character, is but slightly augmented; the frequent supervention of gangrene in this disease; and, lastly, the measurement of the effects of diet, and of the absolute value to be attached to many proposed therapeutic agents. I feel conscious, Mr. President, that I have most imperfectly executed my task, yet trust that the time so kindly spent in listening to these lectures has not been altogether in vain.

Periscope.

PSYCHOLOGY.

TREATMENT OF THE INSANE IN OUR LARGE ASYLUMS.

The following are additional extracts from the article in the *Quarterly Review*, from which a quotation was made in last week's number.

"These dens, for we can call them by no softer name, are the only remaining representatives of old Bedlam. They consist of dismal, arched corridors, feebly lit at either end by a single window in double irons, and divided in the middle by gratings more like those which enclose the fiercer carnivora at the Zoological Gardens, than anything we have elsewhere seen employed for the detention of afflicted humanity. Here fifty male lunatics are herded together without regard to their previous social or moral condition. Thus the unfortunate clergyman, the Rev. Hugh Willoughby, who fired a pistol two years since at the judge at the Central Criminal Court, is herded with the plebeian perpetrator of some horrible murder. Side by side with the unfortunate Captain Johnson, of the ship *Tory*, who, in a fit of extraordinary excitement during a mutiny on board his vessel, cut down some of his crew, but is now perfectly sane, sits perhaps the ruffian who murdered the warder in cold blood at Cold Bath Fields—a villain brought in mad by a tender-hearted jury, who shrunk from the responsibility of hanging him. Here also poor Dad, the artist who killed his father whilst labouring under a sudden paroxysm of insanity, is obliged to weave his fine fancies on the canvass amidst the most revolting conversation, and the most brutal behaviour. Those who contend that all criminal lunatics should be treated alike, do not consider the vast difference between the tone of mind in an abandoned wretch who has lived a life of villany, and the gentleman who has committed a casual offence. As the former advances towards sanity, the brutal disposition which early training and vice and dissipation has engraved upon his nature comes into strong relief; whilst the good breeding which is natural to the latter, and which was but temporarily eclipsed in him, resumes its sway. Nay, nothing is more certain than that the previous habits and manners of the lunatic are to a great extent unaffected by his unfortunate malady, even when it is at its height. The disgrace of thus caging up together the coarse and the gentle, the virtuous and the abandoned, rests wholly upon the shoulders of the Home Secretary. The governors of the hospitals, the medical officers, and the lunacy commissioners, have over and over again remonstrated against

the enormity, and to our national shame have remonstrated in vain. It is proposed to build a special asylum for all the state lunatics, who are now distributed among county asylums, hospitals, licensed houses, workhouses, and jails, to the number of 591,* and it is a duty which we trust will not be longer delayed. There can be little doubt that the presence of these crime-tainted individuals is felt deeply by the innocent lunatics, and that their recovery is retarded by the indignation excited at their degraded companionship with the outcasts of society. The erection of a criminal asylum upon a large scale would both compel a better system of classification, and would necessitate some solution of the difficult question—What shall be done with criminal patients who have recovered? One class of cases at least, as Dr. Tyler Smith has pointed out, leaves no room for doubt. The females who have committed offences whilst under the influence of the delirium attendant upon puerperal fever, and who, having recovered, are past the age of child-bearing, should at once be released. They are no longer liable to a recurrence of mental aberration, and to keep them incarcerated for life is to treat past misfortune as an inexpiable crime. Nothing can be more cruel, unjust, and motiveless....

"For the fullest development of the prevalent system of treating the insane, we must go to Colney Hatch and Hanwell, the two great lunatic asylums for the county of Middlesex. The former, situated on the Great Northern Railway, only six miles from the metropolis, is the largest and perhaps the most imposing looking non-metropolitan building of the kind in Europe. In this establishment, built within the last six years, we may study the merits and demerits of modern asylums. Containing within its walls a population, inclusive of officers and attendants, of 1380 persons, which is equal to that of our largest villages, and presenting the appearance of a town, its wards and passages amounting in the aggregate to the length of six miles, it is here that we shall find the completest system of organisation, and, if we may use the term, of official routine. The enormous sum of money expended upon Colney Hatch, which has reached already to £270,000, prepares us for the almost palatial character of its elevation. Its façade, of nearly a third of a mile, is broken at intervals by Italian campaniles and cupolas; and the whole aspect of the exterior leads the visitor to expect an interior of commensurate pretensions. He no sooner crosses the threshold, however, than the scene changes. As he passes along the corridor, which runs from end to end of the building, he is oppressed with the gloom; the little light admitted by the loop-holed windows is absorbed by the inky asphalte paving, and, coupled with the low vaulting of the ceiling, gives a stifling feeling and a sense of detention as in a prison. The staircases scarcely equal those of a workhouse: plaster there is none, and a coat of paint or whitewash does not even conceal the rugged surface of the brickwork. In the wards a similar state of things exists: airy and spacious they are without doubt, but of human interest they possess nothing. Upwards of a quarter of a million has been squandered, principally upon the exterior of this building; but not a sixpence can be spared to adorn the walls within with picture, bust, or even the commonest cottage decoration. This is the vice which pervades the majority of county asylums lately erected. The visiting justices doubtless believe that it would be a superfluous and even mischievous refinement to trouble themselves about pleasing the eye or amusing the brain of the lunatic; but this is a mighty error, as every person knows who understands how keenly sensitive are the minds of the majority of the insane.

'Stone walls do not a prison make,
Nor iron bars a cage.'

sings the graceful Lovelace; but it should be remembered that the lunatic has no divine Althea to muse upon in his house of detention, and the majority of the insane have no healthy wings by which their minds can leap beyond the dreariness of the present. To divert them from the demon in possession, all the ingenuity of philanthropy should be employed; but this truth has been overlooked both here and at Hanwell, and we are lost in astonishment when we reflect upon the folly of lavishing hundreds of thousands upon outward ornamentation, whilst the decorations common among the poorest labourers are denied to the inmates for whom all this expense has been incurred. There is no more touching sight at Colney Hatch than to notice the manner in which the female lunatics have endeavoured to diversify the monotonous appearance of their cell-like sleeping rooms with rag dolls, bits of shell, porcelain, or bright cloth placed symmetrically in the light of the window-sill. The love of ornament seems to dwell with them when all other mental power is lost, and they strew gay colours about them with no more sense, but with as much enjoyment, as the bower bird of the Zoological Gardens adorns his playing bower.* The prison dress of the male patients is in keeping with the desolate walls. It is infinitely depressing even to the visitor to see nothing but dull grey garments; and the lunatics themselves feel degraded by an uniform dedicated to the gaol-bird. The medical officers of both this asylum and Hanwell are deeply impressed with its injurious effects, and they have long denounced it. Happily the system is confined to the men; not, however, from any benevolent feeling towards the females, but simply because gown-pieces of the same pattern cannot be procured in sufficient quantities to clothe the entire community. Among the sane, self-respect is increased by the possession of decent clothes, and the lunatic is often still more amenable to their influence. A refractory patient at Colney Hatch was in the habit of tearing his clothes into shreds. Mr. Tyerman, one of the medical officers, ordered him to be dressed in a bran new suit. The poor man, a tailor by trade, either from a professional appreciation of the value of his new habiliments, or from being touched by this mark of attention, respected their integrity, and from that moment rapidly recovered. Before leaving the asylum, he stated that he owed his cure to the good effect produced upon his mind by being entrusted with this new suit of clothes. At Hanwell the patients who destroy their dresses are put into strong canvass garments, bound round with leather, and fastened with padlocks. This plan is adopted at some other lunatic asylums; but it always looks repulsive.

"It is only, we believe, in the metropolitan county asylums, which should be model establishments, that the grey prison dress is retained. In the majority of county asylums the smock-frock of the district is used, and the patient moves about undistinguished from the rest of the population by any repulsive badge. In France and Belgium they manage better still. Dr. Webster, in his notes on foreign lunatic asylums, published in the *Psychological Journal of Medicine*, speaks of the bright head-dresses and vivid shawls used in France as giving a cheerful appearance to the assembled inmates. Nothing less could be expected from the known disposition of a people of whom it has been said, that if any man among them was thrown naked into the sea, he would rise up clothed from head to foot, with a sword, bag-wig, and ruffles to boot. In the present matter they have been wiser in their generation than ourselves; and we can imagine with what surprise they would learn that at Hanwell, the most celebrated English establishment for the treatment of the insane, patients are rewarded for good conduct by allowing them to wear a fancy waistcoat. This fact of itself shows the aversion to the prison garb, and the necessity of discarding it. But the same visiting committee which inspects the county gaol governs the asylum, and we regret to say that they allow the organisation of the former to be introduced into the latter.

"In spite of these drawbacks, the progress made within the last twenty years has been immense. A walk through the wards and workshops of Colney Hatch will prove that the lunatic is at last treated as though he had human sympathy and desires, and was capable of behaving in many respects like a rational being. All large asylums possess an advantage over smaller ones in their greater ability to classify their inmates. The wards and corridors of Colney Hatch and Hanwell are so extensive, that they may be likened to different streets inhabited by distinct classes. It is usual to name the compartments according to the mental condition of the patients contained in them. Thus in most asylums we have the refractory ward, the epileptic ward, the paralytic ward, the ward for dirty patients, and the convalescent ward. At Colney Hatch it is considered better to use numbers instead, as the patients soon become acquainted with the denomination of the class to which they belong, and often behave in conformity with it. Thus the lunatic, finding himself in a refractory ward, will sometimes act up to the part assigned to him when he would otherwise be peace-

* "Steps are being taken, we believe, to effect this necessary change; but unless Parliament puts its pressure upon the Home-Office, we shall expect to see the arrangement completed when the Nelson Column is finished, and not before."

* "The walls of one of the wards of Colney Hatch are decorated throughout with well executed bas-relief pictures from Greek subjects by a patient. We are informed that the lunatics who are transferred here from the undecorated wards enter the apartment with expressions of delight, and are particularly careful to preserve the objects of their pleasure in good condition. In some metropolitan asylums the inmates have adorned their prison-house with pieces of sculpture and pictures; and the Germans are fond of indulging the love of colour by filling some of the windows with stained glass. In France abundance of flowers are placed about the establishment, as being eminent sources of delight. In these particulars we have not a little to learn from our continental brethren."

able. The vice of classification is that it separates the population of an asylum into so many mental castes, which in some measure prevents that easy transition from lunacy to sanity, which it is desirable to maintain. In the choice of difficulties, however, there can be little doubt that these divisions in lunatic establishments, as at present constructed, present the most convenient as well as the best means of treating the insane, and the errors to which it is liable can at all times be obviated by the careful supervision of the medical officers. . . .

"At Colney Hatch, as at Hanwell, and indeed all other public asylums, the sexes occupy separate portions of the building, and are only allowed to be present together on particular occasions. This unnatural arrangement undoubtedly arose from the introduction into asylums of prison and workhouse systems of management; for certainly nothing can tend to render the life of the patient more dreary than to find himself carefully excluded from the company of the other half of creation. It is stated by the advocates of separation, that the mingling of the sexes among the insane would be productive of occasional misbehaviour; but nothing could be more unjust than to deprive the majority of the benefits which would arise from frequent social reunion, in consequence of the erotic tendencies of the few. It is with pleasure, therefore, we see the attempts which are being made to assimilate the intercourse of lunatics to that of the sane at Hanwell, Colney Hatch, and other asylums. The most interesting feature of the former establishment is the ball which takes place every Monday night. Shortly after six o'clock the handsome assembly-room, brilliantly lit with gas, becomes the central point of attraction to all the inmates, male and female, who are considered well enough to indulge their inclinations for festivity. On the occasion of our visit there were about two hundred patients present, together with a few visitors and many of the attendants. In a raised orchestra five musicians, three of whom were lunatics, soon struck up a merry polka, and immediately the room was alive with dancers, In the progress of this amusement we could see nothing grotesque or odd. Had the men been differently dressed, it would have been impossible to have guessed that we were in the midst of a company of lunatics, the mere sweepings of the parish workhouses; but the prison uniform of sad-coloured grey presented a disadvantageous contrast to the gayer and more varied costumes at Bethlehem, and appeared like a jarring note amid the general harmony of the scene. In the corners of the room whist-players, consisting generally of the older inmates, were seen intent upon their game; not a word was uttered aloud, not a gesture took place that would have discredited any similar sane assembly; yet not a patient was free from some strange hallucination, or some morbid impulse. Among the merriest dancers in Sir Roger de Coverley, was a man who believed himself to be our Saviour, and who wore in his hair a spike in imitation of the crown of thorns; and one of the keenest whist-players was an old lady, who, whilst her partner was dealing, privately assured us she had been dead these three years, and desired as a favour that we would use our influence with the surgeon to persuade him to cut off her head. In the midst of such strange delusions, it was curious to notice how rationally those who were their dupes enjoy themselves; and it is impossible to deny that such reunions are eminently calculated to hinder the mind from morbidly dwelling upon its own unhealthy creations. It is found that too prolonged and frequent repetition of the balls somewhat diminishes their interest; an evil provided against at Hanwell by restricting the time allotted to them. At nine precisely, although in the midst of a dance, a shrill note is blown, and the entire assembly, like so many Cinderellas, breaks up at once, and the company hurry off to their dormitories. These hebdomadal balls have not yet been introduced at Colney Hatch. A movement has, however, been made during the last six months towards a limited association between the sexes, by allowing them to dine together. Of the five hundred patients who assemble in the ample dining-hall, two hundred are females and three hundred males. The scene when the women first made their appearance is described as something remarkable; the men rose in a body, apparently delighted beyond measure, and the presence of the softer sex has not only tended to break the former monotony, but to keep the assembly in order and good humour. Before this happy meeting there were occasional outbreaks of some of the more excited patients; but now, when any of the men are inclined to be fractious or discontented, the women turn them into joke, and they are silenced immediately. As yet the two sexes are not allowed to sit at the same table, but are located on opposite sides of the room. By far the better plan would be to seat them on different sides of the long tables; but as many persons in authority, wanting confidence in human nature, object to this natural arrangement, the innovators must be satisfied for the moment with the present imperfect concession. When it was first proposed to introduce a billiard-table at Bethlem, the scheme was rejected by a majority of two-thirds of the governors, on the score that the players would fight each other with the cues and balls; and bagatelle, as a kind of half measure, was permitted instead. As the patients confined the balls to their legitimate purpose, and the mace was not turned into an offensive weapon, the billiard-table was at last with reluctance established. The same thing will doubtless happen with respect to the dining arrangements at Colney Hatch; and before long we trust male and female lunatics will exchange courtesies across the table, instead of across the room."

British Medical Journal.

SATURDAY, MAY 16th, 1857.

THE MEDICAL BILL.

On Wednesday, Mr. Headlam reintroduced the Medical Bill in the House of Commons. The measure—which, it will be remembered, is the result of a conference between the Medical Colleges, some of the Universities, and the Medical Reform Committee of this Association—is confessedly a compromise between our own original Bill and that put forward in the early part of the year by the Committee of Conference, acting on the part of the Colleges of Physicians and Surgeons of the United Kingdom. In order to obtain as much unanimity as possible, concessions were made on both sides; and we believe that, without sacrificing any of the principles for which the Association has so long contended, the effect of this compromise has been to disarm an opposition which, we fear, would have been all powerful to put a stop to any legislation upon medical affairs whatever. The measure now brought forward by Mr. Headlam comes before the legislature sanctioned by the Medical Reform Committee of our own body, and supported by the most powerful medical corporations in the kingdom. We do not by any means wish to contend that the Bill is yet perfect, or that it may not be materially improved in Committee; but we do say that no measure of medical reform has ever been introduced with such a fair promise of being passed into law. Lord Elcho, it is true, fears that the Bill will favour the corporations at the expense of the Universities; and, under that impression, he has determined to bring in a second measure. We do not participate in the noble lord's fear. There is no desire on the part of the Colleges, we believe, to gain any advantages over the Universities; and it cannot for one moment be conceived that the Medical Reform Committee of our own body will be participators in any plan for the aggrandisement of the powers in Lincoln's Inn Fields. We are not in a position to judge of the tenor of Lord Elcho's Bill; it may be, for all we know, more generally unexceptionable than that brought in by Mr. Headlam; but we would ask, in all seriousness, whether his lordship would not have better served the interests of those universities for which he seems to act, by introducing emendatory clauses into the first Bill, rather than by dividing the attention of the legislature between a couple of measures?

In the present condition of the question, we cannot well say more. Next week all parties will be in a position to judge more accurately of the nature of the opposition—if, indeed, opposition

it be—which Lord Elcho intends to offer. In the meanwhile, let us most earnestly recommend all the Branches of this Association to petition, petition, petition, in favour of Mr. Headlam's measure. There is a German saying, that "all good things are three". This is the third attempt of late years at medical legislation, and we hope this time it will be successful. At all events, Lord Elcho has expressed a fear that Mr. Headlam's measure will not prove acceptable to the general body of the profession. There are two thousand of our Associates, who have it in their power to blow this supposition to the winds; and we trust that, before another week is over, we shall see such a list of petitions in favour of the Bill in the parliamentary columns of the *Times*, as will convince even Lord Elcho himself that he is mistaken in fancying that Mr. Headlam does not carry the great body of the profession with him, in the strenuous exertions he is making to bring together in this Bill all the antagonistic elements which have so long stood in the way of the general good of Medicine.

DR. FELL'S TREATMENT OF CANCER.

A few months since, we informed our readers that the Governors of the Middlesex Hospital had, under the advice and with the concurrence of the medical officers of that institution, placed at the disposal of one Dr. Fell a certain number of beds in the department of the hospital especially devoted to the treatment of cancer. Dr. Fell is, as is generally known, an American surgeon, who has obtained extensive notoriety, as being the inventor of a novel method of curing or treating cancer. He professes to do what no one has yet done before him; viz., by the action of certain remedies, to destroy the constitutional character of cancer; and, by the aid of a caustic, to necrose, destroy, and eliminate *en masse*, root and stock, the local tumour; doing this in a manner which, though not quite according to the ancient aphorism in respect of the *cito*, nevertheless acts, as is affirmed, *tuto* and moderately *jucundè*.

Now this, as we understand, was the way in which Dr. Fell so rapidly reached the high position of *interim* surgeon to a metropolitan hospital. Having attained to an eminent degree of private practice—and we need hardly say, that all practice in London, which is eminent, is also invariably highly lucrative—he liberally invited his professional brethren to come, and be themselves the witnesses of his method of triumphing over this arch-enemy of poor humanity. Many came; and some were convinced that Dr. Fell had made a decided hit. So good, feasible, and reasonable, indeed, did his method appear in its results, to certain reflecting minds, that to them Dr. Fell's offer of operating in a public hospital was thought worthy of consideration. Under certain conditions, therefore, Dr. Fell was permitted to enter the Middlesex Hospital as a semi-public operator. The nature of his remedy, and his mode of applying it, were to be imparted to the surgeons of that hospital; and, after a given time, the secret of both, and the results as exhibited, were to be fully published, to the anxious admiration of the sceptical and the faithful.

We observed at the time, that we thought, once in a way at least, the public could hardly accuse the profession of being deaf to the voice of a charming novelty; and that Dr. Fell could not claim a serene seat among the victims of prejudice and bigotry, like the modern Hygeist, Homœopath, Mesmerist, *et hoc genus omne*, who pretend, in this respect, to row in the same boat with the persecuted Galileo and Harvey. Dr. Fell has had the fairest of play. We promised at the time, and we repeat the promise, that if, in the event, his performances equal his pretensions, we will do him justice before the world; but we think our patience is over-taxed. There are two parties to the bargain into which the Doctor has entered; and he must not, therefore, expect to have it all his own way. The compact is, as we understand it, this—that the whole history of the remedy and the treatment shall be disclosed to the public whenever the experiments carried on in the Middlesex Hospital shall have reached a degree of completeness sufficient to enable the surgeon-judges to express an opinion thereon. Has not that time arrived? We cannot doubt it. It is well known that Dr. Fell has operated on numerous, and, as we understand, well selected cases of cancer; and that the tumours have been removed by his method. We conclude, therefore, that, as far as the mere operation itself is concerned, the adjudicators could give us no more or better information a year hence than they can do at the present moment. The only pretence of delaying judgment which can be suggested is, that as yet no opinion can be given regarding the secondary consequences of the operation. But such a reason might be given a year hence with almost as much show of sense as at the present moment; for if, in Dr. Fell's well chosen cases, the cancer does not return during twelve months, there is no improbability but that it will do so at a later period, as happens in cases treated by the knife.

This, then, the most important part of Dr. Fell's pretences—that which relates to the eradication of the constitutional cancer—cannot receive any solution from these experiments, unless we are willing to wait patiently two or three years, quiet expectants of a large experience. Consequently, the matter, stripped of all varnish, rests exactly where we previously placed it; and the question to be answered is simply this,—Can Dr. Fell, by the aid of his new caustic, remove a cancer-mass in a more effectual, pleasant, and scientific manner, than can be done by the methods of ablation ordinarily practised? Now, if this question can be answered at once (and who can doubt that it may be?), why is the reply delayed?

The question is one which the profession has a right to urge. A secret remedy—shall we say a nostrum?—is at the present moment widely and extensively used, and, in a certain manner, *under the patronage of the profession.* It was not exactly thus that Jenner and Harvey promulgated their discoveries; nor is the proceeding altogether according to the medical ethics of even these commercial times: still, under the circumstances of the case, we were not unwilling to stretch a point in favour of Dr. Fell; but there are limits to forbearance in this direction. The advertising sheets of our journals have been informing us for months that "shortly will appear" the grand secret; but still it comes not. Puffs of Dr. Fell find their way into the daily prints; and some are of such a character that one of the medical staff of the Middlesex Hospital thinks himself bound to disclaim all connexion with the trumpet-blowing, on his own and his colleagues' behalf; expressing, at the same time, a hope that Dr. Fell is entirely innocent of partaking in it. Then, again, such is the repute Dr. Fell has gained under the eaves of the Middlesex Hospital, that, *per fas* and *nefas*, young and old, from far and near, afflicted with cancer,

are rushing to his hands. Are they all rushing to a delusion? Is the operation extreme and lengthened torture, or a mild and gentle process? Does it remove the tumour more securely and effectually than the knife does? What are its advantages, if it has any, over established practices? These are questions which, we plainly say, ought to be at once answered by the surgeons of the Middlesex Hospital. The cause of suffering humanity and the honour of the profession demand an answer. The materials for the solution of the questions are abundantly sufficient in their hands. They know how the tumour is removed; the duration of the operation; the pain attending it; the character of the wound, and its mode and times of healing: these things they know, for they have seen them. Why should there be more delay? On the most material point—the greater or less degree of probability of the recurrence of the cancer—they can evidently give us no information of any value whatever, unless they delay their report until many of us are in our graves: and, even then, what would be the worth of a few statistics drawn from operations performed on a given number of selected cases?

A grave responsibility rests upon the surgeons of the Middlesex Hospital. Common sense, indeed, would seem to tell us that excessive and long enduring pain must attend the removal of large tumours by caustics; and the experience of most of us has made us acquainted with individual cases, where weeks of such intense suffering has been endured from this very method of ablation. Now, if a few cuts of the knife, rapidly made under the influence of chloroform, are, after all, a better operation than Dr. Fell's, the public cannot too quickly be told so; for it is evident that, if such be the verdict given, an immense amount of needless suffering will be immediately spared the unfortunate victims of cancer; and that, the fewer experiments tried to test the fact, the better for the world and for the credit of the profession.

THE WEEK.

The General Board of Health, according to Sir George Grey, is about to be abolished as a separate establishment. "Instead of proposing a renewal of the existing Board, the Government have come to the conclusion to dispense with it as a separate establishment; and that such portions of its present duties as it was desirable should continue to be discharged should be transferred to the Council Office, to be performed by the Lord President, with the aid of a Committee of the Council." If this recommendation be carried out, the profession may not only bid farewell to any idea of the sanitary affairs of this country being conducted in an independent manner, but to the honest hope once entertained that the Presidency of the Board of Health would ere long be filled by a medical man, and thus constitute one of the few prizes of the profession which the state condescends to hold out to us. We are, it is true, totally in the dark as to the real power which the Officer of Health will be allowed in the Council Office, if even his services be retained; but that he will not be as free to act as he is at present, we fear there can be little doubt. It certainly strikes us with some astonishment that this change should have been contemplated at a moment when the teaching and influence of the Board of Health was being extended to every large town in the kingdom. The science of health, we imagined, was a growing science. Of late years, an immense development of ideas has taken place with respect to public hygiene; and surely the time was come for erecting the Public Health Office into a powerful department, rather than to curtail and shrivel it up into a mere minor department of a Council which is already overburdened with very responsible work. We trust our medical representatives in Parliament will watch the progress of the Bill, and demand some further explanations on a matter of much moment to all sanitarians.

We gather from the Lord Chancellor's reply to Lord Campbell, in the House of Lords on Monday, that the Government has already prepared a Bill, which they intend immediately to introduce into the Lower House, to regulate the sale of poisons. The question is doubtless one of some difficulty, as the Lord Chancellor asserts, inasmuch as new poisons are being found out every day, and it is difficult to draw the line between poison and medicine. At the same time, there can be no doubt that, practically, an immense amount of life would be saved by forbidding the public sale of the half-dozen poisons which are familiar to the public. Arsenic, strychnia, laudanum, oil of almonds, prussic acid, and oxalic acid, form the repertory of nine-tenths of the poisoners and suicides. The injury done to life or health, intentionally or unintentionally, by the more recondite poisons, are not worth mentioning. New drugs, and mineral substances of a most deadly nature, are, it is true, continually being discovered; but then it is only chemists who possess a knowledge of them: and how many would-be suicides or poisoners are chemists? This is the common sense manner of looking at the question; and we do not apprehend that, practically, any serious difficulty will be found in enacting a Bill which will effectually protect human life, without restricting improperly the sale of drugs, or interfering with the lawful dealings of chemists.

A meeting of the Poor-Law Medical Officers in England and Wales, and of the profession generally, is to be held at the Freemasons' Tavern, Great Queen Street, on Thursday the 28th instant. The chair will be taken at 2 P.M. by the Earl of Shaftesbury. The object of the meeting is to agree on a petition to be presented to Parliament; and to transact other necessary business. Mr. Griffin to-day circulates, with a notice of the meeting, and forms of petition, another earnest appeal to his brethren the Poor-law Medical Officers, in which he is joined by Mr. Lord; and we heartily trust that they will respond by mustering in large numbers at the meeting. Mr. Griffin urges that "each Union, which is too distant to have all its members present, should, if possible, send a deputy, and not imagine that the London men will of themselves form a meeting; as he is bound to tell the disagreeable truth, that out of 146 union officers residing there, not more than 38 have, up to the present time, joined the Poor-Law Medical Reform Association." Indeed, of two hundred unions which have not joined the Association, twenty belong to London and its immediate vicinity, without reckoning several at hand in the adjacent counties. This really ought not to be. If the medical officers of the metropolitan unions have not, as individuals, the same grievances as their brethren in the country, they should still remember that they are part of the same body with those who suffer these grievances. The officers of one Union—the

Wandsworth and Clapham—have, as they state, no complaints to make on their own account; but they have long ago joined the ranks of Mr. Griffin's Association, merely from that right good *esprit de corps* which we should greatly rejoice to see much more extensively manifested than it has been.

The Annual General Meeting of the Royal Medical Benevolent College took place on Wednesday last, at the Office in Soho Square; the Right Hon. the Earl Manvers, President of the College, in the Chair. It appeared from the Report, that the Institution was making most satisfactory progress, and was receiving cordial support on all hands. The annual subcriptions during the past year amounted to £2,769; the ordinary donations to £2,876; and the special donations to the chapel fund to £2,760. At the close of the ordinary business, the meeting was made special, for the purpose of confirming an agreement entered into between the Council of the College and the Devon and Exeter Benevolent Medical Society, for the transfer to the College of £1000 stock, on very favourable terms. The proceedings, which were throughout of the most friendly character, terminated with a vote of thanks to the noble President of the College, who occupied the Chair.

A second visitation of apothecaries' shops in the City was made on Thursday, May 7th, by the Censors of the Royal College of Physicians, assisted by the Wardens of the Society of Apothecaries. The Censors report that the shops present a generally improved condition; and they have found occasion to express their approval in nearly every instance. Especial care was manifested by nearly all the proprietors of shops to avoid chances of accident when dispensing poisonous drugs. Cautious and ingenious contrivances and devices were observed by the Censors, which, though various in the different shops, all tend to the prevention of accidental poisoning through careless dispensing. They also state that adequate measures to obviate the purchase of poisons for criminal purposes are yet wanting, and are greatly to be desired.

A recent discussion in the University of Oxford, on the new Examination Statute, has brought into collision the antagonistic elements—stagnancy and progress in education. Some years ago, it was determined that a candidate should be examined on the subjects in two schools—the classical one being made compulsory, while of the others there was a choice. This being found to work inconveniently, it was lately proposed that one school only should be required, and that the classical school should be but one of four of which candidates might take their choice. Here, then, comes the clash of "the ancient Oxford curriculum *versus* modern information and science".

"The Master of University (Dr. Plumptre) was opposed to Moderation honours, and to the requisition of a second final school. He was also opposed to the free choice among the final schools which the statute would enact, and would have a final classical examination from all. *The other studies gave useful information, but did not serve as a training to the mind.* Professor Daubeny rose in consequence of a remark made by the Master of University, that physical studies were not a good training to the mind. His opinion was that they were so."

It will be remembered that at the commencement of the attack of the allied fleet on Petropaulovski, the Russian military settlement on the coast of the Pacific, Admiral Price, the officer in command, shot himself in a fit of temporary insanity. The Indian mail brings us intelligence that two of the commanders of the Persian expedition have put an end to their existence under somewhat similar circumstances. General Stalker, commander of the forces, it appears, shot himself whilst labouring under great anxiety lest his troops should fall the victims of disease; and Commodore Etheridge destroyed himself while suffering mental aberration brought about by long continued anxiety connected with the duties of his command. The occurrence of three such remarkable suicides is profoundly interesting to the psychologist. It would seem to show that the peace so long enjoyed by this country has temporarily impaired the minds of our military leaders, and rendered them unequal to bear the burthen of those tremendous responsibilities which fall upon them in time of war.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

CHANGE OF ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROP. COUNTIES. [Adjourned Meeting.]	37, Soho Square, London.	Mon., May 18, 4 P.M.
SOUTH MIDLAND. [Annual Meeting.]	George Hotel, Northampton.	Thurs., May 21, 2 P.M.
EAST YORK AND NORTH LINCOLN. [General Meeting.]	Infirmary, Hull.	Tuesday, May 26th, 4 P.M.
EAST ANGLIAN. [Annual Meeting.]	Norfolk Hotel, Norwich.	Friday, June 12, 1 P.M.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I GIVE notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

PHILIP H. WILLIAMS, M.D., *Secretary.*

Worcester, May 12th, 1857.

METROPOLITAN COUNTIES BRANCH: ORDINARY MEETING.

AN ordinary meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Tuesday, May 12th; GEORGE WEBSTER, M.D., President, in the chair.

NEW MEMBER.

Mr. W. WEBBER, on the nomination of Dr. Ward, seconded by Dr. Henry, was admitted a member of the Branch.

PETITION AGAINST THE SALE OF POISONS.

The following petition was submitted to the meeting for adoption.

"*To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.*

"The humble petition of the Metropolitan Counties Branch of the British Medical Association, agreed to at a meeting of the Branch held on May 12th, 1857,

"SHEWETH—

"That, in consequence of the present unrestricted sale of poisons, serious accidents and loss of life frequently occur, and great facility is afforded to the commission of suicide and murder.

"Your petitioners therefore pray your Honourable House to pass a Bill which shall place the sale of poisons under proper restrictions.

"And your petitioners will ever pray, etc."

Dr. LANKESTER inquired whether the petition was intended to embrace a reference to the sale of poisons with articles of food, such as children's sweetmeats, etc.

Dr. MURPHY was of opinion that, although it was most proper that notice should be taken of the matters referred to by Dr. Lankester, the introduction of them would open a very wide field. The subject of diseased meat was one which would have to come under consideration.

Dr. EDWARD SMITH believed it best to keep the subjects distinct.

Mr. WEBBER said that the best plan was to adhere to a general principle, as the object of the petition would be better gained thereby than by entering on the consideration of special subjects.

Mr. JAMES BIRD suggested that, when the Bill which is about to be introduced into Parliament has been printed, there will be an opportunity of examining its special provisions.

On the motion of Dr. MURPHY, seconded by Mr. WEBBER, the petition was adopted, and ordered to be signed by the President and Secretary.

APPOINTMENT OF AN ADDITIONAL SECRETARY.

Dr. HENRY proposed the following motion, of which he had given notice at the preceding ordinary meeting:—

"That the present laws of the Branch be so altered, as to allow the appointment of two honorary secretaries in place of one."

The reasons in favour of this arrangement were, he believed, so obvious, that it would be unnecessary to enter on them at any length. He (Dr. Henry) considered that the appointment of a colleague to Dr. Ward would be of great advantage both to the Branch and to the Association. A single secretary could not be expected to give that extension to the Branch which it ought to possess; and even if he could do so, it was almost impossible for him to keep it in activity. He referred to the fact that the business of several other large Branches of the Association was carried on by means of two secretaries.

Dr. OGIER WARD seconded the resolution. He had been secretary to the Branch from the time of its establishment; and he had all along felt that the utility of the Branch might be much increased by his having a coadjutor. The want of efficient aid had been especially felt by him since the retirement of Dr. Cormack from taking an active part in the business of the Branch. Dr. Cormack had spared no opportunity of adding to the members of the Branch; and it was to his exertions that the names of many of the members on the roll were due. The Branch, however, was not now so flourishing as it ought to be; but Dr. Ward believed that, by means of an active secretary in London, not only might the Branch be extended, but the A sso ciation be greatly benefited.

The resolution, on being put to the vote, was carried unanimously.

MEMBERSHIP OF THE BRANCH.

Some conversation took place on the question whether all members of the Association residing within the limits of a Branch ought to belong to the latter. The general opinion was, that although it was desirable that the Branches should be the medium through which new members were admitted to the Association; still, as they could be admitted in another way, the membership of the Branch must be voluntary. Mr. WEBBER urged the importance of extending the Branch and Association, so as to support a JOURNAL which was the property of the profession. Dr. MURPHY coincided; and approved highly of the gentlemanly tone and freedom from personalities which at present characterised the JOURNAL: he thought, however, that the introduction of a little more "gossip" might be an improvement. It was important, he said, that the JOURNAL should co-operate with the Branches in extending the usefulness of the Association. After further remarks, the subject dropped.

A CIVIL SERVICE MEDICAL DEPARTMENT.

Mr. JAMES BIRD made a communication on this subject. His remarks are published below in the form of a letter.

The meeting then adjourned to Monday, May 18th, for the purpose of taking into consideration the Medical Reform Bill introduced into Parliament by Mr. Headlam.

Editor's Letter Box.

A CIVIL SERVICE MEDICAL DEPARTMENT.

LETTER FROM JAMES BIRD, ESQ.

SIR,—The Government has decided upon abolishing the General Board of Health as a separate and independent department of the public service, and a Bill is at this moment before Parliament, having for its object to transfer the duties hitherto performed by the Board, to the supervision of a department of the Privy Council. Would it not be, therefore, well to inquire at this particular juncture, whether the interests of the profession, and those of the public at large, would not be best promoted by the formation of a new department of the public service, to be entitled "THE CIVIL SERVICE MEDICAL DEPARTMENT", for the regulation, supervision, and appointment of medical officers in all those branches of the public service at present held by medical men, upon some uniform system as respects their duties and emoluments?

The numerous, diversified, and all important public services rendered by the medical profession in every part of the kingdom; the extensive use made of their scientific and special acquirements; and the vast aid and cordial co-operation which its members have at all times afforded in carrying out any scheme for the promotion of health or for combating disease, have rendered a continuance of those services a public necessity, and in every respect deserving of a state recognition.

"*A Civil Service Medical Department*" for regulating and securing efficiency in the medical officers attending the poor and the police; in those appointed to gaols, prisons, and reformatories; to public lunatic asylums; to national schools and free emigrant ships; to the public offices; and to public works and establishments; and probably, hereafter, to free hospitals and dispensaries; could not fail to prove of great public utility, if conducted with ordinary care and prudence.

The service should embrace preventive as well as curative medicine, by paid officers of various grades of rank, acting under a code of rules and regulations uniform in character for the whole kingdom, and devoting their whole time to the public service. It should also be responsible for the due and efficient performance of their duties to one properly constituted authority, and the pay and retiring allowance should be fixed by act of Parliament, as in the case of the army and navy.

I am desirous of submitting these views for consideration, as I believe them calculated to promote feelings of independence and self-respect among the members of the medical profession by having their public services duly recognised and appreciated, and because I am fully persuaded that the public interests would be promoted by their being carried into effect. The money expended under the present system, although it amounts to a good round sum, would require to be considerably augmented to carry out this scheme effectually; and there may be some difficulty in inducing some parties to forego the patronage they enjoy at present: but these are difficulties of detail that would be disposed of in due time, and which, I doubt not, would speedily vanish under a free and candid ventilation of the subject. I am, etc.,

James Bird.

6, Seymour Street West, Connaught Square, May 12th, 1857.

PROXY VOTES AT ELECTIONS FOR ADMISSION INTO THE "ROYAL MEDICAL BENEVOLENT COLLEGE."

Letter from W. Allison, Esq.

Sir,—At page 398 of your number for May 9th, Mr. Barber, of Stamford, has called your attention to the usurped, unfair reciprocity amongst the more wealthy and influential friends of candidates for admission into the College, which reciprocity is sanctioned and tolerated by the council. Is it not a question whether or not that license is un-English, because contrary to the spirit of "a fair field and no favour"——because one competitor is allowed the advantage of means which another cannot obtain?

The friendless orphan of a deceased governor who had long paid to the College fund might be excluded from a foundation scholarship, or compelled to incur another year's expenses of canvassing, etc., by parties, the parents of whose less destitute candidate had never subscribed one penny to that fund. Are such combinations allowed in a simple trial of skill, or should they be tolerated for enabling the stronger to oppress the weaker? Does not that unfair reciprocity tarnish the term "royal", alloy "benevolence", and sully the pure stream of charity? Would not the benevolent objects of the charity be more fully exercised and better accomplished by the appointment of a committee to scrutinise; to receive (instead of the council) all applications from the representatives of parties desiring admission into the College; to obtain necessary information in reference to the payments which their late parents had made to the fund, and to give candidates a preference, accordingly, over others who were but equally deserving in other respects; and in reference to the circumstances of all new candidates, to place their names (not alphabetically, but) from one upwards, in proportion to the extent of their claims upon the College—not in proportion to the wealth and influence of their friends, but in accordance with the extent of their poverty and helplessness in the opinion of the committee?

The council might, as usual, just before an election, send to each governor a balloting paper, with a notice that each paper must be filled by the individual receiving it *only*, who must return it *by post* to the general office in Soho Square before the day of election, with a caution "that no proxies would be allowed, and that a discovery of any selfish reciprocal additions of votes upon the papers would render all the votes invalid, and would render the balloting papers inadmissible."

I am, etc., W. Allison.

East Retford, May 9th.

MEDICAL REFORM.

Letter from George King, Esq.

Sir,—Before the next Journal is published, or this meets the eye of your readers, another Medical Reform Bill will be before the House of Commons. Mr. Headlam has certainly done his duty by giving timely notice; and if we expect and wish the Bill to be passed this session, we must do ours, and this is to be done, as you say, "by a general application of all shoulders to the wheel, and a hearty and unanimous push in one direction." That direction is, to the House of Commons. Mr. Headlam must be supported; and the only way of doing this, is by sending him petitions from every Branch of our Association: and individuals should also petition. It is the *number of petitions* that influence the House, more than the number of signatures to a single petition. We must not forget that it is a new House of Commons, and we must make them acquainted with our wants and our grievances before we can expect them to advocate a Medical Reform Bill. Many hundreds of the members of the present House never heard of medical reform. We are already told by Lord Palmerston that this is to be a short session. There will therefore be but little time for discussing the subject out of doors. However tired of the subject we may be, the legislators will have to begin afresh, and we must assist them by all legitimate means in our power. We must speak out and meet too; each member of the Association can explain the subject to his representative, and thus do good service. If we want the laws regulating the medical profession altered and amended, we must support those who have the power to do it. If we can but agree among ourselves as to what we want, and are sure the Government will help us, as the session is to be short, no time should be lost. Petitions to Parliament must be signed and forwarded to members immediately. Much is expected by the public from the British Medical Association, and I am anxious that they should not be disappointed. We must support Mr. Headlam.

I am, etc., George King.

Bath, May 9th, 1857.

Parliamentary Intelligence.

HOUSE OF LORDS.—Monday, May 11th.

THE SALE OF POISONS.

Lord Campbell wished to call the attention of the House to the necessity of further regulations with respect to the sale of poisons. He knew that the Secretary of State for the Home Department had been actively employed for some time past in obtaining information upon the subject; and he believed the right honourable gentleman had collected a great deal of very valuable information upon which some measure might be introduced. Legislation ought to be directed, not only against the administration of poison by design, which had received a salutary check, but against the administration of poison by accident. Some precautions were absolutely necessary to prevent the recurrence of cases of poisoning by mistake.

The Lord Chancellor said that the subject had received not only the most careful investigation from his right honourable friend (Sir G. Grey), but that a Bill had actually been prepared, and would, he believed, in a few days be introduced in the other House, for the purpose of putting down that offence. The difficulties of that subject were hardly to be estimated, because the moment certain poisons were enumerated, the ingenuity of chemists immediately invented others. Then the line which separated poisons from medicines was extremely difficult to define. The Bill to be brought in would guard not only against the evil of selling poison to persons who intended to make a bad use of them, but there was also a clause guarding, as far as possible, against the sale of poisons by which persons were injured in their health. If the Bill was not likely to remove altogether, he hoped it would materially mitigate, the evil.

HOUSE OF COMMONS.—Friday, May 8th.

CHAIR OF MILITARY SURGERY AT THE UNIVERSITY OF EDINBURGH.

Mr. Black asked the Secretary of State for the Home Department if it was the intention of the Government to make an appointment to the Chair of Military Surgery in the University of Edinburgh, which had been vacant for more than twelve months.

Sir G. Grey said that the appointment lay in the hands of his noble friend the Secretary for War, who had selected an officer for the purpose. That gentleman would, he believed, enter upon the discharge of his duties on the 15th instant.

Monday, May 11th.

GENERAL BOARD OF HEALTH.

Sir G. Grey moved for leave to introduce a Bill to make better provision for the exercise of the powers of the General Board of Health. The right hon. baronet in doing so took occasion to observe that the Board had originally been created in the year 1848; its members having then consisted of the First Commissioner of Woods and Forests, and two other gentlemen appointed by the Crown, one of whom was in the receipt of a salary. The original Board had, however, been dissolved in the year 1854, and a new Board had been constituted, having at its head a president who received a salary of £2,000 per annum, he being the only paid member of the Board. By virtue of the Act under which the department had been instituted its powers were to continue until the 29th day of July next, and until the end of the next ensuing session of Parliament. Paying regard, however, to the ordinary duties which the Board had to perform, the Government had come to the conclusion, instead of proposing a renewal of the existing Board, to dispense with it as a separate department, and that such portion of its present duties as it was desirable should continue to be discharged should be transferred to the Council-office to be performed by the Lord President, with the aid of a committee of the Council. If the House should agree to that proposal an immediate reduction of £3,000 or £4,000 per annum in the expenses of the department would be the result, while a still greater reduction might after some experience of the working of the new system be effected. Leave was then given to bring in the Bill.

LUNATIC ASYLUMS (SCOTLAND).

In answer to Mr. E. Ellice,

Sir G. Grey stated that the report of the Commissioners appointed to inquire into the state of Lunatic Asylums in Scotland, would be printed in the course of a few days.

CONSUMPTION OF SMOKE.

Mr. Bowyer asked the Secretary for the Home Department whether the Government would take measures to enforce the law that required manufacturers in London to consume their own smoke.

Sir G. Grey replied that during the last six months there had been fifty-four convictions in London for violations of the law; but these convictions by no means represented the whole of the steps taken by the authorites; because, when the police found that parties were disposed to make the alterations which the Act required, they abstained from taking further measures; so that much more was done in the way of enforcing the law than appeared from the number of convictions.

Wednesday, May 13th.

MEDICAL PROFESSION BILL.

Mr. Headlam moved for leave to bring in a Bill to alter and amend the laws regulating the medical profession. In doing so the hon. member stated, that its general character was the same as that of the measure which he had introduced upon the same subject last session. Its main object was to insure uniformity of education throughout the whole kingdom in the case of medical men. It further provided that persons who had passed the required examination in one portion of the country should possess the right to practise their profession in any other portion of it; and also, that there should be a perfect system of registration, so that the public might be enabled to ascertain, with as small an amount of trouble as possible, whether any particular person was or was not a legally qualified medical practitioner. These were the three principal provisions of the Bill; and he should only add, that the machinery by which he proposed to carry them into effect had met with the general approval of the profession.

Mr. Cowper admitted that the subject of the Bill was one of great importance, and was glad to hear that it had met with the approbation of the medical profession. The State had taken upon itself to prescribe what should be the qualification of medical practitioners, but the laws by which the nature of that qualification was regulated were chiefly derived from old charters, and the whole subject was, as a consequence, in a somewhat anomalous condition. The qualifications required were as various as was the area over which those qualifications could be exercised. There were, for instance, the College of Physicians and the Universities of Oxford and Cambridge, both of which held different views upon the matter. There was again the University of St. Andrew's, in which a system of a character distinct from the institutions which he had just mentioned prevailed. With respect to the area, also, a very great anomaly existed. The College of Physicians, for example, were enabled to give a license to practise medicine within the metropolis and for seven miles around it only, while those who obtained licences at the Universities might practise throughout the whole kingdom. There were sixteen colleges in the United Kingdom, the diplomas of which entitled holders by law and usage to practise only medicine. With respect to surgeons, he might observe that, legally speaking, there existed in their case no distinct qualification. What was, generally speaking, meant by the word "surgeon", was a member of the College of Surgeons, but that was not the legal definition of the term; and it was, in his opinion, extremely desirable that the State, having the power to grant licenses to surgeons as well as to physicians, should do it effectually, and should not allow anybody to practise that profession without having given proof of competent skill in his art, as well as that he had received a fair general education. [*Hear, hear.*] As things at present stood, there were to be found among licensed practitioners men who were incompetent, not alone so far as related to matters connected with their profession, but who possessed but a very small acquaintance with general subjects. The reason which was alleged by way of accounting for that fact was, that the demand for general practitioners was so great that, if a high standard of competency were fixed as necessary before they could obtain a license, the supply would not be equal to the demand, and the rural districts would, to a great extent, be deprived of the services of medical men. Experience, however, in his opinion, tended to show that such would not be the case, inasmuch as it was quite clear that what he might term over-competition now prevailed in the profession, as was clearly shown by the circumstance that medical men were, in many instances, found to be ready to take, under the Poor-law Board, salaries which the authorities themselves regarded as being scarcely a sufficient remuneration for their services. With reference to the Bill before the House, he could only say that he was disposed to look upon it with favour, introduced as it had been under such favourable auspices, as emanating from an hon. member who had taken great pains with the subject. [*Hear, hear.*] The views of the committee, which had sat some time ago, and of which he (Mr. Cowper) was a member, embraced the necessity of uniformity of qualification, and of fixing a *minimum* standard, without having attained to which no one could obtain a license to practise. In order to come up to that standard it was necessary that a surgeon should know something of medicine, and that a physician should be, in some degree, acquainted with surgery, while it was left to the medical colleges to adopt a higher standard in reference to the particular knowledge appertaining to any one branch of the profession. These were the objects which he thought it was desirable to carry into effect in any legislation upon the subject, and in so far as the Bill of his hon. friend tended to that end he should give it his cordial support. [*Hear, hear.*]

Lord Elcho said, it had been remarked by the late Sir R. Peel that there was scarcely a session without a Salmon Bill, and in his (Lord Elcho's) opinion the same observation might very well be applied to the Bill before the House. He, however, did not rise to offer any opposition to the Bill, but simply to put a question to his hon. friend, by the answer to which his course with respect to the subsequent progress of the measure would be guided. Before he put the question he should say a few words in explanation of its nature. His hon. friend had introduced a bill in the last session but one of the last Parliament which had been committed, but which in committee had been found to require so much amendment that it had been deemed desirable to have it withdrawn for further consideration. It entirely ignored the position of an M.D. of one of the Universities, and had been characterised by the hon. member for Surrey as a Bill to provide for certain bodies corporate at the expense of our corporations. (A laugh.) Well, the Bill had subsequently been referred to a select committee, which had sat several weeks, and which had effected so great an alteration in the provisions of the measure that scarcely a line of the original remained. The Bill thus changed had come down from the committee, and their report had received the unanimous assent of the House. Now, he thought the most practical step which the House could adopt would be to take up that Bill again and to pass it into a law. The question he had to ask was whether this Bill was *bonâ fide* the Bill of the committee? It was possible enough that there might be a unanimous feeling among the medical corporations in favour of

this Bill, without a corresponding unanimity among the great body of the profession; and he was very much afraid that the tendency of the hon. and learned member's Bill was to benefit the corporations at the expense of the Universities. Now, the medical education given in the Universities of Scotland and in the University of London was about the best in the United Kingdom, and their degrees were a far better test of a medical man's qualification than the examination before any of the colleges. The degree of Doctor of Medicine of the University of London carried more weight with it than that of M.D. of the College of Physicians, yet an M.D. of the University of London was prohibited from practising within seven miles of the metropolis. If the Bill were *bonâ fide* the Bill of the committee he was ready to give the hon. and learned member his humble support; but if it differed in any essential respect he should ask leave of the House to lay upon the table to-morrow the Bill recommended by the committee.

Mr. Headlam said, his former Bill was not brought forward by the medical Colleges, but originated with a number of medical gentlemen, having Sir C. Hastings at their head. These gentlemen, so far from being friendly to the Colleges, were rather antagonistic to them. When the Bill was coming on, the College of Physicians went to the Home Secretary and induced him to offer objections to the Bill going into committee. In one material point—namely, in the appointments which the Bill of the committee proposed to vest in the Government—the present Bill, he admitted, differed from that of the committee. The noble lord could, however, move any amendments when the House went into committee on the Bill.

Mr. Napier hoped that every facility would be given to the passing of this measure. It was clear that, in order to frame a good practical measure, there must be a good deal of concession on the part of opposing interests. Ireland had long been particularly proud of her medical education; and Trinity College, Dublin, the Colleges of Physicians and Surgeons in Ireland, and the Queen's University were agreed in favour of the present measure. The Bill, therefore, had a fair chance of being accepted by the profession, and by securing a uniform system of medical education it would do much to elevate the character of the medical profession. [*Hear.*]

After a few words from Mr. Craufurd,

Mr. Black, as a member of the committee, said, he regretted that the measure they had recommended had not been laid on the table as the foundation of any legislation on this subject.

Lord Elcho did not suppose that the intention of the hon. and learned member had been to favour the medical corporations, although he feared his Bill would have that effect. He should ask leave to-morrow to bring in a Bill on the subject. [*Hear.*]

Leave was given to bring in the Bill, which was read a first time.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

*Bowman. On May 9th, at Archerfield House, Highbury New Park, the wife of Edward B. Bowman, M.D., of a daughter.

Campbell. On May 7th, at Maryon Cottage, Woolwich, the wife of John Campbell, M.D., R.N., of a daughter.

*Henry. On May 7th, at 5, Harley Street, the wife of Mitchell Henry, Esq., Assistant-Surgeon to the Middlesex Hospital, of a son.

Mathews. On May 8th, at 1, Winterslow Place, North Brixton, the wife of Robert Mathews, Esq., Surgeon, of a daughter, prematurely.

Sharpin. On May 9th, at Bedford, the wife of Henry W. Sharpin, Esq., Surgeon, of a daughter.

Tyser. On May 6th, at Blackheath, the wife of Henry Tyser, Esq., Surgeon, of a son.

Webb. On May 6th, at 7, Elizabeth Street, Eaton Square, the wife of Edward L. Webb, Esq., Surgeon, of a son.

MARRIAGES.

Buchanan—Murphy. Buchanan, George, M.D., of 75, Gower Street, to Mary Anne, eldest daughter of George Murphy, Esq., of the Crescent, Camden Road, at St. Pancras Church, on May 7th.

Byrne—Frankland. Byrne, James, Esq., Surgeon, to Lucy, only daughter of the late Thomas Frankland, Esq., formerly of Georgetown, Demerara, at St. George's Cathedral, Westminster Road, on May 7th.

Mason—Mansir. Mason, George, Esq., Surgeon, of Lincoln, to Mary, relict of Robert Mansir, Esq., of Northampton Square, at St. Stephen's, Paddington, on May 12th.

Shearman—Hodge. Shearman, Chas. Jas., B.A., M.D.Lond., of Sheffield, to Tryphena Jane, second daughter of the late Richard Hodge, Esq., of the Green, Hampstead.

Wright—Wright. Wright, Thomas Burslem, Esq., to Marianne, relict of the late Samuel Wright, M.D., at St. Saviour's, Paddington, on May 6th.

DEATHS.

Bellingham, Francis, Esq., Surgeon, at Bourne, Lincolnshire, aged 74, on April 25th.

Beverly. On April 30th, at Margate, Alice Leila, younger daughter of the late Edward Parry Beverly, Esq., Surgeon, aged 11 months.

Broussonnet, M., *agregé* professor in the Faculty of Medicine, and chief physician of the hospital at Montpellier, aged 53, on March 24th.

Dickson. On May 5th, at 16, Chester Terrace, Eaton Square, Agnes, widow of Sir David J. H. Dickson, Knt., M.D., late Inspector of Hospitals and Fleets.

Fife, George, M.D., late Physician to the Queen's Hospital, and joint Professor of Materia Medica in Queen's College, Birmingham, at Surrey Street, Strand, on May 8th. Dr. Fife died from taking an overdose of morphia. At the inquest, it was proved that on the evening of Friday, May 8th, the deceased went to the shop of Mr. Burfield, chemist, Norfolk Street, Strand, and asked for some morphia, which, he said, he took in small doses, to procure sleep. Mr. Burfield's assistant gave the deceased some morphia in a phial; but said he should not have done so if he had not known him to be a medical man. A tonic medicine was also sold to the deceased at the same time. He then went to the Strand Theatre; and when he returned home to his lodgings in Surrey Street, Strand, he appeared to be in an excited state from drink. Next morning, he was found dead in bed. A surgeon, who was called in, said the deceased had undoubtedly died from the effects of morphia; and that, presuming the bottle which had contained it had been full, there was enough to kill four persons. According to one witness, the deceased had said that family matters preyed upon his mind. The jury returned a verdict—"That the deceased died from an overdose of morphia, he being at the time in a state of intoxication; but that he had no intention of wilfully destroying his life."

Geoffroy, M., Chief Medical Officer of the Public Lunatic Asylum at Avignon, lately. While he was visiting the patients in the asylum, an epileptic, apparently of mild disposition, complained of a pain in his leg. M. Geoffroy stooped to examine it; and was immediately stabbed in the side by the patient, with a pair of scissors. He died in a short time.

Guéneau de Mussy, M., M.D., member of the Academy of Medicine, Honorary Physician of the Parisian Hospitals, aged 83, lately.

Holman. On May 11th, at Hurstpierpoint, Sussex, Frances, wife of Henry Holman, Esq., Surgeon, aged 55.

Marshall. On May 4th, at 10, Portland Street, Southampton, of scarlet fever, Thomas Hewett, only surviving son of Joseph Marshall, M.D., aged 4 years and 8 months.

Marshall, Robert, M.D., Surgeon H.E.I.C.S., at Allahabad, Bengal, aged 44, on March 21st.

Scott, Edward John, M.D., Senior Medical Officer to the Royal Portsmouth Hospital, at Southsea, suddenly, aged 44, on May 4th. Dr. Scott had been admitted to the Fellowship of the Royal College of Surgeons on April 8th.

Shaw. On May 11th, at Hampstead, Mary Elizabeth, second daughter of William Shaw, Esq., Surgeon, aged 8.

Smith. On May 7th, at Bideford, Devon, Lucy Marsh, widow of the late William Smith, M.D., aged 82.

APPOINTMENTS.

Balfour, Thomas Graham, M.D., of the Royal Military Asylum, Chelsea, has been selected to be Secretary to the Royal Commission, appointed for the purpose of inquiring into the organisation, government, and direction of the Medical Department of the army.

*Coates, Charles, M.D., elected Physician to the Bath General Hospital.

Cotton, Charles, M.D., elected Surgeon to the West Norfolk and Lynn Hospital. Dr. Cotton formerly held the same appointment, but resigned it in consequence of ill health about two years ago. A vacancy having lately occurred, he consented, on the request of his friends in Lynn, to be put in nomination, and was re-elected by a large majority. A homœopathic practitioner in the town offered himself also as a candidate, and canvassed vigorously, but without sufficient success to encourage him to be put in nomination.

Fleming, Alexander, M.D., elected Physician to the Queen's Hospital, and joint Professor of Materia Medica in Queen's College, Birmingham, in the room of Dr. George Fife, resigned.

Hulme, E. C., Esq., appointed Surgeon to the Central London Ophthalmic Hospital.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 8th, 1857:—

Aldred, Henry, Manchester
Allen, Josiah, Kidderminster
Beadles, Hubert, Broadway, Worcester
Elliot, John, Kingsbridge, Devon
Meacham, Edward, Manchester
Philipps, Edward, Aberystwyth
Rodgers, Maxwell, Kilrea, co. Derry, Ireland

At the same meeting of the Court—

Coghlan, Thomas
Caldwell, John

Passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively August 2nd, 1852, and May 23rd, 1854.

Apothecaries' Hall. Members admitted on Thursday, May 7th, 1857:—

Bateson, John Moses, Kirkby Lonsdale, Westmoreland
Clark, John Marshall, London
Girdlestone, William Theophilus, Wordsley, Staffordshire
Inman, Robert Matthews, Carlisle, Cumberland
Stilwell, Henry, Uxbridge
Wood, William, Siddington, Gloucestershire

HEALTH OF LONDON:—WEEK ENDING MAY 9TH, 1857.

[*From the Registrar-General's Report.*]

The number of deaths registered in London in the week that ended on Saturday is 1064, and exhibits a small increase on that of the previous week, which was 1038. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1040. But as the deaths of last week occurred in an increased population, the average, with a view to comparison, must be raised proportionally to the increase, in which case it will become 1144. Hence it appears that the deaths now returned were less by 80 than the number that would have occurred under the average rate of mortality.

The number of births recorded last week is 1846, and shows an excess of 782 on the deaths recorded in the same period.

The returns now contain indications of the effect of the cold north-east wind that has blown uninterruptedly for some time. During eighteen days from the 22nd ultimo to the 9th instant, both days included, the mean daily temperature of the air has been constantly below the average, and the extent of depression has been generally 7° or 8°, and on four nights last week the thermometer fell to 32°, or below that point. The result of this continued coldness is seen in the deaths referred to diseases of the respiratory organs, which had previously decreased, but which rose last week from 177 to 208; the special disease under which this increase is found being bronchitis, which rose from 84 to 116. The deaths due to pneumonia (or inflammation of the lungs) remained nearly the same, having been in the two weeks 74 and 70. Last week, bronchitis and pneumonia were fatal to the same number of young persons, viz., 52; but amongst persons of mature age the two diseases were fatal in very different proportions, for 64 persons, aged 20 years and upwards, died of bronchitis, and 18 of pneumonia. Hooping-cough declined last week to 44, a lower number than has been obtained for a long period. There were two deaths from small-pox. Of 32 from measles, five occurred in the sub-district of Bethnal Green, and eight in that of Limehouse. There appears to have been a violent outbreak of measles in the workhouse situated in the latter sub-district, as all the eight deaths occurred in that institution, and nearly all of them within a few days.

Seven nonagenarians died in the week; the two oldest were women, aged 93 years, one of whom died in Brompton, the other in the Pancras Workhouse.

Last week the births of 924 boys and 922 girls, in all 1846 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1550.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·962 in. The mean daily reading was above 30 in. on five days; and the highest reading in the week was 30·12 in., on Tuesday. The mean temperature of the week was 44·8°, which is 6·7° below the average of the same week in 43 years (as determined by Mr. Glaisher). The lowest temperature occurred on Monday, and was 31·5°; the highest on Saturday, and was 65·3°. The range of the week was 33·8°. The mean dew-point temperature was 38·2°, and the difference between this and the mean air temperature was 6·6°. The wind blew almost invariably from the north-east. There was scarcely any rain. The first five days were very cold.

GROSVENOR PLACE SCHOOL OF ANATOMY AND MEDICINE.

The annual distribution of prizes took place on Friday, May 1st, when Alderman Salomons took the chair. Dr. Lankester read the annual report, from which it appeared that the School was in a flourishing condition. It referred to the fact that during the last three years no pupil had been sent back at his examinations. This gratifying result was attributed to the system of daily oral and monthly written examinations that had been adopted in most of the classes in the School. The report also referred to the return of Mr. Blenkins and Mr. Wells, two of the lecturers from the seat of war. Mr. Blenkins is now delivering a course of lectures on military surgery in the school. The following prizes were then distributed. *Anatomy* Lecturer, Dr. Deville; Gold Medal, Mr. A. J. Bannister; Silver Medal, Mr. J. Adsetts; 1 Certificate, Mr. R. W. Clifton; 2 Certificate, Mr. W. Millar. *Junior Anatomy:* Medal, A. Herzen; Certificate, Mr. E. Davies. *Physiology:* Lecturer, Dr. Lankester; Prize, Mr. Edward Cook; Certificate, Mr. R. W. Clifton. *Junior Physiology:* 1 Certificate, Mr. E. Davies; 2 Certificate, Mr. A. Herzen; 3 Certificate, Mr. H. Bucknill. *Practice of Medicine:* Lecturer, Dr. Ballard; Prize, Mr. Edward Cook; 1 Certificate, Mr. W. Lomas; 2 Certificate, Mr. J. Adsetts. *Surgery:* Lecturers, Mr. Wells and Mr. Adams; Prize, Mr. W. Millar. *Chemistry:* Lecturer, Mr. J. E. D. Rodgers; Prize, Mr. Edward Davies; Certificates equal: Mr. E. Bucknill, Mr. H. Bucknill. *Medical Jurisprudence:* Lecturer, Dr. Richardson; Prize, Mr. A. J. Bannister; Certificate, Mr. Thomas Godrich. *Public Hygiene:* Lecturer, Dr. Richardson; Prize, Mr. A. J. Bannister. *Botany:* Lecturer, Dr. Lankester; Prize, Mr. Alfred P. Dowson. *Practical Chemistry:* Lecturer, Mr. Rodgers; Prize, Mr. A. J. Bannister. *Midwifery:* Lecturer, Mr. Bloxam; Senior Class—Prize, Mr. A. J. Bannister; Certificate, Mr. R. W. Clifton; Junior Class—Prize, Mr. W. Lomas; Certificate, Mr. E. Cook. *Materia Medica:* Dr. Ayres; 1 Prize, Mr. Edward Cook; 2 Prize, Mr. J. Adsetts; Clinical Prize for Reports of Medical Cases in St. George's Hospital, Mr. Edward Cook; Clinical Prize for Reports of Surgical Cases in St. George's Hospital, Mr. W. Lomas.

Commission on the Medical Department of the Army. The members of the Royal Commission on the Medical Department of the Army met for the first time on Monday, at No. 1, Whitehall-yard. Mr. Sidney Herbert, M.P., was the president. The other commissioners present were Mr. Augustus Stafford, M.P., Colonel Sir Henry K. Stocke, K.C.B., Dr. Andrew Smith, Mr. Thomas Alexander, C.B., Sir Thomas Phillips, Mr. James R. Martin, Sir James Clarke, and Dr. John Sutherland. Dr. Balfour is selected as secretary to the commission.

Royal Institution of Great Britain. At the general monthly meeting, Monday, May 4th, 1857, the following professors were unanimously re-elected:—W. T. Brande, D.C.L., F.R.S., L. and E., as Honorary Professor of Chemistry; and J. Tyndall, Ph.D., F.R.S., as Professor of Natural Philosophy.

TO CORRESPONDENTS.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

To CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

Communications have been received from:—DR. RADCLYFFE HALL; MR. L. OWEN FOX; DR. P. H. WILLIAMS; DR. B. W. RICHARDSON; MR. RICHARD GRIFFIN; DR. THOMAS WILLIAMS (Swansea); DR. EDWARD SMITH; MR. J. A. LOCKING; MR. WILLIAM I. COX; DR. LANKESTER; MR. J. C. CLENDON; DR. MARKHAM; DR. JOHN WEBSTER; MR. ALLISON; MR. F. D. FLETCHER; MR. R. U. WEST; DR. C. HANDFIELD JONES; MR. G. M. HUMPHRY; DR. GARROD; MR. T. HOLMES; MR. H. OBRE; DR. G. G. ROGERS; MR. JAMES BIRD; MR. W. WEBBER; MR. STONE; MR. GEORGE KING; THE SECRETARY OF THE MIDDLESEX HOSPITAL; DR. C. COTTON; THE SECRETARY OF THE ROYAL MEDICAL BENEVOLENT COLLEGE.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Midland Quarterly Journal of the Medical Sciences. May 1857. Birmingham: Cornish Brothers. London: Longman & Co.
2. A Popular Treatise on the Causes and Prevention of Diseases. By Samuel Fenwick, M.D. Vol. I. London: Churchill. 1857.
3. A Treatise on the Cause of Stammering. By James Hunt, Ph.D. Third Edition. London: Longman. 1857.
4. On the Prevention and Treatment of the Sheffield Grinders' Disease. By *J. C. Hall, M.D., Physician to the Sheffield Dispensary. With Six Illustrations. London: Longman. 1857.
5. The Gymnastic Polymachinon. Instructions for performing a Systematic Series of Exercises on the Gymnastic and Calisthenic Polymachinon. By Captain Chiosso. London: Walton & Maberley. 1857.

ADVERTISEMENTS.

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The Midland Quarterly Journal of THE MEDICAL SCIENCES.

Contents of No. I.—May 1857.

1. On the Nature, Causes, Statistics, and Treatment of Erysipelas. By P. H. Bird, F.R.C.S.
2. On the Radical Cure of Inguinal Hernia. By Holmes Coote, F.R.C.S.
3. Case of Cæsarian Section. By Dr. Charles Clay. (With Engravings.)
4. Observations on Syphilitic Retinitis. By Dr. W. F. Wade.
5. On Conservative Surgery. By F. C. Skey, F.R.S.
6. On the Re-section of the Knee-joint. By Dr. Masfen.
7. On Rational Therapeutics. By Dr. Jordan.
8. Contributions to Surgery. By Evan Thomas, M.R.C.S.
9. Case of Ligature of the External Iliac for Femoral Aneurism. By Professor W. S. Cox, F.R.S.
10. On the Principles and Treatment of Chronic Phthisis. By Dr. Edward Smith. (With coloured Plates.)
11. Observations on the History, Pathology, and Treatment of Melanosis. By Oliver Pemberton, M.R.C.S. (With Coloured Plates.)

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Poor Law Medical Reform Association.

A Public Meeting of the Poor Law Medical Officers of England and Wales, and of the Profession generally, will be held at the Freemasons' Tavern, Gt. Queen Street, Lincoln's-Inn-Fields, on Thursday, May 28th, when a Petition to Parliament will be proposed for signature, and such other business transacted as may be thought desirable.

The Chair to be taken at Two o' Clock precisely, by the Right Hon. the EARL OF SHAFTESBURY.

A Meeting of the Committee will take place at half-past Twelve o' Clock, to make the necessary arrangements, prior to which (the 23rd instant at latest) gentlemen intending to bring forward motions, are requested to transmit copies to the Chairman, at his private residence, Weymouth, in order that arrangements may be made for their consideration.

RICHARD GRIFFIN, Chairman.
CHARLES F. J. LORD, Hon. Secretary.

May 16th, 1857.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXI.] LONDON: SATURDAY, MAY 23, 1857. [NEW SERIES.

Diseases OF SPECIAL OCCUPATIONS.

No. III.

DISEASES OF COLLIERS IN SOUTH LANCASHIRE.

By WILLIAM I. COX, Esq., M.R.C.S., etc., Corresponding Member of the Epidemiological Society.

DURING the years 1855 and 1856, I was actively engaged in the medical care and surveillance of a large colliery in the immediate neighbourhood of Wigan; and hence enjoyed ample opportunities of noting the prevalent diseases to which the colliery operatives are prone; of observing their nature, causes, symptoms, and best modes of prevention.

With the presumed exception of *one* malady (or, perhaps, I ought rather to say pathological condition), which I propose to designate as *black lung*, I know of no disease special to colliers alone. But this consideration can scarcely be permitted to detract from the interest of the subject. For my experience has abundantly convinced me that these operatives, by the nature of their occupation, by the circumstances surrounding them in their daily labour, by the noxious agencies to which they are constantly subjected, and by the habitual tenour of their lives, are far more liable than workmen employed in other callings, or than ordinary mortals, to the inroads of certain maladies belonging to varied and numerous classes. I shall, therefore, offer no apology for entering somewhat into details on these matters of hygiene; deeming them, as I am inclined to do, of the highest importance.

I. CAUSES OF DISEASE.

Before treating *seriatim* of the diseases, to the attacks of which colliery operatives are more especially liable, it will be expedient, and indeed necessary, towards the elucidation of the subject, to give a brief sketch of the conditions of their daily life, and of the circumstances surrounding them (many of which are inevitable), strongly predisposing them to the inroads of particular maladies.

These may be considered as primary and secondary.

A. The primary causes of disease are those hurtful agents, to the influence of which the men are constantly exposed during the hours of labour. They appear chiefly to be—

1. Inhalation of mechanical impurities wherewith the air of the coal-mine is charged.
2. Respiration of noxious gases: such as light carbide of hydrogen (fire damp), carbonic acid, sulphurous acid, and occasionally free hydrogen.
3. Insufficient supply of pure air, consequent on defective ventilation.
4. Respiration of air preternaturally moist.*
5. Working in cramped and painful positions of the body, so as to occasion an unnatural and prolonged tension of certain muscles; accompanied, almost necessarily, with injurious pressure on contiguous viscera.
6. Privation of solar light.

Now, all the abnormal conditions of the atmosphere above specified in causes 1, 2, 3, and 4, have unquestionably a most pernicious influence upon the physical well-being of the operatives subjected to them for a lengthened period of time; and I shall presently show, when speaking of the diseases themselves which are most prevalent and serious amongst colliers, that these are just such as might reasonably be expected to be found in connexion with those unwholesome influences.

No one at all the least experienced in such matters can doubt that the atmosphere circulating through the workings of a coal mine is always impregnated more or less with solid *mechanical impurities*—filled, in fact, with coal-dust held suspended, floating in it in a minute state of division. It is equally certain that a small quantity of this impalpable powder passes habitually through the glottis, through the ramifications of the bronchial tubes, and gradually accumulates in and around the air-cells. The effect of this foreign matter in the tissue of the lung is as a permanent source of irritation, impeding the normal play of the breathing apparatus, and powerfully conducing, as we shall hereafter see, to the development of various and grave maladies of the respiratory and circulating systems.

The air in deep and widely extending mines is not seldom more or less contaminated with the baneful *fire-damp*. Indeed, very few shafts in the coal districts of Lancashire are ever entirely free from this noxious and dangerous gas. I have known colliers working day after day, for many successive weeks, in chambers whence the fire-damp was issuing in such quantities that the safety lamps burned dim and blue, notwithstanding that the very best known system of pit ventilation was pretty effectively carried out. It must be wholly unnecessary to indicate the mischievous effects which the respiration of so contaminated an atmosphere must tend to produce on the respiratory apparatus. The gaseous compounds of hydrogen are well known to have a most disastrous influence on the human economy; and of these the two carbides (*marsh gas* or fire-damp, $C H^2$; and *olefiant gas*, $C^2 H^2$) are perhaps the worst of the whole series. As the result of the combustion of the fire-damp when present, and of defective ventilation when this is unhappily coexistent, *carbonic acid* is also often present to a very pernicious extent in the air in which the men are at work. The breathing of air vitiated by the admixture of an undue percentage of this last named gas has a direct tendency to lower the vital energies of the whole frame, and to destroy the normal static equilibrium of the nervous centres. *Sulphurous acid gas* is sometimes present as a product of combustion from the fires of the air-shafts, etc.: and, finally, *free hydrogen* is *sometimes but rarely* met with.

Defective ventilation, although an evil of far less magnitude and extent than in former times, is still unfortunately the scourge of many coal districts. Of course it not only intensifies the evils and dangers arising from the presence of foreign gases in the air, but constitutes, in the insufficient amount of oxygen supplied to the body which it necessarily implies, a serious mischief.

The respiratory use of air highly charged with *aqueous vapour* is very constant in some mines, and is in many instances an incurable evil. Whether its injurious depressing effects upon the circulation and nervous system are limited to such as are the mere result of the lowering of temperature consequent on the preponderance of moisture, I am not yet prepared to say; but I am inclined to think they are not.

The habitual practice of violent muscular efforts in a *constrained and unnatural posture* is confined to the coal-cutters (or true colliers), and does not apply to the other classes of operatives employed in the pits. Hence we find structural lesions of the kidneys, heart, etc., far more common among the former class.

It would be a needless appropriation of space to dilate on the hurtful effects produced on the human frame by *long privation of sunlight*. These are especially made manifest in the blanched, sallow, very peculiar hue of colliers' faces; in their stunted, clumsy forms; in their curved and calveless legs. The countenance is seldom open and clear, but generally presents that dirty, muddy appearance indicating a spanæmic condition of the system and general torpor of the faculties. The blood itself has often that appearance known as leucocythæmia (white-cell blood). In short, it would seem, from the illustration afforded in the case of colliery operatives, that

* All these unwholesome atmospheric conditions are too frequently united in the air of the same shaft.

man, deprived of the benign influence of the solar ray, somewhat resembles the etiolated plant, with its fragile stalk, its colourless leaves, its altered juices. Moreover, his frame loses in great part its healthy elasticity of tone, and proper natural power of resistance to the invasion of disease. Let it not be thought that I am disposed to exaggerate. Colliers, during the winter months, seldom even behold the light of day, excepting on Sabbaths and pay-days. They descend the pits at 5 A.M., and remain therein to 4 P.M.

B. The secondary causes of disease may be considered to include all those remediable evils in the life of the people which exist, unhappily, to so great an extent, and conduce so powerfully to the production and spread of disease and misery. But of these predisponent causes of bodily disorders, some are certainly present in the homes and habits of colliers to a greater extent than elsewhere, and to such I will briefly advert under the heads,

1. Neglect of personal cleanliness.
2. Gross intemperance.
3. Absence of mental recreation.

For their want of cleanliness the colliers, in a large part of the district to which my observations were chiefly confined, have some faint excuse in the absence of water supply. But the repugnance to ablution is strong and very extraordinary amongst almost all colliers. They deem it hazardous and unwholesome to wash from head to foot, or even any more of the person than is exposed by the ordinary mode of dress. Thus the skin is perpetually loaded with dirt (good wholesome dirt [!] as they deem it), its pores clogged, and its normal action nearly in abeyance. There is a fearful and increasing amount of drunkenness and sexual profligacy in the Lancashire coal districts, and unfortunately there is a sad dearth of the means of moral enlightenment and intellectual advancement. Few are the Mechanics' Institutes—the evening lectures—the harmless and instructive allurements to innocent social enjoyments, which only can effectually antidote the beershop and the reeking haunts of impure pleasure. But as I have already dwelt on this part of my subject in the pages of the *Sanitary Review* at some length, I shall now proceed to consider the diseases themselves which spring from the sources now treated of.

[*To be continued.*]

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF SYME'S OPERATION FOR STRICTURE.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Case I. Thomas B., aged 54, was admitted Sept. 25th, 1856, under the care of Mr. Stanley, on account of stricture of the urethra of twenty-four years standing, for which he had been frequently under hospital treatment, but without permanent benefit. The urine came away in drops; no instrument could be passed. The obstruction was situated at the junction of the bulbous and membranous portions of the urethra. The urethra at this part could be felt quite hard and cord-like. After he had been in the hospital for a short time, it was found possible to introduce a catheter No. 5 into the bladder. On Oct. 16th, Mr. Stanley performed Syme's operation. The bleeding during the operation was trifling, but shortly after he had been removed to bed hæmorrhage commenced; several small vessels were tied, and ice was applied, but without success. At length the bleeding was arrested (after it had continued for four hours) by the application of tincture of sesquichloride of iron. He had no further unfavourable symptoms, except weakness consequent on the hæmorrhage. The catheter, which had been introduced at the time of the operation, was removed on the fourth day, and the urine passed freely. On October 18th, it is noted that none of his urine came through the wound, and that it was passed in a good stream; full-sized catheters were passed from time to time. In the early part of November, he had an attack of rheumatism, which retarded his recovery. The wound, however, went on healing. Early in December, he was attacked with severe rigors, followed by erysipelatous inflammation of the calf of each leg and a large abscess on one side. This, of course, delayed still further his discharge from the hospital, but no further symptoms referrible to the stricture are noted. Finally, he left the Hospital in February, passing a full stream of water, and apparently well.

Case II. George T., aged 36, was admitted into Darker's ward, Jan. 30th, 1857. He is by trade a shoemaker, of regular and temperate habits, and of general good health. He stated that sixteen years ago he was the subject of gonorrhœa, which continued for some time. Soon after that, he observed that the stream of urine became narrower and irregular; he accordingly sought advice, and from the occasional introduction of a catheter, the symptoms improved for a time. They, however, returned, and he found increasing difficulty in voiding his urine; he was then admitted as an out-door patient under Mr. Wormald, under whose care he remained for some length of time, No. 3 and 4 catheters being first used, and more lately one of a smaller size. On examination, the prostate gland was found to be healthy, the seat of stricture being at the junction of the bulbous with the membranous portion of the urethra. The introduction of a catheter (No. 1) was attended with great difficulty; when within the stricture it was held firmly on all sides, and required considerable force to dislodge it. The urine in general dribbled away in drops, and occasionally he had entire retention. He was ordered half a drachm of tincture of sesquichloride of iron every six hours. Two attempts were made with No. 1 catheter before it was introduced into the bladder. The operation was invariably followed by sickness and shivering. In a few days, a larger instrument was introduced into the bladder with less difficulty.

Feb. 21st. He was removed to the theatre, and after the administration of chloroform, he was put in the ordinary position for lithotomy, and a grooved staff was then passed into the bladder. Mr. Stanley then made an incision of about an inch and a quarter in length in the mesial line, dividing the strictured portion of the urethra, and extending it a little above and below the diseased portion. A full sized catheter was then passed into the bladder (after the staff had been removed), which was secured by a suitable apparatus. The patient was then removed; some hæmorrhage followed, which was soon controlled, and he was ordered twenty-five minims of tincture of opium immediately.

Feb. 22nd. He passed a bad night, and stated that he had been in constant pain. Skin warm and moist. Pulse 108, soft. He had been sick a little this morning. There had been no recurrence of the hæmorrhage, and a large quantity of bloody urine had passed through the catheter. The lint was removed. The opiate was repeated.

Feb. 24th (three days after the operation). The catheter was removed from the bladder. The next day some little urine passed by the urethra, but mostly through the wound. No. 7 catheter was passed without difficulty.

Since the last note, the catheter was passed every third day, the quantity of urine that passed by the urethra increasing in quantity daily, while that by the wound decreased as it has gradually healed.

March 16th. The wound is much smaller, its edges granulating, though still some urine continues to flow through it.

He remained for some time under observation in the hospital. When last seen, the wound had healed, and No. 8 passed without difficulty.

UNIVERSITY COLLEGE HOSPITAL.

I. SYME'S OPERATION FOR STRICTURE: DEATH FROM LOW PERITONITIS AND PLEURISY.

Under the care of H. Burford Norman, Esq.

Geo. Hird, about 50 years of age, a groom, of small stature and spare figure, had suffered some impediment in making water nearly twenty years, and had undergone treatment by catheter at various times and places, up to the year 1851, when he had complete retention of urine, and urinary abscess with infiltration of urine into the scrotum. For this, free incisions of the scrotum were made by Mr. Marshall; and he afterwards became a patient of Mr. Erichsen's, in University College Hos-

pital. Dilatation by catheters was then had recourse to with benefit. In 1852, he first came under Mr. Norman's care, at the St. Marylebone Dispensary, having at that time a tight stricture of the urethra, and a large abscess in the perinæum. The abscess was opened, and the stricture dilated so far as to admit a No. 5 catheter; but it did not admit of further dilatation. Later in that year, he was received into the Marylebone Infirmary, where Mr. H. Thompson performed the operation of external incision. The wound healed in a few days, and the stricture became so amenable to treatment, that catheters up to No. 11 were soon passed; and in this state he continued to have a large instrument passed from time to time, but without further trouble.

That winter and the following he was riding to the hounds at Melton, but was at length obliged to give up his employment and returned to town. From that time his employment was very irregular, and he fared badly, but was never intemperate. Instruments were passed from time to time by Mr. H. Thompson, and latterly by Mr. H. B. Norman. In the latter part of last year he came frequently to Mr. Norman, being unable to retain his water at night, or completely to empty his bladder. His urine was highly albuminous, deposited much pus, soon became alkaline on standing, and had a low specific gravity. He suffered from pain in his back and loins, and was in very low health, getting quite unfit for any employment, and much depressed in spirits. At first, nothing larger than No. 3 would pass, but by slow degrees the stricture was dilated up to No. 5 without improvement in the character of the urine, and but little, if any, of his general state. He was the subject also of a false passage, which it required much care to avoid entering instead of the stricture, and whenever the instrument took the wrong course, it gave rise to bleeding, and was followed by severe rigors. No progress being made, he was taken into the hospital, and after two or three weeks confinement to bed, with careful diet, warm baths, and occasional introduction of instruments, it was decided to try the effect of repeating the external division of the stricture.

Feb. 3. A careful examination of the seat of the stricture was made. A No. 7 bulbous sound could be passed, without impediment, four and a half inches, and was there stopped. No. 4 could be passed through a narrow part of the canal at the same distance, and was for some little distance held tightly by the narrowed canal, it then became loose until at six inches, where it was again tightly held, but could be passed on without much force into the bladder.

Feb. 4. The operation was performed of dividing the stricture and the urethra, for about two inches, upon a grooved staff, No. 4, connected with a steel catheter No. 8; the tissues covering the urethra were much indurated. After the incision a No. 8 catheter passed readily into the bladder. Forty-eight hours after the operation the catheter was withdrawn, no bad symptom having then occurred, and the urine flowing freely through and along the side of the catheter. The withdrawal of the instrument was followed by severe rigors, which, however, yielded to a dose of laudanum, with warm bed-clothing and drinks.

Feb. 7th. He seemed better, looked and spoke cheerfully, but he was thirsty, and the tongue was dry and slightly furred over its middle and back parts. His pulse was at 90, not very hard; his skin warm. His bowels were confined, and he had little appetite.

Feb. 8th. A dose of salts and senna procured a free, but not severe action of the bowels; but his state did not improve. From that time his appetite quite failed; his pulse rose to 120, without much force; he had pains from the loins round the lower part of the belly, gradually extending upwards, and reaching the sides of the chest, with cough and much depression. There was but little tenderness of the belly or sides, no tympanitis nor vomiting; and he could always extend his legs. There was no dulness of the chest on percussion, nor friction-sound; and the breath-sounds were healthy.

He died on February 11th, at 6 A.M., having obtained at times a little relief from turpentine fomentations, large linseed and mustard poultices over the belly and chest, the warm hip-bath, and saline effervescent medicines with anodynes, etc. The urine never ceased to flow by the wound, which was beginning to consolidate and contract, and furnished a moderate discharge of healthy pus.

On *post mortem* examination, the peritoneum and pleura were found covered with yellow pus-like fluid; the coils of intestine were glued together by denser lymph; and there were about two ounces of creamy fluid in the pelvis. There were old adhesions of the pleura. The lungs were dark, and much infiltrated with bloody serum posteriorly. The bladder contained about four ounces of turbid urine, which, on standing, deposited much pus. The muscular coat of the bladder was considerably hypertrophied; between the muscular fibres was a small pouch above the left ureter; and the mucous coat of the fundus was red, villous, and destitute of epithelium. The ureters were not dilated, nor the pelves of the kidneys; but the lining of the pelves was red, and distinctly inflamed. The right kidney weighed three ounces; there was a large cyst in its upper part, containing about a drachm of fluid. The left kidney weighed three and a half ounces. The cortical substance of both was pale, contracted, slightly granular, and much less than natural in proportion to the cones. The urethra was nine and a half inches long, healthy in the prostate portion; it had been divided from the bulb forwards about two inches, through a hardened callous mass; anteriorly, there was no perceptible disease.

Remarks. The two cases of Syme's operation reported from St. Bartholomew's are given as good examples of the benefit derived from this measure in cases of obstinate stricture of the urethra; and, as a companion to them, we are enabled, through Mr. Norman's kindness, to report the particulars of a very interesting case of the same kind which terminated less happily, from accidental causes connected with the state of the patient's general health. This was one of the numerous instances in which a choice must be made between two evils—that of being contented with a course of treatment which can only hold the complaint in check, and that imperfectly; or risking an operation on a patient debilitated by long standing disease. The operation here was undertaken as a last resource, as the stricture did not yield to dilatation, and the patient derived no benefit from rest and general treatment. The severe symptoms which occurred when the catheter got out of the proper course constituted an additional motive for undertaking the radical cure of the disease, especially after the encouraging success of the former operation, which would very probably have been permanent but for the patient having recurred to the injurious occupation which he was by that means enabled to follow, in spite of the cautions which were given him. Had he embraced some sedentary trade, he might, in all probability, with due care, have enjoyed a very fair share of health and comfort for the ordinary period of life.

II. AMYLENE.

We have made inquiries with reference to the case which was reported at p. 331, and on which Dr. Snow made some remarks in a letter which will be found on p. 381. Our readers can judge for themselves whether the symptoms described in our report are identical with those pointed out by Mr. Syme; but the severe symptoms which have always in this patient followed the inhalation of other anæsthetics left no doubt in the mind of his attendants and himself that the still more alarming consequences in this case were connected with the amylene and not the operation. In confirmation of this view it may be mentioned that he never took chloroform (which he has inhaled several times) without severe symptoms following it; and that on one occasion, when no operation was performed, he suffered so severely from vomiting as to be unable to take his ordinary food for twenty-seven days afterwards. The case is not brought forward as one likely to occur frequently—this patient being evidently morbidly sensitive to the action of anæsthetics—but as a useful contribution to the history of amylene. It is possible that Dr. Snow may be deceived as to the passing away of amylene from the blood in a few minutes in all cases. At any rate, the odour of that substance was distinctly perceived around this patient a very considerable time after the operation. With regard to the term "poisoning of the blood" used in the report, it was intended to express the very opinion which Dr. Snow puts hypothetically, viz., that some trace of the anæsthetic was really still circulating in the patient's blood. This may of course be erroneous; but considering the severe symptoms which followed the inhalation of chloroform previously, and considering also the much greater severity of the symptoms in the present instance than could reasonably be expected as the direct effects of so simple an operation, it was adopted by those who had the best opportunities of seeing the case. It is quite possible, however, that the suppression of urine might not have occurred without the complication of the injury done to the urinary organs.

Original Communications.

ACUTE RHEUMATISM.

By W. S. Oke, M.D., Senior Physician of the Royal South Hants Infirmary.

[*Read before the Southampton Medical Society.*]

Acute rheumatism has for some years past been of frequent occurrence; but it is more commonly met with in cold and damp situations. The labouring classes are most liable to the disease. Persons of advanced age and young children are comparatively exempt from it.

Acute rheumatism consists of an inflamed, swollen, and painful condition of the joints; and, for the most part, it attacks the large articulations. Coagulable lymph is deposited in the cellular tissue surrounding the ligament; and serous fluid is often at the same time effused within the capsular cavities. It is accompanied by severe dynamic fever. The tongue is furred; the pulse is voluminous, strong, and frequent; the skin pours out a profuse sweat of a peculiar odour; and the urine is remarkably high coloured, abounding with deposits of lithates, and sometimes of purpurates. These symptoms, uncontrolled by medical treatment, generally continue for many weeks.

In some cases, the disease is apt to shift from joint to joint, or to an internal organ. When the latter result takes place, the organ attacked will exhibit the characters of inflammation. The internal parts most commonly attacked are the fibrous textures of the heart and pericardium; indeed, in the majority of young persons affected with acute rheumatism, it may be affirmed that the heart rarely escapes. It is remarkable that this important fact should not have been known before the commencement of the present century; and it is to auscultation that we are indebted for its discovery. Cullen, in his *First Lines*, dismisses the subject with scarce a remark. Baillie, in his *Morbid Anatomy*, has the following observation on the valves, but without any allusion to rheumatism:—"I have also seen the valvular apparatus between the auricle and ventricle in a state of inflammation, and covered with a layer of coagulable lymph; but this I believe to be very uncommon." He makes no mention of the fibrinous vegetations on the borders of the valves, now so commonly met with. Alluding, however, further on, to enlargement of the organ, he writes: "The causes which produce a morbid growth of the heart are but little known; one of these would seem to be rheumatism attacking the organ." Heberden, in his *Commentarii de Morborum Historiâ et Curatione*, published in 1802, clearly shows that he had entirely overlooked inflammation of the heart in acute rheumatism; for, in alluding to young persons being liable to the disease, the affection of the heart is wholly omitted. "Haud insolitum est", he writes, "pueros circa nonum ætatis annum in rheumatismum incidere; et memini me curâsse quadrimum cum hoc morbo conflictantem." Had he observed any implication of the heart in such instances, he would of course not have omitted it in this place, especially as, in the very next paragraph, he states: "Plerumque fit, ut dum rheumaticorum artus gravissimis cruciatibus torquentur, viscera interea omni dolore vacant. Tamen nonnullos curavi, in quibus rheumatismus fines consuetos transiliens in ventriculum, aut cerebrum versus fuit."

Dr. Watson was the first to call the serious attention of pathologists to the frequent association of carditis with acute rheumatism, and to point out the physical signs by which it can be accurately ascertained what part of the organ is involved. This was a most important discovery, as it has led the medical attendant to auscultate the action of the heart from time to time from the very onset of the disease, and to protect the organ, to the best of his power, from an attack.

The ordinary symptoms of carditis are, acute pain in the region of the heart, aggravated by pressure or percussion of the intercostal spaces; embarrassed breathing, increased by lying on the left side; bronchial cough, with sputa sometimes tinged with blood; and a small, rapid, irregular pulse. If these symptoms are accompanied by a sound in the heart's action, as if two rough surfaces were rubbing backwards and forwards against each other, inflammation of the pericardium, and a deposition of plastic lymph upon its serous membrane are clearly indicated: but if, instead of this, a blowing sound, like the puffing of a bellows, is heard, it is equally clear that the inflammation is seated on the fibrous valvular structure of the internal surface of the heart. Should this sound be detected a little below the nipple, the mitral valves will be implicated; if a little above the nipple to the right, the tricuspid or the pulmonary; and, if higher still, the aortic valves are most probably involved. It has been observed, that symptomatic delirium accompanies some cases of pericarditis; but I cannot speak of this symptom from my own experience.

That acute rheumatism is a true inflammatory disease cannot reasonably be doubted. The character of the pulse and of the tongue; the condition of the urine, loaded with lithates and purpurates; and the appearance of the blood drawn from the system, all go to prove that it is so: and, if further proof were necessary, it is to be found in the fibrinous and sometimes suppurative results of the rheumatic action. The former is clearly shown in pericarditis; the latter in abscesses occasionally formed near the affected joints, some cases of which I have myself seen in the Royal South Hants Infirmary.

Acute rheumatism, when confined to the joints, generally terminates in recovery; but, when it attacks the heart or any other internal organs, the prognosis is unfavourable.

The diagnosis is by no means difficult; its febrile and inflammatory character will distinguish it from neuralgia and syphilitic periostitis. The selection of the larger joints; the profuse perspirations; the deep bilious tinge of the urine, in addition to the lithates; the greater degree of pyrexia; and the comparative failure of colchicum to relieve the pain and speedily terminate the attack,—will suffice to distinguish it from gout.

In the treatment of this malady, and indeed of all others, the curative efforts of the constitution are to be kept constantly in view; and two of a very decided character may be generally observed in acute rheumatism. The one is to evacuate by the kidneys a large quantity of bile and of lithic compounds; the other is to eliminate profuse perspirations from the whole surface of the body. It has been supposed by some that, as the excessive sweats do not appear to afford any relief, but rather to exhaust the powers of the constitution, they ought to be restrained. This is an opinion which I cannot endorse, as it is contrary to common sense, and even dangerous to life; for, in all probability, acute rheumatism would prove fatal in a large majority of cases but for this timely outlet from the skin.

The indications of cure in acute rheumatism are to subdue the febrile inflammatory action, and to correct the condition of the blood; and these indications will be fulfilled by bloodletting, by such means as will keep free the renal, hepatic, and cutaneous outlets, and at the same time allay the sufferings of the patient.

There is perhaps no disease which has been, and continues to be, treated with so many different remedies as acute rheumatism. These, for the most part, I shall pass by, as the main object of this paper is to give the result of my own experience, rather than that of others; and I believe myself to be justified in saying that this disease, when treated from the beginning and under favourable circumstances, may be speedily cured by the direct efficacy of medicine.

At the onset, unless there be any valid reason to the contrary, it will be right to take from the system from twelve to fifteen ounces of blood, the clot of which, after standing a while, will be found remarkably firm, with a buff coloured concave surface of tough coagulated fibrine. But this appearance will not justify a repetition of the bleeding, unless any symptoms shall arise that may require it. Half an ounce or more of castor oil is then to be given, which may be repeated every other morning, or from time to time so long as the urine exhibits a bilious character. Immediately after the purgative has ceased to operate, the following medicine is to be commenced.

℞ Hydrargyri chloridi, aloes extracti aquosi, āā gr. vj; pulveris opii, extracti colchici acetosi, antimonii potassio-tartrat., āā gr. iij; confectionis rosæ q. s. M. Divide massam in pilulas duodecim, quarum sumatur una 4tâ quâque horâ, cum haustu infrà prescripto.

℞ Potassæ bicarbonatis ℈j; acidi citrici gr. xv; liquoris potassæ ♏x; potassæ nitratis gr. x; syrupi ℥j; aquæ puræ ʒiss. M. Fiat haustus.

In about twenty-four hours, or less, the pains will be relieved. In five or six days the joints will be set at liberty, and in twelve or fourteen the swellings will have subsided, and the febrile symptoms be subdued. Then, if the tongue be clear and the pulse below 70 in the minute, an alterative alkaline tonic may be given, to strengthen the general health, and prevent a return of the disease.

℞ Potassii iodidi gr. xxiv; liquoris potassæ ʒiss; ammoniæ sesquicarbon. ℈j; syrupi zingiberis ʒss; aquæ menthæ piper. ʒvj. Fiat mistura, cujus sumatur ʒj ter die.

At the same time, it will be necessary to continue a gentle aperient twice or thrice a week.

℞ Pilulæ hydrargyri gr. xij; ammonii potassio-tartratis gr. iss; extracti aloes aquosi gr. xx. Misce bene, et divide in pilulas vj, quarum capiat unam pro dosi.

This is the treatment which I have almost always adopted for acute rheumatism, in the Royal South Hants Infirmary and elsewhere; and, with very few exceptions, it has been crowned with complete success.

If, either from advanced age, a morbid condition of the gums, or any other cause, the use of mercury should be deemed inadmissible, one of the following medicines may be substituted.

℞ Antimonii potassio-tartratis, extracti colchici acetici, pulveris opii, pulveris digitalis, āā gr. iij; extracti aloes aquosi gr. xij; syrupi q. s., ad massam formandam. Divide in pilulas xij, quarum capiat unam 4tâ quâque horâ.

Or the following:—

℞ Vini colchici ʒss; potassæ bicarbonatis ʒiss; potassæ nitratis ʒj; syrupi zingiberis ʒiij; misturæ camphoræ ʒvj. Misce. Capiat æger cochlearia magna duo ter die, et, dolore artuum urgente, cum hâc pilulâ.

℞ Pulveris ipecacuanhæ compositi gr. v; syrupi q. s. M. Fiat pilula.

Sumatur etiam olei ricini ʒss, secundo vel tertio quoque mane.

These means will be found adequate to relieve the pains of the joints, and sometimes speedily subdue the disease; but these are not, in my judgment, so well calculated to protect the internal organs from rheumatic inflammation as the former treatment combined with calomel.

From the very onset of acute rheumatism, more especially in young persons, the action of the heart is to be daily watched by auscultation. Indeed, it may be truly asserted that, in this case, the stethoscope is as needful to the medical man as the lead is to the mariner; for as soon as any abnormal sound of the heart's action is detected—nay, if there be pain only of the cardiac region, accompanied by *fast breathing* and *acceleration* of the pulse—he is warned of approaching danger, and imperatively called upon to advance in the scale of treatment. Blood should be taken from the arm, leeches and blisters applied to the seat of pain, and the system brought under mercurial action as speedily as possible.

℞ Pilulæ hydrargyri gr. xxxvj; antimonii potassio-tartratis gr. iss; extracti digitalis, pulv. opii, āā gr. i. Misce bene, et divide in pilulas vj, quarum capiat unam 4tâ quâque horâ.

The protoxide of mercury is preferred to calomel, as being more speedy in affecting the system.

Should the gums become soon ptyalised, the fibrinous textures of the heart and pericardium will probably be rescued from the attack; but if the mercury fail to affect the system, and a bellows-sound remain after the arthritic symptoms have subsided, the fibrinous vegetations upon the valves will probably have become organised, and more or less interrupt the free current of blood through the valvular apparatus for years afterwards. Or, on the other hand, if the rubbing sound, which had been detected close under the parietes of the cardiac region, should cease, leaving a laborious action of the heart, a rapid and irregular pulse and embarrassed breathing upon the least exertion, an adherent pericardium may be diagnosed, beyond the reach of human skill; and a sudden termination of life prognosticated.

The following case must have indicated the signs both of endo- and pericarditis.

Case I. William Delagny, a Maltese, 18 years of age, of dark complexion and well formed, was admitted in my week into the Royal South Hants Infirmary. He had been steward of the *Parana* steamship, and was reported to have had acute rheumatism, associated with inflammation of the heart, during his homeward voyage. On examining the thorax, there were seen the marks of six leeches, applied near the left nipple, for pain in that part of the chest, which they had greatly relieved. There was extensive dulness over the cardiac region; a very distinct bellows-sound of the mitral valves was heard; and the heart's action was exceedingly laboured and tumultuous. There was no cough nor bronchial *râle;* but there was a weak and morbid aspect; a rapid pulse, deficient in vascular force; and embarrassed breathing upon the slightest exertion.

The history and symptoms pointed to an easy diagnosis; viz., that the serous surfaces of the pericardium were adherent by rheumatic inflammation; that the mitral valves had vegetated; and that the parietes of the heart had become hypertrophied and enlarged. Three days after his admission, he died suddenly; and, upon examining the thorax, the pericardium was found to be adherent throughout, and the heart enormously enlarged. The internal structure was not laid open, in order that so perfect an example of an adherent pericardium might not be mutilated.

The auscultatory sign, denoting fibrinous deposits on the valves, whilst those deposits *are recent*, is probably the bellows-sound; but, as the vegetations become organised and solidified, this sound may be converted into one of a sawing or cooing character. The former is frequently met with; the latter is of rare occurrence. I have met with only one case, which was very remarkable, and where the sound was heard by the patient himself.

Case II. David Day, aged 28, of stout make, a labourer, applied for my advice to cure what he called a "cooing in his heart". He informed me that, two years ago, he had suffered an attack of rheumatism in both knees, from which he completely recovered, and had continued well until eight or nine weeks ago, when the rheumatic pains returned, and still prevailed during the night in his elbows and shoulders; and that he attributed the cooing sound to a violent action of the heart, brought on by digging holes, and wheeling away heavy loads of the earth which he had dug.

The sound was plainly audible, without applying the ear to the chest, and as distinct as a pigeon could make it. It was best heard above the nipple, over the tricuspid valve, and accompanied the diastolic action; and there is reason to believe that it was the result of organised fibrinous deposit upon the above named valve, referrible to the vehement action of the heart, before stated, during a rheumatic diathesis. His aspect was healthy; but he complained of still having a *beating*, as well as a cooing sound, of the heart; and his pulse imparted to the finger that peculiar jet-like character, as if the blood were pumped by the left ventricle only, without any propelling force of the arteries—a pulse which, I believe, often indicates some damage of the heart's machinery.

The symptoms were treated principally with digitalis, but I do not believe that any benefit was derived from it.

Other internal organs, especially in weak constitutions, are sometimes attacked, though not so frequently as the heart; and when the organ implicated has an external outlet, it is more amenable to the efficacy of medicine, as will be seen by the following cases.

Case III. *Rheumatic Bronchitis.* Ellen Walpole, aged 26, of delicate aspect, was admitted into the Royal South Hants Infirmary on October 15th, 1850, affected with the symptoms of acute articular rheumatism, accompanied with pain of the chest and dyspnœa; but there were no morbid signs in the heart's action. She was put to bed, and the following treatment was ordered.

Capiat olei ricini ʒss statim et alternis diebus.

℞ Hydrargyri chloridi gr. v; pulveris opii gr. iij; antimonii potassio-tartratis gr. ij; confectionis rosæ q. s. M. Divide in pilulas xij, quarum capiat unam 4tis horis.

Applicentur hirudines parti thoracis affectæ, et posteà emplastrum lyttæ.

By these local means the chest was soon relieved; and, after having taken the pills six days, she became moderately ptyalised, which so improved her symptoms generally, that in three weeks she was enabled to leave her bed; but, as the rheumatic symptoms returned, she was sent back, and ordered to resume the same medicines, which again affected her gums; and, in about ten days, she was once more convalescent. After, however, another short respite, the urine became again high coloured, and the disease returned the third time, with increased severity; for it not only attacked the joints, but also the bronchial membrane. There were intense pain of the chest, hurried breathing, incessant cough, loud *râles*, and the expectoration of a frothy mucus. The pulse was rapid, small, and 130 in the minute; and she perspired freely.

I now determined to give the same medicines a longer trial, and to keep her in bed till the symptoms had completely subsided, and the secretions of the liver and kidneys were restored to a healthy state. As she objected to a repetition of the leeches, from a feeling of great debility, another blister was applied without them; and the pills were ordered to be taken every three hours, with an aperient when required. This treatment was attended with the happiest effect: the chest and

breathing were gradually relieved; the febrile symptoms subsided; the cough became less and less frequent; the expectoration muco-purulent; and in a few weeks she was discharged cured.

Case iv. *Rheumatic Gastritis.* A gentleman, aged 40, of pale aspect, hæmorrhagic temperament, and liable to copious bleeding from piles, requested me to see him in consultation for an attack of acute rheumatism, complicated with gastritis and hepatic congestion. The knee joints were principally involved, and were swollen and infiltrated; there was severe pain of the epigastrium, which was tender under slight pressure; he had frequent vomiting of viscid mucus, of a blackish green colour, which adhered to the bottom of the basin; the hæmorrhoidal discharge was deficient; the bowels were torpid; and the urine was very high coloured. It was most important, under these circumstances, to subdue the inflamed condition of the stomach, and to restore the liver to a more healthy action. With this view, the hæmorrhagic temperament not allowing the use of leeches to the hæmorrhoidal veins, a large blister was applied to the epigastric region; a quarter of a grain of morphia was given every four hours; and three grains of calomel, with five grains of the compound extract of colocynth, every night, followed by a mild senna aperient in the morning. By this treatment, the stomach was quieted, the bowels cleared, a healthy secretion of the liver and kidneys gradually restored, and the disease subdued. The hæmorrhoidal veins also were made to bleed freely, and thus probably expedited his recovery.

It now and then happens, when the symptoms of acute rheumatism appear to be speedily yielding to treatment, and we are expecting an easy triumph over the disease, that, without any internal inflammation, our progress is repeatedly interrupted by relapses. Under these circumstances, by examining the alvine excretions, we shall probably find the functions of the liver to blame, and thus be enabled to prevent any further relapse by restoring the healthy action of the organ.

Case v. A lady of rank, aged 58, and of a spare, delicate habit, whilst residing at Lyndhurst, in the spring of 1847, became affected with acute rheumatism, of which she had had a similar attack a few years previously. As colchicum in every form had always disagreed with her, she was very properly treated by her medical friend with calomel, antimony, and opium, effervescing salines, and occasional purgatives. Under this treatment, the pain and swelling of the joints soon subsided, but not many days had elapsed before the disease returned with obstinacy, and I was requested to visit her in consultation. After seeing her several times, and bringing her, with scarce any variation of the treatment, to the same point of improvement, she was attacked a third time, which still more exhausted her strength, and exceedingly discouraged her. Finding the urine of a decidedly bilious colour, scanty and turbid, with lithates, we directed our attention to the liver alone, requesting that the alvine discharges may be reserved for inspection.

℞ Hydrargyri chloridi, extracti aloes aquosi, extracti hyoscyami, āā gr. vj. M. Divide in pilulas vj, quarum capiat unam ter die.

On examining the stools, they were found to be slimy, viscid, and of the consistence and colour of tar. This at once explained the cause of the relapses; and, by persisting in this treatment till the liver was restored to a healthy action, and the excretions to a normal condition, she completely recovered, without any further relapse.

In acute rheumatism, whether we look at the bilious colour of the urine, or of the serum of the blood when drawn from the arm, hepatic evacuants will be found profitable from first to last. Indeed, in elderly persons, were it not for the severity of the pain and the want of sleep, the cure of the disease may be generally left to purgatives only. Of these, I greatly prefer castor oil, as it makes the liver disgorge more unmixed bile than perhaps any other purgative. Where the stomach is intolerant of this medicine, the aqueous extract of aloes, with the tartarised antimony and a litttle extract of henbane, will be the best substitute.

℞ Extracti aloes aquosi gr. xviij; antimonii potassio-tartratis gr. iss; extracti hyoscyami gr. vj. Misce, et divide in pilulas vj, quarum una sit pro dosi omni nocte.

I remember one case which was speedily cured in this way.

Case vi. A lady of spare habit, aged 56, was attacked with the ordinary symptoms of acute rheumatism. As her urine was of a very bilious character, I determined on directing my whole attention to the hepatic function for the cure of the disease. With this view, I gave her half an ounce of castor oil every morning, or as often as it could be borne; and, under this simple treatment alone, she rapidly and completely recovered.

CIRRHOSIS OF THE LIVER, WITH A SMALL SIMPLE ULCER OF THE STOMACH: ENORMOUS LOSS OF BLOOD.

By Robert L. Bowles, Esq., Folkestone.

Mr. S., a man of middle stature, 56 years of age, and rather inclined to stoutness, had lived an irregular life, drinking a considerable quantity of spirits, and eating various indigestible articles, such as raw cucumbers and fruits of various kinds; he had also taken carbonate of soda in very large quantities for a length of time. During many years he was subject to vomiting immediately after taking his food, but for eighteen months this symptom had much subsided; though the other dyspeptic symptoms had gradually increased in severity, and jaundice had become more and more decided. A melancholy turn of mind became established; his tongue was contracted, hard, dry, and red at the tip; the fæces had continued dark in colour; and the urine was loaded with lithates. For a fortnight he had been treated with alteratives and saline diuretics, but without any marked benefit. There was no anasarca; but the abdomen appeared to contain a small quantity of fluid, not, however, appreciable to the touch.

In this condition, on Saturday, February 21st, in the evening, after a sense of uneasiness and oppression at the pit of the stomach, he vomited a large quantity of dark coloured blood (a quart, at least). In the course of the next three or four hours, the vomiting recurred five times, and each time about a quart of sanguineous fluid of the same appearance as at first was ejected from the stomach, on which he felt relieved, and in every way more comfortable. When I saw him at 10 p.m., he was not wanting in power; his speech was strong, but his pulse soft and quick; he expressed himself as feeling better than he had done for some time previously. A dark coloured evacuation had been passed from the bowels. A cathartic of calomel and colocynth was prescribed, and full doses of tannin should the vomiting of blood recur.

February 22nd. I was sent for in haste this morning; for, on my patient attempting to get out of bed, an enormous quantity of blood was vomited, both in the shape of fluid and clot, from which he was now very weak. Stimulants were administered, and he recovered himself temporarily; but during the day much blood was thrown up at intervals, and at two several times in the preceding night, at least a quart (according to the friends' account) was thrown up. At night, oil of turpentine, in twenty-minim doses, every two hours, was prescribed.

February 23rd. He had vomited but once during the night, and then no blood was thrown up. During the day, feeling much nauseated, he did not take his mixture at the stated times, but allowed five hours to elapse, when he vomited, and this time blood again showed itself, though not in such large quantities as before. The mixture was renewed, and brandy and ice were given *ad libitum*. He had taken nearly a bottle of brandy in the day and night. As the nausea did not permit him to take support, beef-tea was injected into the rectum; it remained some time, and when it came away, a large quantity of black blood was discharged with it.

February 24th. I was again sent for in haste at 7 a.m. It was evident that he was now fast sinking. He had vomited in the night, but the fluid was only partially mixed with blood. At 9 a.m., he died gradually and easily, after having been in a state of coma for half an hour; immediately preceding this, he spoke well and sensibly.

Throughout the attack, he evinced the restlessness and jactitation peculiar to loss of blood, and particularly bemoaned the want of sleep; thirst was also a very prominent symptom.

Post Mortem Examination twenty-four hours after death. The general surface was completely blanched. There were about two quarts of serum in the peritoneum. The stomach was nearly full of dark grumous blood; and there was also a large quantity of this in the intestines. The mucous membrane of the stomach was much softened, particularly at the fundus, which was very blood-stained, had a layer of coagulated blood adherent to it, and showed a few large veins ramifying in it, one of which appeared to terminate in a small ulcer of about the size of a threepenny-piece. This ulcer appeared as if a piece of mucous membrane had been cut out and peeled off

the muscular tissue, which was very plainly marked. There was no thickening nor hardness around it, but the corresponding surface of the peritoneum was readily removed by the finger nail. The pyloric orifice of the stomach and the duodenum were natural, with the exception of being much blood-stained and softened. The liver was considerably smaller than natural, very hard, yellow, and hobnailed; the hepatic veins were not marked in the centre of the lobules. The gall-bladder was nearly empty.

The kidneys were natural in size, but they were much embedded in fat, and mottled on the surface. The capsule was adherent, and there were several cysts in the parenchyma, which was very granular.

The heart and lungs were healthy.

Remarks. The interest of this case consists in the enormous quantity of blood lost, and the slight morbid changes producing such loss; for though there was an ulcer, it was exceedingly superficial; and it would appear from an adhering layer of coagulum in the neighbourhood, that much must have been lost by exudation through the coats of the vessels. From the most careful inquiries, I believe the least quantity of blood that was lost to have been two gallons; and in this belief, Mr. Roscow (who saw the case with me several times) fully coincides. Such a quantity, and continuing without intermission, would raise a suspicion that some vessel of considerable size was opened, or that there must have been an ulcerated surface of large extent; and when the previous history was taken into consideration, it appeared quite possible to have been of a malignant character. But the question of malignancy could make no difference in the treatment; for life was in momentary danger from loss of blood. The indication then clearly was, to arrest this at once if possible, and then to treat symptoms as they might arise. The most reasonable conclusion, however, that we could arrive at from the previous history was, that cirrhosis of the liver existed. Such being the case, we might have been led at first into giving too favourable a prognosis, for it is asserted that in almost all such cases hæmorrhage is merely an effort of nature to relieve the system, and that when the vessels are disgorged, the bleeding would cease of its own accord; and, later, when it was evident that something more formidable than the relief of congestion was going on, we might have lost all hope, and so have been prevented from plying remedies with sufficient perseverance. The result of this case would make it appear judicious that in all instances where life is threatened from hæmorrhage, remedies should be administered to the last, however strong our convictions that it is useless: *we can never be certain.*

The treatment of the case affords some points of interest: full doses of tannin frequently repeated afforded very little, if any, relief; whereas the turpentine evidently arrested it temporarily; and it is possible that, had it been taken regularly at shorter intervals, the bleeding might have been kept in check sufficiently long to have allowed the system to recover itself, so that the patient might have eked out a few more months of miserable existence; for it was clear that when he discontinued the mixture five or six hours, blood again appeared in his vomit; not so, soon after taking his dose. The brandy, doubtless, was of much service; indeed, I believe it was that alone which kept him alive so long. In hæmorrhage occurring with cirrhosis, purgatives are recommended; in fact, are looked upon by good authorities as the *only remedy;* but certainly they require judicious management. In this case they were rejected by the stomach; and further, the very effort of defæcation almost extinguished the only remaining spark of life.

Fourteen days after the decease of Mr. S., one of his sons died of hæmatemesis, caused in this instance by *malignant* ulceration of the stomach; at least, such was the friends' version of the gentleman's report who performed the *post mortem* examination.

CHLOROFORM, AMYLENE, ETC.: HOW DO THEY KILL?

By William Webber, Esq., late of Norwich.

It is not only most important, but just and right, that we should, as promptly as may be convenient, place before the public, as well as the profession, every cause of death with which we become acquainted, more especially those causes with which we have been connected, or to which we have in any way been unfortunately instrumental. This we must do without regard of any obloquy or unmerited consequences which may be visited upon us by virtue of our openness, candour, and sincerity. Thus, in time, will a shortsighted, unwise, and unjust censoriousness be dispelled, and the parasitic hold of quackery will be eventually dissevered.

Where we proceed upon rational premises and sound principles, we can afford to be open. Surely, then, it is better that we should be so, than suffer ignorantly drawn inferences and consequent misrepresentation to take the initiative, and assign the office of truth to a false tongue, and to that evil genius of weakness—prejudice—the bane of progress. "Art", associated with "mystery", wears the semblance of artifice. Secresy engenders suspicion, and casts a shadow upon the fair features of science; and credulity—the cradle of empiricism—gives to imposture the benefit of the blind-born doubt.

If, in our solicitude and efforts to secure for our patients an immunity from torture (often a cause of death, from the shock it inflicts upon the conservative system of life), we accidentally destroy existence, why need we simulate the murderer's secresy, and thus, adopting a Cain-covertness, thereby convert a venial, nay, justifiable misadventure into the appearance of a felonious act? Death, under almost any circumstances, will out somehow.

To Mr. Paget and Dr. Snow, therefore, are the profession and the public indebted for having at once placed before them the correct details of the fatal results which have lately obtained to them respectively from the employment of chloroform and amylene. These hapless issues, if left to ooze out, as they unquestionably would have done, would most likely have created erroneous impressions, have done damage to the employers of the anæsthetics and to science, and have established a popular prejudice against a valuable remedy, the use of which, as a rule, is right.

It forms no part of my object here to go into the question whether chloroform, or other anæsthetics of that class, have saved life by counteracting shock to the nervous system, or have enlarged the tables of mortality by their effects either at the moment of operation or in after time. I have ventured to enter upon the subject herein involved, as one anxious for the maintenance of the due status of our calling, to urge that, with life confided to our hands, a profession so eminently calculated to hold a high and honoured position, should never for an instant, through a want of moral courage and lack of openness, be subjected to the chance of its great usefulness and incalculable value being in any way evil spoken of or brought into discredit.

And now, in answer to the question, How do chloroform, amylene, or such like agents, kill? I essay, at the risk of all fair criticism (by which I may get a useful hint, if I fail in giving one), to state that, in my humble judgment, they kill by abolishing the electric or nervous rule of the body, preventing thereby the amalgamation of those elements of the circulating fluid which are essential to function and the sustenance of life, and which no agency, independently of the nervous sovereignty, can secure. It may be asked, Why, then, do these agents kill in some instances, and not in others? Because, I apprehend (apart from an overdose, or want of due care in their administion), some depression or deterioration of nervous power, either from a fear of consequences, or the existence of organic change, or some such antecedent, has predisposed to such fatal effect. In Mr. Paget's case, the young boy was "timid", and "became alarmed at the thought of being put to sleep". In Dr. Snow's case, the patient, of mature age, was evidently very apprehensive of consequences, as was shown by his "not having taken food for several hours", and his "drinking a pint of ale just before the operation", and which, by generating acid, might have helped to render the chloroform more active of mischief. I consider *cordials* not only worse than useless, but very objectionable, in such condition of the nervous system: hence my practice of giving opiates before operations, or where I have had reason to suspect apprehension or misgivings on the part of the patient before using chloroform (as was exemplified in Baldwin's case, mentioned in my letter in the Journal of May 9th, under the head of "Ligature before Amputation"); and of ordering a diet of broth or gruel, with salt and a little Cayenne pepper, for a day beforehand: hence, also, my reason for giving an opiate, with a saline stimulant, in brandy and water, *after* the effects of the anæsthetic have gone off, and *before* giving nourishment, as to me it has appeared, that to put stimulants or food into the stomach, with a view to their assimilation, when the nervous system is all but exhausted, is like expecting a spur to do more than extinguish the well nigh worn out powers of a tired horse. Allow rest and repose first to restore nervous energy, and then recruit strength by food *proportionate* to the power of the digestive organs.

Again, why does the heart cease its office, and the lungs yet continue to expand and contract—aye, to inhale oxygen, but nevertheless fail to stimulate "the lord of the bosom" to persist in his wonted beat? Simply, I imagine, because the cerebral or ministerial centre has, through the agency of the "leprous distilment" poured into the blood, been deprived of the necessary supplies of healthy nourishment—the means, in fact, of carrying on the government and life of the constitution. The lungs, aided by the tenacious muscles, acting as long as the final contribution of nervous fluid from the spinal cord endures, afford a parallel to a bank (of "limited liability", of course), which, having disposed somehow or other of its capital, real and imaginary, deposits, and other means, yet carries on business, with the *assurance* of security, till the last paid up call of the shareholders is expended, although the direction, like the paralysed heart, feels that "it is all up". The official lungs at length find their "occupation gone", and give up because they have become overpowered by the carbonic acid gas, against which, in the general ruin, they have been left hopelessly to contend. The bankrupt body then succumbs to the decomposition awaiting it, with a rapidity in proportion to the intensity and celerity of the destroying agent, to the remaining amount of carbonic acid gas, and to the fluidity of the corrupt blood; as in cases of death from lightning, prussic acid, strychnia, etc.; or as in instances of typhus arising from the absorption of excrementitious matter, or the importation of a malarious poison, where often the decay of death begins before life ends. In Dr. Snow's case, it is much to be regretted that the condition of the brain, and also of the spleen, was not inquired into; but it occurs to me that the emphysematous state of the lungs, and the abnormal distension of the right ventricle (not detected during life), might be otherwise accounted for.

Last, but not least, comes the natural inquiry, How is threatened dissolution to be arrested where the anæsthetic, be it chloroform, amylene, or other product of that class, has turned traitor to our humane intentions? With deference, I submit, by injecting into the jugular vein distilled water impregnated with salt (the "savour" of the blood), and rousing the chords of the sleep-bound heart into harmonious play by the help of that tried and valuable adjunct, galvanism. Dr. Stevens, after despatching a rabbit by a blow upon its head, and afterwards breaking up its brain, so as to cut off entirely its connexion with the rest of the body, placed the animal upon a warm water plate, and kept up at his pleasure for many hours the heart's beat, by sprinkling upon the exposed organ salt and water: once he washed off the salt with distilled water, and its throb ceased; he renewed the saline stimulant, and it beat again: he then poisoned it with a weak solution of belladonna; it again lay motionless; again was it revived by the salt and water inspersion, and carried on its wonted contractions till the nervous supply was at an end. The experiments of Sir B. Brodie, Dr. Hope, and others, shew that the nervous centre is not essential to the heart's action, so long as a supply of nourishment is kept up.

Henceforth, then, I would recommend a Blundell's transfusion, or other properly appointed syringe; a galvanic battery; an aromatic spirit vapour-bath, to assist in the elimination of carbonic acid gas by the skin (in preference to the negative stimulus of a chill by the dashing of cold water); a flannel dress or blanket; flat metallic hot water bottles, with loops at the sides or ends for tapes; a solution of salt; ammonia in substance, also a saturated solution of it; bellows, a tracheal catheter, a scalpel, and a lancet,—as the attendants in waiting upon the administration of chloroform, amylene, and the like.

Before concluding this lengthy paper, I must beg to observe, that I should be running counter to my views and feelings, were I to omit stating that to my highly gifted and much esteemed friend, Dr. Wm. Stevens (of whom my late friend, the farseeing, scientific, and amiable Dr. Prout, spoke as being "fifty years in advance of the professional knowledge of the day"), is mainly due the credit of any good which may happily arise from the suggestion I have made for the consideration of my medical brethren; which I have been led to make in consequence of my having (in the year of 1832, during the prevalence of cholera at Great Yarmouth, where I was then practising) carried out his (Dr. Stevens's) plan by injecting salt and water into the veins of several patients who were in the last stage of choleraic collapse, by which they were recovered, after hope from all other means was gone. And I may further add, in justice to him against whom opposition, armed with all the rancour of narrow-minded jealousy and the malevolent shafts of prejudice, too commonly attendant on merit, was unsparingly exercised, that I have had ample proof of the truth of another remark pronounced by Dr. Prout upon Dr. Stevens's paper on the Blood, read at the College of Physicians; namely, that his views contained "germs of discoveries of the last (English-like, I should say *first*) importance to mankind".

It does not appear whether galvanism was employed, or whether the means for employing it were at hand, in either Mr. Paget's or Dr. Snow's case.

The vapour-bath is valuable in driving off sebaceous incrustations and mucoid accumulation; and it has been suggested to me by a very scientific and distinguished chemist, of whose friendship I have long enjoyed the advantage, that a vaporised ammonial solution would, by attracting the carbonic acid gas, assist in its elimination, by alternately absorbing and diffusing or giving it off to the surrounding atmosphere.

I have been led to offer the foregoing remarks, with the special object of drawing the attention of abler heads than mine to a subject which is creating much apprehension in the minds of the public in general, in order to prevent a fast growing discomfort from ripening into a mischievous panic.

ABORTION WITHOUT HÆMORRHAGE: CASE OF PROTRACTED RETENTION OF BLIGHTED OVUM.

By R. U. West, M.D., Alford, Lincolnshire.

Mrs. C. M., of S., aged 40, called me in on May 6th, 1851. She stated that she considered herself to be about thirty-two weeks gone in the family way. Nine weeks previously, she had a sudden loss of a great quantity of "dirty-looking water"; after which, she was well again. There had been no pain and no hæmorrhage. The day before I saw her, she had begun to feel pains, which continued. There was no hæmorrhage. On instituting a vaginal examination, I found a three months (or from three to four months) fœtus in the vagina. I removed it: it was a putrid mass, doubled up and compressed into a sort of oval ball, about the size of a hen's egg; it was hanging by the funis, which was very thin, and six or eight inches long. The os uteri was firmly closed, so that I made no attempt to remove the placenta. I called again two days after, and found the os uteri beginning to open; but it was still not open enough to permit the extraction of the placenta. There was no hæmorrhage, not the slightest. The placenta came away spontaneously on May 13th, there having been no hæmorrhage throughout. The woman menstruated about eleven days after the placenta came away.

In this case, most probably, the fœtus died in the thirteenth or fourteenth week of gestation. Nine or ten weeks after this event, the liquor amnii, tinged with putrescency, escaped. The fœtus was still retained, notwithstanding its own death and the escape of the liquor amnii, for nine weeks longer, and the placenta yet another week, and all this without any hæmorrhage whatever.

The perusal of the case published by Dr. Roulston in the Journal for May 9th, has prompted me to forward for publication the above extract from my note-book.

SPONTANEOUS SEPARATION OF THE LEG BY GANGRENE IN A MAN AGED EIGHTY-NINE YEARS: RECOVERY.

By Thomas L. Pridham, Esq., J.P., Bideford, Devon.

Some weeks since, I was requested to see George Slewman, aged 89 years. I found him, considering his advanced age, looking in good health and spirits, and his intellect unimpaired. He had been a bed-lier for the last seven years. On inquiry, I heard the following extraordinary history of his case.

About a year and a half since, he complained of a pain in his heel; his wife, thinking it was rheumatism, put him on a worsted stocking. About three weeks from that time, his leg appearing to be uneasy and swollen, the stocking was removed, when a bladder was discovered extending continuously from about four inches below the knee to the end of the toes. The bladder was punctured with a needle, when a quantity of clear fluid escaped. A few days afterwards, the skin became of a brownish colour, and at the end of a week perfectly black, a distinct line of demarcation was formed. Within a few weeks, the skin became as hard as horn, and the leg had the appear-

ance as if a black silk stocking was drawn over it. A discharge of offensive matter escaped between the dead and the living parts, but the leg did not waste much, and retained its usual shape, the skin continuing as hard as horn.

This was the state thirteen months after the first sensation of pain in the heel; when, one night, whilst dreaming of youthful days when few men surpassed him in active labour, he suddenly started in his sleep; and, on awaking, he found that his leg had actually dropped from his body, the bones having snapped across in a line with the external line of demarcation. There was very little hæmorrhage. The leg continued in the same state as already described for several weeks, and was kept in an adjoining room to show the friends and relations who came to visit him. I was amongst that number, just six weeks after the separation of the dead from the living parts. What is still more remarkable, the stump had healed, with the exception of a small portion, where the bone protruded a little.

Slewman has been married sixty-six years; his wife is eighty-six years of age, and of sufficient health and strength to nurse and take care of her husband. Little or no surgical advice was sought in the case; the relations, one and all, considered it hopeless, as mortification of the lower extremities is generally considered the forerunner of a speedy dissolution. It was not so, however, with Slewman, who now lives, and is hearty and well; and who says "he hopes he shall not have the same thing over again, as he sometimes complains of pain in his other heel."

Reviews and Notices.

The Hygienic Treatment of Pulmonary Consumption. By Benjamin W. Richardson, M.D., Licentiate of the Royal College of Physicians; Physician to the Royal Infirmary for Diseases of the Chest; etc. pp. 115. London: John Churchill. 1857.

We have here an important gap in medical literature well filled up. In pleasant style and lively strain, but with all due seriousness, Dr. Richardson expounds to all parties concerned, whether the public or the profession, a series of hygienic propositions on the management of phthisis. The plan he adopts, wherein a brief statement is first laid down, and then followed by full expansion and illustration, reminds us of that employed in Dr. Arnott's most admirable of all text-books on physics. There is great clearness in such a method; and, if it necessitates some slight appearance of dogmatism, perhaps, to be at once both brief and clear, an author must be dogmatic. It ensures, at all events, that both writer and reader thoroughly understand the meaning intended.

Dr. Richardson lays down a rule in the form of a positive proposition, and then proceeds to discuss "the reason why". By transcribing these rules, we shall best convey an idea of the nature of the book. For the details under the several heads, we must, of course, refer our readers to the work itself; assuring them that they will not only profit by, but relish, its perusal.

"Rule i. A supply of pure air for respiration is the first indication in the treatment of the consumptive patient.

"Rule ii. Active exercise is an essential element in the treatment of the consumptive.

"Rule iii. A uniform climate is an important element in the treatment of consumptives.

"Rule iv. The dress of the consumptive patient should be adapted to equalise the temperature of the body, and so loose, that it interferes in no way with the animal functions.

"Rule v. The hours of rest of the consumptive patient should be regulated mainly by the absence of the sun.

"Rule vi. The occupation of the consumptive patient should be suspended if it is in-door or sedentary; but a certain amount of our-door occupation may be advantageous.

"Rule vii. Excessive mental exertion should be scrupulously avoided by the consumptive.

"Rule viii. The amusements of the consumptive should be so selected as to favour muscular development, and sustain a healthy respiration.

"Rule ix. Cleanliness of body is a special point in the treatment of consumption.

"Rule x. Abstinence from habits of gross sensual indulgence is an essential part, both in the prevention and the cure of consumption.

"Rule xi. The marriage of consumptive females for the sake of arresting the course of the disease by pregnancy is morally wrong, and physically mischievous.

"Rule xii. The diet of consumptive patients should be ample, and should contain a larger proportion of the respiratory elements of food than is required in health."

By way of showing our author's style, we append two short quotations in reference to the atmosphere which a consumptive should not, and that which he should, breathe.

"The inhalation of an atmosphere charged with smoke is necessarily an evil in the case of the consumptive. In a large town, it is difficult to escape from this evil; for if in a London fog it is injurious for the phthisical man to walk out of doors, his condition in the house is little less favourable. He escapes the damp outside, in fact, to breathe in a heated room, which, in foggy seasons, cannot be freely ventilated, the products of his own combustion, and of those arising from artificial lights, which are in essence the same." (p. 17.)

"During seasons of atmospheric variation, deaths from consumption are most prevalent. Thus, an equable temperature is of great moment, and should always be sought after by the phthisical sufferer." (p. 30.)

"I shall recommend no particular place as a resort for consumptives; for I wish not to enter into disputation on this point. But here is the formula for an hypothetical Atlantis for consumptives. It should be near the sea-coast, and sheltered from northerly winds; the soil should be dry; the drinking water pure; the mean temperature about 60°, with the range of not more than ten or fifteen degrees on either side. It is not easy to fix any degree of humidity; but extremes of dryness and of humidity are alike injurious. It is of importance in selecting a locality that the scenery should be enticing, so that the patient may be the more encouraged to spend his time out of doors in walking or riding exercise; and a town where the residences are isolated and scattered about, and where drainage and cleanliness are attended to, is much preferable to one where the houses are closely packed, however small its population may be. In speaking thus of the value of an equal climate, I am guided entirely by the facts daily presented to me in relation to climatic variations on patients living in or near London." (p. 31.)

From one opinion of our author, however, we are constrained to express our dissent. Dr. Richardson strongly objects to hospitals for receiving consumptives as in-patients. Being personally connected with two such institutions situated in an "Atlantis" of the kind aforesaid, we can speak from experience as to the fact that the majority of patients at the end of May go out of the institutions better than they came in at the beginning of October.

In conclusion, we cordially recommend this little work; feeling assured that such of our readers as will possess themselves of it, will find, in lending it to their consumptive patients, much which they would fain say for themselves, said for them with the precision of a practised writer and with the authority of print, calculated to benefit the patient in exact proportion as he can observe the injunctions conveyed. To every fellow associate, therefore, we say—Buy this little work, and lend it to your consumptive patients.

Clinical Lectures on Certain Diseases of the Urinary Organs; and on Dropsies. By Robert Bentley Todd, M.D., F.R.S., Physician to King's College Hospital. pp. 435. London: John Churchill. 1857.

The high merits of the volume of Clinical Lectures on Diseases of the Nervous System, which was published by Dr. Todd some years ago, and which has reached a second edition, must have caused in the minds of many a desire to see a similar treatise by the same author on the affections of other organs and systems; and all who have entertained this desire must now be gratified at the appearance of the volume of Clinical Lectures on Diseases of the Urinary Organs. The number of

lectures is sixteen; and the subjects treated of are—Hæmaturia; Diseases of the Kidney associated with Albuminous Urine and Dropsy; general doctrine of Dropsy, and various forms of the disease; Dropsy after Scarlet Fever; Acute Renal Dropsy; Cardiac Dropsy; Ascites; and Gout, especially in its relation to the urinary organs. All these subjects are treated of in the well known instructive style of the author; and his remarks are illustrated by the histories of fifty-five cases.

For the histories of these cases, Dr. Todd expresses, in the preface, his obligation to several of his former pupils who have acted as his clinical clerks, and who have aided him in various ways in chemical and physiological inquiries. In mentioning this, he takes occasion to make some noteworthy remarks on the importance of clinical instruction. He believes that sufficient encouragement is not given in our London Hospitals to the students to devote themselves to the best means of obtaining practical knowledge—not merely by acting as clinical clerks, but by keeping records of the cases. An organised system of instruction—the formation of classes under a skilled teacher—is what is required. This is in a measure carried out in some of our hospitals. For instance, at Guy's Hospital, there are special clinical wards, medical and surgical; at University College, there are clinical professors, and a practical class is conducted for training the pupils in the art of physical diagnosis; at King's College, there is an early clinic at 9 A.M., medical and surgical on alternate days. The morning clinic of Graves and Stokes at the Meath Hospital in Dublin, acquired, as Dr. Todd observes, an European fame. But in general, our system of clinical instruction is not so well organised as in the continental hospitals; nor is the work done in this direction proportioned to the opportunities we possess: and this Dr. Todd attributes to certain hindering causes:—

"First: The period of the day at which our hospitals are usually visited. Noon, or soon after, is generally the time fixed upon for this purpose. It is at this hour that men engaged in private business are the most liable to interruption; and punctual attendance is always difficult, and often impossible. Owing also to the pressure of other engagements (and this affects the student as well as the physician or surgeon), the same quantity of time cannot be given as at the early period of the day, and the visit must be often contracted within the shortest limits.

"Secondly: Much impediment is thrown in the way of clinical pursuits by the great number and length of the courses of lectures which students are called upon to attend in the schools. Although, in some degree, curtailed of late years, these may be still further diminished with advantage to both teacher and pupil. For example, how unnecessary in the present state of medical literature are long courses of lectures on the practice of medicine or surgery; or, indeed, on any subject not requiring demonstration and experiment! How much better would it be to confine the lectures on these subjects to the discussion of difficult, doubtful, and important points of pathology and practice, preceded by a sufficient statement of first principles suitable for the uninitiated! And in such lectures care should be taken to indicate the best sources of information, and the most valuable works of reference, and to encourage habits of research and study.

"Men would, under these circumstances, be led to read and digest standard authors, to think for themselves, and to discard the system now prevailing (but only of recent growth) of learning manuals by rote. And much of the time now spent in listening to lectures (the greater part of which can be no more than what may be better read at home) might be devoted to hospital work—and the pupil would acquire by his own sight and touch and hearing, the knowledge which, in the lecture-room, he can receive only upon the description and authority of another.

"And if, along with such changes as these, the examinations instituted for medical diplomas and degrees were conducted in a manner adapted to test positive knowledge, rather than to encourage a flippant expertness in answering questions, the result would be a greatly diminished resort to the grinding process, and a more healthy and zealous pursuit of scientific and practical knowledge for its own sake. Idle and indolent men would exist under all systems; but with more guidance, and less dependence on the dicta of a teacher, those disposed to work would devote themselves to their pursuits with much more ease, and with a sense of freedom from the thraldom of scholastic routine.

"Thirdly: Further impediment to clinical teaching arises from the present meaningless custom of crowding the hospital visits of physicians and surgeons, and sometimes of all the physicians and surgeons, into one and the same hour. The inevitable consequence of such a practice is a desultory, irregular attendance of the class. To-day, the students throng to see one or two remarkable cases, or grave surgical operations; to-morrow, they rush with equal eagerness after some new curiosity; but the steady, uniform, day after day watching of disease in the hospital wards, is greatly discouraged by this want of method, and the clinical teacher labours under the disadvantage of not being regularly followed by a class constantly consisting of the same members.

"It seems to me that in every hospital there should be clinical teachers specially appointed for that purpose. The office of clinical professor may be taken in turns by the hospital physicians and surgeons; and there should be one, or not more than two, constantly engaged in each branch of practice. If there be but one, the visit should take place daily; if two, each clinical teacher should visit on the alternate days. The omission of each alternate day is unfavourable to the clinical watching of patients labouring under acute disease. But the constant attendance of two clinical teachers, two physicians, and two surgeons, appears to me to have advantages which more than counterbalance this occasional difficulty, which, indeed, need never amount to anything more than an inconvenience, inasmuch as abundant opportunity would exist for seeing such acute cases daily.

"In making these remarks—founded, as they are, upon a long experience, and suggested by much consideration of the subject, and, I may add, by great interest in the improvement of medical education—I would not be understood to undervalue what has been done of late years in the clinical schools of this metropolis, and of Ireland and Scotland." (pp. x—xiv.)

This quotation shews the high importance which Dr. Todd attaches to observation as a means of education. His course of Lectures, as well as his former volume, prove him to be eminently adapted to give his pupils the full advantage of the means afforded by the cases which come under his care. And not only must his prelections have benefited those who heard them, and who had the opportunity of observing for themselves the cases referred to; but also in their present shape, simple in expression, free from verbose complications, and practical in tendency, they are well calculated to afford instruction to all members of the profession.

On Diseases of the Liver. By George Budd, M.D., F.R.S., Professor of Medicine in King's College, London. pp. 496. Third edition. London: Churchill. 1857.

It is not necessary for us to do more than direct attention to the appearance of a third edition of Dr. Budd's classical treatise on *Diseases of the Liver*. The merits of former editions are fully sustained in the present one, which appears to thoroughly represent the present state of our knowledge on the subject discussed.

The British Botanist's Field-Book: A Synopsis of the British Flowing Plants. By A. P. Childs, F.R.C.S. pp. 160. London: Longman and Co. 1857.

This is a little work likely to be very serviceable to the English botanist. The arrangement followed is that of the natural system; and the descriptions are so arranged as to facilitate the ascertaining the order, genus, and species of each plant by the process of elimination.

On the Diseases, Injuries, and Malformations of the Rectum and Anus, with Remarks on Habitual Constipation. By T. J. Ashton, Surgeon to the Blenheim Street Dispensary, etc. Second edition. pp. 396. London: John Churchill. 1857.

Of the general merits of this work we expressed an opinion when the first edition appeared; and we have nothing to add to

or to take from what we then said. In looking through Mr. Ashton's book, however, we find that (as will sometimes happen) a highly valuable work has escaped his notice—that by Mr. Quain on *Diseases of the Rectum:* at least, we find no reference to it among the many occasions on which authorities are cited. This is, we suppose, a mere oversight, which the author will remedy in future editions.

British Medical Journal.

SATURDAY, MAY 23rd, 1857.

MEDICAL REFORM.

As Mr. Headlam's Bill and that brought in by Lord Elcho are now printed, the profession will be enabled to make their election between the two measures. In a succeeding page abstracts of both are given, from which it will be seen that in very many parts they are identical—the method of appointing the Council affording the chief difference between them—the only one, in fact, of much importance. Mr. Headlam's measure, as we said last week, is professedly a compromise—an attempt to construct a Council which shall represent not only the Medical Corporations and Colleges, but the great body of the profession "unattached". The fifth clause, for instance, is as follows:—

"The General Council of Medical Education and Registration of the United Kingdom, hereinafter called the General Council, shall consist of one person chosen from time to time by each of the following bodies; that is to say, the College of Physicians of England, the College of Surgeons of England, the Apothecaries' Society of England, the University of Oxford, the University of Cambridge, the University of London, the University of Durham, the College of Physicians of Edinburgh, the College of Surgeons of Edinburgh, the College or Society of the Faculty of Glasgow, and the University of Edinburgh; one person chosen collectively by the Universities of Glasgow, Aberdeen, and St. Andrews; and one person chosen by each of the following bodies: the King and Queen's College of Physicians in Ireland, the Royal College of Surgeons in Ireland, the Apothecaries' Society of Ireland, the University of Dublin, the Queen's University in Ireland; and *six* persons, not being members of council or office-bearers in any of the said medical colleges or societies, to be nominated by her Majesty with the advice of her Privy Council, four of whom shall be appointed for England, one for Scotland, and one for Ireland."

This Council may not be everything that could be wished—it may, perhaps, represent powerfully the governing bodies of the medical corporations; but we do not believe that any council could be constructed which wholly excluded these organised bodies from seats at its board. A writer in the *Morning Post* has indeed denounced a council so composed, on the plea that it would be a council composed of conflicting interests. In our eyes, this is the great guarantee that the interests of the mass of the profession will not be overlooked. It is provided that at least six members of Mr. Headlam's Council shall be appointed by the Crown, from members of the medical profession who are not office-bearers in either the Colleges or Universities. Here, then, we have a compact party, perfectly independent in its opinions, but with a leaning, if anything, towards the general interests of the profession, and at all times jealously watching any attempt at encroachments on those liberties on the part of the Colleges and Universities. It is true that this compact segment only numbers six as against seventeen representatives of the latter bodies, but then it must be remembered that the corporate bodies are mostly pulling different ways. Their interests are not at all in common; they will, probably, on most questions affecting corporate interests negative each other; and the true governing power will rest, we believe, on all important questions with the crown nominees. Whilst the 18,000 medical men of this kingdom have in this mixed form of Council a guarantee that their interests will not be overlooked, they will not, we think, regret to see the representatives of the Universities and Colleges, which bring with them the traditions of our craft, taking their places at a Board which will be all powerful in determining the future studies of medical practitioners.

Lord Elcho's Bill, which is nothing more than Mr. Headlam's measure of last year, transmuted and patched by the Select Committee of a dying parliament, at one sweep demolishes this nicely balanced Council, and substitutes for it one of twelve members, entirely nominated by the Crown, with the addition of the President of the Board of Health. The clause runs as follows:

"A Council shall be established, which shall be styled 'The Council of Medical Education of the United Kingdom', and shall consist of the President for the time being of the General Board of Health, and such twelve other persons as her Majesty, with the advice of her Privy Council, may appoint, of whom not less than nine shall be appointed from among persons qualified to be registered under this Act, not less than two of them being persons so qualified who are resident in Scotland, and not less than two of them being persons so qualified who are resident in Ireland."

Now it is a little unfortunate, that whilst Lord Elcho is desirous of combining the government of the medical profession with the presidency of the Board of Health, an office notoriously filled by a mere party politician, totally unacquainted with the needs of medicine, the Home Secretary is contemplating the abolition of that office altogether, and has actually prepared a Bill to transfer the duties of the Board itself to the Privy Council. Lord Elcho's Council is, therefore, *minus* its head and pivot. The medical men of this country have always been deeply averse to prostrating the interests of their profession at the feet of the Board of Health, even when it supported an independent existence. We do not think we shall misjudge them, when we say that they will resolutely refuse to permit their interests to be dealt with by an obscure Committee in the depths of the Privy Council. If we are to have a Council in which the Crown shall have a voice, let it at least be one so standing by itself, that all the profession shall be able to watch, and in an indirect manner to control, its actions, and not an insignificant Committee located in any hole and corner of a government office, where the will of the minister will be omnipotent, and where all our great interests will necessarily be jobbed away by placemen, or, what is worse, place-hunters.

To our minds the Council, as approved of by the Medical Reform Committee of this Association and by the representatives of all parties interested in medical legislation, is infinitely a better Council than Lord Elcho's, which comes recommended by no better authority than a Committee of the House of Commons—a Committee notoriously ignorant of the wants of the medical profession.

The second most important difference between the two Bills bears upon the point, whether there shall be one or two portals of entrance into the profession. Mr. Headlam's Bill provides *separate* examinations and registration for physicians and sur-

geons. Physicians must be graduates in medicine of an University, and must also be admitted, after examination, as members of a College of Physicians. Surgeons must be examined by Boards constituted as in Clause xxii, and must be enrolled as members of a College of Surgeons. Lord Elcho's Bill provides that all persons shall be examined by a Board constituted from all the Corporations and Universities except St. Andrews; and that all who have passed the examination shall be registered as Licentiates in Medicine and Surgery; subsequent qualifications derived from any University or College in the United Kingdom being allowed to be inserted in the register.

These are the two important distinctions between the rival Bills before Parliament. That Mr. Headlam's measure will have by far the greatest measure of approval, there can be no question; and we earnestly recommend the different Branches of the Association to at once throw their support, in the form of petitions, into the hands of Mr. Headlam, otherwise we shall see the whole question carried up stairs, and shelved by a Select Committee, as it was last year, with the certainty that the product will be a hybrid measure which will satisfy no section of the profession, and pass to that limbo from which no future Lord Elcho will have the hardihood to pluck it.

THE LAST SHAM IN PHYSIC: GLANDER-SCHISM AND FARCY-SCHISM.

Our excellent cotemporary, the *Veterinarian*, in his last May number, has gone over to the *Punch* side of Nature. Our contemporary, generally so solid and proper, has allowed for once one of his contributors to perpetrate a positive joke; two jokes, forsooth, both of extreme German parentage. We call them, according to their true significance, Glander-schism and Farcy-schism.

The inventor of these schisms is one Dr. James J. G. Wilkinson, author of a book in which a mild attempt is made to prove that the human body has some kind of connexion with man; author also of various other mystical and hysterical somnolencies, which have called forth the unbounded admiration of Emerson, and of the mystic school (self-called "spiritual school") in all corners of the earth where corners there are. From the downy cloud on which the human body wrote its connexion with man, said body has suddenly descended in these days to dirty earth, and has straightway begun to dabble in glander matter and farcy matter, to make these stuffs into pills, and to doctor with them. Well might reformed Spenser, in recognition of human mutations, sing in prophecy—

> "Hear, thou great Father of the gods on high!
> That most art dreaded for thy thunder-darts;
> And thou, black sire, that reignest in Hayti,
> How he who o'er Mount Parnass, by his arts,
> Rode on a wind-bag (the immortal Green),
> Is now a miner tamping all unseen."

But enough of philosophy: now to history. Dr. Wilkinson has discovered that the glander poison ("glanderine") "is little short of a specific in the worst forms of bronchitis in elderly persons, where suffocation from excessive secretion is imminent; and that, in such cases, the patients themselves express the relief obtained as magical". Very magical! In such instances, "glanderine appears", says the Doctor, "to supply a desideratum. For its action is rapid and satisfactory in those neglected cases which have smouldered perhaps for weeks in the bronchial flues before the practitioner is called in; and when he arrives, the patient, who then perchance for the first time takes to his bed, is in truth near his end." As we have never met in practice with neglected cases of any kind "smouldering in the bronchial tubes", we grant Dr. Wilkinson his point; viz., that, "under these circumstances, let glanderine only be employed, and the expectoration becomes freer, the fever less intense; strength recovers itself; in twenty-four hours, the expectoration diminishes; the diminution of the sputa proceeds rapidly, and the strength advances with it; the mouth moistens, and the tongue cleans; and the patient is soon out of danger."

Dr. Wilkinson could easily detail cases of this kind from his note-book, "but the limits of space he proposes for himself do not admit of such details." The editors of the *Veterinarian* are much less liberal men than we take them to be, if they would not give Dr. Wilkinson half a number for the perfect demonstration of so profound a system of cure, and of so noble a discovery as the one which he proposes.

There are other cases of bronchitis where there is no present danger, but in which the disease has firmly established itself in the lungs, and requires many weeks for being subdued. "In these cases, glanderine will perform," continues the Doctor, "in eight or ten days, the work of weeks of any other medicament with which he (Dr. Wilkinson) is acquainted." We will not dispute this point either.

Dr. Wilkinson has not tried his panacea in pneumonia, although he will do so "with great confidence". "But in obstinate cases of cough attended with expectoration, and which have been accustomed to commence at Christmas and last till June, its action has been decisive, and annihilative in a few hours of the disorder. It has speedily abated obstinate hooping cough. In catarrh, if the nose and mouth are ulcerated, so much the better for the energy of the characteristic action of glanderine."

But what is all the above to the below? "In terrible cases of scarlatina," says our enthusiastic and credulous therapeutist, "where the odour of the breath is putrid, and the buccal passages are filled with tenacious lymph and mucus, while the swollen tonsils close the posterior canals, this remedy alone, from its wonderful promptitude, seems capable of rescuing the patient." But, adds he, "I have tried it in none such." Lose not a moment, Dr. Wilkinson! not a moment, sir! There are fifty children a day dying as you describe. Try your medicine; try it, and let us have the result speedily; but let other eyes—eyes unglanderised—watch with yours such result.

Glanderine "has been tried", according to its inventor, "in putrid fever, with the most marked and rapid success." Most remarkable! "Indeed, putrescence, destructive or *quasi* malignant ulceration, and tendency to decomposition of the tissues, are among prime indications for its employment. It is well worth a trial in carbuncle and plague."

What next? and what next? Why, a glanderine lotion for "old bad legs, for putrid bed-sores, for syphilitic sores, for confluent small-pox." What next? Friends, countrymen, and lovers! lend us your ears, and be silent, that you may hear. The glanderine apostle deponeth thus: "I have cured one case of anasarca of the lower limbs with farcine!"

Now, in the name of common sense, shall we go on any

further? Yes; a step or two, just to the verge of the precipice of nonsense, to have one furtive peep into the unfathomable abyss of folly; no more. Hold your breath, good reader, and listen to the following theory, which has sketched itself out to Dr. Wilkinson, relative to the *action* of glanders, and which, to save words, he states "*affirmatively*".

"The poison is actively centrifugal, and tends to abolish the centres of vitality by powerful ejection of their minutest contents; the spaces" [of the centres of vitality, to wit] "being filled up with matter the result of malignant or destructive inflammation. It is the type of vital destructions; and begins its ravages in the nose of the horse, because that is the spot where it can most easily explode its first seeds of disease. It is opposite to arsenic, which corrodes by stopping function and isolating parts; this over-energises, explodes, and scatters the grains of living organisms."

In a subsequent passage, we have a description of the mode of preparing glanderine pills. Here the pharmacist is specially directed to "wear kid gloves", and to "mind his eye". As a *finale*, the poison (or the remedy, for it is all the same) is to be made up into infinitesimal doses. The sixth attenuation pilule, which is the Doctor's pet, contains in one grain but one-millionth of a grain of the glanderine, and this is extended through a millionfold its space. Then "how safe", says the Doctor, "is its administration!" His habit is to dissolve one of these pilules in half a tumblerful of water. He has on many occasions applied the contents of such tumbler to *raw* surfaces, and has even thrown it up the nose in ozœna, and "with *only* beneficial results".

Had these important revelations appeared in a less scientific journal than the *Veterinarian*, they would not have received from us this mark of our profound regard; for our readers will see with half an eye that the whole paper is but a cleverly, we may say covertly, devised fable of a homœopathic wanderer; while those who have read Dr. Wilkinson's other works will recall enough to remind them that he has mistaken his vocation; that he was born a mystical poet, and turned from his true vocation to become a dreamy physician. But when we see a truly scientific periodical, conducted by two of the ablest minds in their profession, acting as mouthpieces to such Midsummer madness, we must, in the most friendly spirit, offer a word of expostulation. Of what avail is it that our laborious and quiet investigators of Nature and of the phenomena of Nature should toil and spin, and wear themselves out, body and soul, in their works, if works thus painfully wrought out are to be placed in juxtaposition with such idle fancies of the brain, such garbled science, such phantom observation, and such hobgoblin ecstacies, as those over which we have now exhausted our patience rather than our honest ridicule? The thing is not to be borne. Let those who like to play Harlequin dress up science as Harlequin's well known comrade; but, by all that is manly and truthful, let those who follow science devoutly and reverently clothe her in more sober and majestic attire.

To all who may be interested in the extremely curious, it is important, finally, to state that, on an evidence of cure quite as scientifically reliable as any evidence regarding the efficacy of glanderine itself, it appears that, while the manuscript of the Wilkinson glanderism flux was in press, the "compositor" was cured of a violent catarrh; the "reader" had three decayed teeth suddenly recoated with enamel; and the "printer's devil" not only became as pure as the driven snow, but was completely cured of an old standing ulcer on his cloven foot! These facts only afford a new proof that truth is more wonderful than fiction.

THE WEEK.

Our fellow associates will learn with much satisfaction that a Bill to Restrict and Regulate the Sale of Poisons has been introduced into the House of Lords by Earl Granville, President of Her Majesty's Privy Council. In the list of substances classed as "poisons" are included, together with the articles ordinarily used as the weapon of the suicide and murderer, various drugs used for the purpose of procuring abortion. Druggists are restricted from selling any poison except to a person of full age, and in the presence of a witness known to both parties: a certificate from a parish priest, a medical practitioner, or a magistrate, to the effect that the drug asked for may be safely supplied to the applicant, is also required. Other clauses of the Bill provide for the coloration of poisonous materials, and for their being kept in a distinct department of the shops or dispensary—a regulation, the necessity for which is abundantly shown by the frequent occurrence of cases of poisoning by mistake, as in the instances referred to below. The Bill is not intended to interfere with medical prescriptions, nor with sales to wholesale dealers, or for the lawful purposes of trade. Altogether, the Bill, so far as we have been able to judge of its provisions, seems to be as comprehensive a measure, and one as likely to diminish the loss of life by the criminal or accidental administration of noxious drugs, as any which could be devised, considering the difficulties attendant on the subject. We strongly urge on our associates the importance of at once sending petitions in its favour to both Houses of Parliament. An outline of it will be found at page 450.

Two cases of poisoning by something sold in mistake for tincture of rhubarb have occurred within the last few days. One of the instances occurred at Carlisle. An old woman, aged ninety, named Sarah Moore, sent to a druggist's shop for a dose of tincture of rhubarb. The messenger was served by a junior assistant; who said that, in consequence of the great age of the person, only half the dose should be given. The old woman, soon after taking the medicine, exhibited all the symptoms of narcotic poisoning, having taken tincture of opium. The verdict returned was that "The death of Sarah Moore was caused by the neglect of Henry Thompson" (the druggist's assistant) "in carelessly dispensing medicine." The other case occurred at Bangor. A woman, named Jane Williams, procured from a druggist in Bangor some tincture of rhubarb. On swallowing the dose—an ounce in quantity—she became suddenly sick, faint, and cold, and complained of a burning heat in the lips and a painful sensation of fulness in the face She was seized with convulsions; and, before medical aid could be procured, she died. The verdict in this case was "Natural Death"! No examination of the body was made, under the idea that no practical good could result, and that it would be heartrending to the friends of the deceased. Nor does any examination of the source whence the poisonous dose was taken appear to have been made; while Dr. O. O. Roberts, one of the witnesses, stated that he had been called to attend a patient to whom had been furnished tincture of rhubarb from the same supply which

had furnished that given to the woman Williams, and who had been seized with a similar train of symptoms.

The trial of Thomas Fuller Bacon and Martha Bacon for the murder of their children has terminated in a verdict of *Not Guilty* as regards the former, and in *Acquittal* of the latter on the ground of insanity. It will be remembered that the man Bacon was placed on trial in consequence of a statement made by his wife to Mr. Elliott, the police magistrate, that the murder had been committed by him. Notwithstanding the constant denial of the truth of this statement by the man, and his urgent desire to his wife to retract it, she persisted in it until the end of the first day's trial, when she confessed that her husband was falsely accused, and that she alone committed the murder. Subsequently, having been taken into custody, she became alarmed; and under the fear that if she did not clear herself she would in all probability lose her life, she resolved on criminating her husband. The verdict of insanity was a most just and proper one; and is in accordance with the views which we expressed in commenting on this case in the Journal of January 10th of this year.

The proposal of Sir George Grey to abolish the Board of Health, and transfer its functions to a committee of the Privy Council, appears to be regarded by some of the public press with as unfavourable an eye as it is by the medical profession. The *Morning Post* of May 16, in a forcibly written article on the subject, says:—

"As a matter of necessity, rather than of choice, the Bill of Sir George Grey must, we presume, be accepted; but it cannot be received as a permanent settlement of the great sanitary questions which have of late years been mooted. It will still be asked: Shall this country have an efficient Government department charged with all that pertains to the promotion and preservation of the health of the people? Shall England continue to neglect and violate some of the most important laws of hygienics in the management of armies, navies, prisons, lunatic asylums, poor laws and vaccination laws, municipal police, and in all that pertains to preventive medicine? Shall there be no better regulation of medical education and qualification—no supervision of the dealers in poisonous drugs—no check on the sale of adulterated food? These and similar questions must, ere long, be grappled with. . . . .

"This country undoubtedly requires a thoroughly efficient Board of Health, amenable through its chief to Parliament. The President of such a Board ought, as 'Minister of Public Health,' to have his time and energies fully occupied with the business of his department. As a means of promoting uniformity of action, and as a safeguard against evasion of responsibility, the medical affairs of the State should all be directed by one department. On the other hand, to prevent the mischiefs of an unmodified centralisation, considerable latitude for free action ought to be entrusted to local and subordinate agencies.

"We have never yet had a Board of Health entitled to such a name. We have had no proper infusion of sound medical science, and no right recognition of the duties which such a Board ought to perform. There have undoubtedly been a few officers of high fame and talent appointed; but they have not been adequately supported by a co-operative staff of competent scientific men. Worse than all, the whole power over sanitary affairs has always been placed in the hands of mere politicians, the requisite skill and science being supplied by their servants. Except in the case of Mr. Simon, there has been no inducement held out to first-class professional men to devote themselves to sanitary science. When occasional sanitary work has been required to be done, it has been of necessity given to gentlemen at other times little occupied with such business. There have been no means adopted for rearing and securing for the State a trained and experienced band of officers of health. Hence all our failures and shortcomings, as a nation, in practical hygienics."

It will not astonish those of our readers who are well acquainted with the shortcomings and real impotency of the medical department of the army, that the great Military Hospital now rising from the alluvial swamp at Netley has already "come to grief" ere it has risen many feet from its foundation. Not before £70,000 of public money had been expended upon the building, was it discovered that its plan was so entirely faulty that to complete it would be to perpetuate a manufactory of foul air for our poor suffering soldiers. One of our cotemporaries has indeed attempted to excuse the Medical Department for its share in this abortive and unfortunate undertaking; but we shall attempt to show next week either that the Medical Department of the army neglected its duty in allowing such a monstrously defective plan to be adopted, or that it is totally powerless to prevent the perpetration of the most monstrous error, entailing a vast expense of money upon the nation and an incalculable amount of unnecessary suffering upon the part of the soldier. Nothing but the pressing matters of the week prevent our calling the attention of the public to this question, now that the Royal Commission of Inquiry into the Medical Department of the Army is ripping up its acknowledged defects.

The usual mode of election of medical officers to Hospitals has long been a source of more or less dissatisfaction; as it has been notorious that the chances of candidates have been in proportion to their personal influence, and not to their merit. The Committees of the Queen's College in Birmingham, and of the Southern Hospital in Liverpool, have set the example of discountenancing the system of canvassing, and of electing candidates according to their testimonials. On the last occasion on which this experiment was tried—that of the election of a Physician to the Queen's Hospital and a Professor of Materia Medica in Queen's College, Birmingham—the result has been most satisfactory; a gentleman having been elected who, independently of his testimonials, has long gained for himself an European reputation in that department of medical science which he has been chosen to teach. The medical school of Birmingham will find that it has gained an accession of strength in the appointment of Dr. Fleming. In contrast with the proceedings at Birmingham may be placed the manner in which (as report says) the recent election of Assistant-Surgeons at St. Mark's Hospital has been conducted. It is said that, before the vacancies were advertised, the principal medical officer of that institution had already determined who were to be his colleagues. At all events, a surgeon who had made the class of disease which is treated in that Hospital a special subject of study and practice, found that he had no chance as a candidate, and therefore withdrew the application he had made. Mr. Salmon may have a perfect right to rule as "monarch of all he surveys" in the realms of Ascaridia; but he goes a little too far in despotism, if he takes on himself to dictate who shall be his colleague, or who shall wield the sceptre as his successor.

THE MEDICAL REFORM BILLS.

Two Medical Reform Bills are now before Parliament: one prepared and brought in by Mr. Headlam, Sir Wm. Heathcote, and Mr. Napier; the other by Lord Elcho, Mr. Fitzroy, and Mr. Craufurd. Subjoined is an abridgment of Mr. Headlam's Bill, retaining all the essential points. Of Lord Elcho's Bill, which is the same as was agreed on by the Parliamentary Committee of last year, it will be sufficient to merely denote those clauses in which lie its chief differences from the Bill of Mr. Headlam.

I. MR. HEADLAM'S BILL.

I. This Act may be cited as "The Medical Act, 1857."

II. This Act shall commence and take effect on the *first day of August*, 1857.

III. This clause repeals various Acts and parts of Acts, except as to the recovery of penalties for offences committed before the passing of this Act.

IV. *Medical Council.* A "General Council of Medical Education and Registration of the United Kingdom", which shall comprise branches for each division of the United Kingdom, shall be established to effect uniformity of education in the United Kingdom, to regulate the several subjects in which candidates for Diplomas or Letters Testimonial shall be examined, to determine as to the fitness and efficiency of Medical Schools, and to provide for the due registration of legally qualified practitioners, and for the other purposes of this Act.

V. The General Council of Medical Education and Registration shall consist of one person chosen from time to time by each of the following bodies:—the Colleges of Physicians and Surgeons of England; the Apothecaries' Society of London; the Universities of Oxford, Cambridge, London, and Durham; the Colleges of Physicians and Surgeons of Edinburgh; the College or Society of the Faculty of Glasgow; the University of Edinburgh. One person chosen by the Universities of Glasgow, Aberdeen, and Saint Andrews, collectively. One person chosen by each of the following bodies: the King and Queen's College of Physicians in Ireland; the Royal College of Surgeons in Ireland; the Apothecaries' Society of Ireland; the University of Dublin; the Queen's University in Ireland. And *six* persons, not being members of Council or Office-bearers in any of the said Medical Colleges or Societies, to be nominated by Her Majesty with the advice of Her Privy Council; four of whom shall be appointed for England, one for Scotland, and one for Ireland.

VI. This clause provides for appointment to be made by the Crown, if the Universities of Glasgow, Aberdeen, and Saint Andrews, cannot agree on one person to represent them in the Council.

VII. The representatives of the Medical Corporations and Universities, and the members nominated by Her Majesty for each division of the United Kingdom, shall be the Branch Councils, and shall carry out the regulations of the General Council as to education and registration.

VIII. Members of Council representing the Medical Corporations must be qualified to be registered.

IX. On the resignation or death of a member of the General Council, his place shall be filled up.

X. *Meetings of the General Council.* The General Council, within *three* months, shall elect one of their members to be their President, and shall make rules and regulations as to the times and places of their meetings; and in the absence of any rule or regulation the President may, when necessary, summon meetings of the General Council by letter to each member. At every meeting, in the absence of the President, some other member, chosen from the members present, shall act as President. All Acts of the General Council shall be decided by the votes of the majority of the members present at any meeting, the whole number not being less than *eight;* and at all such meetings the President for the time being shall, in addition to his vote, have a casting vote, in case of an equality of votes.

XI. *Appointment of Registrars, etc.* The General Council shall appoint a Registrar, being a person qualified to be registered under this Act, who shall act as Secretary of the General Council, and who may also act as Treasurer, unless the Council shall appoint other Treasurer or Treasurers; and the person or persons so appointed shall likewise act as Registrar for England, and as Secretary and Treasurer or Treasurers for the Branch Council of England. The General Council and Branch Council for England shall also appoint clerks and servants; and every person so appointed by any Council shall be removable by that Council, and shall be paid such salary as the Council shall think fit.

XII. The Branch Councils for Scotland and Ireland shall each respectively appoint a registrar and other officers and clerks.

XIII. There shall be paid to the members of the Councils such fees for attendance and such reasonable travelling expenses as shall be allowed by the General Council, and approved by the Secretary of State for the Home Department.

XIV. The expenses of the General Council shall be defrayed by means of an equal percentage rate upon all monies received by the several Branch Councils; and the expenses of the Branch Councils shall be defrayed respectively out of the residue of the monies so received.

XV. *Registration of Persons in Practice before the passing of this Act.* Physicians and Surgeons are to be registered separately. Physicians shall include all persons not engaged in the art and mystery of an Apothecary and not practising Pharmacy, who shall apply to be registered on or before *December* 1, 1857, and who, at the time of application shall be at least 24 years of age, and shall have, *prior to the passing of the Act*, taken a degree in medicine in any English, Irish, or Scotch University, or shall produce a diploma or license granted by the Colleges of Physicians in London, Edinburgh, or Ireland, or by the Archbishop of Canterbury. Surgeons shall consist of persons who shall apply to be registered within the time aforesaid, and who shall produce a diploma or license (or satisfactory proof thereof) from the Colleges of Surgeons in England, Edinburgh, or Ireland, the Faculty of Physicians and Surgeons of Glasgow, the Society of Apothecaries in London, or the University of Dublin; or who shall have been in actual practice as an Apothecary in England and Wales prior to August 1, 1815; or who shall hold a warrant of appointment as Surgeon or Assistant-Surgeon in the Army or Navy or East India Company's Service dated prior to August 1st, 1826.

The fee for registration in each case shall be *ten shillings.*

XVI. *Registration after the passing of this Act.* The Medical Registrars shall, on and after the *commencement of this Act*, proceed to register, in books to be kept for that purpose, and on payment of a fee which shall be determined by the general Council, and shall not be less than *three* nor more than *six guineas*, the name and place of abode, together with a description of the testimonials, of every Physician or Surgeon who shall apply to be registered, and who shall be qualified for registration as hereinafter provided; and every registered Physician or Surgeon who shall afterwards remove from that part of the United Kingdom in which he had been registered shall, in order to practise as a Physician or Surgeon, cause his name to be transferred to the register of the part to which he shall so remove, and shall, having first caused himself to be enrolled as a Member or Licentiate of the corresponding College or Faculty of the said part of the United Kingdom, be entitled to be registered in such register in like manner as he was before registered, on payment of a fee of *ten shillings.*

XVII. *Register to be published.* The Medical Registrars in each division of the United Kingdom shall, under the authority of the respective Branch Councils, in the month of *February* in every year, cause to be made correct registers of the names and places of abode of all persons who shall have been registered under the provisions of this Act; and the registers for Scotland and Ireland shall be published as early as may be convenient in each year, in union with the register for England; and the collected register shall be called "The Medical Register of the United Kingdom," and a printed copy of the Medical Register for the time being shall be evidence that the persons therein specified are registered according to the provisions of this Act, and the absence of the name of any person from such printed copy shall be evidence, until the contrary be made to appear, that such person is not registered.

XVIII. This clause provides for keeping the register correct.

XIX. Any Medical Registrar who shall wilfully make or cause to be made any falsification in any matters relating to the register shall be deemed guilty of a misdemeanour, and shall, on conviction thereof, be sentenced to be imprisoned for any term not exceeding *six* months.

XX. *Preliminary Examination in General Education.* The Branch Councils of each division of the United Kingdom shall, within *three* months after their *first* meeting, appoint Examiners, subject to the approval of the General Council, to

examine in general education: and no person, other than a Graduate in Arts in some University of the United Kingdom, or in some foreign University approved by the General Council, unless he shall have passed the examinations for a degree in Arts, or examinations that shall be deemed equivalent by the General Council, in some University of the United Kingdom, shall be entitled to present himself before any College for the purpose of obtaining letters testimonial, as hereinafter provided, unless he shall have received a certificate signed by some one or more of the said examiners, for which certificate he shall pay a fee of *two* pounds, or such fee as the General Council shall appoint, subject to the approval of the Secretary of State for the Home Department.

XXI. *Physicians.* After the *passing of this Act*, the Medical Registrars shall require proof from every person who applies to be registered as a Physician, and who is not qualified to be registered under the provisions of other Clauses of this Act, that he has completed the age of *twenty-four* years, and that he has graduated in Arts and Medicine, or in Medicine after having passed the examinations for a degree in Arts, or equivalent examinations in some University of the United Kingdom, or in some foreign University approved by the General Council, and that he has been examined by and has received letters testimonial from one of the Royal Colleges of Physicians of England, Scotland, or Ireland, and has been enrolled as a member of that College.

XXII. *Surgeons.* After the *passing of this Act* the Medical Registrars shall require proof from every person who applies to be registered as a Surgeon, and who is not qualified to be registered under the provisions of other Clauses of this Act, that he has completed the age of *twenty-one* years, and that he has been examined by and has received letters testimonial from the Colleges hereinafter named; that is to say—

In England, the examinations in Medicine, Surgery, and Midwifery shall be conducted as follows:—

The examinations in Medicine and in its collateral sciences (except in cases in which it shall seem to the Council that the examination in the collateral sciences has been otherwise complied with), shall be conducted at the Royal College of Physicians by a Board consisting of Examiners, of whom *one-half* shall be appointed by the Royal College of Physicians of London, and shall be duly registered as Physicians, and *one-half* by the Master, Wardens, and Society of Apothecaries of the City of London, who shall be persons duly registered as Surgeons and Practitioners in Medicine and Midwifery. The Examiners constituting this Board shall have an equal voice in all proceedings of the Board. Every Examiner shall be entitled to examine on each and every subject of examination.

The Chairman of this Board shall be one of the Examiners, appointed by the Royal College of Physicians, and shall be elected by a majority of votes of all the Examiners present. He shall not be entitled to vote, except in the event of the votes of the other members being equal, in which case he shall have a casting vote.

The examinations in Surgery and also in its collateral sciences (except as above) shall be conducted by the Court of Examiners of the Royal College of Surgeons of England.

The examinations in Midwifery shall be conducted at the Royal College of Surgeons of England, by a Board consisting of Examiners, of whom *one-third* shall be appointed by the Royal College of Physicians, *one-third* by the Royal College of Surgeons of England, and the remaining *third* by the Master, Wardens, and Society of Apothecaries of the City of London, and of a Chairman, who shall be appointed by the Council of the Royal College of Surgeons of England, and shall be one of the Vice-Presidents or other member of the Council of the said College. The Examiners of this Board shall have an equal voice in the proceedings of the Board.

In *Scotland*, the examinations shall be *three* in number, viz., one in Surgery and its collateral sciences, one in Medicine and its collateral sciences, and one in Midwifery. These shall be conducted by the Royal College of Physicians of Scotland, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow; that is to say: in Edinburgh by the Royal College of Physicians of Scotland, and the Royal College of Surgeons of Edinburgh; and in Glasgow by the Royal College of Physicians of Scotland and the said Faculty, conducted either separately before Examiners appointed by each body, or before a joint Board of Examiners, to be appointed by each body separately or conjointly; and where there shall be separate examinations before Examiners appointed by each body, the subjects and fees of examination shall be divided among such bodies.

In Ireland the examinations shall be *three* in number, as in England and Scotland. The examinations in Surgery shall be conducted by the Royal College of Surgeons of Ireland, the examinations in Medicine by the Royal College of Physicians of Ireland, and the examinations in Midwifery by the Colleges of Physicians and Surgeons of Ireland. The said examinations may be conducted by each of the said Colleges separately, before examiners appointed by each of them respectively, or before a joint Board of Examiners.

In both Scotland and Ireland the Council have the power of dispensing with the examinations in the collateral sciences, as in England.

All persons who shall have successfully passed the said examinations, shall be enrolled as members of the Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh, the Faculty of Glasgow, or the Royal College of Surgeons of Ireland, as the case may be, and shall, on proof of such enrolment, be registered in the Surgeons' Registers.

XXIII. *Registered Persons to belong to the Colleges of the Country in which they practise.* Every Physician or Surgeon admitted as a Member or Licentiate of a College of Physicians or Surgeons, and every Surgeon admitted of the Faculty of Glasgow, who shall afterwards remove from that part of the United Kingdom in which he had been so admitted, shall cause himself to be enrolled as a Member or Licentiate of the corresponding College or Faculty of that part to which he shall so remove, and shall be entitled to be so admitted without further examination, on payment of an enrolment fee, which shall not exceed the admission fee paid by those who have been examined and admitted by such College or Faculty, exclusive of the fees paid for examinations; and every physician and surgeon who shall not within *three* months after registration, or after such removal, cause himself to be so enrolled, shall be struck off the register, and shall not be restored until he shall have been so enrolled, and shall have paid to the Treasurer of the Medical Council a penalty not exceeding *five* pounds for each calendar month during which he shall have been so in default.

XXIV. Names struck off by any of the Colleges, or by the Faculty of Glasgow, from their lists, may, on representation to the Branch, be erased from the Register.

XXV. Medical practitioners convicted of felony may be struck off the Register. The Branch Council may at any future time replace the name.

XXVI. *Uniformity of Qualifications.* The several Colleges and Faculty shall from time to time, when required by the General Council, prepare and lay before the General Council a scheme of the course of study and particulars of the examinations to be gone through, and of the fees for examinations; and the General Council shall be empowered to fix a minimum fee for such examinations, and shall make from time to time such changes in any of the schemes so laid before them as to them shall seem expedient; and the General Council shall secure, as far as is practicable, that the qualifications for the said testimonials shall be uniform, according to the nature thereof, throughout the United Kingdom.

XXVII. *For securing Efficient Examination.* It shall be lawful for any person or persons deputed by the General Council for that purpose, to attend Examinations in Medicine or Surgery, to be present at any of the examinations held for the purpose of granting letters testimonial; and if the General Council shall be of opinion that the regulations prescribed by them for the examination and grant of letters testimonial shall have been infringed, evaded, or neglected, it shall be lawful for the General Council to direct that no person be registered upon the testimonials of the College (or the Faculty) in default until the same be amended to the satisfaction of the General Council.

XXVIII. This clause provides that accounts of money shall be kept and published annually.

XXIX. *Pharmacopœia.* The General Council shall cause to be published under their direction and authority, by the Colleges of Physicians of England, Scotland, and Ireland, a book containing a list of medicines and compounds, and the manner of preparing them, etc., to be called *The British Pharmacopœia;* and the general Council shall cause such Pharmacopœia to be altered and amended by the said Colleges as often as they shall deem it necessary.

XXX. *Privileges of Registered Persons.* Every person registered under this Act, not being a physician, shall be entitled to demand and recover in any court of law reasonable charges for

medical and surgical aid, advice, visits, and medicine, rendered or supplied by him to his own patients.

xxxi. After the passing of this Act, none but registered persons shall be entitled to recover charges.

xxxii. *Persons not registered incapable of holding Appointments.* After the passing of this Act, no person who is not registered under this Act shall be deemed to be a legally qualified physician, surgeon, or medical practitioner, within the meaning of any charter or Act of Parliament, or to any intent or purpose whatever, or shall be capable of holding any office or appointment, either by direct or indirect terms confined to legally qualified medical practitioners.

xxxiii. *Penalty for falsely pretending to be a Registered Person.* Every person not registered under this Act, who shall wilfully and falsely pretend to be, or take or use any name, title, admission, or description implying that he is registered under this Act, shall, on being summarily convicted of every such offence, before any *two* justices of the peace for the county, city, or place where the offence was committed, pay a sum not exceeding *twenty* pounds nor less than *five* pounds, to be recoverable as hereinafter described.

xxxiv. *How Penalties are to be recovered.* Any *two* justices of the peace may hear and determine any complaint made under the next preceding clause, on the oath of one or more witnesses, or by the confession of the accused party, and shall award the penalty or punishment; and in every case of the adjudication of a pecuniary penalty, and of nonpayment thereof, it shall be lawful for the said justices to commit the offender to any gaol or house of correction within his jurisdiction for a term not exceeding *six* calendar months, the imprisonment to cease on payment of the sum due.

xxxv. Any person obtaining registration by false representations, and every person aiding and assisting him therein, shall, upon conviction, be adjudged guilty of a misdemeanour in England and Ireland, and in Scotland of a crime and offence.

xxxvi. *Exemptions.* Every person registered under the provisions of this Act shall be exempt, if he shall so desire, from serving on juries, etc.

xxxvii. *Provision for Persons practising in the Colonies and elsewhere, and for Students.* It shall be lawful for the General Council to make regulations for dispensing with such provisions of this Act as to them shall seem fit, in favour of persons now practising Medicine or Surgery in any part of Her Majesty's dominions other than Great Britain and Ireland by virtue of any Degree in Medicine from any English, Irish, or Scotch University, or by virtue of any diploma or license from either College of Surgeons, or from the Glasgow Faculty, or from the University of Dublin; and also in favour of persons practising medicine or surgery within the United Kingdom on foreign or colonial diplomas or degrees *before the passing of this Act;* and of persons whose cases may be considered by the General Council fit for special exception; and also in favour of any now acting as surgeons or assistant-surgeons in the Army, Navy, Militia, or in the service of the Honourable East India Company; and, also so far as to the Council shall seem expedient, in favour of Medical Students who shall have commenced their professional studies before the *passing of this Act.*

xxxviii. *New Charters.* It shall be lawful for Her Majesty to grant to the corporation of the Royal College of Physicians of London a new charter, and thereby to give to such corporation the name of "The Royal College of Physicians of England".

xxxix. It shall be lawful for Her Majesty to grant to the corporation of the Royal College of Physicians of Edinburgh a new charter, and thereby to give to the said College of Physicians the name of "The Royal College of Physicians of Scotland". A new charter may also be given, amalgamating the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, under the name of "The Royal College of Surgeons of Scotland".

xl. It shall be lawful for Her Majesty to grant to the corporation of the King and Queen's College of Physicians in Ireland a new charter, and to give to such corporation the name of "The Royal College of Physicians of Ireland".

xli. The said charters shall not contain new restrictions in the practice of Physic or Surgery.

xlii. *Chemists and Druggists.* Nothing in this Act contained shall extend or be construed to extend to prejudice, or in any way to affect the lawful occupation, trade, or business, of chemists and druggists.

xliii. *Apothecaries in Ireland.* Nothing in this Act contained shall interfere with the rights, privileges, or employment, of duly licensed apothecaries in Ireland, so far as the same extend to selling, compounding, or dispensing medicines.

II. LORD ELCHO'S BILL.

iii. *Council of Medical Education.* A "Council of Medical Education of the United Kingdom" shall consist of the President for the time being of the General Board of Health, and such twelve other persons as Her Majesty, with the advice of Her Privy Council, may appoint, of whom not less than nine shall be persons qualified to be registered under this Act, not less than two being resident in Scotland, and not less than two being resident in Ireland. Of the persons to be so appointed by Her Majesty, three shall be so appointed for a term of four years, three for five years, three for six years, and three for seven years.

iv. Vacancies may be filled by Her Majesty, with the advice of Her Privy Council. Any person going out of office may be re-appointed. The whole number of members of the Council qualified as aforesaid shall be kept up to not less than nine, and the number of such qualified members resident in Scotland and Ireland respectively to not less than two. Every member appointed to fill a vacancy occasioned by the expiration of the term of office, shall be appointed for four years, and every member appointed to supply a vacancy caused otherwise than by the expiration of a term of office, shall be appointed for the remainder of that term of office. The Council may act notwithstanding vacancies.

v. The Council shall hold meetings at such place and time as the President of the General Board of Health shall appoint. Five members to be the quorum.

vi. The said President shall be the Chairman, and shall nominate one of the other members to be the Vice Chairman of the Council.

vii. All questions shall be determined by the majority of votes, and the Chairman shall have a casting vote.

ix. The Council shall have power to delegate to Committees of their own body, of not less than three members, either generally or in relation to any part of the United Kingdom, any of their powers and duties other than the powers to make rules or regulations as to the course of study or examination. Two of the members of such Committee shall be a quorum.

x. The members of the Council resident in Scotland and Ireland respectively, shall be members of every such Committee for Scotland and Ireland respectively.

xi. *Examiners in Preliminary and Professional Education.* For Examinations after the first day of December 1857, there shall be established in England, Scotland, and Ireland respectively, two Boards of Examiners, called respectively the "Preliminary Board" and the "Professional Board".

The Preliminary Board shall be established for the preliminary examination in general education, and shall consist of such persons as the Council may appoint. [The obligation to pass the examinations of this Board is the same as in Mr. Headlam's Bill. The fee is not to exceed *Five* Pounds.]

The Professional Board shall consist of Examiners appointed as hereinafter mentioned:

The Board for England shall be appointed by the College of Physicians of London and by the College of Surgeons of England; until the year 1865, by the Society of Apothecaries of London; and by the Universities of Oxford, Cambridge, and London respectively.

The Board for Scotland shall be appointed by the Colleges of Physicians and Surgeons of Edinburgh; by the Faculty of Physicians and Surgeons of Glasgow; by the Universities of Edinburgh and Glasgow respectively; and by the two Universities of Aberdeen conjointly.

The Board for Ireland of Examiners to be appointed by the Colleges of Physicians and Surgeons of Ireland; until the year 1865, by the Governor and Company of the Apothecaries' Hall of Dublin; and by the University of Dublin and by the Queen's University, respectively.

Any person who shall have passed the examination of the Professional Board, shall be entitled to a certificate of qualification to practise, for which he shall pay a fee not exceeding Twenty-five Pounds; and all moneys received by any of the said Boards shall be paid to the Treasurer of the Council.

xii. The Council shall determine and may alter the number of Examiners to constitute the Professional Board for each part of the United Kingdom, and also the proportions in which and the branches of Science and Practice for which the several bodies shall appoint the Examiners.

xiii. The Council shall make rules as to the age and times at which candidates shall be admissible to the Examinations, and as to the subjects of examination, and as to the degrees of proficiency, and the certificates of character which candidates

shall be required to produce, and as to the course of study; and as to the time, place, and manner of holding these Examinations, and as to other matters. All rules made by the Council shall be laid before both Houses of Parliament.

XIV. The Examiners shall be appointed yearly.

XVI. The members of the Council, and any person deputed by the Council, and any one registered under this Act, shall have free access to all Examinations conducted by the Professional Boards.

XX. *Appointment of Registrar, Assistant-Registrar, and other Officers.* The President of the Board of Health shall appoint, from among persons qualified to be registered under this Act, a Medical Registrar for the United Kingdom, and one Assistant Medical Registrar for Scotland, and one for Ireland; also a Treasurer, and such Clerks and other Officers as he may deem necessary, and may from time to time remove any person so appointed; the salaries of the said Officers shall be paid, with all reasonable expenses incurred by the Medical Registrar, out of any moneys which may be provided by Parliament for that purpose.

XXI. The Registrar shall keep an Alphabetical Register of Medical Practitioners.

XXII. *Registration of Persons in Practice before the 1st December* 1857. Every person who before the First Day of December 1857 is possessed of one or more of the qualifications described in the Schedule (B.), shall be entitled to be registered on producing, before the First Day of January 1858, to the Medical Registrar, or to the Assistant Medical Registrars, his diplomas or licenses; or if he was actually practising Medicine in England and Wales prior to the First Day of August 1815, on signing a declaration, or upon transmitting within the same period, by post, to the Medical Registrar or one of the Assistant Medical Registrars, information of his name and address, and of his qualification or qualifications (including such declaration), and of the time or times at which the same was or were respectively obtained. It shall be lawful for the several Colleges and other Bodies mentioned in Schedule (B.) to transmit to the Registrar, before the said First Day of January 1858, Lists, certified under their respective seals, stating the respective qualifications and places of residence of persons on their books; and it shall be lawful for the Registrar to enter on the Register such persons without other application. Any person possessed before the said First Day of December 1857 of a qualification, who does not make application to be registered before the First Day of January 1858, and who has not been included in any List transmitted as aforesaid, shall upon such production or transmission by him as hereinbefore mentioned, be entitled, upon payment of a sum of *Two Pounds*, to be registered.

[Schedule (B.) 1. Fellow, Licentiate, or Extra Licentiate of the Royal College of Physicians of London; 2. Fellow or Licentiate of the Royal College of Physicians of Edinburgh; 3. Fellow or Licentiate of the King's and Queen's College of Physicians of Ireland; 4. Fellow or Member of the Royal College of Surgeons of England; 5. Fellow or Licentiate of the Royal College of Surgeons of Edinburgh; or, 6. Of the Faculty of Physicians and Surgeons of Glasgow; or, 7. Of the Royal College of Surgeons in Ireland; 8. Licentiate of the Society of Apothecaries, London; or, 9. Of the Apothecaries' Hall, Dublin; 10. Doctor, or Bachelor, or Licentiate of Medicine, or Master in Surgery, of any University of the United Kingdom; 11. Doctor of Medicine of any Foreign University, practising as a Physician in the United Kingdom at the time of the passing of this Act, who shall produce certificates of his having taken his degree of Doctor of Medicine after regular examination, and of having resided during a period of not less than two years in some University previous to the taking of such degree.]

XXIII. Entries made in the Local Registers shall be also entered in the General Register.

XXIV. Evidence of qualification must be given before registration. Any appeal from the decision of the Registrar or Assistant Registrar may be decided by the Council, or by the several Committees of the Council. Any entry fraudulently or incorrectly made may be erased from the Register by order in writing of the Council or Committees of Council.

XXVI. A certificate from the Medical Examiners shall entitle to registration as a "Licentiate in Medicine and Surgery."

XXVII. Every person registered in respect of any qualification possessed before the First Day of December 1857, shall be entitled in every part of the United Kingdom to practise according to the nature of his qualification.

XXVIII. Every Licentiate in Medicine and Surgery shall have the right to practise in Medicine, Surgery, Midwifery, and Pharmacy, in every part of the United Kingdom.

XXIX. Every person entitled to be registered in respect of any qualifications existing on or before the First Day of December 1857, as a Surgeon, and also as an Apothecary, may, if he think fit, be registered as Licentiate in Medicine and Surgery.

XXX. Every person who before the First Day of December 1857 shall have been registered in respect of one qualification only, and who shall have subsequently passed a Complementary Examination and have paid a fee not exceeding *Twelve Pounds*, shall be entitled to be registered as a Licentiate in Medicine and Surgery.

XXXIV. Registered persons may have subsequent qualifications inserted in the Register.

[The remaining clauses in this Bill are mainly the same as in Mr. Headlam's Bill.]

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

ADDRESS OF THE EDITOR.

All letters or communications for the Journal should in future be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D., *Secretary.*

Worcester, May 12th, 1857.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Adjourned Meeting.]	37, Soho Square, London.	Tues., May 26, 4 P.M.
East York and North Lincoln. [General Meeting.]	Infirmary, Hull.	Tuesday, May 26th, 4 P.M.
Yorkshire. [Annual Meeting.]	Cutlers' Hall, Sheffield.	Thurs., June 4th, 1 P.M.
East Anglian. [Annual Meeting.]	Norfolk Hotel, Norwich.	Friday, June 12, 1 P.M.
Midland. [Annual Meeting.]	Town Library, Leicester.	Thurs., June 18th, 2 P.M.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An ordinary meeting of this Branch was held at the York House, Bath, on April 29th. W. Davies, M.D., President, in the chair. There were also present: G. Allen, Esq. (St. George's); J. S. Bartrum, Esq. (Bath); W. Clarke, Esq. (Bristol); E. Cockey, Esq. (Frome); C. Collins, Esq. (Chew Magna); J. Crang, Esq. (Timsbury); E. Crossman, Esq. (Hambrook); E. Boult, Esq. (Bath); C. Edwards, Esq. (Batheaston); R. S. Fowler, Esq. (Bath); T. H. Fleming, M.D. (Freshford); J. Godfrey, Esq. (Bristol); W. Hutchins, Esq. (Keynsham); J. Hinton, Esq. (Blaina); G. King, Esq. (Bath); C. Leonard, Esq. (Bristol); E. S. Mayor, Esq. (Bristol); F. Mason, Esq. (Bath); J. Metford, Esq. (Bristol); G. Norman, Esq. (Bath); G. Ogilvie, Esq. (Bedminster); J. Parsons, Esq. (Bedington); G. Plimmer, Esq. (Melksham); T. Poole, Esq. (Bath); J. K. Spender, Esq. (Bath); R. Stone, Esq. (Bath); E. Skeate, Esq. (Bath); J. G. Swayne, M.D. (Bristol); S. H. Swayne, Esq. (Bristol); J. Tunstall, M.D. (Bath); G. Vicary, Esq. (Warminster). Dr. Fyfe was present as a visitor.

NEW MEMBERS.

The following were balloted for, and unanimously elected members of the Branch:—Drs. Coates, Fleming, and Fripp; and Messrs. Boult, Hutchins, Ellis, and Terry.

CASES AND COMMUNICATIONS.

CASE OF PANCREATIC TUMOUR. BY J. PARSONS, ESQ.

[This case will be published in the Journal.]

Dr. Davies commented on the function of the pancreas, which seemed to be the conversion of the fatty matters of the food into emulsion, that it might be fitted for absorption into the lacteals. Experiments showed that, if the duct was tied, the emulsion was not perfect. It was unfortunate that no observation had been made in this case whether fatty matter was discharged with the fæces.

FLEXION OF THE UTERUS: ILLUSTRATED BY DRAWINGS. BY J. G. SWAYNE, M.D.

[This paper will be published in the Journal.]

Mr. Godfrey had generally noticed prolapsus occurring in connexion with flexions of the uterus, the os uteri being just within the vagina. If the womb is raised, the symptoms are relieved, but the complaint is not cured. He narrated a case where a large quantity of fluid was passed from the vagina, leading to a suspicion that there had been hydrops uteri; but, on closer examination, it was found to be limpid urine, that had been retained in the bladder from malposition of the uterus, which had thus set up additional irritation. He was convinced that these cases sometimes alternated, the flexions being at one time towards the rectum, sometimes towards the pubes. A case of this kind had shown how cautious we ought to be in passing severe strictures on the diagnosis of other practitioners.

Mr. Boult remarked that, in such cases, defæcation being very painful, constipation was a constant symptom, which, if not attended to, reacted most injuriously on the enlarged and depressed womb. Many of such cases would of themselves recover if proper attention was given to the action of the bowels, combined with the horizontal posture.

Dr. Swayne, in reply, agreed with the observations of both these members as to the position of the uterus, and the importance of the treatment of the constipation. Many cases, however, needed operative interference.

HISTORY OF FOUR CASES OF LITHOTOMY IN THE FEMALE: WITH THE SECTIONS OF THE CALCULI. BY R. W. COE, ESQ.

This paper was read by the Secretary.

Mr. Godfrey exhibited the section of a calculus that, thirty years ago, had been removed by Aston Key from a girl aged eight years, by the high operation. The specimen was probably unique, this having been almost the latest case so operated on.

Mr. Norman gave the history of several cases where he had operated on females without incontinence of urine. His plan had been gradually to dilate the urethra till the finger could pass without difficulty; then with a pair of forceps to remove the stone. In one case, the incontinence continued for forty-eight hours; in another, for four days. His colleague, Mr. Gore, when recently operating on two cases, had cut the upper boundary of the urethra just enough to let the calculus pass; and there had been no incontinence.

Mr. Clarke observed, that the dilatation of the female urethra for the removal of a calculus was not new. The directions given in books were most unsatisfactory, and, if followed, would probably lead to incontinence. He gave the history of four cases: the first had long suffered from incontinence; the three last, in which the urethra was incised at its upper part, to permit the passage of the calculus without overstretching the canal, had taken no time, and were quickly well.

CASE ILLUSTRATIVE OF PRACTICE IN DISEASES OF THE UTERUS. BY JOHN SODEN, ESQ.

This paper was read by the Secretary.

[It will be published in the Journal.]

Mr. Stone gave the following history of a case. A lady of middle age had never been ailing, but for slight irregularity she consulted one of the speculum doctors. He soon persuaded her that she had severe disease of the womb; that no one but himself and some few others could treat her, or were aware of the importance of the case. Her husband was surprised to hear this history, and required that Mr. Stone should give his report. He found the mucous membrane of the os and cervix perfectly natural, the only abnormal condition being an increase in the weight of the womb; and that she had ceased to menstruate (arising from her time of life). However, it was useless talking to her; she was convinced that no one else could cure her, or do her any good. She went from one doctor to another: they applied escharotics, and the sides of the vagina became partially united together; the sequel of the case being, that she separated from her husband.

Dr. Davies confirmed Mr. Soden's history of his case; and similar examples were narrated by Dr. Tunstall, Mr. Boult, Dr. Swayne, and Mr. Norman.

CASE OF PUERPERAL CONVULSIONS. BY G. ALLEN, ESQ.

Mr. Allen gave the history of a case of puerperal convulsions recently under his care. The mother was perfectly healthy—first pregnancy, gone nearly her full time. Suddenly she was seized with the most fearful convulsions. On examination, the os uteri was found quite closed, and no attempt at labour. She was freely bled, and the fits were arrested for four hours, when another attack came on, without any dilatation of the os. The pupils were immovable; the insensibility complete. Three hours after, she appeared to be dying; but the os was then soft and dilatable. With great difficulty the forceps were passed, but afterwards withdrawn, as the uterus began to act. The vectis was then used, and in twenty minutes the child was born, the mother being wholly insensible and unconscious of the birth. Forty-eight hours after, she became most excited and deranged, but subsequently quite recovered.

Mr. Mason gave an account of four cases of puerperal convulsions that had been under his care.

[Mr. Mason's cases will be published in the Journal.]

Mr. King, in such cases, had not habitually bled, but emptied the uterus as speedily as possible, after which convulsions usually at once ceased, and the other symptoms gradually subsided.

Mr. Clarke drew attention to the pathology of puerperal convulsions. The varying treatment obliged practitioners to regard the various causes. The plethoric cases were much benefited by bleeding and vigorous depletory measures; on the other hand, many cases arose from the retention of urea in the blood. Recently he had been engaged in such a case. A woman had died in a sudden and very unaccountable way. During her pregnancy she had been very ill; she had been sitting by the fire; on her return to bed she was intensely convulsed; from this she recovered. She got up to defæcate, when suddenly child and placenta came away, and labour was over. The woman died that same day. On examination of her body, the pleura, peritoneum, and other organs were involved; the fluids had a urinous smell; the kidneys were

extensively degenerated and quite fatty; the urine passed was very small in quantity; very albuminous with fibrinous casts and fatty matters.

Dr. Swayne, Mr. Mason, and Mr. Norman commented on the power of controlling the fits by bleeding in the earlier stages, and that next to delivery it was the most important part of treatment.

Mr. Collins detailed two cases where convulsions came on within a few days after delivery. The convulsions were similar to those more strictly puerperal. Cases of this character were given by Mr. Mason and Mr. Bartrum.

Mr. Poole had found convulsions in those cases where there had been absorption of putrid matters subsequent to labour.

Mr. Swayne called attention to convulsions of the hysteric type: in these, after a while, pains come on without convulsions. In another class of cases, the improvement after bleeding is very great; the patient becomes partly conscious, the convulsions cease, but there is no remembrance of what has taken place: the circumstances have passed away from the remembrance like a dream.

Dr. Tunstall considered that these various cases must be treated somewhat variously. Bleeding was of service to relieve the most urgent symptoms, and to relax the system so as to induce labour. It was not right to call those puerperal convulsions that occurred some time after labour; their pathology was quite different, though the puerperal condition might have some remote influence in inducing them.

METROPOLITAN COUNTIES BRANCH: ADJOURNED GENERAL MEETING.

An adjourned general meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Monday, May 18th; George Webster, M.D., President, in the Chair.

MEDICAL REFORM.

Copies of the Bills introduced by Mr. Headlam and Lord Elcho were produced. As there had been no time for examining them since they were issued,

Dr. Lankester moved—

"That the present meeting adjourn till Tuesday, May 26th, at 4 P.M., for the purpose of discussing more fully the two Medical Bills now before Parliament."

Dr. Murphy seconded the motion; and objected strongly to the requirement of a second examination from physicians after graduation in an university.

The resolution was carried unanimously.

Dr. Murphy gave notice that at the next meeting he should move the following resolution:

"The Metropolitan Counties Branch of the British Medical Association, feeling the deepest interest in the success of the present effort to reform the medical profession, deem it most advisable—

"1. That the universities and colleges should mutually concede certain rights and privileges for the general object of reform.

"2. That the rights of the Colleges to grant or withdraw licenses to practise should be strictly preserved.

"3. That the Universities, as the seats of education, both general and medical, should be protected; and that the Degree in Medicine granted by any University recognised by the Council of the proposed Reform Bill, shall be considered a qualification sufficient to demand a license to practise without further examination."

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 14th, 1857.

George Budd, M.D., Vice-President, in the Chair.

ON THE EFFECT PRODUCED ON THE CIRCULATION BY THE LONG-CONTINUED ACTION OF COLD WATER EXTERNALLY.

BY H. BENCE JONES, M.D., F.R.S., AND W. HOWSHIP DICKINSON, ESQ.

Opportunities of making use of some douche and shower-baths of more than ordinary potency having presented themselves, the following experiments were undertaken, with a view of removing some of the uncertainty which now prevails regarding the effects of the outward application of cold water. These experiments are divided into three sections:—1st, on the general effect of the douche or shower-bath; 2ndly, on the effect of the shower-bath at different temperatures; 3rdly, on the effect of the shower-bath in different circumstances.

1. The first experiment was made by a douche-bath, by which 225 gallons of water were allowed to fall upon the head for a quarter of an hour. By this the pulse was greatly relaxed in frequency and power, and it became irregular; at one period of the experiment the reduction amounted to 30 beats in the minute. The second experiment was made with a shower-bath delivering about 20 gallons of water a minute—upwards of 300 gallons in fifteen minutes. The results were similar to those obtained with the douche-bath, but were more marked. During the second minute, the pulse was found to be less frequent by 40 beats than it had been previous to the fall of water; and from the fifth minute to the fifteenth, when the experiment terminated, it was observed to be frequently intermitting and very weak. The third experiment was made with a still more powerful shower-bath, at Vienna. This delivered nearly 38 gallons of water a minute—upwards of 550 gallons in fifteen minutes; but the openings in the rose were very fine, and the shower was much spread. In the fourth minute the pulse was found to be imperceptible, and during the remainder of the quarter of an hour for which the bath was continued it was feeble and irregular. Afterwards the pulse was observed to be smaller and rather slower than it had been previously, but it was immediately restored by a warm bath. Thus it seems that a strong douche or shower-bath produces an excessive immediate effect upon the pulse. By the first shock it may be reduced in rate even 50 beats in the minute; it then recovers a little, but after four or five minutes, when the shivering commences, it again becomes reduced, and often is rendered quite imperceptible.

2. The experiments in this section were made for the purpose of showing whether the effect varied with the temperature of the water. The most interesting are two which were made with the powerful shower-bath alluded to in Section 1, second experiment. In the first, the water was at 70° Fahr. The pulse did not fall in rate for three minutes, although it lost much in strength and volume. When shivering commenced, at the end of the fourth minute, the pulse was imperceptible, and it was scarcely to be felt until the end of the sixth, and it remained weak and irregular until the termination of the experiment at the end of the tenth minute. In the second experiment the water was iced down to 50° Fahr. The effect was much more rapid. During the first fifteen seconds the pulse was reduced at the rate of 38 beats per minute; this was followed by a reaction better marked than before, and the annihilation of the pulse, which followed the commencement of shivering, was much more complete and of longer duration.

3. Some of the effects observed to follow the use of the shower-bath, taken under varying circumstances, are here stated. Two experiments were made: one at the baths at Ischl, in Austria, and one at the Russian bath, at Vienna, where cold shower-baths were alternated with very hot vapour-baths. It was found that the increased action of the pulse produced by the exposure of the body to hot steam prevented that depression which would otherwise have resulted from the cold water. A converse experiment is quoted from Dr. Currie's *Medical Reports*. An ague patient, who had derived advantage from the cold affusion during the hot stage of the fit, nearly died from the alarming depression which resulted from the same application while he was in the cold stage.

The general conclusions were:—1. The usual effect of a strong douche or shower-bath is the immediate depression of the pulse. By the first shock of water between 64° and 68° Fahr. the pulse becomes weak and irregular, and may be reduced in rate even fifty beats in the minute. After the first shock the pulse recovers a little, but remains weak until the secondary effect or showering comes on, when it becomes weaker and intermitting, and may be quite imperceptible. After ten to fifteen minutes the pulse remains very small and weak, and shivering continues whilst the experiment lasts. 2. If the shower-bath is a small one (eight gallons), and the person taking it in good health, no great difference is perceived in the pulse whether the water is hot (110°) or warm (74° Fahr.) If the water is very cold (47° Fahr.) the pulse becomes smaller, but the rate is not affected. With a shower-bath giving twenty gallons per minute, a difference of twenty degrees (from 70° to 50° Fahr.) causes a great difference in the shock. The difference in the after-effect, or shivering, is not so marked. The depression of the pulse when the shivering comes on is more continuous with the cold water, and is more manifest up to the end of the experiment.

3. When the pulse is raised above, or depressed below, its healthy standard, the shower-bath or douche produces very much less or a much greater effect than would be produced by the bath under ordinary circumstances. As it seemed possible that a part of the reduction of the pulse might be due to the action of the cold water upon the capillaries and the radial artery in which the pulse was felt, a set of experiments were made in which the forearm and hand were exposed to temperatures varying from 25° to 124° Fahr. The results of these experiments may be thus stated:—*a*. When one arm is in water at 50° and the other in air at 46° Fahr., no difference in the pulse is observed in fifteen minutes. *b*. When one arm is in water at 110 and the other in air at 46° Fahr., little if any difference could be felt in the same time. *c*. When one arm is in water at 44° and the other in water at 107° Fahr., there was the same result in the same time. *d*. Even one arm at 33° and the other at 112° gave no result. *e*. Still lower and higher temperatures, 25° and 115° Fahr., did not give any decided result in fifteen minutes. *f*. The douche-bath on the arm and hand, at 42°, produced no greater effect on the pulse than still water at 44° Fahr. Hence, generally, it follows, that no part of the effect produced by the shower-bath on the pulse, depends on the action of the water on the hand and forearm in which the pulse is felt.

Dr. Budd inquired if the author had had any experience of the long-continued shower-bath in the treatment of diseases in St. George's Hospital. It was often of service in spasmodic affections, and it would be interesting to determine how long it could be safely employed.

Dr. Jones said that his experience of the shower-bath as a curative agent was confined to the use of the one in St. George's Hospital, which only acted for eight seconds. He had found this of use in chorea and other nervous affections. In the experiments detailed it was interesting to observe the effects of the first shock upon the system; this, with the secondary effect of shivering, was the same when the shower-bath was used as when cold bathing was employed. Another point of interest was the difference in sensation experienced when the forearm was placed under the influence of different temperatures. It was not so great at a low temperature as it was at a somewhat higher one. This result he attributed to the fact that the skin was a bad conductor of heat.

Dr. Webster inquired whether Dr. Jones had seen any ill results from the use of the Russian bath. He (Dr. Webster) had understood that the use of this agent had been attended with fatal consequences, and that the late Emperor of Russia had issued an ukase prohibiting its so frequent employment. The result had been that the bath had not been so much employed as formerly. From his own experience, he might observe that both the douche and shower-bath were now employed much less frequently on the Continent than they were fifteen years ago.

Dr. Jones replied that his experience of the Russian bath was confined to Vienna. In that capital the baths were open to all comers, whether ill or well. He believed they were resorted to chiefly by rheumatic patients, but no selections were made. He might remark that in Vienna the public baths were excellent, and those connected with lunatic asylums perfect.

Dr. E. Smith would have been glad to have heard whether the effects of a prolonged shower-bath or a prolonged exposure to cold water were the most definite on the system. He had been struck with the extraordinary fall in the pulse in the experiments related by Dr. Jones. He thought that the high rate of pulsation before the patients went into the bath, in Dr. Jones's experiments, must have been due to mental excitement, and so far would have interfered with the experiments. It was necessary, to arrive at a just conclusion, that the observations should have been made when this excitement had terminated.

Mr. Brooke mentioned that he himself, in swimming a considerable distance, had found himself unable to proceed in consequence of great depression from long exposure to the cold of the water. Exhaustion came on, the pulse was reduced in frequency, and there was an amount of depression altogether independent of the loss of muscular power.

Dr. Jones admitted that there would be some mental excitement previous to going into a bath. It was difficult, if not impossible, for a person in a bath either to notice the state of the pulse or the thermometer accurately, though he might be able to determine if intermissions occurred.

DIETETIC MEDICINE. BY I. PIDDUCK, M.D.

The author pointed out that in order that all the tissues of the body may be perfectly formed and duly nourished, proper materials must be furnished. These are found in the milk in infancy, in mixed diet in after life. For the bony structures, the phosphate, fluate and carbonate of lime must be adequately supplied. The refinements of civilised life have deprived the wheaten flour of the bran, which contains the largest proportion of this ingredient. He detailed his experience at a school, where of 108 children, 12 were scrofulous, and 25 had spinal curvature. In four cases, the bend was in a forward direction in the lower part of the column, and all had incontinence of urine. It is his belief that curvature in this direction is a frequent cause of this malady, and in treating the general health three out of four got well, the remaining case being much ameliorated. His treatment consisted in preparing ginger-bread nuts with phosphate of lime and saccharine carbonate of iron, one of which was given three times a day. The phosphate was obtained from ivory turnings, deprived of gelatine by long boiling. This alimentary method he believes quite sufficient for the cure of spinal curvature without the employment of any mechanical contrivance.

Dr. Budd remarked that when any material was required in the system, there was a craving for that material by the person so affected. It was noticed long since that when persons were affected with scurvy they had a craving for vegetables. In parts of the west of England, where lime was very scarce, it was the custom to preserve the egg-shells; when these were thrown amongst the poultry, the laying hens would seize upon them with avidity. He thought that the observations of Dr. Pidduck proved that, where there was a deficiency of bony deposit, it might be made up by the introduction of the elements of bone into the system.

Tuesday, April 28th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

CASE OF DOUBLE TALIPES VARUS, IN WHICH THE CUBOID BONE WAS PARTIALLY REMOVED FROM THE LEFT FOOT. BY SAMUEL SOLLY, ESQ., F.R.S.

The patient was a South American, aged 21, a stout muscular man of lymphatic temperament, difficult of control, and particularly sensitive to pain. Both feet presented perfect specimens of the deformity; the left was, however, shorter and more inverted than the other. None of the muscles of the lower extremities were perfectly developed. The treatment first commenced (June 7th, 1852) with the division of several tendons and of the plantar fascia, and the application of mechanical apparatus; it was continued through the following two years, during which period two or more divisions of tendons were made, and a variety of apparatus employed. The result was good as regarded the right foot, but most unsatisfactory with the left. Such, however, was the patient's impatience under pain or restraint—leading him, as it did, to loosen the apparatus and remit the pressure on every opportunity—that Mr. Solly considered himself warranted in adopting the suggestion of Dr. Little, that he should remove the cuboid bone, which seemed the bar to the ultimate success of the case. On June 11th, 1854, Mr. Solly removed nearly the whole of the bone, cutting quite through it, and opening the articulation with the metatarsal bone of the little toe, but not that with the os calcis. So complete was the effect that the foot could immediately be bent beyond the mesial line in the outward direction. The good effect of the operation, however, was much marred by the loss of three weeks which expired before pressure could be applied. The procedure was not attended with any constitutional disturbance, and the wound healed in fourteen days. In December 1854, the tendons of the tibialis posticus and flexor communis were again divided; since that period instruments had been relied on for the completion of the cure. The feet were, in January 1857, fairly on the ground, and the patient bore his weight upon them, and walked with the aid of a stick. The author concluded by observing that although the operation for the removal of the cuboid bone had undoubtedly greatly facilitated the cure in this particular case, yet he did not consider the effect produced to be such as to encourage the profession to perform the operation, except in some few old and obstinate cases which might have resisted every other treatment; and in the event of a recourse to such a procedure, Mr. Solly advised the removal of the entire bone, as tending to produce a more permanent effect than resulted from the operation in this case.

Mr. Lonsdale said he had been connected with the Orthopædic Hospital for thirteen years, and had seen hundreds of cases of club-foot, in persons of all ages, but he had never seen

the least necessity for having recourse to so serious an operation as the removal of the cuboid bone. Mr. Solly did that in the end which he ought to have done in the beginning, using the long splint to keep the foot everted. By applying firm compresses or screw pads, everything could be done by mechanical means which Mr. Solly effected by the knife. In answer to the President, Mr. Lonsdale said he always divided the tendons as a preliminary part of the treatment.

Mr. W. Adams divided cases of club-foot into three classes. First, those occurring in infancy and youth; secondly, those in persons between twenty and thirty years of age; and thirdly, those in persons beyond thirty. In the first class, a cure could be effected in form and function, and this was one of the triumphs of modern surgery. The second class were very difficult to deal with; they might be cured in point of form, but not in function. The third class he regarded as incurable, both in respect to form and function. For the second class of cases, Dr. Little first proposed the excision of the cuboid bone, with the object of diminishing the time of treatment from a year or a year and a half to six or eight weeks. The result of the present case, however, had not borne out the anticipation, the difficulty having arisen from the impossibility of applying mechanical apparatus. The apparatus pressed upon the convexity of the foot, and the patient having a wound on the outside of the foot, could not bear the pressure. This difficulty might be overcome by the employment of an apparatus which he had contrived, and which did not press upon the foot, but acted upon the principle of a straight splint, transferring the pressure from the foot to the leg.

Mr. Solly said he used the long splint in the early part of the treatment.

Mr. Brodhurst asked Mr. Adams whether he advocated the excision of the cuboid bone.

Mr. Adams said he was prepared to resort to any operation, whether of excision or amputation, that might be required by the exigencies of the case in the third class to which he had referred.

Mr. Brodhurst said the wound on the outside of the foot prevented pressure on the point where pressure ought chiefly to be made; but even if that wound did not exist, he thought it would be wrong to remove the cuboid bone. Considering the mechanical structure of the foot, he did not think that the cuboid bone had much to do with the deformity. The whole of the tension was on the inner side of the foot, where the ligaments were the most rigid, and might be divided with advantage. He doubted whether a case could occur requiring the removal of any part of a bone from the tarsus. He had seen more severe cases than the one under consideration, and at the same time more successful treatment.

Dr. Little thought that, taking all the circumstances of the case into consideration, the patient had every reason to be satisfied with what had been done for him. With regard to the removal of the cuboid bone, he had only suggested the propriety of that operation in cases of inveterate varus.

Mr. Solly said, as soon as the bone was removed, the foot was brought into its normal position; and so striking was the effect, that Mr. Adams, who was present, and admitted that he came prejudiced against the operation, declared that he was perfectly satisfied with the result. The ordinary mechanical means were in most cases sufficient. The removal of the bone, however, was a more rapid process, and in the present case there was no other obstacle to bringing the foot to its normal position.

SCIRRHUS OF THE MALE BREAST. BY J. L. MILTON, ESQ.

[*Communicated by* John Simon, Esq., F.R.S.]

The patient was a man aged 58, a healthy but very intemperate person, the father of nine children. No scirrhus could be traced in any of the family. He attributed the affection to the constant pressure which his employment (that of a brass-finisher) compelled him to make on the left side of his chest, just below the nipple. The disease began two months previously, as a small hard nodule, below the left nipple. About four months afterwards, finding that it steadily increased in size, he applied to a "doctress," who gave him hemlock to use both outwardly and inwardly. The swelling slowly increased to the size of a walnut, and at the end of the seventh month sloughed out. When he was first seen (three months later) there was a large cup-shaped cavity, the base of which was covered with a thick, tenacious, greenish secretion, dotted with black; the edges were thick and livid, but not everted. The surrounding skin and cellular tissue were extremely hard. In the vicinity, enlarged cutaneous veins were noticed. There was a smaller ulcer just below, and several tubercles were seen in the vicinity. The ulcer was not offensive, and discharged a moderate quantity of sanious fluid; it occasionally bled very slightly, and was attended with but little pain or uneasiness; its surface was callous. One gland in the axilla was a little enlarged; the mammary gland on the right side was indurated; the lymphatic glands in both groins were somewhat harder and larger than natural. The patient had of late lost both flesh and strength. There was great difficulty of breathing. Stethoscopic examination revealed extreme feebleness of the breathing sound, interrupted by very long pauses. The left side was dull on percussion; each respiratory movement was attended with a heaving of the whole trunk. There was no expectoration beyond a little mucus. The pulse was small. Nothing abnormal was detected in the abdomen, but the urine was always brown, quickly became fœtid, and was loaded with urate of ammonia. No operation was attempted; sedatives were given, but did not afford so much relief as ether. The breathlessness rapidly increased, and a choking sensation was felt on attempting to eat. During the last fortnight of his life he never lay down. He died May 3rd, 1856, five weeks from his first visit. No *post mortem* examination of the internal organs could be obtained, but the tumour was removed; it was found to be very slightly adherent to the pectoral muscle.

The tables accompanying the paper exhibited twenty (including the present) cases of this disease in the male, of which histories could be obtained, and thirteen of which the histories were defective. Of the former, one patient was an American, one an Italian, one a Frenchman. Two, from the context, were also supposed to have been Frenchmen. The remaining fifteen cases, being all collected from the records of English hospitals, were assumed to have occurred in the persons of Englishmen. The writings of French, English, and American authors, alone yielded any information on the subject. Those of German, Italian, Irish, and Scotch authors, contained, with the exception of a clinical lecture by Mr. Liston, nothing of interest or importance. It was, therefore, very difficult, if not impossible, to decide with any certainty on the relative frequency of this disease in France, England, Scotland, etc. The cases collected warranted the inference that it was equally common in those three countries, contrary, as the author believed, to common conviction. The earliest period at which the disease was found to have commenced was twenty years of age; the latest, in the eighty-third year. In three cases, the patients sank from extension of the disease to internal organs, in eleven, thirteen, and fifteen months. Three others died—two in four, and one in five years. In two of the three cases also from extension of the disease to internal organs; in the third, this was presumed to be the cause. In one of the cases, fatal in four years, there are some grounds for believing that removal would have warded off the fatal result. In one case of death from cachexia and exhaustion, the date was not ascertained. In seven cases, the disease was removed; the patients recovered, but had not been heard of since. Of five others operated on, one died six years after, without any return of the disease; one at the expiration of fourteen months; another, "a considerable time" after, had experienced no relapse; one was alive twelve years after; one unknown. One patient, not operated on, was living several years after the discovery of the disease. The early appearance of the disease in some of these cases reopened the question of whether it were dependent on decay of the reproductive faculty, or, according to Mr. Paget's opinion, on decay of nutrition? The author considered that, unless it were conceded that a gland might grow prematurely old and diseased, as the hair follicles, teeth, and eyes will, in certain cases, it was difficult to admit either hypothesis. It seemed also doubtful if the cause and symptoms of this disease were alike in the male and female; the three cases in which death ensued at an early period, having been apparently attended with less pain and destruction of the breast than occurs in the female. It appeared from the average of the cases to be of a less fatal nature in man than in woman.

Irish Medical Association. The Annual Meeting of the Irish Medical Association will be held at the Royal College of Surgeons in Dublin, on Tuesday the 2nd of June. The Meeting will be open to the profession generally. The Chair will be taken at twelve o'clock. The Annual Dinner will take place on Monday the 1st of June.

Editor's Letter Box.

PROXY VOTES IN ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from R. W. Jones, Esq.

Sir,—Having contributed towards the erection of the Royal Medical Benevolent College, and having been an annual subscriber towards its funds from its commencement, I may be supposed to feel some interest in its operation. I most fully concur in the remarks of Mr. Edward Barber made at page 398 of your Journal for May 9, as to proxy votes in the election of pensioners and scholars. It was evidently not contemplated by the rules that votes should be exchanged or bartered for, in the manner they are, by candidates who are fortunate enough to have active personal friends "at Court," with proxy papers entrusted to them. The practice exercises an undue influence, adverse to the *more friendless*, and consequently, very often, the more deserving applicant. If "governors" are anxious to serve one particular candidate, to the exclusion of others, it would be better to record a "plumper" in his or her favour, which the present constitution of the bye-laws empowers him to do, rather than allow five out of six of his votes (as in the election now pending) to be disposed of to persons whose superior claims may be chiefly "having a friend at Court." Better would it be if the laws of the College allowed the six votes to be counted as six votes in favour of *one* candidate, instead of being subdivided amongst six. Such an arrangement holds in some institutions of this nature.

Would you consider it out of the province of your Journal to publish annually after the election the names of the successful candidates to the scholarships and pensionerships of the College? or, what would be a still greater advantage to members of the British Medical Association, if you furnished us with a list of all the candidates, with the number of votes polled by each? It might tend to benefit deserving applicants in ensuing elections, and could do no harm.

I am, etc.,

R. W. Jones.

Beaumaris, May 15th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, May 15th.

GENERAL BOARD OF HEALTH BILL.

In answer to Mr. Duncombe,

Sir G. Grey consented to postpone the next stage of this Bill till Friday, May 22.

Monday, May 18th.

DISEASES OF THE ARMY IN THE CRIMEA.

Mr. Baxter asked the Under Secretary for War if the Report on the Pathology of the Diseases of the Army in the East, by Dr. Aitken and Dr. Lyon, had been printed; and if he had any objection to lay it on the table of the House?

Sir J. Ramsden said, that the report referred to had been printed at the War Department; and there would be no objection to lay it on the table of the House, if the honourable member would move for it.

LUNATIC ASYLUMS (IRELAND).

Mr. Beamish asked the Attorney General for Ireland when the Report of the Commissioners appointed to inquire into the expenditure upon the Lunatic Asylums, Ireland, might be expected to be laid upon the table of the House?

Mr. Fitzgerald said that from the quantity of business which yet remained to be done in regard to this commission, there was no reasonable prospect of obtaining the report in time for any useful purpose this Session.

THE CATTLE MURRAIN.

Lord Naas asked the Vice-President of the Board of Trade whether Her Majesty's Government had received any communications relative to the murrain said to be raging among the cattle on the continent; and whether he would lay such communications on the table of the House?

Mr. Lowe said, he had no objection to lay the communications which had been received on this subject on the table; but a report which had been made by Dr. Greenhow, under the directions of the Board of Trade, would in the course of a day or two be laid on the table; and as it would contain all the interesting information contained in those communications, perhaps the noble lord would wait until he saw the report. If, however, on seeing it, the noble lord was not satisfied, there would be no objection to the production of the original documents.

Wednesday, May 20th.

DISEASES OF THE ARMY IN THE CRIMEA.

On the motion of Mr. Baxter, a copy was ordered of the report on the pathology of the diseases of the army in the East, by Dr. Aitken and Dr. Lyon.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Cates. On April 7th, at Poona, East Indies, the wife of William Edward Cates, Esq., Assistant-Surgeon H.E.I.C.S., of a son.

Kirby. On May 19th, at 32, Euston Square, the wife of Edmund A. Kirby, M.D., of a daughter.

Pitman. On May 13th, at Slough, the wife of Henry Alfred Pitman, M.D., of Montague Place, Russell Square, Physician to St. George's Hospital, of a daughter.

Thomas. On May 13th, at Swaffham, Norfolk, the wife of Frederick J. Thomas, Esq., Surgeon, of a daughter.

Weber. On May 18th, at 49, Finsbury Square, the wife of Hermann Weber, M.D., of a daughter.

MARRIAGES.

Brooks—Burt. Brooks, the Reverend George B., M.D., to Caroline Broughton, third daughter of John G. K. Burt, M.D., of Harwich, Essex, at St. Andrew's Church, Jamaica, on April 15th.

Roberts—Bellingham. Roberts, Bransby, Esq., Surgeon, of Eastbourne, Sussex, to Emily, youngest daughter of John Bellingham, Esq., of Rye, Sussex, on May 14th.

Walter—Norris. Walter, Walter W., Esq., Surgeon, of Stoke-sub-Hamdon, Somerset, to Helen Elizabeth, youngest daughter of Henry Norris, Esq., of Charmouth, Dorset, on May 13th.

DEATHS.

Beard. On May 16th, in Welbeck Street, Cavendish Square, Henry William, second son of F. Carr Beard, Esq., Surgeon, aged 4 years.

Morris. On May 16th, at Lower Edmonton, of scarlatina, Mary, wife of Charles James Morris, Esq., Surgeon, aged 23.

Rayner. On May 17th, at 19, Kingsland Crescent, Bertha Jane, daughter of John Rayner, Esq., Surgeon, aged 8 months.

*Wakley. On May 19th, at 41, Marine Parade, Brighton, Elizabeth, wife of Thomas Wakley, Esq., Coroner for Middlesex, and late M.P. for Finsbury.

APPOINTMENTS.

Godfrey, Thomas, M.D., of Broom Hill, Coachford, Cork, has been appointed a Magistrate for the county of Cork.

Gowland, Peter, Esq., elected Assistant-Surgeon to St. Mark's Hospital.

Kenderdine, Thomas B., Esq., Surgeon, of Whangarie, New Zealand, formerly House-Surgeon to the Macclesfield Dispensary, appointed a District Coroner of that Colony.

Lane, James R., Esq., elected Assistant-Surgeon to St. Mark's Hospital.

Parkinson, George, Esq., elected Surgeon to the St. George's and St. James's Dispensary.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 15th, 1857:—

Chipp, John, Shrewsbury
Eichler, Charles Ferdinand, Sydney, New South Wales
Griffiths, Richard, Machynlleth, Montgomeryshire
Keal, John Thomas, Oakham, Rutland
Kelly, Charles, Ramsay, Isle of Man
M'Intyre, James, Coleraine, co. Derry
Muskett, Joseph James, Holt, Norfolk
Price, William Preston, Margate
Rayner, Thomas, Birstal, near Leeds
Wilkinson, John Sebastian, Islington

University of St. Andrews. List of gentlemen on whom the Degree of Doctor of Medicine was conferred after passing the May examination, 1857:—

Alcock, Thomas, M.R.C.S. and L.A.C., Hyde, Cheshire
Banning, Robert Joseph, L.A.C., Fairfield, near Liverpool
Barnett, Joseph Knight, M.R.C.S., Walsall
Barr, William Alexander, M.R.C.S., R.A. 3rd Foot
Batt, Augustine, M.R.C.S. and L.A.C., Witney, Oxon
Blackmore, Humphrey Purnell, M.R.C.S. and L.A.C., Salisbury, Wilts
Bruneau, Edouard, M.R.C.S., Mauritius
Chapman, John, London
Daly, Denis Bowes, M.R.C.S.I., Navan
Davies, Jesse Conway, M.R.C.S., Flintshire
Day, William Henry, M.R.C.S., Stratten, Wilts
Gange, Frederick Abner, M.R.C.S. and L.A.C., Essex
Gray, Thomas Scott, M.R.C.S. and L.A.C., London
Grylls, William Richards, M.R.C.S., London
Hensley, Henry, M.R.C.S. and L.A.C., Bath
Hudson, Robert Fawell, Lic. Fac. Phy. and Surg. Glasgow, Lancashire
James, Moses Prosser, M.R.C.S. and L.A.C., Braintree, Essex
Johnson, David, M.R.C.S. and L.A.C., Dudley
Lloyd, John H., M.R.C.S., and L.A.C., Anglesey, N. Wales
M'Cormick, John, M.R.C.S.I., Donegal, Ireland
M'Loskey, Patrick, M.R.C.S.Ed. and L.A.C., Rathwell, Northamptonshire
M'Oscar, John, L.A.C., London
M'Whinnie, John, Lic. Fac. Phy. and Surg. Glasgow, R.N.
Marshall, Alex. Wilson, Lic. Fac. Phy. and Surg. ditto, Birkenhead, Cheshire
Maugham, William, M.R.C.S. and L.A.C., Carnarvon
Mould, Thos. Rawlings, M.R.C.S., Strabane
Norman, Sergeant, J. C., M.R.C.S. and L.A.C., Colchester, Essex
Oliver, William Silver, M.R.C.S.I., Kilfinane, Co. Limerick
Orsborn, John, F.R.C.S. and L.A.C., Bittern, Southampton
Phillips, Henry J., M.R.C.S., London
Reid, Harry, Lic. Fac. Phy. and Surg. Glasgow, Torrybarr, Fifeshire
Rogers, Joseph, M.R.C.S., London
Rogers, Thos. Lawes, M.R.C.S., London
Russell, David, M.R.C.S.Ed. and L.A.C., Birkenhead, Cheshire
Sim, Robert, M.R.C.S.Ed., Edinburgh
Simpson, Thos. Pemberton, M.R.C.S., Scarborough
Smith, Henry Tyrwhit, M.R.C.S. and L.A.C., Melton Mowbray
Taylor, Frederick Bayne, M.R.C.S., Brighton
Thane, George Dancer, M.R.C.S., London
Vinrace, John, M.R.C.S., Ashby-de-la-Zouch
Watson, William Wilberforce, M.R.C.S., Scarborough
Whicher, James, M.R.C.S., London
Wood, Henry Benjamin, M.R.C.S., Lydd, Kent

HEALTH OF LONDON:—WEEK ENDING MAY 16TH, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London in the week that ended on Saturday was 1,050, of which 514 were deaths of males, 536 those of females. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1,046; but as the deaths of last week occurred in an increased population, it is necessary for comparison that the average should be raised in proportion to the increase, in which case it will become 1,151. It appears that the number of persons who died last week was less by a hundred than would have died if the average rate of mortality had ruled, a result which must be accepted as proof of a favourable condition of the public health.

The deaths referred to diseases of the respiratory organs in the present returns are 202; the corrected average for corresponding weeks is 184. Bronchitis was fatal in 102 cases, being about half of the whole number under the general head of pulmonary diseases to which it belongs. This complaint exhibits a greater fatality than is usual in the second week of May, in consequence of the unseasonable coldness that prevailed in previous weeks; for according to the ordinary mortality the number last week should not have exceeded 76. The deaths from pneumonia (inflammation of the lungs) are 75, and exactly agree with the average. Hooping-cough, which carried off 51 children, is now rather less fatal than it was in the earlier months of the year; scarlatina declined to 14, and no death from this complaint was returned from the districts on the south side of the river. Two cases of small-pox were registered; 39 of typhus and common fever, the average being 55. Of the six principal diseases of the zymotic character, no fatal cases were returned in Wandsworth, Rotherhithe, or Camberwell, except one in the last-mentioned district; only 2 in Whitechapel, and 2 in Lewisham. Two deaths are referred to carbuncle. Three persons died of intemperance.

In the present returns are the deaths of six nonagenarians; a man 90 years of age, a widow 92 years, a man 93 years, a man and a woman 94 years, and a woman who died in the Merchant Tailors' Almshouses at Lee at the age of 97 years.

Last week the births of 873 boys and 809 girls, in all 1,682 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,523.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·808 in. The highest reading was 30·01 in. on Saturday. The mean temperature of the week was 57·6°, which is 5·9° higher than the average of the same week in 43 years. It was also higher than the mean of the previous week by 13°. The mean daily temperature was above the average on every day after Sunday; and on Friday and Saturday the excess was 10° and 12°. The lowest temperature was 39·1°, and occurred on Sunday (the 10th); the highest was 80·2°, and occurred on Saturday. The range of the week was therefore 41·1°. The mean dew-point temperature was 49·9°, and the difference between this and the mean temperature of the air was 7·7°. On Monday the wind changed in the afternoon to south; during the rest of the week it was first in the south-west, then in the east, and on Saturday changed to west. The fall of rain was only 0·08 in. There was a good deal of lightning on several nights. Saturday was a very warm day.

ACTIONS FOR RECOVERY OF FEES.

The following cases have lately occurred in the County of Durham:—

Barnardcastle County Court, Thursday, April 14th. (Before H. Stapylton, Esq., Judge.) Kipling *v.* Shaw. Mr. Coulthard for plaintiff, and Mr. Barnes for defendant. The action was brought by plaintiff, a medical practitioner, to recover £4:3:3. He had often attended defendant's sister, a poor woman named Taylor, in her illness, without making any charge, but on the occasion in question he alleged that Shaw requested him to attend her; and therefore expecting to receive pay from him he sent in his bill. Defendant was willing to pay £1:16 of the account, but refused to pay the remainder, the charge for attendance on his sister, as he had never given any orders to plaintiff to attend her. Plaintiff would not accept the proffered sum, and brought the present action to recover the whole amount. £1:19 had been paid into court, thus leaving £2:7:3 in dispute. Mrs. Taylor's daughter said that she went to Mr. Kipling's house, but he was not in. As she was returning home she met him, and requested him to visit her mother, as she was very ill. He came in a very short time after. Plaintiff said that when the daughter asked him to visit her mother he refused to do so, but Mr. Shaw came afterwards and requested him to go, and he did so immediately, expecting at the time that he would pay him. His Honour examined plaintiff's books, and found that the accounts of Mr. Shaw and Mr. Taylor, husband of defendant's sister, were entered separately, *and quoted a case showing that the plaintiff could not sue when the goods had been entered to another party.* Plaintiff explained that this was done merely for the sake of distinction. His Honour said he would defer his judgment to next court, and in the meantime would consider the subject.

Darlington County Court, Wednesday, May 13th. (Before H. Stapylton, Esq., Judge.) Strother *v.* Cleghorn. Mr. Allison for plaintiff; Mr. Steavenson for defendant. Plaintiff claimed £10 : 5 : 6 for professional services. He had attended a person named George Johnson; defendant employed him, complaining that Johnson's friends kept him in a destitute condition, and saying he would see him paid. After some time the patient died. Defendant called upon him for his account, and he delivered that now in dispute, which was on a less scale than he usually charged. Cross-examined: Never attended deceased until Mr. Cleghorn requested him to do so. He or his assistant saw him almost daily after being first called in. Everything was debited to defendant. He had accepted £8 11 : 6 : in part payment of his entire bill, that being the amount of charges for attendance on defendant and his own family, and sent in a second bill on Johnson's account at the same time. The second bill, as to "the late George Johnson," was so made out for Cleghorn's convenience. It *was reasonable to charge* 10*s.* 6*d. for passing the catheter, even though his assistant was the operator, and had only to cross the street for the purpose.* Mr. Easby, plaintiff's assistant, said defendant applied to have separate bills, remarking that he had an account against Mr. Strother, which he would deduct. There were fifteen charges for 10*s.* 6*d.* for the catheter. Mr. Plews had previously ordered some medicine for him, and it was placed to Mr. Plews's account. Dr. Haslewood deposed that the charges were usual, and it would be a matter of benevolence and feeling to make them less. Cross-examined: Would not have made such charges under the circumstances. If a kind-hearted person requested him to attend another he would be disposed to meet him in the same spirit and make him some allowance. Did not think he would have demanded more than 5*s.* for each passing of the catheter. Mr. Steavenson then called the defendant, who said the deceased was his mother's uncle; he requested Mr. Strother to attend him, and for fear of his not attending properly to him said he would see him paid. Mr. Strother never passed the catheter himself. He denied having said anything against deceased's relatives; having a bill of some years standing against Mr. Strother, he asked to have the accounts on both sides squared, but never thought such monstrous charges would be made. His Honour thought they were heavy, and suggested that perhaps some reduction would be made. Mr. Allison said he would have done so had defendant come to him. His Honour wished to have evidence that similar charges had been made to others. After some conversation, Mr. Allison assented to take a judgment for £7.

QUEEN'S COLLEGE AND HOSPITAL, BIRMINGHAM.

A meeting of the Council of Queen's College, Birmingham, was held on Wednesday, May 6, for the purpose of electing a physician to the Queen's Hospital, and a professor of Materia Medica in Queen's College, in the room of Dr. George Fife, resigned. Dr. J. K. Booth, the Principal, occupied the chair: there were also present the treasurer of the College, the Dean of the Faculty, the Treasurer of Queen's Hospital, the Senior-Physician of Queen's Hospital, and other officers and members of the Council. The Council, in issuing the notice of the vacancy for the office of Physician, had stated that the appointment would be made in the following manner:—"The names of the candidates will, in the first instance, be referred by the Council to the professors of medicine and surgery, who shall make a special report thereupon to the Council, specifying the names of such candidates as, in their judgment, are qualified and eligible, and, in their opinion, best fitted to fill the vacant appointment, specifying the grounds of the recommendation, which shall be entered on the minutes of the Council; and the Council is then to appoint, from the candidates included in such report, the one whom they consider best qualified and most eligible to fill the vacant office." It was also announced that "Canvassing the Council, either personally or throuh friends, was strictly prohibited, and would be held an entire disqualification." At the meeting a long report was brought up, stating that six applications for the office of Physician had been received, four of which had been withdrawn. There remained two candidates, Dr. Alexander Fleming and Dr. John Glen, graduates in medicine of the University of Edinburgh, both of whom were qualified and eligible. It was further reported that, "after a most careful examination of the testimonials, Dr. Fleming was found best qualified for the appointment of Physician to the Queen's Hospital; having obtained the highest honours which the University of Edinburgh can bestow; having had extended experience both at home and abroad; and having, by his researches on an important branch of medical science, added to the existing knowledge of that science." Dr. Fleming was also recommended as the most eligible candidate to fill the joint chair of Materia Medica on the following grounds: "That he had held with distinguished credit for eight years, by the appointment of Her Majesty's government, the chair of Materia Medica in Queen's College, Cork: that he was selected in 1851, from among many candidates, Examiner in Materia Medica and Therapeutics in the Queen's University in Ireland: that Dr. Fleming's researches on an important medicinal agent" (aconite) "had obtained for him a world-wide reputation: that he had by his zeal, ability, and literary contributions, greatly improved the science of Materia Medica and Therapeutics;" and also on the ground that his ability and success as a teacher of Materia Medica was fully testified to by his colleagues in the Queen's College at Cork and many distinguished members of the medical profession in Great Britain, the continent of Europe, and America. The report was signed by the following gentlemen: John B. Davies, M.D., Professor of Forensic Medicine and Senior Physician of the Queen's Hospital; James Johnstone, M.D., Professor of Medicine and Senior Physician to the General Hospital: Thomas P. Heslop, M.D., Professor of Physiology and Physician of the Queen's Hospital; William Sands Cox, F.R.S., F.R.C.S, Professor of Surgery, and Senior Surgeon to the Queen's Hospital; G. B. Knowles, F.R.C.S., F.L.S., Professor of Botany, and Surgeon to the Queen's Hospital: George Shaw, F.G.S, Professor of Chemistry; Samuel Berry, F.R.C.S., Professor of Midwifery, and Surgeon to the Magdalen Asylum; David Bolton, F.R.C.S., Professor of Anatomy, and Surgeon to the General Hospital; Oliver Pemberton, F.R.C.S., Demonstrator of Practical Anatomy, and Surgeon to the General Hospital. The report was approved, and Dr. Fleming was elected to fill the vacant offices. A letter was read from Mr. G. B. Knowles, stating his intention to resign the appointment of Surgeon to the Queen's Hospital, which he had held during fifteen years.

Liverpool Medical Institution: Election of Honorary Medical Officers to Public Charities. A special meeting of the members of the Liverpool Medical Institution was held on Wednesday, May 6th, to take into consideration a letter from the committee of the Southern Hospital requesting the opinion of the members as to whether the adoption of the plan of election without canvassing, recommended by them, and carried into effect at the last election of surgeons to that Hospital, had given satisfaction or otherwise, and whether they would recommend the same plan to be adopted at a future election. The chair was taken by Dr. Cameron. It was proposed by Mr. Desmond, and seconded by Dr. Nevins, and carried: "That the members of this institution return their most cordial thanks to the committee and trustees of the Southern Hospital for the courtesy and readiness with which they have acceded to their recommendations as to the method of conducting elections of honorary medical officers, as well as for their letter inquiring the opinion of the members as to the result of the adoption of that recommendation at the last election. It is a matter of great satisfaction to the members of the medical institution that the change in the mode of election has been adopted. They trust that the example thus set may be followed by the other charities in this town; and they hope that the trustees of the Southern Hospital will persevere in the course already entered upon, with such modifications and alterations as may from experience appear to them desirable." It was proposed by Dr. Whittle, and seconded by Dr. Vose: "That a suggestion be made to the committee of the Southern Hospital, that in future elections candidates should not be allowed to circulate copies of testimonials." After a discussion, in which considerable difference of opinion was expressed as to the advisability of such a restriction, an amendment was proposed by Dr. Macintyre, seconded by Dr. Hibbert Taylor, "That the consideration of this and other matters of detail be postponed for future discussion." The amendment was carried. It was moved by Mr. Waters, seconded by Mr. Higginson, and carried unanimously, "That the secretary be requested to send a report of the proceedings of this meeting to the medical and local papers." A vote of thanks to the chairman was carried unanimously.

Medical Society of London. A paper will be read this (Saturday) evening, by J. S. Gamgee, Esq., "On William Harvey and Carlo Ruini; the blood and its two circles; the history of their discovery."

SALE OF POISONS.

A Bill has been brought into the House of Lords by the Lord President of Her Majesty's Privy Council "to restrict and regulate the Sale of Poisons". The preamble recites that the existing restrictions on the sale of arsenic have been found to be insufficient, and that the unrestricted sale of other poisons facilitates the commission of crime, and occasions frequent fatal accidents. Clause 3 attempts the difficult task of defining what "poison" really is. The word is construed to include certain drugs, simple or compounded, mentioned in the schedule A of the Act. These consist of a large number of pharmacopœial and other preparations, most of which are in common use as articles of medicine. The list is as follows; namely, arsenic and its compounds; corrosive sublimate (the bichloride of mercury) and its compounds; the poisonous vegetable alkaloids (as strychnine, etc.); prussic acid; the cyanides of potassium, mercury, and silver; the chlorides of zinc and antimony; the essential oil of bitter almonds, and any mixture containing it (as "almond flavour"); cantharides and its preparations; belladonna and its preparations; hemlock and its preparations; aconite and its preparations; opium, in tincture, extract, and powder; foxglove and its preparations; stramonium and its preparations; chloroform and its compounds; oxalic acid and binoxalate of potash; nux vomica seeds and bark; tartarised antimony and its solution; coculus Indicus, ergot of rye, savin, lobelia, and all liquids or solids containing or consisting wholly or in part of the above mentioned poisons, poisonous drugs, and herbs. Certain compounds, prepared according to the directions of the *Pharmacopœias* of London, Edinburgh, and Dublin, or any of them, are excepted. Other substances and preparations may be added to this *Index Expurgatorius* by an Order in Council. It is enacted then that no person shall sell any poison, on any pretence whatever, except to a person of full age, and in the presence of a witness of full age, who is known to the person selling the poison, and to whom the purchaser is known, and on production of a certificate signed by the parish priest, or a medical practitioner, or a justice of the peace, to the effect that the poison may be safely supplied to the applicant. Entries of the sale of poisons are to be carefully made by the vendors, containing full particulars of the sale of the poison, the name and address of the purchaser, etc. All solid poisons must be covered with tinfoil, and distinctly labelled with the address of the vendor; and the word "poison" cast or moulded on the bottle. Colourless solid poisons must be mixed with soot or indigo, in the proportion of one part by weight of soot to 15 parts of the poison, or 1 part of powdered indigo to 31 parts of the poison. Colourless liquid poisons must be coloured with a strong solution of archil. Every gift of poison will be deemed a sale. The above provisions will not affect medical prescriptions, or sales by wholesale to retail dealers, or sales for lawful purposes of trade. All poisons must be kept apart, distinctly labelled, in shops and dispensaries. Poisonous medicines for external use must be vended in blue glass bottles, of a quadrangular shape, and properly labelled. The penalty for violating the Act will be a fine of £20 for the first, and £50 for every subsequent offence. Druggists will be disqualified from acting as such by a second conviction. (*Times.*)

Royal Orthopædic Hospital. The seventeenth anniversary of this institution was celebrated on Wednesday last by a dinner at the London Tavern, presided over by Lord Feversham. The number of patients admitted during the past year was 1,532, the whole number admitted since the foundation of the hospital having been 19,769. The receipts for the past year exceeded those of any previous year, amounting altogether to 4022*l.* 15*s.* 1*d.* At the same time, there were many expenses to be met. There was a mortgage for 6000*l.* to be redeemed; there were also nearly two hundred cases waiting for admission. Two of the largest rooms in the hospital were still unoccupied, the conversion of which into wards would increase the accommodation for in-patients to nearly sixty beds. The subscriptions announced amounted to 2,160*l.*

TO CORRESPONDENTS.

A Theme for Welsh Bards. A correspondent directs our attention to the following paragraph which appears in the *Carnarvon and Denbigh Herald* of May 16th.

"Medical Promotion. Amongst the names of gentlemen who underwent the necessary examinations, and had the degree of Doctor of Medicine conferred upon them at the University of St. Andrew's, on Monday the 11th instant, we find that of William Maugham, M.R.C.S.L., and L.S.A., of this town (Carnarvon). Dr. Maugham, has, therefore, the proud distinction of having earned his M.D. together with the two previous degrees within twelve days."

A modest announcement, certainly, of a most important fact! But if the *Carnarvon and Denbigh Herald* is the only herald of Dr. Maugham's good fortune and superior qualifications, his merits will not be sufficiently known in North Wales. The success of his Herculean onslaught on the three Examining Boards should be published in all the papers of that part of the Principality, both in the English language, and in the ancient tongue of the Cymry. Cannot a bard be found to harp his praise?

Communications have been received from:—Dr. William Webb; Mr. George May; Dr. R. U. West; Dr. John W. Ogle; Dr. Brinton; Mr. R. W. Jones; Mr. Orrin Smith; The Medical Officers and Lecturers of St. Mary's Hospital; Dr. T. Herbert Barker; Mr. Webber; Dr. T. Hayes Jackson; Dr. W. S. Oke; Mr. Joshua Parsons; Mr. Bartrum; Mr. Frederick Mason; Mr. Eyton (with enclosures); Mr. J. V. Solomon; Dr. Day; The Medical Officers and Lecturers of the Middlesex Hospital; Mr. T. L. Pridham: Mr. R. L. Bowles; Dr. B. W. Richardson; Mr. T. Holmes; Mr. Mitchell Henry; Mr. William I. Cox; Mr. Rawes; Dr. John Kirkman; Dr. P. H. Williams; Mr. W. D. Husband; Mr. Stone; Dr. J. M. Coley; Mr. Griffin; Rev. H. S. Petry; Mr. H. Lankester (Leicester); Mr. Robert Jones (Conway); Dr. Lankester; Mr. McDermot; Dr. Snow Beck; and Mr. Kesteven.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXII.] LONDON: SATURDAY, MAY 30, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

URINARY FISTULA WITHOUT STRICTURE: PLASTIC OPERATION.

Under the care of A. URE, Esq.

[*From notes by* E. A. HART, ESQ., *House-Surgeon.*]

GEORGE S., aged 27, a cavalry soldier, red-haired, stout and strumous, was admitted on February 6th, 1857. He had had seven or eight attacks of gonorrhœa, with occasionally some slight difficulty at the time in passing urine; but this always passed off very speedily without inconveniencing him. He had always passed a good stream of urine. Instruments had never been introduced for him, never having been necessary. In the course of his occupation he had had a good deal of hard riding in the military fashion, but for six months he had been secured from riding by indulgence to an infirmity from which he suffered—varicosity of the veins of the leg. Three months after this term of indulgence commenced, two abscesses formed; one below the base of the penis, the other on the scrotum, a little to the left of it. He suffered little pain from their progress. In a few weeks they burst and two small openings remained, through each of which urine passed freely during micturition. Such was his state when admitted. Examination showed the lateral opening to be the termination of a sinus leading from the central fistula. This was laid open; and an attempt was made to induce a cure by exposing the fistulous hole and procuring closure by granulation from the bottom. It failed. On March 25th, it was determined to perform a plastic operation, in the method recommended by Dieffenbach. An ellipse of skin was removed around the edges of the opening. These were found to be of cartilaginous callosity; they were pared and made raw; the skin around the scrotal portion was detached and drawn up; the cutaneous edges of the wound were brought into apposition, in such manner that, skin being borrowed from the scrotum, the superficial wound was placed an inch higher than the deep. Suspensory bandages were applied, that the weight of the scrotum might not drag downwards the wound. At the end of four days adhesion was complete in the lower part of the wound; the granulations in the upper part were healthy; but union here was not completed, and, after the lapse of some weeks, a small aperture still existed of the size of a pin's point, through which a few drops of urine escaped, not during micturition but immediately after it. On the 20th of April, a small conical button of actual cautery was applied. When the eschar separated, the aperture no longer existed. He has since passed water frequently without any escape whatever occurring, and his cure may now be pronounced to be accomplished.

REMARKS. This may be considered an unusually interesting case, from the singularity of the origin of the fistula, which must be ranked in this instance among diseases of occupation, and from the success attending the attempt made to remedy its inconveniences. The operation is one which has been proposed and performed by Dieffenbach with varying success. As a means of alleviating a very distressful ailment, it deserves to be noted carefully by our English surgeons. And as Mr. Ure is to be credited with the merit of introducing it prominently to their notice, so he may be congratulated on the success attending his application of the proceeding to the present case.

ST. BARTHOLOMEW'S HOSPITAL.

In our last, we reported a case in which an operation on the urethra was followed, in a patient suffering from disease of the kidneys, by death from pyæmia. This, although not common, is to be expected occasionally; but that pyæmia should follow an operation in which no bone is involved, in a healthy boy, is a very rare occurrence indeed. The exemption of children, even those of unhealthy constitutions, from secondary infection is well known; hence this exception to so general a rule appeared worthy of note. This is followed by the notes of two other cases of interest which have recently been observed at the same hospital; in one of which disease attacked the humerus apparently as the result of an accident which was experienced a short time before, and rapidly involved the whole bone; and the separation of the dead from the living part produced a fracture, a circumstance certainly remarkable in any case, and, if the history given be correct, almost if not quite unparalleled in so short a space of time without previously existing disease of the bones, of which there seems to have been no trace in this instance.

The third case is a good example of softening of the spinal cord as the result of concussion. The proximate cause of death appears to have been jaundice, which occurred very soon after the application of galvanism; but this was probably a mere coincidence.

I. CALCULUS IN THE BLADDER: LITHOTOMY: PYÆMIA: DEATH.

Under the care of W. LAWRENCE, Esq.

[*From Notes by* W. CHIPPENDALE, ESQ., *House-Surgeon.*]

Thos. C., aged 11, a healthy looking boy, was admitted, on account of stone in the bladder, on September 20th. The operation was performed on September 27th; and a stone, composed of the lithates, coated with phosphatic deposit, was removed. There was slight arterial hæmorrhage after the operation, easily checked by cold.

The boy progressed without a bad symptom up to October 8th, when he passed through the wound a large mass of clotted blood, which had apparently been detained some time in the bladder.

On October 11th, he was very feverish, and was seized with diarrhœa and vomiting. This was attributed to his friends having supplied him with some grapes. Notwithstanding remedies, however, this state persisted for the next two or three days; he was feverish, very delirious at night, and also during the day. The diarrhœa and vomiting recurred at intervals. He had had a severe rigor on the previous day. The abdomen was soft and tolerant of pressure every where except in the right iliac fossa.

On the 13th, however, well marked symptoms of peritonitis came on; there was also crepitation over both sides of the chest in front. He sank rapidly, and died on the 15th. A faint yellow stain of the conjunctiva was observed on the day before death.

On *post mortem* examination, the peritoneum was found full of turbid serum, and the lower margin of each lobe of the liver was coated over with recent lymph. There were numerous secondary deposits in the substance of the liver; others were formed on the anterior surface of the upper lobe of the left lung, and in the cellular tissue of the penis.

II. CASE OF NECROSIS OF THE HUMERUS FROM INJURY: SPONTANEOUS FRACTURE (COMPOUND): AMPUTATION: DEATH.

Under the care of W. LAWRENCE, Esq.

[*From Notes by* W. CHIPPENDALE, ESQ., *House-Surgeon.*]

— Ragben, aged 50, a thin cachectic looking man, was admitted October 20th, on account of an accident to the arm five weeks before. The arm was said to have been quite strong before this. An abscess formed a week afterwards; and, on his admission, bone was found exposed. There was at this time

no deformity of the arm. On the morning of his admission, however, while turning over in bed, he heard the bone snap; and, on examination, the ends of the fracture were very distinctly felt through the wound. A considerable portion of the bone was felt exposed.

The limb was put up in splints, in the usual manner; but he could hardly bear the requisite pressure. It soon became necessary to remove the splints, in order to open large abscesses which formed in the neighbourhood of the elbow, axilla, and other parts of the arm. Interrupted splints were now substituted for the ordinary ones. He remained some weeks without any alarming symptoms. The cough and expectoration, which had been abundant, decreased, and he seemed to be improving under the use of tonics and stimulants, when, on November 29th, the wound, which had almost closed, was enlarged upon a director, to allow of the escape of matter. Free venous hæmorrhage followed, but was restrained by plugging the wound and applying a compress.

December 2nd. The bleeding suddenly recurred, and was again checked by plugging. The compresses, however, had to be removed, on account of the pain they caused; and, as the hæmorrhage could not be restrained, and there was no union in the wound, it was decided to amputate the limb.

The man improved for a few days, but his cough recurred, with copious purulent expectoration; and he died on the tenth day.

On examining the limb after removal, a large sequestrum of bone, about four inches long, was seen to be almost detached. Several other fragments were loose and partly detached. The extremity of the upper fragment was covered with plastic matter. The brachial artery and its branches were carefully traced, but were uninjured; and the source of the hæmorrhage was not ascertained.

III. INJURY TO THE SPINAL CORD, WITHOUT LESION OF THE BONES, PRODUCING PARAPLEGIA: JAUNDICE: DEATH.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Joseph B., aged 19, was admitted March 12th, on account of paraplegia, following an injury to the back received ten days previous to admission. He had fallen from a height of twelve feet on his feet, and then on to the ground on his back, striking his loins violently. This seemed to have been followed by instant loss of motion. When admitted, sensation and motion were entirely abolished in the lower extremities, and he had no power over the bladder or rectum; no reflex motions could be excited. Nothing unnatural was detected about the spinal column.

The treatment was of course at first expectant. He progressed favourably, and began slowly to regain motion and sensation; and, on the 25th of April, it is noticed that he could draw his legs up perfectly, and that he felt the introduction of the catheter, and had also slight sensation when the bowels were moved. Electricity was ordered to be applied every other day, from the right trochanter to the foot. On April 30th, after the application of the current, sudden pain came on in the abdomen; he complained of sickness and loss of appetite. Rigors followed, and increased pain, accompanied by diarrhœa. He became jaundiced, fell into a low typhoid condition, and died on May 5th.

On *post mortem* examination, the liver was found enlarged, extending into the left hypochondrium, and deeply tinged with bile. The bile-duct was pervious. There was no injury of the bones of the spine; and the cord, down to the level of the first lumbar vertebra, was healthy. At that spot, it was found to be soft, degenerated, and shrunken.

KING'S COLLEGE HOSPITAL.

A SERIES OF CASES OF ALBUMINURIA.

[*From Notes by* A. Meadows, Esq., *House-Physician.*]

We append short notes of a few cases of diseased kidney, which will illustrate many of the points of the pathology and treatment of this affection; and have incorporated in our report the substance of a clinical lecture on the subject recently delivered by Dr. G. Johnson.

Case I. John P., aged 39, a shoemaker, of temperate habits, much confined to the house, and ill nourished, was admitted March 19th, under the care of Dr. Budd. Seven years ago, his legs became anasarcous, and he suffered from ascites. These symptoms did not continue long. Five weeks before admission, he was attacked with vomiting, succeeded in a few days by pain in the region of the kidneys, and anasarca of the lower extremities. The urine had been scanty for a long time. When admitted, his legs and feet were much swollen; the belly and scrotum were distended and fluctuating; the urine was of a smoky colour, loaded with albumen, and containing waxy casts. His appetite was bad. He did not complain of any pain. There was constant nausea, but no vomiting. He was ordered to take half a drachm of compound jalap powder every morning, and three minims of dilute hydrocyanic acid in water three times a day; and to have a vapour bath. Under this treatment, the legs and belly diminished in size; and the quantity of urine passed in the day increased from thirty-two ounces at the date of his admission to sixty-eight ounces on April 28th, when the citrate of iron was ordered. The latter (hot water and hot air baths being occasionally substituted for the vapour bath) produced copious perspiration, and the bowels were kept moderately relaxed. He recovered sufficient power in his legs to get about pretty comfortably. The urine is in sufficient quantity, and contains only about half the amount of albumen; and he is now sufficiently recovered to leave the hospital.

Case II. John J., aged 55, was admitted, May 2, under the care of Dr. Budd. He was a porter; in the habit of drinking freely. He had been in another hospital, last year, for compound fracture of the leg; and there was a history of pyrosis, thirst, and loss of appetite since that time. His complexion was sallow, his expression vacant, and he could not express himself clearly. The liver was somewhat enlarged; there was tenderness in the belly and loins; the urine was very scanty (about one pint in twenty-four hours), loaded with albumen, and containing small waxy casts; there was no anasarca. He had slight cough, and fine crepitation, with bronchial breathing, could be heard over the base of the left lung. There was slight diarrhœa: this having been checked, he was ordered an effervescing saline draught and dry cupping over the loins.

May 6th. The quantity of urine has diminished to half a pint; its condition is much the same. Bronchial breathing and crepitation are more distinct over the base of the left lung. The pulse can scarcely be felt; the extremities are cold. He was delirious during the night.

During the next two or three days he rallied a little under the influence of stimulants; but on May 10th erysipelatous inflammation set in around some fistulous openings in the leg (apparently the result of the old accident), and he sank in four days. The quantity of urine constantly decreased, and at last averaged only eight ounces in the day; its specific gravity remained at about the normal standard. Dulness and small crepitation persisted at the base of the left lung.

On *post mortem* examination, the lower half of the inferior lobe of the left lung was found in a state of red hepatisation, as were also the middle and lower lobes of the right lung. The liver was somewhat contracted. The left kidney was enlarged, lobulated, firm, of a natural colour, and appeared quite healthy. The right kidney was slightly lobulated; there were two small cysts on its anterior surface, about the size of a pea. The cortical substance was about a quarter of an inch in thickness; and it appeared shrunken, weighing four ounces, while the other weighed five and a half.

Case III, under the care of Dr. G. Johnson, was that of a woman with acute renal dropsy, who, on admission, was passing a small quantity of highly albuminous urine, of high specific gravity, containing blood and small waxy casts, the latter entangling blood-globules. No treatment except rest and bread pills was employed, under the idea that the urea which was retained in the blood would itself act as a diuretic. This was justified by the result. She was kept warm in bed; she soon began to pass a good quantity of urine, and was cured of the dropsy in six weeks.

Case IV. A painter, who had been much exposed to the weather, in November last began to pass so large a quantity of urine that diabetes was suspected; but the urine turned out to be albuminous, and not saccharine. It was pale coloured, with numerous casts, some of them of the large waxy variety, indicating chronic wasting of the kidney. His sight was dim; he had numerous epileptic fits; and he soon sank.

On *post mortem* examination, the kidneys (as had been anticipated) were found much wasted, weighing only three ounces each; the cortical structure was almost gone, and the Malpighian bodies were replaced in many places by cysts. There was deposit of recent lymph on the pericardium. The heart was much hypertrophied, weighing twenty-nine ounces. There was no disease of the valves, or of the large vessels. Dr. Johnson called attention

to the hypertrophy of the heart, which he thought due to the impeded circulation in the capillaries, the consequence of the blood disease, and to the absence of dropsy, which he ascribed to the quantity of water, which he had been passing, a result of the denudation of epithelium from so many of the renal tubes, by which only a simple basement membrane is left, through which the fluid easily transudes.

Case v. A gouty old man, aged 71 years, was admitted with dropsy of recent origin. The urine deposited a considerable sediment, and on examination was found highly albuminous, and contained a large number of small waxy casts entangling pus-globules. After he had been in the house for a few weeks, a number of cells containing oil appeared in the urine adhering to the casts. This circumstance, joined to his age and unhealthy constitution, caused an unfavourable prognosis to be entertained; as it was feared, from the amount of the oil contained in the urine, that the kidneys were undergoing fatty degeneration. However, under the use of dry cupping, milk diet, and purgatives, followed by tincture of sesquichloride of iron, he soon began to improve, and has gone on steadily mending. The dropsy is quite gone, and the albumen has nearly disappeared; a small number of casts are still to be seen, but they do not contain any pus or blood. The quantity of urine is greatly increased, and it hardly deposits any sediment.

Dr. Johnson remarked in this case the uncertainty of prognosis in our present knowledge of these diseases; the appearance of small pale waxy casts in the urine, containing large cells filled with oil, being generally indicative of extensive and advanced fatty degeneration.

Case vi. The last case is that of an engine driver, who was admitted on April 29th, with dropsy of two months duration. He was extremely pale, and was passing about fifty ounces per diem of urine, containing a good deal of albumen, and a copious sediment of small waxy and granular casts, in which some blood and a few oil-globules could be seen.

He has been treated with the warm air bath, saline purgatives, and dry cupping. The quantity of albumen and sediment has much decreased, while that of the urine ranges from eighty to a hundred ounces *per diem*. The dropsy speedily disappeared; and then, as he appeared reduced by the hot air baths, they were omitted, and he was put on a course of steel. This inability to bear the hot air bath is not infrequent in Dr. Johnson's experience.

Original Communications.

LECTURE ON MORAL INSANITY.

By John Kitching, Esq., Medical Superintendent of the Retreat, near York.

[*Concluded from page* 391.]

Idiotcy or imbecility may exist from the birth of the individual; and imbecility may be strongly marked, or slightly marked, and may go through all degrees, till it can scarcely be traced or distinguished.

The same is probably true of the original condition of the moral faculties. They may be deficient at birth, or they may be almost obliterated. The term moral idiotcy has not obtained general sanction, because the phenomenon signified by it has not obtained general recognition. But there are scientific persons who use it as expressing a condition of mind by no means uncommon in those who obtain notoriety as great criminals. Whether there be such beings as moral idiots—that is, persons in whom the moral faculties do not exist, or are incapable of being exhibited from their birth—we will not at present stop to inquire. Certain I am, that there are persons in whom they are either arrested in their development, or subjected very early in life, to disease, by which their free action is impeded or perverted. Now, take the following case. Two parents shall have a family of children. They shall be pious persons, and shall train up their children in the precepts and practices which they believe to be conducive to their present and future welfare. They shall endeavour to curb the impulses of sensuality, and restrain the ardour of passion; shall bring them up in the practice of temperance and self-denial; shall instil into their young minds the principles of Christian ethics; shall strive to interest them in the pursuit of intellectual objects; and shall set before them the example of those virtues which they wish their offspring to imbibe and imitate. All this pious effort results in the accomplishment of their desires in their children generally: but there is one exception. That one manifests in his infancy a different nature from the rest. Instead of being docile, he is intractable; instead of imbibing a love of the truth, he disregards it, and is mendacious; instead of loving his brothers and sisters, he either hates them, or alternately caresses and ill-treats them. Instead of learning to subjugate his passions, he is violent, impulsive, wayward, disobedient, dishonest, greedy, profane, and cruel, a pest and a nuisance to all who come near him. At school, he is the torment of his playmates, the thorn in the flesh to his masters. His boyish perversities become unendurable; and he is expelled from the school. The same traits follow him up through his adolescence, strengthen with his growth, and probably at last develope themselves in the perpetration of some heinous deed, which brings him to the felon's cell. Now, where are his brothers and sisters? They have expanded into men and women, filling their respective stations of usefulness, and exemplifying those virtues which they imbibed from the same fountain with their unfortunate brother. He received the same care as they; his education was equally guarded with theirs; they enjoyed no advantage which was not as freely afforded to him. Sprung from the same seed, grown in the same soil, nourished in the same clime, and tended with the same care, why did one plant only grow up deformed, unsightly, and poisonous, bearing no exquisite blossom like the rest, and producing no fruit but what was bitter and loathsome? Why, indeed? It is because either something has arrested the development of those parts of the brain, which are concerned in the due performance of the moral and instinctive faculties, or some disease has interfered with the healthy performance of their functions. It was this which rendered the individual incapable of profiting by the early efforts of his parents for his moral and religious welfare, and of benefiting by his subsequent education. It was this organic defect or physical disease which rendered him the creature of any passions he might possess, which deprived him of self-control, which caused his subjugation to the impulses of animal instinct, and made him the sport of any wild and reckless fancy that took possession of his imperfect mind. Destitute of those faculties by which other men regulate their conduct, and unable to exercise the restraint necessary for the continued operation of a motive, he is not susceptible to the like extent with them of the improving influences of education. In the most severe forms of this strange malady, he is, in fact, morally an animal. Let him acquire by any means a predilection for any animal indulgence, he throws himself into its pursuit with unrestrained powerlessness. This may be the pleasure of drinking, or some other low form of animal enjoyment. Whatever be the temptation, he has no antagonistic faculties to control it. When excited by alcoholic drink, his strange and imperfect nature comes out in clearer forms. He is then conspicuously different from other men when they are intoxicated, and it often happens that his associates even say that when drunk he is mad. But I need not follow the description of such an individual into further detail. I have drawn the portrait of no hypothetical case. Too many families can bear witness to the truthfulness of this description. It is a portraiture familiar by too much suffering, trial, and disgrace, to be either overlooked or mistaken.

It is only a few short months since a victim to this form of moral insanity was arraigned and condemned at the criminal bar for the perpetration of an abominable and loathsome crime. I do not forget the amount of ridicule which was thrown upon the opinion that this man was the subject of mental disease. But no amount of ridicule, no bias and special pleading—whether that bias be judicial, editorial, or whatever other source it may have—can alter the firm conviction of my judgment, that that homicide was a man of unsound mind, that he was diseased in his moral faculties, the creature of his passions, destitute of the checks and control which other men possess, and therefore, by so much, deprived of the full measure of accountability. Such a man, whilst he was at large, could be but a scourge to himself and his friends; and the gallows, in terminating his career, possibly did a kind office for both. But those who condemned him to that end have taken upon themselves an onerous responsibility in thus cutting with the sword the Gordian knot which ought to have been disentangled by the scientific application of medical psychology. No man can abhor the crime of wife murder more than I do; but because we detest and shudder at the heinous act, are we to leave out of count the diseased condition of the mind which led to its

perpetration? If this is the Draconian spirit in which our medico-legal questions are to be settled, let us consistently carry it out by returning to the old barbarities of smothering our hydrophobic patients between feather beds; or let us take a lesson from the Esquimaux, who bury their madmen alive, and so get rid of all trouble in deciding nice questions about their responsibility.

Now, that the commission of murder is not the only horrible and awful act in which the disorder of the instinctive and moral faculties will display itself, is evident, from that strange and terrible affection known as Vampyrism. Happily, cases of this extreme and repulsive form are rare; but extreme cases are very instructive, forming, as they do, the ultimate result to which slighter forms, ascending through gradual stages, may lead, they serve as useful standards of comparison. Vampyrism is fortunately not a common disease. The former case is much more common, and of vastly greater importance to be generally known. The general disorder of the moral faculties displayed early in life too often brings upon the unfortunate individual a style of treatment which adds to his misery without reclaiming him. Harsh treatment and corporal chastisement inflict useless suffering upon the child; the organs, which are already disordered, are irritated; and the result of this increased irritation of the physical organs is an augmented manifestation of mental perverseness; and so the disorder is confirmed and aggravated, and is rendered incurable by any after treatment. The recognition of this form of insanity is of immense importance to society. To the individual himself, the early diagnosis of his condition makes all the difference between exasperating his malady till it breaks out in dreadful crime, and thus brings him face to face with learned judges, and subjecting him to a course of treatment calculated to protect and save him. Nothing conduces so much to the filling of our jails, hulks, and penal settlements, and to the fearful increase of our criminal population, as the want of acquaintance with the early indications of this morbid condition. Unfortunately, however, for the early recognition of the disorder, and the application of the treatment proper for it, those who are the most subject to it are the offspring of the poorest and most ignorant classes. Depraved, criminal, or drunken parents, cannot transmit a healthy organisation to their descendants; and the brain and nervous system participate in chief in the inherited degeneration. By their organisation, the children of such persons are prone to the same vices and propensities; and the example and influences of their early life only tend to foster and strengthen the propensity to them.

This fact involves one of the most important considerations to which the attention of society can be directed. Though vice and insanity are two very distinct things, they have relations to each other, which it is exceedingly important not to overlook. The mind can only act in any direction through the body; and every act of the mind exerts a direct influence upon the physical condition of the brain. Thus, no long continued series of mental operations can be carried on, no propensity can be acquired by long habit of any kind, no habitual vice contracted, without an alteration being produced in the structure of the brain or nervous system. And altered structure brought about in this manner in the nervous system of the parent is what he transmits as the original constitution of his child. This is the reason why we see the same virtues or the same vices pervading a whole race down through generation and generation.

Dr. Laycock said, in a lecture at Edinburgh, that drunkenness had been seen descending in one family from father to son through five generations: and what is true of drunkenness, the propensity to which is inherited through a peculiar structure having been induced in the brain of the parent, and permanently established in the son, applies also to other vices and other mental peculiarities. Voluntary vice in the parent begets an organic tendency to the same vice in the child; in other words, the alteration in the cerebral structure produced by vicious and responsible indulgence in the ancestor, becomes the original and normal conformation of the descendant. An involuntary and irresistible proneness to vice is, in this way, inherited in the physical conformation by the offspring of such parents.

This is one of the sources of congenital moral insanity. I do not say that it is the only one, by any means. Do not, on any account, misunderstand me, by supposing that this account of moral insanity necessarily implies a vicious parentage. Such an assertion would contradict what I have stated in a former part of this lecture. What I mean to assert is, that long continued habits of depravity confer a vitiated cerebral or nervous organisation upon the succeeding generations, which is manifested either in an irresistible tendency to the same vices, or a generally diseased condition of the organs of mind. It is a well known fact that drunkards, for instance, have idiot children in a far larger proportion than sober people. Such facts as this cannot be either too generally known, or too strongly impressed upon the public mind: they shew the tremendous amount of responsibility which attaches to the thoughtless votary of sensual or wicked pleasure.

I have heard it stated, as a kind of excuse, by men who were pursuing such courses, that they were only injuring themselves—that they were their own greatest enemies. They are grossly deceiving themselves! The consequences of their misdeeds may be transmitted through future generations, and doom posterity for ages to come to the miseries of insanity, or all the terrible consequences of uncontrollable propensities to crime.

Now, take another case. A person grows up to adult age or middle life, with no particular deficiency in his intellectual powers or moral character. He becomes the subject of some bodily disease, such as fever, or inflammation of some important organ; or he sustains an accident, by which some part of his head is injured; or some great misfortune or grief befalls him, as ruin in business, a shock to his affections, or domestic bereavement. After this, an alteration takes place in his character and habits. His tastes undergo a change. The pleasures he indulges in are of a different kind to those he formerly enjoyed. There is a degeneration in the tone of his mind; and a much greater preponderance of the lower instincts and propensities in his conduct and conversation. This change is sometimes so remarkable as to resemble a change in the identity of the individual. It seems as if the man had become transformed into a different person, and so realises in modern times the transmuting effects of Circe's wand.

If the animal propensities and sensual instincts are not let loose from their accustomed restraint, the change will be different in kind, but yet the same in degree. The moral perceptions being weakened or destroyed, truth and fiction have an equal value; the false and the true are separated by no recognised boundary; malice, revenge, hatred, and duplicity take possession of the mind, and hold undisputed sway; the property of others is appropriated without compunction; heavy debts are incurred for the most useless possessions, and along with these graver features of moral decline, are frequently associated the neglect of personal neatness, and great indifference to cleanliness. When this latter symptom is present, it affords, in my opinion, a striking proof of the presence of the disorder. But it is often absent, and there is nothing in the external aspect of the patient to betray his disorder, unless we come to minute medical signs.

I have now supposed two cases—in both of which the phenomena of moral insanity have been shown in their more extensive and severe forms. But there is a further analogy between this kind of insanity, and that affecting the intellect, which I must not pass over. In the latter, I showed that it was possible for the intellect to remain sound, or apparently so, in most directions; whilst in one it was affected with some strange delusion or inconsistency. So it is also with regard to the moral faculties. They may remain for the most part uninjured, and may betray a loss of integrity chiefly in one direction. We see this partial form displayed in the practice of dishonesty—in that of falsehood—in the habit of destroying property by fire—in excessive addiction to some one sensual indulgence—and, in fact, in a great variety of ways, as diversified as are the instincts, propensities, sentiments, or emotions, which coexist in a healthy mind, and can therefore be brought into disordered action in a mind that has lost its healthy function. Now, when we witness changes like these in the moral manifestations of an individual, and especially when they can be accounted for on no plea of the gradual decadence of moral and religious principle, from the contaminating influences of bad company or powerful temptation; when, on the contrary, all the incentives are "to virtue's side", to what possible source shall we ascribe them, if not to a disordered function of the brain? Is it at all reasonable to suppose that a respectable person should *will* to change his nature to such an extent, and in such a degrading direction? This would be an anomaly in human nature such as has no parallel. For, however infirm and weak the will may be, it is at least generally towards the higher and nobler side of things. It seems to me to be as likely to be the result of the deliberate will that a person should thus be transformed in this case, as that the child

in the other should *will* to grow up destitute of all those powers and qualities which are necessary in order to secure to himself a happy life, and to win the love and esteem of others. The only resource we have left is to ascribe the phenomena in both cases to mental disease.

I trust I have now said enough to shew that this conclusion is the only true one, and that there is such a thing as Moral Insanity. The same conclusion is rapidly gaining ground in other circles than amongst medical men. Statesmen, lawyers, magistrates, and clergymen are giving in their adhesion to these doctrines; and before long they must also secure acceptance by our judges likewise. Speaking of the clergy, it gives me great pleasure to quote the words of a learned Divine, so directly to the point, that nothing could be more appropriate for my purpose. "The day has probably arrived already," says the Rev. W. Thompson, in a learned paper on crime and its excuses, "when the existence of moral insanity, of a disease which wrecks the moral perceptions, and leaves the intellect almost intact, shall be recognised as fully as any other form of madness."

The latest medical writer on this subject adopts a classification of the different kinds of moral insanity so exactly agreeing with that which I have here followed, that I cannot refrain from supporting my argument by his assistance. "All examples of moral insanity which the records of criminal jurisprudence supply," says Dr. J. H. Williams (*On Unsoundness of Mind, and its Legal and Medical Considerations*), "may, we conceive, be ranged under one of the following heads:—

"1. Cases in which the development of the moral feelings or affections appears as originally deficient.

"2. Cases in which the perversion of the moral feelings or affective faculties appears to occur incidentally.

"3. Cases in which the moral feelings appear to become universally disordered.

"4. Cases in which the moral feelings appear as partially diseased."

It has been my aim, however, in the present lecture rather to place the subject in a popular light, and to draw my materials more from what is open to the common observation of all, than by reference to medical authorities, or to treat the subject in a strictly medical way. Unless I had kept this in view, I could not have omitted to refer to many writers who are examining and illustrating the subject in a spirit of true philosophy, aided by all the learning and science which modern experience has accumulated in this difficult branch of psychology.

Now, it will naturally be asked how we are to distinguish the vice that is voluntary and controllable from its counterfeit, the general moral insanity, of which I have endeavoured to give a sketch? The description of a disease may be very correct, and yet have so many points of resemblance between it and something else, that it may be undistinguishable without the indication of some specially diagnostic marks. Are we to rank all vice, immorality, and depravity, as indications of insanity? Are we to regard all our criminals as madmen, and convert our prisons into lunatic hospitals? No. If there is no distinction, if there is no imputable vice and moral evil, why does the Bible assume that all men are sinners, and threaten us with punishment, as well as encourage us with the promise of reward? The belief in a disease of the moral faculties, does not destroy the belief in the existence of voluntary and responsible crime. It serves to give to the latter a deeper dye of criminality, and to bring out its odiousness in stronger colours. It makes one more sensitive to its repulsiveness. Whilst it covers the wayward and erratic manifestations of the diseased brain with the mantle of scientific charity, on the one hand, it adds weight to the accountability of the true criminal on the other. I must endeavour, therefore, to point out how the two states may be distinguished. Before doing so, however, I must remind you that in attempting to come to a conclusion respecting the state of a person's mind; in endeavouring to estimate the degree in which he was influenced to the commission of an act, or the pursuit of a line of conduct, by the force of his organic propension, or by the voluntary surrender of himself to criminal motives, we have no diagnostics so clear and indisputable, as exist in the determination of physical inquiries. Questions which involve the consideration of motives, of the power or weakness of the will, and of the amount of control which the individual may possess over his actions, must always possess a difficulty which removes them from the ordinary sphere of adjudication. The determination of such questions must be referred to the few who have made them special objects of study; and even with these they must, until the boundaries of our knowledge are greatly enlarged remain, to a certain extent, matters of opinion. Where there is no fixed gauge or standard to refer to, men will not come to the same conclusion. If any element of vagueness remain in the proposition, different minds will estimate that vagueness according to different values, and will vary in their conclusions according to the importance they assign to that, relatively to the remaining elements. The logical expression of the difference between criminality and insanity consists in possessing the power of willing and of not willing in the criminal, and not possessing that power in the insane. The practical discrimination between the two states must consist chiefly in the antecedents and concomitants of the act.

If the offender has shown by his past life that he was susceptible, to the ordinary extent, of the influences of education, that he was amenable to the operation of the same motives, acting with the same power as other men are ruled by; that he could withstand the operation of temptation to a like extent with others; could fully appreciate and apply the instruction afforded to him; if he had no marked infirmity of intellect, and no special moral defects which displayed themselves under every combination of circumstances, even where they would operate injuriously upon his interests, it would be a fair and correct inference, that he had the power of willing and of not willing, the *potential velle et nolle*. Whilst in this state, such a person must be held accountable for his actions, and he would fairly be called upon to answer for any crime he might commit. But the contrast between this state and the picture which I drew of the subject of early, or congenital moral insanity, is very great. The criminal consents of his own will to be no longer guided by the motives which inspired his former conduct: he determines to pursue his object, and suffer any pangs of self-reproach and remorse which assail him. The wicked man often plans and pursues the wrong, whilst the power of his will is exhibited in the long success with which he hides his guilt from others, and perhaps puts on the outward semblance of all the virtues.

Some recent cases may possibly occur to the mind, where religion and benevolence were assumed as cloaks to systematic and long continued swindling. No stretch of the doctrines here propounded, or propounded by any writer whom I have read on moral insanity, could embrace in its grasp cases like these. There is no danger, then, of the theory of irresponsibility encroaching very far on the region of properly imputable crime. The venerable institution of the gallows is in no danger of being paralysed by the certificate of the mad doctor.

The crimes I have just noticed were instigated by intelligible motives—the desire to possess wealth, and to enjoy its advantages; and the motive upheld the criminal through a long course of consistent duplicity. The moral madman is incapable of this long sustained duplicity. He is not incapable of duplicity; that is one of the common features by which his disorder is marked; but his hypocrisy is spasmodic and intermittent, maintained for a short period to suit the occasion, and dropped as soon as the short lived incentive to it disappears. The free and responsible agent succeeds in adopting a line of hypocritical reformation till he becomes a "ticket-of-leave man". I do not believe that any "moral madman" could ever become a "ticket-of-leave man" by any such means. If he could exert a degree of self-control adequate to the procuring of a ticket of leave, he would be cured of his moral madness, and would remain a comparatively virtuous character till his disorder again broke out. If it be required to distinguish between the voluntary abandonment of a virtuous life for a life of crime, and the occurrence of moral madness, the incidents by which the change was ushered in, in the latter case, will generally afford sufficient data. It seldom happens that the invasion of the latter is not preceded by some bodily disease or some mental shock, such as pecuniary embarrassment, domestic loss, outraged affections, etc. Females become sometimes affected with it from the long continued action of jealous feelings. In all such cases, the comparison of the individual's present state with his former state, and the coincidence of some accident, disease, or overwhelming misfortune, with the period of the transition from one state to the other, can surely leave but little reason to doubt the nature of the condition. To those who are only acquainted with the phenomena subsequent to the change, the case may be very embarrassing or obscure; and, within my own experience, this has proved a source of serious error. Hence it is an essential requisite for coming to a correct judgment in many of these cases, that the life-history of the patient be carefully inquired into, and circumstantially examined. The evidence, therefore, upon which the decision

must rest, in a large proportion of the cases of this malady, is of a historical nature. The inquiry is not so much whether any particular act, or short series of acts, is the act of an insane person, as whether the general tenor of the patient's present condition differs from that which characterised him at some former period of his life; and this difference can be ascribed to anything calculated to affect a morbid change in his brain. If it can, the phenomena exhibited are those of moral insanity. Now, the conclusion which I wish you to draw from what has been said is this—that, so far as there is any parallelism between the conduct of the responsible criminal and the subject of moral insanity, what is the result of free agency and deliberate choice in the former, proceeds from the inevitable action of the organism in the other; that, whilst one of the agents has faculties which enable him to withstand the solicitations of temptation, in the other the counterbalancing faculties are weakened or destroyed by disease. The latter does not act from temptation; for temptation implies a struggle carried on between powers on equal terms—the possession of a free will to choose or to refuse, "sufficient to have stood, but free to fall". In the moral madman, the powers are unequal; the force to refuse is inferior to its antagonist, or does not exist; the act results from an organic impulse almost equal, if not quite, to a necessity; the imperious instinct rushing, half blind, to its gratification, with the irresistible ascendency of a fate.

The impulsiveness which characterises a large class of the victims of moral insanity is a striking feature. In many instances, it appears to be the most prominent symptom; and most writers on the subject dwell largely on the subject of impulsive insanity. The existence of such a form of madness must be at once admitted; and that the moral faculties participate in the disorder is unquestionable; but they are probably not the only seat of the deranged action.

To whatever origin these dangerous impulses may be referred is, however, of little consequence. That there is such a form of madness, the records of criminal jurisprudence supply abundant evidence. We must, in many branches of this inquiry, be satisfied at present with the careful observation of the facts, and wait for their further elucidation, till the physiology of the brain is much better understood than it now is, both in its healthy and morbid conditions. We shall have gained a very important step, when we succeed in rendering the distinction clearer between the manifestations of a deranged state of mind and those of a guilty and responsible one. We must not, in this direction, either, expect our progress to be very rapid, when the path is so difficult; for, as Dr. Williams says, "in the practical application of this inquiry, we must be prepared for the meeting of many cases full of doubt, which our best and most anxious investigations may fail to elucidate. Under such circumstances, to complain of any difficulty or seeming contradiction, is only to complain that human intelligence cannot pass those bounds which the wisdom of the Creator has ordained: and though it may thus happen that, at times, the innocent may suffer, we will indulge just grounds of hope that such examples must be rare indeed; and, on the other hand, should mercy incline the scale of justice, and crime revel in the success of ill deeds, we have both Divine assurance and human observation to attest, that seldom hath punishment, though lame of foot, failed to overtake a villain."

ON FLEXIONS OF THE UTERUS.

By J. G. Swayne, M.D., Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Midwifery at the Bristol Medical School.

[*Read before the Bath and Bristol Branch, April 30th*, 1857.]

Within the last nine or ten years, the various versions and flexions to which the unimpregnated uterus is liable have received a more than ordinary amount of attention, both in this country and on the Continent. The diagnosis and symptoms of these affections have been so fully described by various authors, especially by Dr. Simpson, that it is scarcely necessary for me to notice them now, even were there time to do so, except in the most cursory manner. Their treatment, however, is still a question upon which much difference of opinion exists. I shall therefore speak of it at greater length, and in so doing illustrate my remarks by a few cases from my own practice. Dr. West, in his work on *Diseases of Women*, has recorded some statistical observations which he has made respecting the more prominent symptoms attending flexions of the uterus. These are various disorders of menstruation, such as menorrhagia, dysmenorrhœa, and leucorrhœa, pain and difficulty both in defæcation and micturition, the former being more frequent in retroflexion and the latter in anteflexion; pain in the pelvis generally, though usually most severe in that part to which the fundus uteri is turned or flexed. Besides these, there is occasionally pain and numbness down one thigh, probably from pressure of the uterus on the sacral nerves. Also, as Dr. Rigby has pointed out, congestion, irritation, or inflammation of one ovary is sometimes produced from tension of the broad ligaments, and obstruction to the return of blood from the ovary. One point which I have particularly noticed myself in these cases is the much greater urgency of all the symptoms enumerated in women who have borne children than in those who have never been pregnant. This appears to arise from the increased size and vascularity of the uterus, which is a necessary result of child-bearing. After the birth of a child the uterus never completely returns to its previous size and density. Hence, when it is displaced it is liable, from its greater size, to produce more pressure on surrounding organs; and from the increased softness and vascularity of its tissues, it is more prone to swell from congestion and engorgement of its vessels. One of the commonest results of retroflexion is a great engorgement of the posterior lip of the os uteri. The os itself is more open than usual, and much increased in its transverse diameter, the ends of which are bent backwards so as to exaggerate its tincœform character. The posterior lip is much engorged, and frequently œdematous; this causes it to be longer, and to project lower down in the pelvis than the anterior lip. These effects are produced by the obstruction to the return of blood from the veins of the part, arising from pressure upon them at the point of flexion. When the posterior lip is in this engorged condition, abrasion of its epithelium, and sometimes even deep ulcerations of its mucous membrane, are apt to take place. When the ulceration is at all deep, copious hæmorrhages may come on, and thus relieve for a time the distended vessels of the part. In anteflexion a similar condition of the anterior lip is induced, except that the anterior becomes elongated even more than the posterior lip, and also more pointed and conical in shape. Dysmenorrhœa is a tolerably constant symptom of uterine flexion, and also arises from the constriction and consequent contraction of the uterine neck at the point of flexion, causing an obstacle to the escape of the menses from the cavity of the uterus. Some of the most obstinate cases of dysmenorrhœa which I have seen, have appeared to depend entirely upon anteflexion of the uterus which had existed for a long time, and which it was in consequence almost impossible to remove.

There is at present much difference of opinion respecting the treatment of uterine flexions. Some practitioners seem to regard the flexion as a consequence, or rather an accompaniment, of the engorgement or ulceration which they may find in the neck of the uterus, and direct their treatment chiefly to the latter; others, with whom my own experience of these cases leads me to coincide, look upon the congestion and ulceration of the uterine neck as a result of the flexion. Schweighäuser, of Strasburg, and Schmidt, of Vienna, by whom the earliest descriptions of retroflexion have been given, contented themselves with remedies calculated to remove the constipation and congestion of the pelvic viscera which so usually accompany that displacement, and contended that in most cases, when those are removed, the displacement will remedy itself. Views in many respects similar to these are held by Dr. Oldham, Dr. West, and many others in this country. On the contrary, Drs. Simpson, Rigby, and others maintain that the removal of the displacement by mechanical means is the most important part of the treatment. Most of the cases which I have met with confirm their opinions in this respect; and I may quote one of the best marked as an illustration.

Case. Hannah Collins, aged 38, married ten years, had had eight children, the last of which was born about one year and ten months since. She was admitted as an out-patient of the Bristol General Hospital on September 11th, 1854, having been transferred to me by Mr. Coe. She was first taken ill about four months ago. She then had a copious discharge of clots and fluid blood, which she supposed to arise from a miscarriage. This discharge had continued at intervals ever since. She was now much reduced by it, and felt very weak and unable to walk; she suffered from palpitations, and her countenance was sallow and exsanguine. There were occasional pains in the back and loins. On the Friday before she was transferred to me, I examined her with Mr. Coe, and found the os uteri patulous, and capable of admitting the tip of the forefinger. On examining with the speculum, there was considerable

ulceration of the posterior lip, which bled freely when touched. A strong solution of gallic acid was applied to the part with a camel's-hair brush.

September 11th. She was much the same, and was ordered to take a mixture of sesquichloride of iron twice a day, and to use an injection of infusion of matico. On examining the uterus carefully with the finger, it was found to be retroflexed. It was therefore reduced by the sound, and a solution of nitrate of silver (gr. lxxx to ʒi) was applied by a brush to the interior of the uterine neck, and to the ulceration.

September 17th. She is much better. There has been no hæmorrhage. She was ordered to continue the same remedies.

September 21st. She is not so well. The pain in the back has returned, with some hæmorrhage. The uterus was found to be again displaced, and its cervix still ulcerated. It was therefore replaced, and a solution of nitrate of silver (gr. xxx to ʒi) was applied to the cervix.

September 25th. She is better. The discharge continues, but the pain in the back somewhat abated. Some days after this she had a return of the hæmorrhage, and all the other symptoms were aggravated. She was therefore taken into the Hospital, kept in bed, and directed to lie either on her side or abdomen. The uterus was replaced every other day with the sound, and the ulcer was touched with a solution of nitrate of silver (gr. xl to ʒi). She remained in the Hospital ten days, and went out much better.

After this she attended as one of my out-patients, and was subjected to the same local treatment twice a week. On November 20th I examined her, and found the uterus pretty well in place, the os much diminished in bulk, and the ulcer nearly healed. At the end of the month the ulcer had completely healed, and the uterus was quite in place. She had also quite recovered her strength, and therefore gave up her note. She has had no return of the complaint since.

In this case the ulceration of the posterior lip of the os uteri, and the consequent hæmorrhage from it, were clearly the result of the retroflexion; because these symptoms continued with little or no amelioration, notwithstanding all the local applications that were made; and there was no decided improvement until the uterus was returned to its proper position by the sound. The retroflexion and its consequences, however, were not cured until the patient had been kept in bed for several days, and the uterus had been replaced as often as any displacement occurred. My own experience leads me to regard the restoration of the uterus to its proper position by mechanical means, as the most important part of the treatment of retroflexion; and I can by no means agree with those who would treat any of the concomitant affections and leave the misplacement to take care of itself. The uterus should be replaced by the sound every second, third, or fourth day in the manner recommended by Dr. Simpson; and the patient, whilst under this treatment, should be kept in bed lying in the prone position, or at all events on the side, until the tendency to displacement appears to be overcome.

In some cases, the uterus may be kept in place after it is reduced by an oval pessary of vulcanised India rubber, introduced so as to have a bearing upon the anterior lip of the os uteri, and thus to prevent the cervix from being thrown upwards and forwards, as it must be when retroflexion takes place. When the cervix is thus kept upwards and backwards by a pessary, the uterus will not allow of sufficient flexion to throw its fundus into the recto-vaginal *cul-de-sac*. When this plan of treatment fails, the intra-uterine pessary or supporter recommended by Dr. Simpson may be tried, provided the case is attended with much discomfort and suffering. In a slight case, one would scarcely be justified in having recourse to a measure which is hazardous even under the most favourable circumstances, and which has in some instances led to a fatal result. Should the instrument be used, the patient ought to be kept in bed, and carefully watched. Should any signs of uterine irritation manifest themselves, the instrument must be at once removed.

In most cases of retroflexion, we may hope to effect a cure by mechanical means, provided this treatment can be adopted early: the case becomes less promising, *cæteris paribus*, according to the time which has been allowed to elapse after the displacement. In many instances, especially when the complaint has been of long duration, nothing will prevent the uterus from falling back into its old position as soon as the sound is withdrawn. In these adhesions have probably been formed, which keep the uterus down in its abnormal position, or else there is a wasting of tissue in that wall of the uterus towards which the flexion has taken place. Dr. West speaks particularly of these two conditions, and regards the former as the more frequent, and therefore the more important. He states also that flexions of the uterus are occasionally the result of imperfect involution of that organ after delivery. Here, again, little benefit can be expected from mechanical means.

Sterility has been stated to be a frequent result of uterine flexions. I cannot assent to this statement, because I have seen several cases of retroflexion, and also anteflexion, in which impregnation has taken place: still, however, there is a great tendency to abortion at the end of a month or six weeks. The occurrence of pregnancy is a fortunate event in the treatment of these cases, as it furnishes us with a simple and effectual method of cure. My attention was first directed to that point about six years ago, by my colleague, Mr. Coe, who had paid much attention to uterine displacements. The following case is a good example of cure effected by replacing the gravid uterus from time to time, until its increasing size rendered displacement impossible.

Case. Martha Reed, aged 36, living in Trenchard Street, married, and having had two children, consulted me first on November 28th, 1851. She then stated that she had not been well since her confinement, about three months previously. She had a good labour, and recovered tolerably well, with the exception of a pain in the region of the sacrum, which had continued ever since, and increased lately. The pain was increased by sitting or lying on the back, and also by defæcation. She also complained of a bearing down in the anal region. She menstruated once about six weeks ago, and now believeed that she was pregnant. On examining *per vaginam*, I found the os uteri more anterior than it should be, and rather open, so as to admit the tip of the finger. The fundus was somewhat enlarged, and bent backwards, so as to lie between the vagina and rectum. On examining by the speculum, the posterior lip of the cervix appeared slightly ulcerated. It was, therefore, touched with nitrate of silver.

December 1st. She had some pain and slight bloody discharge after the caustic was used. The pain in the sacral region was no better.

December 2nd. I saw her at her own house whilst in bed. Having placed her on her elbows and knees, I passed two fingers into the rectum, and pressed the fundus uteri upwards and forwards above the promontory of the sacrum. When pregnancy exists, the uterine sound is, of course, inadmissible.

December 8th. I again saw her in bed: the uterus had remained in its proper place. She complains of nausea; and the bowels are constipated. She was ordered to take half an ounce of castor oil. The pain in the back is much abated.

The uterus remained *in situ* for some days, until December 13th, when, on examining her, I found the fundus uteri much enlarged, and lying between the vagina and rectum. On examining *per rectum*, I found that it pressed considerably on the gut. I placed her on her elbows and knees, and attempted to return the fundus from the rectum, but without success. I then tried to do so from the vagina, and succeeded with some difficulty. She was directed to lie in bed for three days, and keep as much as possible in the prone position or on her side.

December 16th. I examined her, and found the uterus in its proper place. She has felt no pain in her back since the uterus was reduced.

I again examined on December 19th and 26th, and found the uterus still in place, but much enlarged.

January 5th. She complained of pain in the loins and sacral region. I therefore examined her, and found the uterus in place; but the os felt open and somewhat irregular. I examined with the speculum, and observed some superficial ulcerations of the os, which I touched with the nitrate of silver.

January 26th. I examined her, and found the uterus much enlarged, and beginning to rise above the pelvis. The ulceration of the os had disappeared, and she now suffered no inconvenience of any kind.

She went on well from this time until April 23rd, when she called on me, and stated that quickening took place about two months ago. I therefore gave her a lying in note, and from that time she progressed favourably until June, when she was attended in her confinement by one of my pupils. She had a good labour, and recovered well, without any return of the retroflexion.

The symptoms produced by anteflexion differ somewhat from those of retroflexion. The most ordinary and prominent of these are, dysmenorrhœa, frequent inclination to pass urine, some pain in the groins or hypogastric region, with numbness extending down one or both thighs. Anteflexion and anteversion are very apt to coexist, whereas retroflexion and retroversion are much more distinct. In anteflexion, also, the bend

at the neck of the uterus is occasionally much more marked than in retroflexion, so that the sound must be very much bent before it can be introduced even after raising the fundus uteri by the tip of the index finger. Dysmenorrhœa is a frequent symptom of anteflexion, especially in young unmarried women. It appears to arise from constriction of the uterine neck, and consequent obstruction to the menstrual flow. In one of these cases which I met with, the flexion had also occasioned a superficial ulceration of the os uteri. In this case, the dysmenorrhœa appeared to be removed by the introduction of the uterine sound just before each menstrual period, although it was some time before this could be accomplished, owing to the very acute angle at which the uterus was bent. In general, however, cases either of anteversion or anteflexion are very troublesome to treat and difficult to cure. As soon as the uterus has been replaced by the sound, it is almost sure to fall back again before long into its old place; and it is very difficult to prevent it from doing so by placing the body in any particular position. The best position, however, is the supine, with the hips raised by means of a pillow. In cases attended with much inconvenience, the intra-uterine supporter may be used, in order to keep the uterus in place for some days. Pessaries appear to me to be worse than useless in most of these cases.

CASE ILLUSTRATIVE OF PRACTICE IN AFFECTIONS OF THE WOMB.

By John Soden, Esq., F.R.C.S., Surgeon to the Bath United Hospital.

[*Read at the April Meeting of the Bath and Bristol Branch.*]

The case I wish to bring before the notice of this meeting does not illustrate any new or important point either in pathology or in practice. It has not even the merit of novelty, for its narration will recall to the memory of many gentlemen present some parallel example drawn from their own experience.

It is quite legitimate in a society like ours, without lowering ourselves by prying into professional delinquencies with too much individuality, to take cognisance of a departure from the strict rules of honesty in the practice of our profession, when such conduct has become a custom amongst a certain class of medical practitioners. By silence we give a sanction to their proceedings; and when the fashion that at present encourages them has passed away, and the public mind is conscious of the quackery (to use a mild term) it has fostered, the whole profession will be involved in the retributive justice that should descend only on the heads of a few. We acknowledge a just Nemesis on the old drug system in the countenance given to homœopathy. Let us avoid a more formidable want of public confidence in the legitimate practitioners of medicine, by early repudiating such practices as are illustrated by the following case.

A lady, purposing to pay a lengthened visit to Bath, secured a house for the whole period of her intended stay. In immediate expectation of her arrival, her friends were surprised by receiving instructions to get rid of the house, coupled with the intimation that the lady's plans had been altered. It seems that, on her way through London, Mrs. —— was induced to consult a practitioner of great repute in the specialities of ladies' disorders. By him she was at once informed that she was suffering under a formidable affection of the womb; that only himself and one or two others in London, and there only, were competent to its treatment; that operations were necessary; that the cure would occupy five months; and, finally, that Mrs. —— must give up the house in Bath, and take one in London for the time specified, and of course place herself under Dr. ——'s care. The friends at Bath were distressed and astonished at this report of one whose health they had every reason to suppose was excellent. After conferring with Dr. Davies, they succeeded in inducing Mrs. —— to reconsider her determination, and she duly arrived in Bath about a fortnight ago.

I was requested to see her, under the idea that a polypus or some other disease existed requiring an operation. I found a lady of 50 years of age, of very juvenile appearance for that period of life; her aspect betokening perfect health, which she stated herself to have uninterruptedly enjoyed. She said that menstruation had commenced with her very early; it had always been so abundant as to prevent her from going into society for the first few days. She had led an active life, had married early, but had never been pregnant. For the last two years, the menstrual flow, still maintaining its regularity, had increased so as to become profuse, occasioning feelings of weakness at the time. There was some sense of uneasiness in the thighs after walking, but never any pain in the back, nor any sensation referrible to the region of the womb itself. There was no intermediate discharge.

On examination with a speculum, I found the aperture to the uterus very small, but the lips of the os were large, pale, smooth, free from all inflammation and discharge, and otherwise natural and healthy, the large size being the only peculiarity they presented.

To recapitulate the particulars: the lady was 50 years of age, in perfectly good health, and complaining only of an excess of the menstrual discharge, without any symptoms or appearance indicative of organic disease; yet, on such slight grounds, she was to be the victim for five months (to commence with) of a course of "caustic" treatment. Would not common sense cry out against the application of escharotic stimulants to an organ under the irritation of its expiring function, which, in the natural course, must soon subside? Can any plan be conceived more likely to promote the disorder it was designed to arrest? If, at that period of life, any constitutional tendency existed to morbid deposits, would not such a proceeding inevitably tend to its development? Neither ignorance, thoughtlessness, nor stupidity, can be urged in excuse for such treatment as was here contemplated.

British Medical Journal.

SATURDAY, MAY 30th, 1857.

MEDICAL REFORM.

The medical reform question has this week undergone discussion both in the Medical Reform Committee of the Association, and in the Metropolitan Counties Branch. Both these bodies, the reports of whose proceedings will be found in another place, have adopted Mr. Headlam's Bill as the best groundwork of the two; and have suggested certain alterations and amendments. The Reform Committee have also drawn up an address to the members of the Association, calling on them to promote the second reading of the Bill, by means of petitions. We hope that this call may be extensively responded to. Hundreds of petitions ought to be sent in within the next ten days. The amendments proposed by the Committee to be made in the Bill relate to matters of detail, and do not affect its general merits as a comprehensive measure of medical reform—as good a one, perhaps, as can be now obtained. The plan which has been adopted is one which we should be glad to see extensively followed: for, while a blind acquiescence in any measure that might be brought forward is not to be desired, a system of prominently advancing some objectionable clause as a reason for repudiating the entire measure is a proceeding calculated neither to do good, nor to allow good to be done.

The following is a form of petition which might be conveniently adopted.

"*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.*

"The humble Petition of the undersigned practitioner of medicine residing in ,

"Sheweth, That a Bill has been introduced by Mr. Headlam into your Honourable House, to alter and amend the laws regulating the medical profession.

"That in the opinion of your petitioner, the aforesaid Bill is calculated to remove the evils that have been so long felt by the public as well as by the profession itself.

"Your petitioner therefore humbly prays that the said Bill may speedily pass into law.

"And your petitioner, etc."

THE VICTORIA HOSPITAL AT NETLEY.

The Royal Commissioners now prosecuting their inquiries into the constitution and working of the Medical Department of the Army, would receive a very instructive lesson as to the incompetency of that department to deal with the questions properly belonging to it, by considering the present position of the great military hospital which was founded last year at Netley. This imposing building, calculated to hold one thousand patients, having just emerged from the ground to a sufficient height to show its outlines, and having absorbed £70,000 of public money, is stopped by order of Government, and now stands in the open day a conspicuous engineering blunder, calculated "to point a moral and adorn a tale" to all those who believe in the efficiency of our army medical government.

Strange as it may appear, the abortive Victoria Hospital is the produce of a committee composed of the Surveyor of the Royal Engineers' department, Colonel O'Brien, the Assistant Quartermaster-General, Dr. Mapleston of the 15th Hussars, and the Deputy Inspector-General of Fortifications. The first fact which strikes us in the composition of this committee, instructed to inquire into the best method of constructing the largest public hospital determined upon by Government since the walls of Greenwich and Chelsea arose, is that only one medical man is to be found among the number. It would seem far more natural that the hygienic conditions of such a fabric should have been settled by a board composed of the Director-General of the medical department, and certain picked men from the staff of Hospital-Inspectors—officers whose duty it is to watch over the healthful condition of our hospitals—than that one surgeon of a hussar regiment should be the sole representative of the medical element in such a construction. It will be replied, we know, that this committee made extensive inquiry into existing hospital arrangements; if they did so, we cannot congratulate them upon the result of their labour. We never heard that they paid a visit to the Middlesex Hospital, confessedly the best ventilated establishment of the kind in this country; we never heard that they consulted the plans of the great French hospitals—of that at Bordeaux, or of the Lariboisière at Paris; at least, if they did, they singularly missed the distinctive and important features of these admirable establishments. They went through the wood, and cut a crooked stick at last.

The Netley Hospital as at present devised will kill more patients than it will ever cure. It has been well observed that hitherto all our hospital wards have been treated as though they were mere sleeping rooms; and as if the usual means of ventilation necessary to remove air simply rendered impure by healthy respiration were sufficient to change the hospital atmosphere charged with the thousand impurities which are given off from the bodies of sick patients. In order to keep the air of sick apartments sweet, two things must be attended to: in the first place, each ward should be thoroughly ventilated in itself by means of open fireplaces, opposite windows running to the top of the room; secondly, each ward should be entirely separated from its neighbours. The interior of a hospital should be treated, with respect to atmosphere, as an iron ship is with respect to water—so divided into compartments that the element, when deleterious, may be confined within its own bounds, and not allowed to bring destruction into adjoining ones. On this plan the great Military Hospital at Bordeaux was constructed, some thirty years ago; and on this beautiful plan nearly all similar establishments have been erected in France, and even in Belgium. The skeleton of this establishment is as simple as it is beautiful; it is merely a collection of small wards or hospitals, perfectly isolated from each other, being connected by an *open* corridor, and having a garden between each. By means of this excellent arrangement, every ward is thoroughly ventilated by opposing windows; and the foul air of the patient becomes deodorised by, and affords food to, the plants; whilst the plants send up a constant supply of oxygen to the patients. The animal and vegetable creation are allowed to balance themselves, care being taken that the principle of the infinite diffusibility of gases is permitted to work in a manner calculated to produce pure air; and the consequence is a perfect hospital. We do not believe for one moment that, if a plan of this perfect structure had been deposited, with others, in a model department in the office of the Quartermaster-General of the Forces at head quarters, such a blundering plan as we fear is indelibly worked in stone in the Netley swamp would have ever existed, for the medical reformer to refer to with shame and regret. Such a model department was suggested as long ago as 1842, by Mr. Ranald Martin, at the desire of the late Lord Metcalfe, in these words:—"To obviate *for the future* such extensive waste of life and money, and with a view likewise to improve such existing buildings as may admit of amendment, it is proposed that standard or model plans be prepared for barrack and hospital accommodation, on a scale proportioned to certain given numbers of men, and suited to the various climates occupied by British troops. The most cursory observation will satisfy us that, of certain given plans, one only will prove excellent; whereas now, all over the British possessions, we find in existence every conceivable plan, ending in no approved or fixed plan whatever; so that, in fact, that which ought to be settled, and is very easily capable of being settled by regulation, is up to this day left, as I have stated, to the fancy of individuals." (*Influence of Tropical Climates on European Constitutions*, p. 421.)

If Mr. Martin had been gifted with prophecy, he could not have foretold more clearly than he has done in this passage the fate of the new hospital as constructed on the old hap-hazard principle. If any man wishes to ascertain for himself the errors that have been committed at Netley, he has only to consult the plan. All the wards communicate with one common corridor, which will serve as a pipe to conduct the contaminated atmosphere of one ward to the comparatively pure air of its neighbour. It would seem that this vital error was not sufficient: the *latrines* also communicate with the wards; hence we have a double source by which an "hospital atmosphere" is provided for. Dr. Corfe, the Apothecary of the Middlesex Hospital, in a temperate letter to the *Salisbury and Winchester Journal*, justly condemns this malarrangement. "Let us suppose," says this gentleman, "that, through the distressing calamities of war, this huge hospital becomes filled on the medical side with cases of fever in its various grades, dysentery, scurvy, etc., and in the surgical division with phagedænic ulcers, sloughing stumps and sores, abscesses, and diseases of the osseous system, etc.: let me ask what possible guarantee is there, under the present system of ventilation, that there will not be a constant 'hospital atmosphere', which

no system of artificial ventilation will obviate or remove, so as to prevent its becoming a source of great evil to its unfortunate inmates?"

This is, however, only one of the errors committed with respect to this building; the Medical Officer's room is planned to be in connexion with a waiting room for two hundred patients. God grant him health under such conditions! A great number of the wards, instead of looking out in the front, which commands the Southampton Water, with its beautiful moving panorama of vessels, command views of *dull army camps in the rear!* When shall we get architects to understand that there is powerful medicine in a cheerful view? But what will sanitarians say to the fact, that the sewerage of this town of a thousand sick men is planned to flow on to the flat expanse of a river mud-bank, directly in front of the building? There is but one way to get rid of the sewerage of such an enormous establishment as that constructing at Netley, and that has already been successfully carried out at the vast lunatic asylum at Colney Hatch with the happiest results: namely, the pumping it into a high tower away from the building, from which it might flow so as to irrigate and enrich the garden ground and crops. Such a system is now at work in the neighbourhood of many large workhouses and county lunatic asylums; but the builders of the Victoria Hospital prefer making the mud, a pestiferous artificial marsh, which it will most assuredly become, twelve hours out of the twenty-four, if the proposed plan of sewerage is carried out.

But it will be asked, How is the Medical Department answerable for any part of this blundering? Our reply is, that if it is not answerable, it ought to be answerable. It either has a potential voice in such a matter as the building of a great military hospital, or it has not. If it has, how comes it that such errors have been committed? If it has not, what is all its complicated machinery worth? A cotemporary, who appears to defend any act of the Medical Department of the Army, states, that the Director-General was consulted about the plan, and approved of it, with the exception of the arrangement of the *latrines*, and one or two other minor items. If he did, he clearly approved a plan which the officers of the Middlesex Hospital have condemned since his emendations were agreed to: a plan which Government has set its seal of condemnation upon by summarily suspending the works. We do not for one moment think either that the corrections made in the original vicious plan were at all calculated to cure its fatal errors; neither do we believe that any protest made against the building by the Medical Department of the Army would have had the least weight with the Government in throwing it aside. For these reasons we trust that the Royal Commissioners will ponder well the history of this great bungle, and then we do not doubt that the present construction of the Army Medical Department will be as summarily condemned by them as it is by all medical reformers.

TESTIMONIAL TO WILLIAM NEWNHAM, ESQ.

A short time since we had the pleasure of announcing that a subscription had been set on foot with the view of presenting to Mrs. Newnham a portrait of her husband, in honour of his services to the Medical Benevolent Fund. On Tuesday last, at the monthly meeting of the Committee of the Medical Benevolent Fund, the portrait was presented by the President, Sir James Clark, to Mr. Newnham, who stood as proxy for Mrs. Newnham, and replied in a neat speech to that of Sir James Clark. The following inscription on the frame of the picture briefly records the motives of the donors and the merits of the receiver:—

"This portrait of William Newnham, Esq., is presented to Mrs. Newnham, by numerous subscribers to the Medical Benevolent Fund, as a testimonial of the high respect, affection, and gratitude entertained by them for her most excellent husband, to whose disinterested, noble, and indefatigable exertions for many years as Secretary, Treasurer, and General Manager that charity is indebted for its present great success and extensive usefulness. May, 1857."

The subscriptions having exceeded the price of the portrait, allowed the Committee to present with it, to Mr. Newnham himself, a small piece of plate, bearing an inscription indicative of the occasion and the cause of its presentation.

There can exist but one feeling among the members of the profession of approval of this proceeding on the part of the Committee of the Medical Benevolent Fund, as well as of gratitude for the admirable and most effective exertions of the gentleman whose merits have called it forth. May he yet live many years to enjoy the blessings which a life like his must bring with it!

THE WEEK.

The meeting of Poor-law Medical Officers held at the Freemasons' Tavern on Thursday last, passed off in a highly satisfactory manner, the most cordial unanimity characterising the proceedings. A report was read, in which acknowledgment was made of the valuable services rendered by the medical students; and a petition was agreed on, to be signed and presented to Parliament. We hope to be able to give a more full account of the proceedings in our next.

The *Times* of May 27 contains in the police reports the histories of two cases of attempted suicide by poison, which came under the notice of Mr. D'Eyncourt, the magistrate presiding at Worship Street office. The cases are both strikingly illustrative of the dangerous facility with which poisons can be obtained, and of the necessity for restrictive legislation on the subject. One of the intending suicides was a woman, who, under mental distress, attempted to destroy herself by laudanum, which she obtained—not in one large quantity, but in small amounts from different shops. The other case was that of a young woman, who obtained from a druggist three pennyworth of oxalic acid, nominally for the purpose of cleaning the bottoms of white boots. The authorities of the London Hospital, into which institution the patients were admitted, directed Mr. Burch, the resident medical officer of the institution, to draw the attention of Mr. D'Eyncourt and his brother magistrates to the wholesale and reckless sale of poisons. Mr. Burch, who appears to have made some careful investigations of the subject, said:

"I can assure you that the number of cases that come to our knowledge where poisons have been obtained in this manner, *and sold without either name or address upon the package or phial*, is almost incredible. No respectable chemist, of course, would do so; it is almost invariably done by men of restricted means and limited business, to whom such profits are an object; but to give you an idea of the scale on which such a nefarious system is carried on, I may mention that Sir Edward Buxton, the chairman of our Board, has placed himself in communication upon the subject with the Home Secretary, that a stop may be put to such a state of things, if possible; and that, in a tabulated statement drawn up, accompanying a report upon the matter, the particulars are given in the whole of 223 cases of such attempts at suicide, and all within a very limited period."

The public papers contain also the reports of two cases of accidental poisoning by laudanum. In one instance, an Irishman, aged 40, took it by mistake for Godfrey's cordial; in the other, the laudanum was left on a table, in a bottle marked "Dalby's Carminative", and a portion of it was drunk by a child.

Association Intelligence.

MEETING OF THE MEDICAL REFORM COMMITTEE.

A meeting of the Medical Reform Committee was holden at 3, Waterloo Place, Pall Mall, on Wednesday, May 27th; Sir Charles Hastings in the chair. There were also present, Sir John Forbes, M.D.; G. W. Hastings, Esq.; Dr. Henry; Dr. Lankester; T. Nunneley, Esq.; Dr. Sibson; G. Southam, Esq.; J. Stedman, Esq.; and Dr. G. Webster.

The meeting was convened "for the purpose of considering the Medical Reform Bills introduced into Parliament by Mr. Headlam and Lord Elcho, and for adopting such measures in reference thereto as might be thought advisable."

It was resolved that Mr. Headlam's Bill be taken as the basis of deliberations, and that such amendments as appeared necessary in it should be suggested.

The clauses of the Bill were considered *seriatim;* and various alterations in it were suggested, which are embodied in the address published below.

It was also resolved:—

"That this Committee desire to record their earnest wish that unanimity on the question of Medical Reform should at this juncture be established between the Universities and the Medical Corporations: and to express their readiness to assist in any way in their power in attaining such unanimity."

It was also resolved:—

"That an address to the members of the British Medical Association, in general support of Mr. Headlam's Bill, be inserted in the Journal." This address is given below.

Alexander Henry, M.D., *Secretary.*

ADDRESS OF THE MEDICAL REFORM COMMITTEE TO THE MEMBERS OF THE BRITISH MEDICAL ASSOCIATION.

The Medical Reform Committee of the British Medical Association desire to direct the earnest attention of the Members of the Association to the present aspect of the Medical Reform question, and to call on them to aid in promoting its early settlement; as there seems to be now an opportunity of effecting this long desired object on terms conducive to the good of the profession and the public, and at the same time conservative of the honour of established institutions.

It is well known that, previously to the present time, the progress of all measures of Medical Reform which have been proposed has been frustrated by the opposition offered by the Medical Corporations. So great has been the impediment produced by this opposition, that, rather than lose the opportunity of having a Bill passed which should contain the majority of the principles for which this Association has always contended, the Committee were prepared last year to accept a Bill, in which the constitution of the governing body of the profession was proposed to be entirely vested in Her Majesty's Government.

In the course of the last winter, however, the various Medical Corporations, and several of the Universities, agreed on a Bill, the principal clauses of which were identical with those contained in the measure that was introduced last year by Mr. Headlam, and that received the approval of this Committee and the support of a large proportion of the medical profession. This Committee, on examining the provisions of the Bill, found it advisable to place themselves in communication with its promoters, principally with regard to the proposed constitution of the Medical Council; and, after a conference held at the Royal College of Physicians, at which, with the representatives of the Medical Corporations of England, the Chairman, and several members of the Committee were present, it was proposed by the Committee that there should be added to the representatives of the Medical Corporations and Universities in the Council a certain proportion of persons to be chosen by Her Majesty's Government not holding any place or office in the Corporations or Universities. This proposal was courteously acceded to by the Conference Committee of the Corporations, and appears in the Bill now introduced by Mr. Headlam, though the proportion of such Members to the whole of the Council is not so large as the Committee desire to see it.

The Committee, in their deliberations, have become convinced that no measure of Medical Reform has a chance of success, in which there is not a certain amount of concession between the numerous parties whose conflicting interests have to be considered. For this reason, they think it advisable rather to yield in certain points of detail than to impede the progress of Medical Reform by an obstinate adherence to matters which would assuredly meet with strenuous opposition.

The Bill introduced by Mr. Headlam contains the following principles which have long been recognised as the necessary ground-work of every efficient and just measure of Medical Reform.

1. A General Council of Medical Education and Registration for the United Kingdom.

2. A system of Registration of all legally qualified practitioners.

3. Uniformity of qualification (for physicians and for surgeons respectively); with provision for adequate general and professional education.

4. Equal right of practice in all the divisions of the United Kingdom.

5. Restriction of unqualified persons from using titles implying registration under the Act.

[Members who are desirous of obtaining a further acquaintance with the provisions of this Bill, as well as of that introduced by Lord Elcho, are referred to the British Medical Journal of May 23rd, which contains copious abstracts of both Bills, in which all the essential points are given.]

Seeing so much that they approve of in the measure, and anxious to join with the corporations in their efforts for medical reform as long as they can do so without dereliction of principle, the Committee have carefully considered the different clauses of Mr. Headlam's Bill, and have resolved on recommending that the following alterations should be made when the House goes into Committee upon it.

1. In Clause v, that the University of Durham and the Apothecaries' Society of Ireland be omitted from the list of bodies entitled to send members to the General Council.

2. That Clause viii stand as follows: "All members of Council must be qualified to be registered under this Act."

3. In Clause x, line 29, that the following words be inserted after the phrase "which Rules and Regulations shall remain in force until altered at any subsequent meeting": "Provided that due notice of such proposed alteration shall have been given."

4. In Clause xv, line 7, that the words "including a statement whether as a Licentiate or Fellow", stand as follows: "including a statement whether as a Graduate in Medicine of a University, or a Licentiate or Fellow of any College of Physicians."

5. In Clause xv, lines 37 and 38, that the words "situated in that part of the United Kingdom in which he shall apply", be omitted.

6. In Clause xviii, p. 7, line 2, that the words "incumbent on", be substituted for the words "lawful for".

7. In the same clause, line 6, that the words "three months" be substituted for "one month".

8. In Clause xxi, p. 7, line 5, that after the words "foreign university approved by the General Council" the following be inserted: "Or after having passed the preliminary examination; or if he shall have been registered as a surgeon at the time of passing of this Act."

9. In Clause xxii, that the age of admission of surgeons shall be *twenty-two* years.

10. In the same clause, page 10, that, as in Scotland, the "General Council", in place of the "Branch Council", be the body to settle disputed points in Ireland in regard to examinations, etc.

11. That the examinations under Clause xxii should be conducted in part by University Professors in each country; also, that the arrangements under the same clause for examinations in England might be of a more simple character.

12. In Clause xxiii, line 38, that the words "after the period of two years from the date of his admission", be omitted.

13. That Clause xxvii commence in the following way: "The examinations shall be open to the public; and it shall be lawful," etc.

14. That the Regulations of the General Council should be submitted to and approved by Her Majesty's Secretary of State for the Home Department.

The Committee, therefore, would urge on the associates the importance of promoting the second reading of the Bill. This, it is hoped, will take place on an early day; and it is most desirable that petitions in its favour should at once be forwarded to those members who have introduced the Bill (Mr. Headlam,

Sir W. Heathcote, and Mr. Napier), and to other members of the House of Commons. It is therefore trusted that each member will write out and sign a petition, and at once forward it to a member of the House of Commons. The number of petitions is greatly more important than the number of signatures to a single petition; therefore no time should be wasted in endeavouring to obtain numerously signed petitions.

Charles Hastings, *Chairman.*

London, May 27th, 1857.

[A form of petition is given at p. 458. Editor.]

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

The First Annual Meeting of the South Midland Branch was held at the George Hotel, Northampton, on Thursday, May 21; Henry Terry, Esq., President, in the Chair. There were also present: T. Herbert Barker, M.D. (Bedford); J. M. Bryan, M.D. (Northampton); Thomas Clark, Esq. (Wellingborough); Edw. Daniell, Esq. (Newport Pagnell); B. Dulley, Esq. (Wellingborough); John Farmer, Esq. (Silverstone); D. J. T. Francis, M.D. (Northampton); J. P. Knott, Esq. (Blisworth); J. G. Leete, Esq. (Thrapston); F. H. Marshall, Esq. (Moulton); James Mash, Esq. (Northampton); P. McLoskey, M.D. (Rothwell); R. R. Morris, Esq. (Brixworth); P. R. Nesbitt, M.D. (Northampton); W. Percival, Esq. (Northampton); T. Prichard, M.D. (Abington Abbey); A. Robertson, M.D., F.R.S. (Northampton); R. S. Stedman, Esq. (Sharnbrook); H. Terry, jun., Esq. (Northampton); H. Veasey, Esq. (Woburn); R. W. Watkins, Esq. (Towcester); J. H. Webster, M.D. (Northampton); W. S. Wyman, Esq. (Kettering).

There were also present as visitors: — Bryan, jun., Esq. (Northampton); F. W. Dix, Esq. (Long Buckby); J. M. Faircloth, M.D. (Northampton); and F. B. Woods, Esq. (Northampton).

NEW MEMBERS.

The following gentlemen were elected members of the Parent Association, and of the Branch: G. H. Grindon, Esq. (Olney); G. Hammond, Esq. (Irthlingborough); and F. Southam, Esq. (Wansford).

The following members of the Association were also elected members of the Branch: T. Collier, Esq. (Towcester); J. C. Martin, Esq. (Oundle); and W. Williams, Esq. (Guilsborough).

COMMITTEE OF MANAGEMENT.

Henry Veasey, Esq. (Woburn), and W. Thurnall, Esq. (Bedford), were added to the Committee of Management of the Branch.

PRESIDENT'S ADDRESS.

The President delivered the following address:

Gentlemen,—I think there is no one present in this room who is not much gratified by the very respectable and highly influential (I wish I could say very numerous) attendance we have on this interesting and important occasion,—an occasion in every respect adapted to call forth feelings and expressions of satisfaction and delight. Our meeting this day may be compared, and not very inaptly, to a birthday meeting—the birthday of our Branch—the South Midland Branch of the great "British Medical Association." Our existence as a Branch Society had been conceived in idea many months; it was much advanced and quickened at a meeting held in this house last October; it has, since then, grown progressively, well, I hope, and strong, till at length our members fully formed, our functions and faculties duly developed, we this day present ourselves, to our Profession and the world, a goodly offspring of our much-honoured parent stock, proud of our pedigree, fraught with the best intentions, and purposing, God willing, to lead an upright, active, useful, and honourable career through life.

I cannot but feel highly gratified by the honour you have done me in appointing me your President for our first year, and I beg to thank you for it; but at the same time I must confess that my feelings of gratification are by no means without alloy, as I am painfully sensible of my inadequacy to the proper discharge of the duties of my position. Few are there, indeed, if even one amongst us, so little accustomed to take a prominent part in public meetings as myself. My habits are decidedly those of retirement. I am not possessed of a fertile imagination enabling me to make a good speech, and that little which I fain would say, I have seldom nerve to say it well. But, Gentlemen, your kindness has placed me here, and on that I will depend for pardon of deficiencies, and aid in difficulties, should such perchance attend my course. Referring, however, to my appointment in another point of view, losing sight of my personal gratification, on the one hand, and my fears, on the other, I will acknowledge there is one reson why I highly approve of it, and why I consequently have not hesitated to accept it, which reason I will thus explain:—

It seemed very natural that our first annual meeting should be held in this town, and that a member of the Association, resident in Northampton, should be our President; but why, I asked myself, having here as my friends and brother Associates, men high in education, eminent in practice, and eloquent in speech,—why has your favour fallen on me? My grey hairs tell me why. With one exception, and that a very painful one, I am by far the oldest member of the Profession and Association in this town, and I always think that respect for old age, in public as well as in private life, is an amiable trait of character, a mark of good feeling, and in this instance, I verily believe, an indication of that high tone of moral as well as Medical Ethics, which, I hope, will form the character and ever guide the conduct of our Branch. I alluded to one exception, and I should do sad injustice to my feelings did I say no more. There is one whom I am proud to see amongst us now,—would that I saw him in this chair, my friend of more than forty years,—distinguished in literature, elevated in society, and whose career in his Profession has been such that few have equalled, and very few indeed surpassed, whose upright daily walk in life and acts of charity are known to all, but whom, of his inscrutable Providence, it has pleased God to visit with heavy affliction, diminishing his sphere of usefulness, and, especially, depriving us this day of a chairman who would have done great honour to his chair. You know of whom I speak; and those amongst us who, having been present, remember with what grace and dignity Dr. Robertson presided over the General Meeting of the Association in 1844, will best appreciate our loss to-day.

I entertain the utmost esteem for "The British Medical Association", and though I have very seldom indeed attended the Annual Meeting, still I have watched its course with deepest interest, and have always considered it by far the most valuable and useful Medical Association the Profession ever possessed; and it is presented to us, at this time, under the most favourable auspices, free from dissension, free from debt, and possessed of a weekly *Journal*, admirably conducted, and replete with the literature, philosophy, and practice of the art of medicine; though, from the medical library of our Infirmary, I see other journals, there is none I like better than our own, and let it ever be the object of our Associates, as contributors, to make it better still. Our Association has always stood on high ground; our parent stock has seen rough weather, and has "braved the battle and the breeze", but it has withstood them all, and it is at this time, I firmly believe, more deeply rooted, more firmly fixed in the general esteem of the Profession than at any previous period of its history. Would that the circumference of this goodly tree were equal to its root, and that its now many thriving Branches caused the growth of many more to fill up many gaps, then, indeed, would its formation be perfect, its strength extreme, and its fruit abundant.

I will allude but slightly to the subject of Medical Reform. Much good, I have no doubt, may be done, and in due time, I hope, much will be done by judicious legislative enactment; but by far the greatest good must be obtained from ourselves, and lacking that, no laws can ever make us strong. We call ourselves professional brethren,—would that in our daily course of life we realised the thought, and ever took delight in aiding the difficulty and supporting the fortitude of him who is oppressed; then, I believe, neither the stern command of the Poor-law Commissioner, nor the barefaced effrontery and falsehood of the quack need disturb us. If the former could not obtain our service by payment such as beggars have, they would be obliged to pay us as gentlemen; for with all their hardihood and all their power, they dare not rid themselves of medical advice. And of the quack I say, let us maintain our course in friendship, let us hold fast our bond of union, as other professions do, then let him do his worst, and I believe he will seldom hurt us much; it is our weakness which gives him strength. I believe that empiricism is coeval with time, and it will probably last to eternity. Where there is cunning, cupidity, and a disregard of truth, on one side, and sickness, weakness, and credulity on the other, it is but natural that such should be the case. If I with truthful diffidence express my fear, and another with unhesitating confidence proclaims his power, my patient's judgment being frail, am I surprised that he prefers his foe? At no period of time, I believe, did ever a greater amount of quackery prevail than now, and not alone in medicine. In this our boasted nineteenth century, it is

quite impossible to comprehend, in their direct antagonism, the works and wanderings of the human mind. On the one hand we see, with admiration, intellect of the highest order, fruitful of its happiest results in the most astounding discoveries of art and science (see the Electric Telegraph); and on the other we behold with shame men, not unendowed with learning, classical in education, and standing in high position, yet still believing and proclaiming, they *can make this dead wood talk and walk*. How can such things be? May I reply by a quotation from one of the most beautiful passages of Young, who, in one of his "Night Thoughts," says:—

"How great, how small, how abject, how august,
How complicate, how wonderful is man!
How passing wonder He who made him such!"

Gentlemen, I wished to have said a few words more on our much needed social and individual reform, but the subject is so beautifully treated by Dr. Robertson in his Presidential Address, August 7, 1844, that, with his permission, which I have obtained, and yours, which I now solicit, I will read my extract, and sit down.

"But, Gentlemen, although quackery and the other ills inseparable from our lot, are without any obvious remedy, surely the same cannot be said of those wrongs arising out of our defective conduct to each other. Here the check is in our own hands; and if we do not apply it, the fault is entirely our own. Our reciprocal duties are neither abstruse nor unintelligible. To find them out, we need not involve ourselves in the intricacies of Medical Ethics. We may learn them by the simple application of that great moral and social rule laid down by Him who spake as never man spake, 'Whatsoever ye would that men should do unto you, do ye also unto them'. A chivalrous, high-minded, and unshrinking obedience to this golden precept, in the daily intercourse we hold with each other, would alone achieve the greatest good that could possibly be conferred upon our profession. And if we knew the things which belong to our own peace of mind, we would study, individually and collectively, to bring about this greatest and best of all reforms. For what advantageth it if we attain the very summits of professional eminence, unless those summits are gilded by the 'sunshine of the breast'—the smiles of our own calm, clear, and approving conscience? Reputation is, indeed, a bubble, if it is not fairly earned. Apollo's proudest laurels are a badge of dishonour and disgrace, if they are come at by the expense of our honest but less fortunate brethren. Let us ever recollect that fame and emolument are not our noblest enjoyments. Cicero, the most accomplished moral essayist of antiquity, has defined in marked and memorable language our high position and the exalted nature of our duties: 'Homines ad Deos nullâ re propiùs accedunt, quàm salutem hominibus dando'. These words are familiar, and have been often quoted; but yet they cannot be kept too constantly before the mind, if we wish to cherish that respect for our order which is one of the greatest incentives to honourable conduct, both professional and personal. It is by 'doing justly' to our professional brethren, and to all mankind; by 'loving mercy' in the unwearied exercise of our godlike profession; and by 'walking humbly' in the sight of our great Creator, like those who have to give an account, that we shall best fulfil the beneficent mission whereupon we are sent into this world."

CASE OF RHEUMATIC PARALYSIS. BY B. DULLEY, ESQ.

Mr. Dulley brought forward a case of rheumatic paralysis, which, after long and varied treatment, received but little benefit. An interesting discussion ensued as to the pathological condition of the spinal cord in such affections. [This case will be published in the Journal.]

PUERPERAL CONVULSIONS. BY EDWARD DANIELL, ESQ.

[Mr. Daniell's paper will be published in the Journal.]

In reply to questions, Mr. Daniell was not prepared to say that convulsions were more liable to occur in anæmic patients. He was always apprehensive of manual or instrumental interference; and would not hasten delivery, unless it could be done without much disturbance.

Dr. Barker asked if sloughing of the nates or hips had been observed in cases where coma had existed for some time; mentioning a case of a patient who was comatose for seventy-four hours, in whom, no precaution having been taken to change the position, sloughing of the hips occurred to a fearful extent.

Dr. Webster alluded to convulsions as occurring in four consecutive pregnancies, in an anæmic patient of full habit and lax fibre, relieved each time by manual delivery.

Mr. Woods alluded to the necessity of manual interference in cases of abnormal presentation, even though convulsions were present. He advocated the free use of venesection.

Mr. Watkins and Mr. Veasey alluded to the use of chloroform during the convulsive periods; quoting instances in which its administration allowed of manual examination, and even delivery, without a recurrence of the fits.

DIFFUSED ADIPOSE TUMOURS. BY J. H. WEBSTER, M.D.

Dr. Webster introduced a patient with diffused adipose tumours on the back of the neck, beneath the skin, and on the parietes of the abdomen, which dispersed under the free use of liquor potassæ, as recommended by Sir B. Brodie, and which, on the discontinuance of the medicine, returned. [This case will be published in the Journal.]

INTRA-UTERINE FRACTURE, ILLUSTRATED BY PHOTOGRAPHS AND PREPARATIONS. BY T. H. BARKER, M.D.

[This paper will be published in the Journal.]

ADULT WITH ARRESTED DEVELOPMENT OF THE UPPER EXTREMITIES. BY F. H. MARSHALL, ESQ.

CASE OF RECOVERY FROM POISONING BY STRYCHNIA. BY J. M. BRYAN, M.D.

[This case will be published in the Journal.]

THE DINNER.

The members of the Branch, with the Mayor of Northampton, and the Rev. W. Butlin, subsequently dined together at the George Hotel, when the usual loyal and professional toasts were given and responded to.

OFFICERS OF THE BRANCH.

The following are the officers of this Branch for the year: *President*—H. Terry, sen., Esq. (Northampton). *President-Elect*—E. Daniell, Esq. (Newport Pagnell). *Secretaries*—H. Terry, jun., Esq. (Northampton); R. S. Stedman, Esq. (Sharnbrook). *Treasurer*—H. Terry, jun., Esq. (Northampton). *Committee of Management*—T. H. Barker, M.D. (Bedford); J. M. Bryan, M.D. (Northampton); B. Dulley, Esq. (Wellingborough); P. R. Nesbitt, M.D. (Northampton); W. Thurnall, Esq. (Bedford); R. W. Watkins, Esq. (Towcester); H. Veasey, Esq. (Woburn); J. H. Webster, M.D. (Northampton). *Representatives to General Council*—J. H. Webster, M.D.; T. H. Barker, M.D.

METROPOLITAN COUNTIES BRANCH: ADJOURNED GENERAL MEETING.

An adjourned general meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Tuesday, May 26th, at 4 P.M.; George Webster, M.D., President, in the Chair.

MEDICAL REFORM.

Dr. Ogier Ward stated that it had been suggested to him that medical graduates of universities now in general practice, and who might prefer at present to be registered as surgeons, ought to be permitted at any future time to have themselves registered as physicians on relinquishing the practice of surgery and pharmacy, and paying an enrolment fee, without further examination.

Dr. Murphy, in proposing the resolutions of which he had given notice, observed that it had been widely stated that the whole profession was in favour of Mr. Headlam's Bill; and therefore he would have wished a larger number of members of the Branch to be present. His object in proposing his resolutions was one of great importance; for if the principle involved in them were generally recognised, there would be a better chance of having a medical reform bill passed, and there would also be afforded a means of removing a great mistake—the confusion of qualification with license to practise. It had generally been assumed that the being qualified to practise, and possessing a license, were identical; the two, however, were distinct, and indeed there were many persons practising medicine who were by no means qualified to do so, but who had obtained their licenses by the aid of grinders and cramming.

It would be advisable to go back for a short time into the history of the profession, and see how the system of the union of license with qualification had given rise to monopoly. The charter of Henry the Eighth gave to the College of Physicians absolute power over surgeons, who could not perform operations—as bleeding or trepanning—without the authority of physicians. But at the same time the College of Physicians admitted graduates from all the foreign universities; a nominal *ad eundem* admission into the Universities of Oxford or Cam-

bridge being alone demanded. Harvey, the boast of the College, was a graduate of Padua. But afterwards this wide door of entrance into the College was narrowed, so that no one could practise in London except by permission of the College, to which he could not be admitted unless he were a graduate of Oxford or Cambridge, and therefore, unless he had signed the thirty-nine articles. Hence the entire class of dissenters in religion, and all persons who could not afford an university education, were shut out from practising medicine within the dominion of the College of Physicians. But the public beginning to look elsewhere for medical advice, the apothecaries soon began to be established as practitioners; and the physicians could not displace them. The contests of the physicians and apothecaries were well portrayed in Garth's *Dispensary*. In the reign of Queen Anne, the question as to the legality of the practice by apothecaries was tried by law. An apothecary was prosecuted by the College of Physicians, in the court of Queen's Bench, for practising illegally. The decision pronounced was in favour of the physicians; but, on the case being carried before the appellate jurisdiction of the House of Lords, that body reversed the former decision, on the ground that the apothecary, understanding medicine, was fully entitled to practise. Thus matters went on until the Act of 1815; previously to which there was the same desire for medical reform as now, and the same complaints against quackery and illegal practice. The Act of 1815, contrary to the intention of its originators, gave the licensing of the general practitioner into the hands of the Apothecaries' Company. And now the monopoly of the College of Physicians was divided with that of the Society of Apothecaries; and the most strenuous endeavour was made to keep up the monopoly. At the present time, the physician is completely supplanted by the apothecary—a state of affairs which is met with nowhere else in the whole world.

Mr. Headlam's present Bill (Dr. Murphy went on to say) differed altogether from his former one in regard to the constitution of the council. In his Bill of last year, it was proposed that there should be in all twenty-four members, of whom eight should be elected by the whole profession, the remainder being the representatives of the universities and colleges, one from each. Now three of the Scottish universities were thrown together to return one member, in order that representatives might be given to the Apothecaries' Companies of London and Ireland. The apothecaries in Ireland had no right to practise medicine; but they had the exclusive privilege of selling and compounding drugs. In the examination of surgeons, also, the two Bills differed. In Mr. Headlam's former Bill, the examination in medicine was proposed to be conducted by the College of Physicians, assisted by five surgeons in general practice. In the present Bill, it was proposed that half the board of examiners in medicine should be constituted from the Society of Apothecaries. And in other parts of the examination, the College of Surgeons—than which no body in the profession ought to stand higher, and to which belong some of the highest names in medicine—is mixed up with the Society of Apothecaries.

The license of a college, Dr. Murphy said, should not involve the mere testing a man's qualification to practise at the time. There should be conjoined with it an obligation to support the dignity and honour of the profession. But the right to give licenses to practise should not be exclusively confined to the colleges; the universities should be permitted to license, as well as to educate and grant degrees in medicine, if they do these rightly. He thought that now, when university education could be more readily obtained than formerly, it should rather be the duty of the colleges and universities to unite in producing a well educated class of practitioners, instead of a few specially educated, while the mass of the profession was inferior. He wished that the Colleges of Physicians and the Universities would restore the profession to the grade of physicians instead of retaining in it that of apothecaries.

Dr. Murphy concluded by moving the following resolutions:—

"The Metropolitan Counties Branch of the British Medical Association, feeling the deepest interest in the success of the present effort to reform the medical profession, deem it most advisable—

"1. That the universities and colleges should mutually concede certain rights and privileges for the general object of reform.

"2. That the rights of the Colleges to grant or withdraw licenses should be strictly preserved.

"3. That the Universities, as the seats of education, both general and medical, should be protected; and that Degrees in Medicine granted by any University recognised by the Council of the proposed Reform Bill, shall be considered a qualification sufficient to demand a license to practise without further examination."

Dr. Camps seconded the motion.

Dr. Lankester, while agreeing generally with the opinions expressed by Dr. Murphy, thought that Dr. Murphy had fallen into the common error of confounding the organisation of the medical profession with the relation of the profession to the State. He could have wished that the Government would look on the matter from a public point of view, and that having constituted an examining board to grant a general license to practise, it would leave the subsequent organisation into physicians, surgeons, and apothecaries, to be managed by the profession itself. However, the distinctions in the profession, which had arisen artificially, were recognised both in Mr. Headlam's and in Lord Elcho's Bills. In accepting either of these, we were taking the least of two evils. The Bills were an improvement on the present state of things, because they both repealed certain laws; but they were an evil so far as they recognised and perpetuated the existing colleges. It was, however, felt by all that there was no chance of having a Bill passed in opposition to the London Colleges of Physicians and Surgeons. On this ground, Lord Elcho's Bill would be altogether opposed; and the question was, whether we should accept Mr. Headlam's Bill with modifications. He believed that the Reform Committee of the Association had agreed as to the *principles* of the Bill; while some alterations might be required in details. He feared, while not objecting to the principle of Dr. Murphy's resolutions, that the tendency of the second of them would be to give too much power to the Colleges.

Dr. Edward Smith thought that a resolution should be passed pledging the meeting to support one only of the Bills. If medical legislation were now beginning altogether, there might be provision for having only one examination for the license to practise. But now there were many corporate bodies, to which the profession owed much, whose claims would have to be considered. It appeared to him that in Mr. Headlam's Bill mutual concessions had already been made between the Colleges and Universities.

Dr. Camps complained that the tenor of Clause xv of Mr. Headlam's Bill, as reported in the Journal of last week, was not correctly given there, so far as it related to the registration of physicians. Certain words (marked in italics) had been omitted from the Clause, which stood thus:

"The Medical Registrars shall (immediately after the commencement of this Act), under the authority of the respective Branch Councils of England, Scotland, and Ireland, proceed to register in books, to be kept for that purpose in each division of the United Kingdom respectively, to be called 'The Physicians' Registers,' on payment of a fee of ten shillings, the name and place of abode, together with a description of the testimonials, *including a statement whether as a Licentiate or Fellow*, of every person then practising as a Physician in either of the three kingdoms respectively, and not engaged in the art and mystery of an Apothecary, or in the practice of Pharmacy, who shall, on or before the first day of December, 1857, apply to be registered, and who shall at the time of such application be of at least twenty-four years of age, and who, prior to the passing of this Act, shall have taken a degree in medicine in any English, Irish, or Scotch University, or who shall produce his diploma or license, or shall produce a duly attested certificate, or such other proof as shall be satisfactory to the Branch Council of each part of the United Kingdom respectively, of his having obtained a diploma or license to practise as a Physician, dated prior to the passing of this Act, and granted by any of the English, Irish, or Scotch Colleges or Corporations enumerated in Schedule (C) to this Act, No. 1." He objected to the words "whether as Licentiate or Fellow."

The President thought that an agreement to accept Mr. Headlam's Bill as the basis of proceedings was the only way of getting the question settled. On previous occasions, when the Government had been urged to take up the question of medical reform, they had pleaded the disagreements of the profession as a reason for having nothing to do with it. Now, for the first time, the corporations were inclined to agree with the profession. At first he had regarded these proceedings with some suspicion; but much of this feeling had been removed. He reminded the Branch that when the proposed plan of electing representative members of the profession on the Council had been set aside, it was agreed that one-third of the Council should consist of members to be nominated by the

State, not belonging to the Councils of the Corporations or Universities. He hoped the Branch would stand firmly to this proportion of members.

After some further discussion, it was agreed that a preliminary resolution should be first passed.

Dr. Lankester therefore proposed the following resolution, which was seconded by Dr. Stewart, and unanimously carried: "That this meeting recognises in Mr. Headlam's Bill many of the leading principles of medical reform contended for by the British Medical Association, and would accept it, with certain modifications, as an instalment of that full reform which the public and the profession have a right to demand."

After some further discussion, the following resolutions were proposed and agreed to, on the motion of Dr. Lankester:

"That this meeting urge the necessity of the following alterations:—

"1. That the Medical Council consist of person of whom at least one-third be nominated by Government from among members of the profession not constituting the governing bodies of the Corporations and Universities.

"2. That persons who have taken a degree in medicine in any University of the United Kingdom be not required to undergo any further examination in order to obtain a license from the Colleges of Physicians to practise their profession in accordance with the bye-laws of the College from which they obtain their license.

"3. That persons already in practice in Great Britain with the degree of a British University shall be able to register themselves as physicians at the time of passing and at any time after the passing of the Medical Act.

"4. That the Apothecaries' Society of Dublin, being a purely trading body, has no claim to be represented in the Medical Council of the United Kingdom."

The resolutions proposed by Dr. Murphy were then adopted by the meeting.

Dr. Murphy proposed the following resolution, which was seconded by Dr. Ward, and carried:

"That the Branch has observed with surprise that in Mr. Headlam's present Bill, Clause xv and Schedule C altogether exclude the graduates in medicine at present in practice from the register, unless examined and licensed by the Royal College of Physicians; and further, that Clause xxiv, regarding the names to be struck off the register, is most ambiguously expressed; and they are of opinion that the words 'Provided always that the name of no person shall be erased from the register on the ground of his adoption of any theory in the practice of medicine or surgery' should not be inserted."

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, May 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Yorkshire. [Annual Meeting.]	Cutlers' Hall, Sheffield.	Thurs., June 4th, 1 P.M.
East Anglian. [Annual Meeting.]	Norfolk Hotel, Norwich.	Friday, June 12, 1 P.M.
Midland. [Annual Meeting.]	Town Library, Leicester.	Thurs., June 18th, 2 P.M.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D., *Secretary.*

Worcester, May 12th, 1857.

Editor's Letter Box.

HÆMORRHAGE FROM THE VAGINA.

Letter from J. M. Coley, M.D.

Sir,—Having read in the number of your Journal for May 16th, an account of a fatal case of hæmorrhage arising from ulceration and partial destruction of the mucous membrane of the vagina in a young girl, communicated by Mr. Obré, I am induced, with your permission, to inform him that the case is not a singular one. Many such cases have come under my notice. One, which was nearly fatal, occurred at the Hôtel Dieu a few years ago, during my residence at Paris, under the care of Dr. Trousseau, who delivered a clinical lecture on the occasion, which I attended. The girl, like Mr. Obré's patient, had never menstruated. The treatment adopted by Dr. Trousseau, after the usual modes of plugging had been found ineffectual, consisted in the gradual application of a succession of small linen plugs, formed by tying them at a distance of an inch and a half or two inches from each other to a piece of string. The plugs were formed by folding small pieces of linen rag, each about three inches long, which, when complete, resembled the tail of a kite. As soon as the plugs were successively passed through the hymen, so as completely to fill up the vagina, the discharge of blood entirely ceased, and the life of the patient, who had been apparently moribund, was saved. At the end of three or four days, a few of these small plugs were gently withdrawn by means of the string, and this operation was repeated daily afterwards, until all the plugs found to be detached were removed.

After the bleeding in these cases has been suppressed, and all the plugs have been extracted, a purulent discharge succeeds. This proceeds from the ulcerated surface, and is soon cured by injections of a solution of nitrate of silver or diluted nitric acid.

I am, etc.,

J. M. Coley.

10, Bernard Street, Russell Square, May 20th, 1857.

HÆMORRHAGE FROM THE VAGINA.

Letter from T. Snow Beck, M.D., F.R.S.

Sir,—In the remarks upon the very interesting case of fatal hæmorrhage from the mucous lining of the vagina, published in your Journal of May 16th, Mr. Obré "regards it as an unique case, both as relates to the cachexia or blood disorder, which must have favoured such a profuse and irremediable hæmorrhage, and the limitation of it to the mucous surface of the vagina," and considers that the "bleeding was altogether rare and peculiar."

I am not aware of any similar case recorded wherein the hæmorrhage proved fatal, and wherein the bleeding has been shown, by *post mortem* examination, to have proceeded from the mucous membrane of the vagina; but it is far from unusual to meet with copious discharges of blood in the female, which arise solely from the mucous membrane of this canal.

Different conditions of the mucous membrane appear to admit of this hæmorrhage. It is often a consequence of the commencement of the catamenial function; when it may return for several months, and then cease, or the condition of the membranes which induces it may continue, and lay the foundation of much future suffering. Profuse discharges of blood also accompany an irritative inflammation of the mucous membrane of the vagina. I pointed out this fact in 1852, in a paper *On Inflammation of the Vagina*, in the following words. The catamenial periods become gradually approximated "until the menstrual discharge appears every fortnight, or oftener, continues seven or eight days, and consists of a copious flow of bright florid fluid, often mixed with coagula of blood. In some cases, I have known a red discharge, depending on inflammation of the vagina, to continue for six weeks without intermission, and to withstand the effect of various astringent remedies, until the inflammation was subdued by the free application of leeches. Nor was this discharge of trifling amount, for both from its quantity and the effect it produced on the constitution, it might strictly be termed menorrhagia." (*London Journal of Medicine.*) Hæmorrhages from the mucous membrane of the vagina are also frequently met with about the middle period of life, especially in women who have had large families, and depending upon congestion of the numerous plexuses of veins

in the pelvis. It is also a consequence of the formation of pelvic tumours, etc.

The points of practical importance in these hæmorrhages are, that astringent medicines have little or no effect in restraining them, and that the employment of local applications is of the greatest importance. Both these facts appear to have been strikingly illustrated in the case just recorded, and the value of them in a practical point of view must be my excuse for wishing to direct more particular attention to them.

I am, etc., T. Snow Beck.

9a, Langham Place, May 1857.

MEDICAL REFORM: IMPORTANCE OF PETITIONS.

Letter from A. Stookes, M.D.

Sir,—The experience of twenty-eight years has convinced me that medical reform is only to be procured by a sort of poll of the whole medical profession in the kingdom. I would therefore suggest, as Mr. Headlam's Medical Reform Bill is again before the House of Commons, to the Council of the British Medical Association the desirability of sending to the secretaries of every branch, and to other influential and active members of the Association, blank forms of petitions to which they may procure signatures. The petitions when signed should not all be sent to Mr. Headlam, but to the members for the county, city, or borough from which they emanate, with an urgent request that the M.P. will not only present the petition, but back its prayer with his influence. If this is done well, medical reform will be accomplished; but, without some such method of procedure to interest individual members of Parliament in the movement, there will be on the second or third reading either "no house," or another select committee; in either case medical reform is "burked." I recommend blank forms to be sent because, in a busy profession like ours, what is every one's business is often nobody's business; and every one thinks every one else should get up the petition, and so no petition is got up. Blank forms would require little more than signatures, and these, with comparatively little trouble, could be procured; and every town, village, and hamlet, with the aid of the machinery the Association can command, could send up its petitions for reform.

I am, etc., A. Stookes.

Rodney Street, Liverpool, 25th May, 1857.

THE PRIVILEGE OF PRACTICE IMPROPERLY RESTRICTED BY MR. HEADLAM'S BILL.

Sir,—In reprinting, in the last number of the Journal, the Bill introduced into the House of Commons on the 13th May by Mr. Headlam, you have made one important and grave omission. In the Bill, as ordered to be printed by the House, the twenty-third clause, headed "Registered Persons to belong to the Colleges of the Country in which they practise," stands thus:

"xxiii. Every physician or surgeon having been admitted as a Member or Licentiate of a College of Physicians or Surgeons, and every surgeon admitted of the Faculty of Glasgow, who shall, *after the period of two years from the date of his admission*, remove from that part of the United Kingdom in which he has been so admitted, shall cause himself to be enrolled as a Member or Licentiate of the corresponding College or Faculty of that part of the United Kingdom to which he shall so remove, and shall be entitled to be so admitted without further examination, on payment of an enrolment fee, etc."

In reprinting the Bill in the last Journal, you have omitted altogether the words marked above in italics, "*after the period of two years from the date of his admission*"; or rather, you have substituted for these words a single word, "*afterwards*", thus giving a very different meaning indeed to the clause.

In all its long and praiseworthy efforts in the cause of medical reform, the Medical Association, besides insisting that throughout the United Kingdom there should be every where both an elevation and an unanimity in the medical education and examination of those entering the profession, has also always held the principle that, after thus first attaining unanimity in these two primary points, there should be subsequently a perfect equality of privilege in practice among licensed medical men.

But the twenty-third clause in Mr. Headlam's Bill *entirely* upsets and repudiates this last leading principle in medical reform. By its provisions, a man who has been licensed by a College in London cannot forthwith proceed to practise in Scotland or Ireland; or a man licensed by a College in Dublin, Edinburgh, or Glasgow, cannot forthwith proceed to practise in England. After obtaining the license of a College, he must first reside within the jurisdiction of that College *for two years*, before being legally able to practise in another part of the United Kingdom.

Could anything more truly absurd or more truly illiberal be devised? What would we all think if a corresponding clause were inserted, that no medical books or medical journals should be allowed to pass, until two years after the period of the printing and publication of them, beyond the limits of the individual kingdom in which they were first printed and published, whether that kingdom be England, Ireland, or Scotland?

As I am writing, allow me to add, that, with many others, I greatly approve of Lord Elcho's Bill in preference to that of Mr. Headlam's, because it deals far more efficiently, thoroughly, and successfully, with the whole question of Medical Reform. Lord Elcho's Bill takes away the power of legally licensing to practise from all Universities, Corporations, Colleges, and Companies; and vests this power in three new central boards in London, Dublin, and Edinburgh, made up of examiners, and it is to be hoped of the very best men, elected out of these Universities, Corporations, and Colleges. The real fact is, we have, in England, altogether outlived these antiquated, mediæval institutions, with all their narrow and grasping exclusive privileges. Mr. Headlam's Bill is essentially a Bill not for the abrogation, but for the extension and increase of these privileges, as far as the old medical corporations or medical guilds of England, Ireland, and Scotland, are concerned. In these respects Mr. Headlam's measure is as preposterous and mistimed as if he were to introduce a Bill for giving increased and extended monopolies to any of the other old trade corporations or guilds of London, Dublin, Edinburgh, and Glasgow. If he, or any other Member, were to introduce a Bill to give new and extended exclusive powers and revenues to the companies of "goldsmiths," "skinners," "tailors," etc., of these cities; and a right to educate, examine, and exact fees from the goldsmiths, skinners, tailors, etc., of all the other cities and towns of the empire, would such a proposition be likely to be enforced by Parliament? I think not. And yet it would be fundamentally the same in principle as Mr. Headlam's Bill.

Lord Elcho's Bill is only in accordance with the march of opinion, and the progress of the times in all other matters, when it removes the exclusive privileges of all our present medical institutions, and disfranchises all Universities and Corporations from the power of granting legal licenses to practise. I believe, at the same time, that if Lord Elcho would alter the constitution of his Council, so as to make it "representative," his Bill ought to receive, and betimes would receive, the earnest support and advocacy of such an independent body as the British Medical Association. At the same time it must be remembered that Sir George Grey, Mr. Macaulay, and other great statesmen, who have studied the subject of Medical Reform, have almost all, if not all, advised a Council elected by the Crown, answerable to the public and the profession in Parliament. I am, etc.,

A Fellow of Two Colleges.

May 25th, 1857.

[We plead guilty to the omission referred to in the former part of the above letter. The words referred to are, we admit, objectionable; and, by reference to p. 461, it will be seen that the Reform Committee of the Association recommends them to be expunged. As for the rest, we certainly cannot see that Mr. Headlam's Bill, any more than Lord Elcho's, preserves absolutely intact the rights and privileges of the corporations. The duty of examining is by Mr. Headlam's Bill vested in the corporate bodies; but the acts of each *one* of these will be under the supervision of the representatives of *all*. It is virtually the entire Council that will grant all licenses to practise. (See especially Clauses xxvi and xxvii.) The allusion to "goldsmiths", "skinners", "tailors", etc., is rather puzzling to us. Surely, "A Fellow" does not mean to say that, for instance, Mr. Headlam's Bill gives the College of Surgeons in London *per se*, an absolute right to educate and examine surgeons from all other places. If he really mean this, we must be allowed to differ from him. If, on the other hand, he objects to having a controlling power exercised over the practice of medicine and surgery, and wishes any man to be able to set himself up as a doctor in any city or town as easily as any one can enter into business as a goldsmith, skinner, or tailor, all we can say is, that such free trade in medicine is not exactly what is wanted. Editor.]

MEDICAL REFORM.

Letter from D. Nicol, M.D.

Sir,—Comparing the two Medical Bills now before the House, I perceive that by Lord Elcho's all registered persons are entitled to recover, in Courts of Law, reasonable charges for medical and surgical aid, etc., rendered to their patients; but by the Bill of Mr. Headlam, approved and promoted by our Association, physicians are excluded from participation in this provision for securing to other medical practitioners a legal claim to professional remuneration.

If I remember rightly, the Medical Bill of the last Parliament made no such exception in the case of the physician; and what the motive or purpose of his exclusion in the present Bill may be, I am not aware. The effect, however, is less obscure; for, after justly exacting certain qualifications for medical practice, comprising time, expense, and other circumstances of study, examinations, fees, and registration, this Bill, by denying to the physician a legal claim to remuneration for his professional services, virtually declares them valueless, and absolves from liability all who may be dishonest enough to avail themselves of this protection, so unaccountably granted them by law.

If it be the desire of some to maintain the traditional myth, that the physician of the present day is still in reality the patron of classic times; that his professional rank and independent wealth are synonymous and convertible terms; that he consecrates his time, study, skill, and even personal safety, to the free service of his clients, and shrinks from the indelicacy of a fee, or revolts with honourable disdain from the degradation implied in the acceptance of a *locatio vel conductio;*—let us protest, at least, against the illusive pedantry being solemnly accredited by an Act of Parliament, or deliberately countenanced by the British Medical Association. Either let us at once become the patron on our assumption of the honours of the doctorate, and wait for them until we can afford to wear them, or let us repudiate this vapid sham, as worthy only of a corporation of gents and snobs, or of that section of the fraternity of attorneys that clamours for the distinction of appearing in County Courts and Police Offices with periwigs and togas, as badges of their affinity likewise with the Roman patron.

But, as we cannot seriously suppose that this extraordinary exception is really meant to imply either that the Bill deals with the physician as a modern Crassus; that it grants him alone exemption from the suspicion of mercenary service; that it ignores the value of his professional aid; that it denies him common justice, or licenses dishonesty; so neither can we believe it intended by a legal fiction to confer any honourable distinction on the character or vocation of the physician, since it is sufficiently notorious that he not only receives, but expects—nay, demands—and lives by his fees, and that no patient, above the condition of a pauper or unfortunate, looks for his services on any other terms.

The barrister, although appropriating to himself the gloss of this fiction, and, while rejoicing in the mythical character of the patron, awards his *protégé* but the name of client, invariably secures his *quiddam honorarium* before he renders the services for which it is bestowed—and, *proh pudor!* not unfrequently for services never rendered. But this practice, it is quite plain, cannot, except in a few instances, obtain in the case of the physicians; since it may be readily understood that, from the nature of their services, the great majority of them, acting as general practitioners, of necessity must, and do, keep an account of their fees, or visits, or operations, or other professional acts; and are, or expect to be, paid only at stated periods.

It would appear to me equally puerile and unjust to encourage the enactment of a law which, if really based on the custom of Roman patronage, has neither truth, common sense, nor utility, to recommend it; and which, in effect, would render the modern physician ridiculous in the first instance, and then leave him the prey of the dishonest.

I am, etc.,

D. Nicol.

Swansea, May 21, 1857.

PROXY VOTES IN ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from R. W. Jones, Esq.

Sir,—My letter, in page 447 of your last publication, has elicited a very polite and courteous note to me, from the indefatigable benefactor and originator of the above institution, Mr. John Propert, to whom I beg to tender my best thanks. By transferring the *substance* of his letter to your columns, you may probably obviate the necessity of admitting any more communications on the same subject. He says:—

"The Council and myself are quite of the same opinion as yourself, in respect to the mode of voting; and be assured it will be altered before the next election."

Mr. Propert sent me a list of the various candidates at the last election, which I enclose, leaving you to exercise your discretion as to publishing it, in whole, or in part, as suggested by me on the 15th instant.

I am, etc., R. W. Jones.

Beaumaris, May 24th, 1857.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from W. B. Kesteven, Esq.

Sir,—Having been present at the late annual meeting of the Royal Medical Benevolent College, I take the liberty to inform you that the report of the meeting furnished to you, and published in the Journal for May 16th, is more "harmonious" (?) than strictly correct.

The courteous adoption of an amendment proposed by those who have been designated "dissentient governors", and the cordial reception of that courtesy by the latter, must not be interpreted as implying the removal of all grounds of complaint. On the contrary, these still exist. Endeavours are at this moment being made to negociate with the council for a return to the original intentions of the College.

I doubt not but that it is the determination of the so-called "dissentients" steadily to pursue by all legal means the objects they have announced to the council. "Harmony" will not, cannot, be restored, until a permanent reduction of the charge for the education of exhibitioners, to the *maximum* of thirty pounds per annum, shall have been secured by the laws of the College.

I am, etc.,

W. B. Kesteven.

Upper Holloway, May 20th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, May 21st.

MILITIA MEDICAL SERVICE.

Mr. Brady asked the Under Secretary for War whether it was the intention of Her Majesty's Government to include the militia medical service in the inquiries about to be instituted relative to the Army Medical Department.

Sir J. Ramsden replied in the negative.

THE UNIVERSITY OF ST. ANDREW'S.

Mr. E. Ellice wished to put a question to his right honourable friend the President of the Committee of Privy Council, with reference to a statement represented to have been made by him of the manner in which medical degrees were conferred by the University of St. Andrew's. His right honourable friend was represented to have said that those degrees were made a matter of commerce, and given without regard to the qualifications of the candidate. Now, this was wholly at variance with facts; and he wished to give his right honourable friend the opportunity of correcting the impression that had gone abroad, by asking him whether he had intended to make the statement attributed to him.

Mr. W. Cowper had no hesitation in informing his honourable friend that if the impression to which he referred had been conveyed by what he had said, he must have been greatly misunderstood. He (Mr. Cowper) particularly stated that the practice of giving diplomas without examination was one which formerly prevailed at the University of St. Andrew's, but which had ceased. He mentioned the old practice as an illustration of the necessity for the adoption of more definite rules than at present existed; but he never meant to imply that that practice prevailed at the present time.

Monday, May 25th.

Petitions were presented by Sir A. Ramsay, from the medical men in Rochdale, in favour of Mr. Headlam's Medical Bill; by Mr. T. Duncombe (2), from Mr. John Gibbs, of St. Leonard's, Sussex, against the Medical Profession Bills, and the Board of Health Bill.

SURGEONS IN THE MILITIA.

Colonel Greville wished to ask the Under Secretary for War whether it was the intention of the Government to issue pay to the surgeons of militia regiments who have been called upon by the War Department to reside at the head-quarters of the permanent staff, for the purpose of taking medical charge of the officers, non-commissioned officers, and their families; and, if so, at what rate.

Sir J. Ramsden said that it was the intention of the Government to do so at the rate laid down in the militia regulations of 1854.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

*Tuke. On May 23rd, at the Manor House, Chiswick, the wife of Harrington Tuke, M.D., of a son.

MARRIAGES.

Ross—Wadham. Ross, J. T. C., Esq., F.R.C.S., Bengal Army, to Sarah, second daughter of the late Thomas Wadham, Esq., of Frenchay House, Gloucestershire, at Clifton, on May 23rd.

DEATHS.

Atkinson. On May 21st, at Iver, Buckinghamshire, Ellen Elizabeth, wife of William Atkinson, Esq., Surgeon.

Browne. On May 20th, at 37, Euston Square, aged 6 years, Mary Hullett, second child of J. Hullett Browne, M.D.

Dulhunty. On May 23rd, at Paignton, Devon, Jane, widow of the late John Dulhunty, Esq., many years Surgeon of the Royal Naval Hospital at Plymouth.

Kinsey. On May 4th, at sea, on board the steam-ship *Bentinck*, Maria, wife of R. B. Kinsey, Esq., Surgeon Bengal Army, aged 41.

Morley, Thomas Wm., Esq., Surgeon, aged 57, on May 17th.

Walker, Henry, Esq., late Professor of Physiology and Comparative Anatomy in the Calcutta Medical College, and formerly Surgeon to the Governor General Lord Hardinge, at Hendon, aged 54, on May 22nd.

APPOINTMENTS.

D'Olier, Isaac A., M.B., elected Surgeon to the Spanish and Portuguese Jews' Lying-in Hospital.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 22nd, 1857:—

Dyer, John Edward, Hornsey Road
Evans, John, Gloucester Cottage, Regent's Park
Fluder, Charles John, Lymington, Hants
Greene, John, Birmingham
Gregory, George, Westhoughton, near Bolton, Lancashire
Gerrard, John Stothert, Falmouth, Jamaica
Hyde, Richard Armstrong, Longford, Ireland
Meredith, Henry Price, Upper Seymour Street, Portman Square
Pritchett, Henry, York
Verchère, Albert Marc, Geneva, Switzerland
Wilson, Henry Brase, Hobart Town, Tasmania

At the same meeting of the Court—

Lilburne, James
Haran, Timothy John

Passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members, the former of the Edinburgh, the latter of the Dublin College of Surgeons: their diplomas bearing date respectively April 16th, 1845, and October 2nd, 1849.

Monday, May 25th:—

Hill, Joseph Butler Kent, Lymm, near Warrington, Lancashire
Kearney, Edward, Clomnaney, Carndonah, Ennishowen, co. Donegal
Lewis, Henry, Blackheath
Lewis, James Potter, H.E.I.C.S.
Meers, Edward Evan, Mile End
Monckton, Francis Alexander, Maidstone
Rogers, Richard Henry, Youghal, co. Cork
Simpson, Robert, Shapp, Westmoreland
Sly, William, Wincanton, Somerset
Whitcomb, Henry Morrny, Miltown, Milbay, co. Clare

At the same meeting of the Court—

Ward, Marmaduke Philip Smith, of the Royal Marines, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date June 30, 1848.

Apothecaries' Hall. Members admitted on Thursday, May 21st, 1857:—

Alexander, Finlow, East Harling, Norfolk
Holt, James, Castleford
Hoyle, Thomas Elkanah, Heighingham, Lincoln
Jones, John Edwards, Dolgelly, North Wales
Knaggs, Henry, Huddersfield
Lloyd, Edmund, Richmond, Surrey
Ruttledge, Thomas Edward, Farringdon, Berks
Sharp, Christopher, Oldham, Lancashire
Walker, Thomas James, Peterborough

HEALTH OF LONDON:—WEEK ENDING MAY 23rd, 1857.

[From the Registrar-General's Report.]

The mean temperature of the air during the last fortnight has been 14° degrees higher than that of four weeks preceding, and the salutary effect of the change is distinctly seen in the present return. The weekly deaths registered in London had been, in April and in two weeks of May, generally above 1,050; in the week that ended on Saturday the number was 948. In the ten years, 1847-56, the average number of deaths, in the weeks corresponding with last week, was 1,007. But as the deaths of last week occurred in an increased population, it is necessary, with a view to comparison, to raise the average in proportion to the increase, whereby it will become 1108. The deaths of last week were less by 160 than the number which would have occurred, under the average rate of mortality, in third week of May.

In some recent returns it was seen that the deaths attributed to diseases of the organs of respiration were about 200; a warmer temperature reduced them last week to 167. The average derived from corresponding weeks in previous years is, when corrected, nearly the same, namely 165. Fatal cases of bronchitis declined in the last two weeks from 102 to 84; those of pneumonia from 75 to 66. The deaths caused by zymotic diseases declined, in the same period, from 194 to 168, and the mortality of this class is unusually low, for the average is 253. A third part of the deaths enumerated under this head was caused by hooping-cough, which carried off 56 children. Typhus (including common fever), which at this period, in former years, usually carried off about 50 persons, was fatal last week to 33. Scarlatina and small-pox exhibit a marked decrease: the former was fatal in only 12 cases; the latter in only one, which occurred in a family in Somers Town, in which four children were attacked, none of them having been vaccinated before one child had discovered symptoms of the disease. A girl of sixteen months died of "varicella, pneumonia," in Princess-street, Marylebone. No less than 8 persons died from syphilitic disease, at ages varying from one month to 67 years. Two persons died of intemperance. The oldest person recorded in this week's returns is a centenarian, who is stated to have lived to the age of 102 years. She was a widow, and died on the 17th May, at 5, Queen Elizabeth's College, Greenwich. A carpenter died on the 16th, at 6, Golden's-place, Lambeth, at the age of 79 years, who is reported to have been a great-grandson of Defoe.

Last week the births of 885 boys and 748 girls, in all 1633 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1489.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·706 in. The barometer was at its highest point 29·96 in. at the beginning of the week, and fell to 29·36 in. at the end of it. The mean temperature of the week was 58·9°, which is 5·3° above the average of the same

week in 43 years (as determined by Mr. Glaisher). The mean temperature was above the average on every day except Friday, and on the first two days the excess was about 9°. The *highest* temperature occurred on Monday, and was 79°; the *lowest* also occurred on that day, and was 45°, giving a range of 34°. The mean dew-point temperature of the week was 50·5°, and the difference between this and the mean temperature of the air was 8·4°. The wind blew on every day from the south-west till Friday afternoon, when it changed to north-east. Rain amounting to 0·35 in. fell on the last two days. None fell on any of the previous days, with the exception of some light showers on Thursday.

UNIVERSITY OF ST. ANDREWS:—MEDICAL EXAMINATION PAPERS. MAY, 1857.

The following were the questions proposed to the candidates for the degree of M.D., at the recent examination:—

First Examination. First part. *To be Translated into English.* Est etiam observatio necessaria, quâ quis in pestilentia utatur adhuc integer, cùm tamen securus esse non possit. Tum igitur oportet peregrinari, navigare. Ubi id non licet, gestari, ambulare sub divo, ante æstum, leniter; eodemque modo ungi: et vitare fatigationem, cruditatem, frigus, calorem: multoque magis se continere, si qua gravitas in corpore est. Tum neque mane surgendum, neque pedibus nudis ambulandum est, minimeque post cibum, aut balneum: neque jejuno, neque cœnato vomendum est: neque movenda alvus; atque etiam, si per se mota est, comprimenda est. Abstinendum potius, si plenius corpus est. Itemque vitandum balneum, sudor, meridianus somnus, utique si cibus quoque antecessit; qui tamen semel die tunc commodius assumitur; insuper etiam modicus, ne cruditatem moveat. Alternis diebus invicem, modo aqua, modo vinum bibendum est. Quibus servatis, ex reliquâ victûs consuetudine quàm minimum mutari debet.—Give the derivation and primary meaning of the following words:—Oxygen, Chlorine, Iodine, Aphonia, Stethoscope, Hæmoptysis, Rhinoplastic, and Cathartic.

Second Part. *Chemistry.* 1. Enumerate the compounds which oxygen forms with nitrogen; stating what they are, and writing their formulæ. 2. Give the processes for the formation of sulphuric, muriatic, and nitric acids. 3. State the principal tests for arsenious acid in solution; also for the salts of lead in solution. What are the antidotes for the latter, and for corrosive sublimate? *Materia Medica.* 4. What are the pharmacopœial preparations of mercury that are used internally? State their uses and average doses. 5. What are the principal uses and proper (average) doses of the following preparations:—1. Gallic acid. 2. Tincture of aconite. 3. Solution of arsenite of potash. 4. Extract of belladonna. 5. Tincture of cantharides. 6. Acetic extract of meadow saffron. 6. Write a Latin prescription (without using abbreviations or symbols) for an aperient draught; and give directions that it should be taken the first thing in the morning, and that the dose should be repeated every third day.

Second Examination: Anatomy and Physiology. 1. Sketch briefly the distinctive characteristics of man. 2. What is the average quantity of food required for the maintenance of the human body in health? Give diet-scales respectively suited for men in regular active exercise and for the inmates of workhouses, with reasons for your selection. What are the principal arguments for and against the moderate use of alcoholic drinks? 3. Give a sketch of the ordinary and minute anatomy of the salivary glands, and state what you know regarding the chemistry and functions of their secretions. 4. Describe the anatomy of the shoulder-joint, and give the attachments of the muscles by which it is strengthened. 5. What are the effects of continuously respiring a vitiated atmosphere? What is the average mortality in Great Britain, or any part of it? How far is it supposed it might be decreased by sanitary improvement?

Third Examination. [N.B. In answering the practical questions the examiners require every candidate to specify the mode of treatment he is in the habit of adopting, and the doses of the medicines which he prescribes.] *Pathology and Practice of Physic.* 1. Describe the principal modes in which the blood is altered in disease. 2. Explain how diseased conditions of the heart, liver, and kidneys may produce dropsy. How would you treat the dropsy arising from these different causes? 3. Describe the symptoms and treatment of delirium tremens. How may it be distinguished from acute inflammation of the brain? 4. How would you distinguish between carcinoma and chronic ulceration of the stomach? In what different modes may the latter prove fatal? Give a sketch of the treatment you would adopt in these diseases. 5. Describe an ordinary case of continued fever, terminating in recovery. State how you would treat such a case. What are the arguments for and against special fever-wards in hospitals?

Fourth Examination. Surgery. 1. Describe the mode of performing the operation of lithotomy; and give its advantages and disadvantages as compared with lithotripsy. 2. What are the symptoms and the diagnostic marks of the different kinds of iritis; and what the treatment proper for each? 3. State the causes, symptoms, progress, and treatment of cancrum oris. *Midwifery.* 4. Describe the structure of the placenta, and its relation to the uterus and its vessels. 5. Give the symptoms and treatment of puerperal peritonitis, as distinguished from puerperal fever. 6. What is trismus nascentium? State its causes, its symptoms, and the morbid appearances after death.

SOUTHAMPTON MEDICAL SOCIETY.

Case of Fox *versus* Taylor.

At a meeting held on May 5th, 1857, Mr. Mackey in the chair, an interesting paper was read on Nævus and its Treatment by Dr. Pardey, after which the case of Fox *versus* Taylor was again brought before the Society. Mr. Taylor having stated in his defence that he had accepted the vacant office in the Romsey Union before the receipt of Mr. Fox's letter requesting his sympathy and support. Mr. Fox produced an official letter proving the appointment to have been undecided on for some days after Mr. Taylor had acknowledged the receipt of Mr. Fox's letter. It was moved and seconded, "That Mr. Francis Taylor be requested to withdraw his name from the Society." An amendment was proposed "that the question be deferred till a special meeting on Friday, 8th May." The resolution was withdrawn. On Friday, May 8th, a meeting was held. Dr. Oke was in the chair; and eighteen members were present. A letter from Mr. Taylor was read, requesting the Society to suspend its judgment till his version should be before the medical public. To this it was objected that the Society had given Mr. Taylor ample opportunities of defending himself, had gone out of its way to hear him in private, and could no longer allow itself to be trifled with." It was moved and seconded, "That the Medical Society of Southampton have again had occasion, at a recent meeting, to consider the accusations of Mr. Fox against Mr. Francis Taylor, in consequence of Mr. Fox having produced an official document, by which it appears that no vacancy in the Romsey Union was legally declared until January 5th, 1857; whereas Mr. Fox had written to Mr. Taylor asking for his sympathy and support on January 3rd. As this fact entirely overthrows the validity of Mr. Taylor's explanation given to, and permitted to be used by, the president and secretaries,—namely, that on his acceptance of the office of Union-Surgeon he had not received any communication from Mr. Fox, but was informed the office was vacant—the Society trust that on reconsideration Mr. Taylor will see he has acted injudiciously, since no public office can be said to be vacant until it is officially declared to be so. The Society, therefore, respectfully recommend Mr. Taylor to resign his appointment until the questions in dispute can be amicably adjusted." The motion was carried; 12 voting for, and 5 against it. The meeting then adjourned.

The Brompton Consumption Hospital. The anniversary dinner of this institution was given on Wednesday week at Willis's Rooms, St. James's. Lord Stanley, M.P., was in the chair, and among those present were the Rev. Sir H. Foulis, Bart., the Hon. Captain Pakenham, Colonel Boldero, M.P., Mr. H. S. Thornton, Dr. G. H. Roe, Dr. R. Quain, Mr. John Bull, and the Rev. B. Marriott. The usual loyal and patriotic toasts having been given and duly honoured, the chairman gave the toast of the evening, "Prosperity to the Brompton Hospital". In proposing this toast the noble lord stated that of 45,000 deaths which occurred yearly in the metropolitan districts, 5,600 were caused by consumption; thus, excluding infantine mortality, about one-fifth of the deaths arose from this disease. Since the establishment of this hospital it had relieved 5,586 in-patients and 36,030 out-patients; its income had in one year amounted to 19,000*l.*, but had averaged between 7,000*l.* and 8,000*l.* During the evening subscriptions were announced amounting to upwards of 1000*l.*, of which the noble chairman gave 20 guineas, and the Earl of Derby 30 guineas.

ROYAL MEDICAL BENEVOLENT COLLEGE. The following is the result of the election of pensioners and foundation scholars, held on May 21st, 1857:—*Pensioners.*—Successful Candidates. Mrs. Casson, 3926 votes; Mrs. Yonge, 3727; Dr. R. W. Scott, 3579; Mrs. Wright, 3481; Mrs. Little, 3358; Mrs. Aylward, 2914.—Unsuccessful Candidates. Mr. Josiah Smith, 2605 votes; Mrs. Smiles, 2429; Mrs. Burrows, 2212; Mrs. Wilton, 1959; Mrs. Haselar, 1482; Mr. R. Wilmot, 956; Mrs. Marsh, 886.

Foundation Scholars.—Successful Candidates. John White Kettle, 4157 votes; Horace Joseph Palmer, 3982; Frederick Cooper, 3960; William Horace Eccles, 3857; George W. A. Salmon, 3466; Frederick Hugh Short, 3352.—Unsuccessful Candidates. Walter Fletcher, 3202 votes; Arthur T. Tupper, 2840; George Walter Tait, 2759; Henry Edward Cole, 2758; Clement Locke Smiles, 2712; James Appleton, 2300; Ernest F. Hetherington, 1876; John Ernest Bailey, 1865; Henry J. Staff, 1571; Samuel Arthur Taylor, 1407; William Walter Wood, 1403; William Hunter Hutchinson, 1312; James Butler, 1299; Lewis E. H. Sherwell, 1271; Chas Pritchett, 1229; Matthew Henry Jackson, 770; Thomas Philip Carstairs, 764; Ralph William Trigance, 691; Richard Alfred Lett, 679; Maurice J. W. Newman, 665; James Edward Hindle, 661; Charles Edward Winter, 598; Matthew Lee Smith, 527; William Henry Buss, 395; James T. H. Ashcroft, 381; Frederick John Parkinson, 378; Francis King Blanch, 377; Christopher Irving, 362; Thomas Spode Roden, 237; Charles Arthur Macaulay, 119; Henry Lloyd, 79.

MEDICAL SOCIETY OF LONDON. A paper will be read here this (Saturday) evening, by Dr. A. Leared, "On the Expectoration of Fibrinous Casts and other Substances." This will be the last meeting of the Session.

TO CORRESPONDENTS.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

TO CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

Communications have been received from:—MR. JOHN SODEN; DR. J. G. SWAYNE; MR. JOHN KITCHING; MR. W. D. HUSBAND; MR. R. W. JONES; DR. ALEXANDER STOOKES; A FELLOW OF TWO COLLEGES; DR. J. M. COLEY; MR. ROBERT TAYLOR; DR. D. NICOL; DR. T. HERBERT BARKER; DR. LANKESTER; MR. H. TERRY; MR. R. S. STEDMAN; MR. WM. TIDMAS; MR. W. B. KESTEVEN; DR. T. S. BECK; DR. BRINTON; MR. T. HOLMES; MR. STONE; MR. MCDERMOT; DR. MONRO; MR. G. M. HUMPHRY (with enclosure); and SIR JOHN FORBES.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Scottish Lunacy Commission. Report by Her Majesty's Commissioners appointed to Inquire into the State of Lunatic Asylums in Scotland. With an Appendix. Presented to Both Houses of Parliament by Command of Her Majesty. Blue Book. Edinburgh: 1857.
2. God in Disease; or the Manifestations of Design in Morbid Phenomena. By James F. Duncan, M.D. Second Edition. London: Nisbet & Co. Dublin: George Herbert. 1857.
3. Health of the Metropolis. Weekly Returns printed by the General Board of Health.
4. Notice sur Hyères et Cannes. Par Edwin Lee, M.D. Paris: G. Baillière. 1857.
5. A Catechism of the Medicine and Surgery of the Eye and Ear. By T. Wharton Jones, F.R.S. London: John Churchill. 1857.

ADVERTISEMENTS.

Photographic Portrait of John HUNTER, F.R.S., etc.; taken from a choice Proof, late the property of Edward Utterson, Esq., by that eminent Engraver, WILLIAM SHARPE, after the celebrated picture painted by Sir JOSHUA REYNOLDS, in the Royal College of Surgeons. Price 7s. 6d. Size 12½ by 10 inches, exclusive of margin.

Published by J. HOGARTH, Haymarket, London.

Plates, cloth, 8vo, 10s.

Stricture of the Urethra, its Pathology AND TREATMENT. By HENRY THOMPSON, F.R.C.S., M.B., Surgeon to the Marylebone Infirmary, etc.

"Mr. Thompson has given the profession by far the most complete treatise on urethral strictures that it possesses."—*The Lancet.*

"The best treatise on the subject in the English language. A nearly inexhaustible mine of practical instruction."—*American Journal of Medical Sciences.*

London: JOHN CHURCHILL, New Burlington Street.

Royal Medical Benevolent College. —The following were the Successful Candidates at the Election of Pensioners and Foundation Scholars held on May 21st, 1857:—

PENSIONERS.

1.	Mrs. Casson	3926 Votes.
2.	Mrs. Yonge	3727 ,,
3.	Dr. R. W. Scott	3579 ,,
4.	Mrs. Wright	3481 ,,
5.	Mrs. Little	3358 ,,
6.	Mrs. Aylward	2914 ,,

FOUNDATION SCHOLARS.

1.	John White Kettle	4157 ,,
2.	Horace Joseph Palmer	3982 ,,
3.	Frederick Cooper	3960 ,,
4.	William Horace Eccles	3857 ,,
5.	George W. A. Salmon	3466 ,,
6.	Frederick Hugh Short	3352 ,,

By order of the Council,

Office: 37, Soho Square, 28th May, 1857.

ROBERT FREEMAN, Secretary,
HERBERT WILLIAMS, Assistant Secretary.

Pepsine. — The Liq. Pepsiniæ, as used and recommended by Dr. NELSON, can be had from Messrs. W. & C. R. TITTERTON, 6, Snow Hill, Birmingham.

Pepsine.—M. Boudault begs to state that he cannot be answerable for the purity and strength of any Preparation sold under his name unless obtained from his sole Agent, Mr. PETER SQUIRE, Her Majesty's Chemist, 277, Oxford Street, London, to whom all applications respecting it must be addressed. A Translation of his Pamphlet on Pepsine may be had of his Agent, on receipt of three Postage-stamps.

24, Rue des Lombards, Paris.

RECOMMENDED BY THE FACULTY.

Pure Manzanilla Sherry, 48s. per dozen. Amontillado, from 54s. Montilla, 72s. Olla Rosa, 66s. Jerez Viejo Aromatico, 84s. Bordeaux premier, 48s. Hungarian Magyar, red and white, 48s. JAMES MARKWELL, Sen., since May 1840 specially appointed Wine Merchant to Her Majesty and the Imperial Embassies. Offices, 35 to 40, Albemarle Street, and 4, Stafford Street, Piccadilly. N.B. Several dozen in Stock of the famous Old Wines accumulated by J. M. during his lengthened proprietorship of Ibbotson's, Long's, the London and the Grafton Hotels. Good and pure Wines are not cheap. Stock, 5,500 dozen.

Wines of all kinds to Shippers, in octaves, quarter-casks, hogsheads, butts, and pipes. Several cases of Longworth's celebrated Cincinnati Sparkling and dry Catawba, Monongahela Whiskey, and American Peach Brandy. A few lots of the Prospect Hill, Reading, Wine.

Vichy Water. — W. Best, having made arrangements with the Vichy Water Company, of France, can now offer it at the reduced price of 12s. per dozen, in the new glass bottles, comprising the following Sources:—Célestines, Hôpital, Grand Grille, Hauterive, Dames, and Lardy Célestines; also the Vichy Salts and Pastils. At his old-established Eau-de-Cologne, Arquebuzade, and Foreign Mineral Water Depôt, 22, Henrietta Street, Cavendish Square.—Agent for Dr. Struve's Brighton Mineral Waters.

N.B. Balls supplied with Champagne and Seltzer Water.

Genuine Garden Seeds.—Timothy BRIGDEN, SEEDSMAN and FLORIST, 10, RAILWAY ARCADE, LONDON BRIDGE, begs most respectfully to inform his friends and patrons, that his unrivalled collection of Agricultural, Vegetable, and Flower Seeds, is now arranged, and Catalogues will be forwarded post free upon application. T. B. further begs to state that he still continues to make assortments of choice Vegetable Seeds, in collections suitable for Gardens of every size, from Ten Shillings and upwards.

Ladies and Gentlemen not being able to call at the above Establishment, may rely upon their Orders being executed with only Frst-class SEEDS.

All Orders from unknown correspondents must be accompanied with reference or Post Office Order. Borough Branch.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXIII.] LONDON: SATURDAY, JUNE 6, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

YORK COUNTY HOSPITAL.

THREE CASES OF AMPUTATION AT THE SHOULDER-JOINT.

By W. D. HUSBAND, Esq., F.R.C.S.Eng., Surgeon to the Hospital.

CASE I. *Extensive Injury of Upper and Lower Arm: Amputation at Shoulder-Joint: Death from Subcutaneous Mortification, from severe Bruise of Hip.* Mark Robinson, a guard on the North Eastern Railway, was looking out for his own train on a foggy evening (Dec. 21st, 1854), when another train, proceeding in a contrary direction, came suddenly upon him, threw him down, and then passed over him. He was found to be seriously injured, and was carried to the hospital; there I saw him within half an hour after the accident.

The patient, a stout muscular man, in vigorous health, had sustained very extensive injury of the arm, which was extensively lacerated from the shoulder to the wrist-joint. The humerus was so fractured, or rather smashed, that only the head and condyles seemed to have escaped injury. Blood had been flowing freely from several wounds communicating with the fractured bone, and was only now restrained, as no tourniquet could be applied by direct pressure over the bleeding orifices. The bones of the lower arm were also broken in several places, and the soft parts lacerated. The man complained of some pain in the hip, but had walked along the station to a fly, and up the steps of the hospital without any difficulty.

As no other alternative remained, I proceeded at once to remove the injured limb at the shoulder-joint. No chloroform was administered, at the request of the patient, who sat upright in a chair, and bore the operation with great fortitude. An attempt was made to compress the subclavian artery; but, as I agree entirely with Mr. Fergusson that the compression of the artery may be effected in an experiment on a willing subject, but can never be depended upon in the actual operation, where the pressure may be so easily removed, I relied on the ready aid of our then intelligent and efficient house-surgeon, Mr. T. C. Paley, to grasp the axillary artery as soon as it was divided in forming the inner flap. The biceps muscle was transfixed opposite the joint, and made to form the outer flap. The knife was then carried across the joint, dividing the capsular ligament and tendons around the joint, and disarticulating the bone; and it was made to form an inner flap, similar in size to the outer one, while cutting its way out, somewhat in the way recommended by Lisfranc. The artery, divided in the last movement of the knife, was immediately grasped by Mr. Paley, and tied. The patient lost little blood, and was soon comfortably in bed, expressing his surprise that he felt so well after the injury and the subsequent operation.

The humerus was found to be comminuted from head to condyles, and the soft parts lacerated and almost reduced to a pulpy state.

December 22nd. The patient has passed a favourable night, under the influence of an opiate given immediately after the operation. There is evidence of a bruise over the right hip, which is somewhat painful. It was ordered to be fomented.

December 24th. The shoulder is going on well, but the hip is very painful and swollen; and the skin is becoming dark coloured, and the subjacent tissues feel "boggy", as if broken up.

December 25th. The skin over the hip looks sloughy; and, under the somewhat hardened and ulcerating skin, considerable effusion is evidently forming in the subcutaneous tissues. The patient is restless and feeble, with a small rapid pulse and brown tongue; and the amputation wound now presents a sloughy unhealthy appearance.

December 27th. The condition of the hip has continued to deteriorate. The surface of sloughing skin is now very extensive, and there is immense effusion in the gluteal and adjacent regions. The patient is evidently sinking fast, in spite of stimulants and support, which have been freely taken since the symptoms of gangrene developed themselves. The man sank gradually during the day, and died in the evening.

The hip alone could be examined. The skin over the gluteal, femoral, and lumbar regions, was almost black; the cuticle was removed; and the true skin was in a condition of incipient gangrene. On dividing the skin, which cut somewhat like crisp leather, an immense amount of bloody serum gushed out; the subjacent muscles and tissues were found dark coloured, and reduced to a condition of thick pulp.

CASE II. *Injury of Upper and Lower Arm by Flax-dressing Machine: Amputation at Shoulder-Joint: Severe Prostration: Recovery.* Bridget Brown, aged 22, was admitted into the hospital, November 1st, 1855, having had her right arm drawn into and extensively injured by a flax-dressing machine at Pocklington, whence she had been brought—a distance of thirteen miles. She appeared to be a stout healthy girl, and stated her previous health to have been good. The lower arm was extensively lacerated, and the bones fractured and crushed in several places, and exposed by the loss of tegumentary covering. The humerus was not fractured, but the soft parts covering it were most extensively lacerated, and separated from the bone up to its head; and when the bandages, which had been applied tightly round the arm at the time, were removed, blood freely gushed out.

Being anxious to save some part of the upper arm, if possible, as soon as the patient was fairly under the influence of chloroform, I determined, as the force had been applied to the anterior and posterior aspect of the limb, to ascertain the condition of the soft parts at the outer and inner aspects, with a view to amputate immediately below the head of the humerus by lateral flaps; but, as soon as the muscular covering was cut into, it was found to be so completely broken up, that no sound covering could be obtained for the bone if amputation lower than the joint were attempted. I therefore at once amputated at the shoulder-joint, in the manner described in the last case; and the axillary artery was secured immediately by our present house-surgeon, Mr. Hanbury. At this moment, the patient's pulse became almost extinct, her countenance blanched, and she appeared almost lifeless. A large cold sponge was thrust into the gaping stump, and held firmly to the exposed surface, to prevent hæmorrhage; and stimulants were freely administered. She rallied a little, when the sponge was slowly removed, and any bleeding vessel secured as soon as exposed.

The girl continued in a most precarious state for many hours. Strong stimulants, including an ounce of brandy, were given every ten minutes; and the interval could not be extended to twelve minutes until eight hours after the operation, without very evident increased prostration.

Nov. 2nd. The patient continues very feeble, but the pulse is somewhat fuller, the extremities warmer, and the countenance improved. The stimulants are required less frequently.

After this date, the girl continued to improve; the stump healed slowly, but progressively; and she left the hospital in about six weeks, in her usual health.

CASE III. *Scrofulous Caries of the Shaft and Internal Condyle of the Humerus: Amputation at the Shoulder-Joint: Recovery.* Stephen Weldrum, aged 15, a strumous looking boy, was admitted into the hospital March 29th, 1856, with extensive disease of the upper arm. He was stated to have enjoyed fair health until, about five or six months previously, he was attacked with what was supposed to be rheumatic inflammation

of the knee and elbow. The affection of the lower limb was completely relieved, but the arm continued swollen and painful; and, about three weeks ago, an abscess broke about the middle of the upper arm, and continued to discharge freely. The arm above the elbow was much thickened from extensive bony deposit, which evidently extended from the head to the condyles of the humerus; and the skin of the entire upper arm was discoloured with tortuous veins running over it in various directions. A probe, passed into the opening through the skin, detected bone denuded, but not loose. There was also considerable deposit around and under the clavicle, and about the shoulder-joint. There was also some dulness on percussion under the clavicles. He was ordered to take twenty drops of syrup of iodide of iron three times a day, and a tablespoonful of cod-liver oil twice daily.

April 24th. Under the influence of the iodide of iron and the cod oil, the patient has acquired strength and weight; but matter has formed in several places along the humerus; and sinuses now exist in connexion with denuded bone, from the head of the bone to its condyles; and, at the lowest opening, a probe can be passed through the external condyle, apparently into the elbow-joint. A consultation with my colleagues was now held, to determine whether any and what operative proceedings should be adopted, when, on a careful examination of the chest, the pulmonary symptoms were found to be so suspicious that we determined to defer any operation at present; and he was made an out-patient, and continued the iron and oil treatment until August 30th, when, his health having improved most satisfactorily, and the chest symptoms being much relieved, it was resolved in consultation, as no minor operation offered any prospect of relief, to amputate at the joint.

September 10th. With the aid of my colleague, Mr. R. Hey, and in the presence of Professor Erichsen (who accidentally visited us on the day) and several of my medical friends, the boy being under the influence of chloroform, I removed the arm at the shoulder-joint, in the manner described in the other cases, with the only exception of having to make the outer flap partly by transfixion, and partly by cutting from without inwards, on account of the very large bony deposit extending to the head of the bone, which interfered with the free sweep of the catline. The axillary artery was dexterously secured by my colleague; very little blood was lost; and the boy recovered without a bad symptom. He is now (eight months after the operation) in good health.

The bone, cleaned after maceration, is now before me, and is nearly three times the size of a healthy humerus; it is exceedingly rough and uneven, with numerous stalactite-looking processes along its surface, and several cloacæ communicating with the original shaft of the bone, which is partly detached, and partly attached to the new case. The head of the bone, as also the condyles, are carious; and a large opening passes through the internal condyle into the fossa, which receives the olecranon process. The greatest deposit of new bone is at the point of insertion of the deltoid, and along the bicipital ridges.

Remarks. Amputation at the shoulder-joint is by no means the serious or difficult operation which the directions of some surgical writers would lead us to imagine, if we were to be guided by the minute details given by some, and the many modes recommended by others for performing this amputation. By transfixion of the deltoid opposite the joint, an ample flap can be formed from that muscle; and the joint, if not opened then, may be readily found, the bone disarticulated by division of the ligaments and tendons, and an inner flap readily formed to correspond with the outer one. In the case No. 1, I had some slight difficulty in getting the humerus to act as a lever, and thus draw its head from the glenoid cavity, from its head being separated from the shaft; but, by pressing my finger into the joint after the partial division of the capsular ligament, I was enabled to depress the head of the humerus, and thus readily to divide the remaining capsular and tendinous attachments, and to form the inner flap. In all three cases, the axillary artery was readily seized, and very little blood was lost—less, certainly, than at ordinary amputations, with a careful adjustment of the tourniquet.

The first patient died from what all surgeons who are conversant with railway accidents have reason to dread—a severe contusion, crushing the subcutaneous tissues, while the skin, from its greater elasticity, suffered little, and hence masked the subjacent mischief, until, its nutrition having been cut off by the destruction of the subcutaneous vessels and nerves, it became nvolved in the general ruin. How often have we to regret the loss of a patient who comes into hospital with a crushed limb, which is amputated, and would do well, but the blow which has knocked him from his engine, or the contusion received on some part of his body, while his limb has been under the wheel, has reduced every resisting tissue to a pulp; and the death of an extensive portion of the body is soon followed by that of the whole. I say no more on this interesting subject, as I purpose soon to supply the Journal with several interesting illustrations of this class of cases.

The second case occasioned some anxiety, in the attempt, as the humerus was not fractured, to save some portion of that bone; but, even after amputation at the joint, a proper covering was obtained with difficulty, and some of that procured sloughed away in a few days. Whether the syncope during the operation arose from the slight hæmorrhage, acting upon a patient who may have lost more blood at the time than we were led to believe, or, as Dr. James Arnott would probably assert, from chloroform, I do not pretend to decide; but her condition was certainly one of most frightful collapse, and she was only rescued by the constant and intelligent attention of Mr. Hanbury, who never left her for many hours after the operation, and adjusted the stimulation to the effect required to be produced. The amount of brandy, chloric ether, ammonia, and beef-tea, taken for several hours after the operation, was very large; and any attempt to withhold the stimulants for even two minutes longer than the usual period could not be successfully accomplished until many hours after the operation had elapsed.

The third case differs from the other two in the very material fact of being required for disease. The improvement in the condition of the lungs, which at first determined us to delay the operation, under appropriate treatment, was very marked; and the removal of such a serious source of exhausting influence as the diseased limb has no doubt tended to assist Nature in her subsequent conservative efforts. No operative proceeding short of the entire removal of the limb at the shoulder-joint was, after careful consideration, thought to be sufficient to remove the whole disease; and the examination of the diseased bone after its removal showed the soundness of the decision. The carious head and condyles, and diseased elbow-joint, would have rendered any attempt at removal of the sequestrum unsuccessful, and amputation at the shoulder must have been ultimately required.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

REMARKABLE CASES OF FRACTURE.

Under the care of G. M. Humphry, Esq., Surgeon to the Hospital.

Case I. *Fracture of the Thigh for the fourth time at the same part.* Sarah Hales, aged 60, a stout, rather pale, but not unhealthy woman, in 1847 caught her foot in the carpet and fell, breaking her left thigh bone a little above the knee. In seven weeks she was allowed to get up, and in twelve weeks could walk again. In 1850 her foot slipped on a potatoe, and she again fell, breaking the bone at the same part. In six weeks it was united, and in eleven weeks she was able to get about. In 1852, when raising herself from the floor, her hand slipped, and falling upon that knee the bone was broken at the same place for the third time. She was able to walk in about the same time as before. In January, 1856, when walking along the road her foot slipped and she fell, the thigh-bone giving way for the fourth time at the same part. Whether the bone gave way before she fell, or whether it was broken by the fall she could not tell. She had not much pain, but knew the limb was broken because she had lost the use of it. She was brought to Cambridge the next day; and, when examined, the fractured portions of the bone, which were thickened a little, could be rubbed together as though the ends were rounded and smooth. This gave scarcely any pain, and there was very little swelling or bruising. Mr. Humphry was apprehensive, from this condition of the part, that union would not take place. To give it every chance, the limb was carefully splinted, and perfect rest secured by gum-chalk bandages, etc., which were kept on for eighteen weeks, when, firm union having taken place, she was allowed to get up and go on crutches. These have been some time laid aside, and she can walk without them. The bone is firmly united. There is a little overlapping, but not much thickening.

Case II. *Spontaneous fracture of both Thigh-Bones.* Sophia Low, aged 56, was admitted April 23rd, 1857. The following is

taken chiefly from her own account. She was a healthy-looking person. She said that her right thigh was broken May 5th, 1855, under the following peculiar circumstances. For some years her leg had been subject to pain, chiefly about the middle of the thigh, but extending upwards and downwards from that point. A month before it broke the pain became more severe, and she raised her leg from the ground with difficulty. Two days before it broke she caught her toe when going up stairs: this caused sharp pain at the middle of the thigh, and a lump formed there. She was walking out when it seemed as though the left foot caught, and she fell; but she is sure that she felt the right leg break *before* she reached the ground. The fracture was treated by a surgeon with splints, etc. It was united in five weeks, so that the splints were removed and the limb gradually got strong again. Since then she had had no more pain in the thigh; and she was well till soon after last Christmas, when a pain, similar to that she had before experienced in the right thigh, affected the other limb. It got gradually worse. In the last two or three days before the thigh bone broke the pain was very acute, and the limb was in much the same state as the other had previously been before the fracture of it: so much so that she feared it would break. It did so on March 1st in the same way as the other had done. She "kind of made a stumble, and felt it break before she reached the ground." Long splints, etc., were applied in the Hospital. The fracture united in the usual time, and is now quite firm. There is no pain now in the thigh; but she is complaining of pain in both her arms, a little below the shoulders.

Remarks. Both these are cases of rare occurrence. In the first place it is an unusual thing for fracture to take place so repeatedly at the same part; the uniting medium, or callus, being usually as strong as, if not stronger than the bone itself. It would appear that in Sarah Hales there must have been, on each occasion, some deficiency in the reparative process.

The case of Sophia Low is still more unusual and interesting. The causes of spontaneous fracture are generally either cancer or mollities ossium. In this instance it would seem to have been neither of these, but probably some low inflammatory process, possibly of a rheumatic nature, removing or weakening the osseous structure at particular points of the skeleton. The writer has not been able to find the record of any exactly parallel case. It is remarkable that in this, as in other examples of spontaneous fracture, even those resulting from cancer and mollities, union took place in about the usual period. In this case, it may be further observed, the fracture was attended with a cessation of the disease which led to its occurrence.

ST. BARTHOLOMEW'S HOSPITAL.

I. INFLAMMATION OF THE TIBIA ATTENDED WITH EXCRUCIATING PAIN: OPERATION.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

The following case displays a condition of the bone rarely met with, in which the symptoms, though closely resembling those produced by limited suppuration in the cancellous tissues of the bone, yet were occasioned, it would seem, by a condition differing from it in a pathological, at least, if not in a surgical point of view. The inflammation in this case appeared to have originated in the compact tissue forming the wall of the bone, and to have differed altogether in its course and indications from that periosteal and superficial inflammation which leads to deposit on the surface, and which is curable by iodide of potassium, and by incision made to relieve the tension of the periosteum. It differed also from the limited abscess in the cancellous tissue, in the extraordinary amount of pain which it caused, and in the fact that this pain was continuous, while in most, if not in all cases of limited abscess, the patient enjoys long intervals of ease. It resisted all milder methods of treatment, but yielded at once and finally to a free opening through the inflamed tissue. It is worthy of remark, however, as exemplifying the slowness of all processes in which bony tissues are involved, that, even after the removal of its cause, the pain in the bone lasted still more than a day. The relief afforded appears to be quite permanent; and although the opening in the bone is probably quite filled up, the woman has experienced no recurrence of her symptoms.

Ann M., aged 28, was admitted with enlargement of the tibia about its middle third, with excruciating and constant pain in the part. She attributed the disease of the leg to an old accident fourteen years ago, but the history of this was obscure. A month before admission she was seized with violent throbbing pain in the leg, in a limited spot, with some enlargement. She went into another hospital, where she was treated with iodide of potassium, and a free incision was made upon the periosteum, but without any good result. Similar treatment (iodide of potassium, etc.) was adopted here with similar result, the swelling and pain remaining unaffected. The pain was so acute that immense doses of opium were required. She took as much as three grains in the night, besides more in the daytime.

On April 18th, Mr. Stanley exposed the bone, under the use of chloroform. It was found softened, and readily removed with the gouge. On the introduction of the probe into the softened walls of the bone, a thick membranous pulpy pus exuded. A free opening was obtained for this, and the patient was sent to bed.

The pain continued for thirty-six hours, and then entirely and permanently subsided. With the exception of an attack of erysipelas, followed by inflammation of the saphena vein, the case has done perfectly well; the wound is still not quite closed, but she seems entirely relieved of all other symptoms.

II. SUDDEN DEATH AFTER AMPUTATION OF THE BREAST, PROBABLY FROM LATENT ERYSIPELAS.

Under the care of J. Paget, Esq.

Deaths every now and then take place after surgical operations, on the cause of which neither the progress of the symptoms, nor the appearance on dissection throw any sufficient light. Such a case was observed the other day at this hospital. A woman had been subjected to the operation of amputation of the breast on May 24; she went on at first perfectly well, and was seen, on the night of the 25th, at half-past 11 P.M., quite comfortable. The house-surgeon was summoned to her at 5 A.M., and found her delirious, the skin hot and dry, the tongue coated and brown, the pulse weak, in fact, with all the symptoms of typhoid fever. Diffusible and alcoholic stimulants were freely given; and three grains of sesquicarbonate of ammonia every hour, with wine and brandy *ad libitum*, but she never rallied in any degree, and died on May 27th, at 5 P.M., without any further symptoms; no rigors, sweats, or other indications of the approach of pyæmia, nor any external signs of erysipelas.

On *post mortem* examination, no visceral disease was found which could throw the slightest light on the cause of death. There was, indeed, some thickening of the pia mater, and flattening of the convolutions of the brain, which organ appeared somewhat atrophied; but all this was evidently of long standing.

Remarks. In commenting on this case, Mr. Paget observed that the only conjecture which he could bring forward to account for the result was, that the woman was labouring under that condition of the blood which would have led to erysipelas, but that she had not sufficient vital power to develope the external disease.

UNIVERSITY COLLEGE HOSPITAL.

WUETZER'S OPERATION FOR RADICAL CURE OF HERNIA.

Under the care of J. E. Erichsen, Esq.

Henry P., aged 21, a porter, was admitted, under Mr. Erichsen's care, on March 7th, on account of hernia, which had come on two months before, in a fit of coughing; and, according to his account, had descended into the scrotum the same day. It became strangulated; and he was at that time admitted into the hospital, when the hernia was reduced by taxis. A bandage was then applied, and he returned to his work. The hernia, however, soon descended again; and on March 1st there were again some symptoms of threatened strangulation (pain, nausea, etc.); but the hernia was easily reduced. He gave up work and came into the house at the above date, to undergo the operation for radical cure. The hernia was on the left side, not very large; the external abdominal ring was tolerably patent; the patient was in perfect health.

The operation was performed on March 11th, in the same way as in Mr. Holmes Coote's case reported in this Journal for March 7th, p. 186.

March 12th. There was slight tenderness in the part, but no general symptoms.

March 18th. The apparatus was removed, and a plug of lint introduced in place of the wooden plug; the external abdominal ring was covered with a pad and bandage.

No further symptom occurred. A truss was fitted, as a matter of precaution, at first; and the man was discharged April 6th.

He was seen again a month after his discharge. The invagination was then complete, and the hernia did not descend. He had laid aside his truss for some time.

Remarks. This case appears a good instance of the benefits which may follow Wützer's method of treatment. Here was a man in the prime of life, addicted to violent exercise, in whom the hernia showed a disposition to become strangulated on slight irritation (doubtless as an effect of its rapid descent, and the consequent imperfect dilatation of the canal), and who would therefore have been obliged to constantly wear a truss, which would have been liable continually to get displaced in the violent movements which his work necessitated, and thus have become an additional source of danger; for every one who has attended to the histories of many cases of hernia in hospitals knows how often strangulation follows on the wearing out and misfitting of a truss. To this may be added the question of the expense of such a series of instruments to a man in his walk of life. Surely it is worth while, in a case like this, to perform so simple and apparently safe an operation, when it holds out a prospect of permanent cure. It would be interesting, however, to see what the state of parts is a long while after the operation, when the canal has been subjected for years to the pressure of the intestines, and when, therefore, any small space left unoccupied by the plug formed out of the scrotum may have become developed into a pouch to contain the hernia.

WESTMINSTER HOSPITAL.

MR. HOLT'S PLAN OF TREATING STRICTURE.

[*From notes by* G. Nayler, Esq., *House-Surgeon.*]

We subjoin another successful case of the treatment of permanent stricture by rapid dilatation. The case will speak for itself, and requires no comment. We may perhaps imagine that the advantages of the treatment are counterbalanced by certain risks (of the reality of which, however, we have not hitherto found evidence); and it would be the duty of a surgeon to take this point into consideration in determining upon following this plan.

Henry H., aged 28, was admitted on May 18th, suffering from complete retention of urine, of twelve hours duration. He had been suffering from stricture for two years, and the stream had latterly become very small. No instrument could at that time be passed; but, after repeated doses of liquor opii sedativus and warm baths, he passed a large quantity of urine in the evening. Next day he complained of soreness in the urethra, and there was slight discharge: he was, therefore, left quiet in bed for three days. On May 21st, Mr. Holt succeeded in passing No. 4, and then introduced on the dilator catheters up to No. 10. This gave great pain, but it soon subsided; and a dose of opium was given. No symptoms followed except slight pain in making water, which soon subsided. No. 10 was passed occasionally, without any difficulty, during the remainder of the time he stayed in the house. The size of the meatus urinarius did not admit a larger catheter. He was discharged cured on the 29th.

ST. GEORGE'S HOSPITAL.

I. STRUMOUS TUBERCLE OF THE BRAIN.

Under the care of H. Bence Jones, M.D.

Jane T., aged 11, was admitted March 31st, under the care of Dr. B. Jones. She had always been delicate, but had been much worse during the past month, though with no very marked symptoms beyond increasing weakness at first. For a fortnight, however, she had been subject to frequent vomiting, and during one or two days had been in a semi-comatose condition. On admission, her face was flushed; there was convergent strabismus of the right eye. She had tenderness over the abdomen and obstinate constipation. The scalp was very hot; she screamed violently every few minutes, scarcely slept at all, suffered from violent pain in the forehead, and was only partially conscious. There was no paralysis. The pulse was 96, weak; the tongue furred. She was treated by a course of calomel, blisters dressed with mercurial ointment to the neck, and ice to the scalp. This produced a little temporary relief to the pain in the head; but although the administration of mercury (by the mouth and by inunction) was pressed so as to slightly affect the gums, the semi-comatose condition continued, and became indeed more marked. Towards the end of April, her condition changed for the worse, as the dejecta were passed involuntarily, and she began to suffer from convulsive fits, affecting principally the left side. From this time she sank, but very slowly, and died on the 28th of May, more than two months after the first loss of consciousness, from which she had never rallied.

On *post mortem* examination, the membranes of the brain were found perfectly healthy; the convolutions were a little flattened, and the lateral ventricles much distended with serum. The central structures of the brain were firm. There was a very large mass of crude tubercle near the base of the brain in the substance of the left middle lobe, causing considerable projection downwards of the cortical structure, which was expanded over it. This collection reached upwards nearly far enough to touch the corpus striatum and optic thalamus. The thin portion of the cortical structure expanded over the tubercle was redder than natural, and quite firm.

All the other organs of the body were found perfectly healthy, except that a very few miliary tubercles were thinly scattered through both lungs.

Remarks. This case is of interest from the rarity of the pathological condition revealed by dissection. Though it is by no means unusual in children to find large masses of strumous matter in the brain, yet it is, as far as our experience has gone, very rarely that this is the only part in which the disease shews itself; and therefore the diagnosis of these cases remains, with our present knowledge of cerebral affections, hopelessly obscure. It is clear that, in the case before us, the administration of mercury (though indicated by a train of symptoms which pointed to meningitis as the local condition) could have no effect in the removal of a large crude tubercle.

II. DILATATION OF THE PULMONARY ARTERY, WITH DISPLACEMENT OF THE HEART.

Under the care of H. W. Fuller, M.D.

Henry L., aged 33, was admitted April 8th, 1857, under the care of Dr. Fuller. He had been for some time a patient at the Brompton Consumption Hospital, and was very weak and emaciated. The immediate cause of his application at this Hospital was erysipelas of the face; of which, however, as the course of the complaint presented no points of interest, we shall not speak further. Examination of the chest showed the left side dull to percussion throughout, but especially in its upper half. In the suprascapular and infraclavicular regions there was loud hollow breathing, accompanied occasionally by large bubbling sounds over the whole of this side, but especially in the upper half. The vocal resonance was increased. Harsh coarse breathing was heard over the lower half of this side. The breathing was harsh and increased over the upper part of the right lung. Over the course of the pulmonary artery a strong pulsation and thrill were perceived; and a murmur was heard with the second sound at the base of the heart. On renewed examination a few days later, this was replaced by a double murmur; the thrill and increased pulsation were still as perceptible as before. A dilated condition of the pulmonary artery was suspected as giving rise to this symptom. The symptoms of the case it is hardly worth while to give in detail. The man appeared to be progressing pretty satisfactorily, when, on April 27th, he was attacked with vomiting, soon followed by other symptoms of peritonitis, and he died on the 30th.

At the *post mortem* examination, besides the appearances of the inflammation of the peritoneum, which was the immediate cause of death, the following appearances presented themselves about the chest. On first opening this cavity, it was observed that the left lung was entirely out of sight, being hidden behind the heart. The latter organ was displaced considerably, upwards, and to the left side, so that the root of the pulmonary artery was situated opposite the first left intercostal space. Both the pulmonary artery and the aorta were somewhat dilated, and the former was a little atheromatous at its base. The valves, however, appeared quite sound, and no other morbid appearance was noticed about the heart.

The left lung was firmly bound down to the posterior wall of the chest, and its tissue was solidified, and sank in water. On making sections of it, several small vomicæ were found in its

apex; and the apex of the opposite lung contained also much crude tubercle and some few vomicæ.

The liver was much enlarged, and projected up considerably into the thorax on the left side. It weighed 9 lbs. 2 oz., and was very hard and firm in texture. It, as well as the kidneys, contained a good quantity of fat. The spleen was enlarged.

Remarks. In this case great difficulty was experienced in coming to a correct diagnosis as to the cause of the pulsation. The opinion expressed during life was, however, justified by the *post mortem* appearances; and it will be well to bear in mind the occurrence occasionally of these displacements of the heart, in patients whose lungs are bound down by old disease; in consequence of which the pulmonary artery, dilated probably from the old retardation of the pulmonic circulation, is brought up directly against the wall of the chest, and occasions a pulsation which might almost be mistaken for that of aneurism.

Original Communications.

CASE OF PANCREATIC CYST.

By Joshua Parsons, Esq., Beckington, Somerset.

[*Read before the Bath and Bristol Branch, April 30th*, 1857.]

Mrs. W., aged 60, the wife of a clergyman, a lady of good general health and great activity, the mother of ten children, had been for many years subject to occasional attacks of spasm of the stomach, which had latterly increased in frequency and severity. In the month of April 1853, she took a journey into a distant county, and while there was seized with an unusually severe attack of spasm, resisting the usual means of relief, and apparently followed by gastric inflammation. This inflammation was treated, under the care of the medical friend in whose house she was visiting, by leeching and mercurials, carried to the extent of slight ptyalism. She slowly improved so far as to be able to journey homewards; after which, she came immediately under my care.

At this time, the symptoms were those of chronic gastritis; and as such, they proceeded without much change, sometimes alleviated by treatment, but with loss of flesh and strength, till the month of August.

One day, at the beginning of that month, she called my attention to a tumour which she had discovered in the epigastrium. How long it had existed there, we cannot tell. I had frequently made manual examinations of that region, but, owing to the great tenderness, had hesitated to make such deep pressure as would perhaps have discovered its existence earlier. The swelling was now of about the size of a small orange, slightly moveable, situated immediately in front of the spine, and evidently behind the stomach, as the flatus in that organ could be felt by the hand rolling about in front of it. The swelling increased steadily for about a fortnight, till it had reached the size of a cricket-ball, when one morning the patient told me with great satisfaction, that it had entirely disappeared; but that she had been suffering all night from diarrhœa of a peculiar character. The discharges were entirely fluid, of a glairy consistence, dirty white colour, with a few flakes, and of an odour which immediately struck me as being salivary. It was precisely similar to that produced by spitting on hot iron. Some relief of the gastric symptoms followed this discharge, but it was only temporary. The tumour soon reappeared, and attained its former dimensions, but never in that region much exceeded them. Symptoms of kidney irritation now appeared, with much pain and tenderness in the left lumbar and iliac regions; and, after a few weeks, a tumour appeared immediately above the anterior superior or spinous process of the ilium, which presented the same feel as the former one, and was plainly continuous with it; increased tension of the one being produced by pressure on the other.

For many weeks no remarkable change occurred: the last formed tumour enlarged slowly. There were great suffering, and increasing emaciation and debility. The patient removed to some distance, so that I could only see her at long intervals; and I am greatly indebted for the closing history of the case, and the particulars of the *post mortem* examination, to my friend Mr. Chitty, of Mere.

At the beginning of February 1854, nine months from the commencement of the illness, a return of the diarrhœa occurred, with subsidence of the swellings, and relief of the pain. This lasted for two days, and then the tumour filled somewhat suddenly again. In ten days, the diarrhœa returned, with copious vomiting; this time attended with discharge of much dark grumous blood, both from the bowels and stomach; and the patient was evidently sinking rapidly.

On February 25th, I visited her, and found her greatly reduced and extremely emaciated; but the tumours, though perceptible, were flaccid, and had ceased to give the sense of fluctuation. While I was sitting in her room, she suddenly stretched out her arms, desiring to be lifted up in bed, became immediately unconscious, with a blanched face, cold perspirations, and imperceptible pulse, and died in a short time, with all the symptoms of internal hæmorrhage.

The following is the account of *post mortem* appearances, kindly supplied to me by Mr. Chitty. There was no peritonitis. The intestinal canal and the other abdominal viscera were of a dark leaden hue. The stomach was small and contracted; its large curvature was elevated; the smaller was bound down tightly by adhesions, with what remained of the pancreas, to the spine, and this firm adhesion extended by the spleen and left kidney to the left iliac fossa. By these adhesions a canal was formed, in which was the morbid pancreas, consisting apparently of a long cystic tube, extending from the duodenum to the left hypochondrium, fully six inches in length. Behind the descending colon it become a cavity, of the size of the fist, containing throughout a dark grumous fluid, like decomposed blood. The walls of the cyst were of cartilaginous hardness, and lined with a dark brown substance. There was also within the cyst an extravasation of recent blood. The tumour was immediately opposite to, and adherent with, the colon, which gut was disorganised and soft, but not ulcerated; nor could I discover any communication between it and the cyst. The left kidney was softened and disorganised, but contained no trace of calculous disease. The spleen was small, soft, and black. The left pleura contained much serum, and the lung was small, collapsed, and covered with a layer of fibrine. The other organs of the body appeared healthy, though greatly wasted.

Remarks. So far as my limited opportunities of consulting medical literature extend, the case now detailed appears to be a rare one. Its pathological history is interesting, but, unfortunately, lacks a commencement. Such a cyst as I have described, appears to find its analogue in ranula of the sublingual and submaxillary glands; but amidst the displacement and disorganisation which had confused all the parts, it was, of course, impossible to ascertain the condition of the pancreatic ducts at the time of the *post mortem* examination. The first morbid change was retention of the pancreatic secretion; and it is possible, though of course I only offer it as a conjecture, that such a retention might have been caused by the gastric inflammation which succeeded the primary attack of spasm, extending either to the ducts themselves or the investing parts. The salivary organs being at this conjuncture stimulated to extra secretion, an amount of fluid sufficient to produce dilatation might the more readily have accumulated. If we suppose a cyst to have thus originated, its subsequent progress and relation to the symptoms seem very clear. A temporary abatement of its progress occurred; when, about a fortnight after its first discovery, the contents were evacuated through the bowels. This discharge probably took place through the natural outlets; but as in ranula, if the salivary ducts are not enlarged or kept patent by artificial means, the accumulation soon recurs, so there was a speedy return of the symptoms. The cyst now enlarging, and prevented from spreading to the right side by the comparatively firm structures at the root of the liver, made itself a way behind the spleen and kidney to the left hypochondrium, producing great renal disturbance, perhaps aggravated by the presence of a small calculus that was voided about this time (September). For four months, no remarkable change, except progressive enlargement, occurred. The cyst had come into contact with the descending colon, and had involved the gut in the destructive irritation of its presence, and now another discharge of its contents took place. The speedy return to the original dimensions of the tumour must, I think, be attributed to extravasation of blood, thus accounting for the great loss of vital power by which it was accompanied. This blood, retained long enough to become decomposed, furnished the grumous discharges of the last attack of diarrhœa, as well as the similar matter found in the sac after death, while the loss of a second quantity of blood there found undecomposed, sufficed at last to extinguish the flickering powers of life.

Though the nature of the disease in this case seems so clear

under the light of the scalpel, it was by no means so during life; and various were the opinions and conjectures offered by several medical men who saw, or were consulted on, the case. To my mind, the character of the discharge attending the first subsidence of the tumour was strong evidence of the correctness of that diagnosis which dissection confirmed.

I can offer no suggestions respecting the curative treatment of this malady; and, indeed, it seems difficult to conceive how any such could be applied: but I will hazard one remark that, while it bears upon the physiological use of the pancreatic fluid, might also suggest a means of relieving the sufferings attending such a melancholy case. During the whole course of this case, there was never any uniform or persistent disturbance of the bowels. There were the three attacks of diarrhœa already mentioned, and on one or two occasions some disorder caused by manifest error of diet; but in general the bowels were neither costive nor relaxed, nor were the appearance or consistence of the secretions unnatural. On the other hand, the stomach was in a perpetual state of severe irritation, bordering on, if it did not amount to, actual inflammation; and this, it appears to me, arose, not only from the interference of the tumour behind it, but from the acrid properties of its own undiluted secretions; and if so, some relief might be afforded by the exhibition, during the times when the stomach is not actively employed in digestion, of large doses of bland mucilaginous fluids, holding small quantities of soda in solution. In accordance with this view, it was found that in this case fresh made whey, cold and frequently sipped, alleviated the sickness and pain more than any other article of diet or medicine.

NEW OPERATION FOR PHIMOSIS.

By A. G. Walter, Surgeon, Pittsburgh, Pennsylvania, U. S.

The various methods for the relief of phimosis, which have been introduced and practised from the oldest times of surgery to the present, though answering the purpose intended, cannot fail to impress upon the mind of the surgeon of the present day the ardent desire to have an operation substituted, which will be free from the objection of producing mutilation or deformity. It behoves the conservative surgeon, when called on to remove deformities of the human body, or to relieve obstructions in the different organs, to save any and every healthy part of the human system, and to remove the infirmities, either congenital or acquired, with the least expense to the body; for Nature, in her wisdom, has not created the smallest particle of human organism but for some especial purpose. The healthy body is perfect in all its parts; nothing superfluous can be found about it. By some mysterious agencies, however, Nature at times departs from the customary path during formation; she is arrested in her developments of parts of the human system; and deformities, defects, malformations, and obstructions, are the consequence. To relieve these, man's genius has been taxed; improvements of the various means have followed each other; but it was left to the present age, enlightened and ennobled by the blessings of conservative surgery, to make surgeons pause, reflect, and study Nature's inexhaustible powers, and to send them forth as restorers, and not as mutilators.

In congenital phimosis, and frequently also in the acquired form, we find the deformity to be produced by the tightness of the frænum; the constriction being seated in the internal layer of the prepuce, the external one being free from fault, and therefore not requiring to be interfered with. To overcome this abnormal formation of the prepuce, circumcision, division of both layers of the prepuce on its dorsal or inferior aspect, are practised. These methods, no doubt, relieve the defect; but they also produce artificial deformity of the member. By the practice which I intend to offer to the consideration of the profession, these *opprobria chirurgorum* are avoided, and the member is restored to its natural and healthy condition.

The penis is held firmly and horizontally by the fingers of an assistant, which grasp it near its root, drawing at the same time the prepuce backwards over the body of the organ towards the pubes as much as possible; a fine grooved director, with a blunt point (its groove pointing downwards) is then inserted between the prepuce and glans penis, close to the right side of the frænum, and is pushed on till it is arrested by the reflexion of the inner layer at the corona glandis. A fine bladed scalpel is next passed into the groove of the director, its cutting edge looking downwards; and both layers of the prepuce at the orifice are divided. The knife being pushed on in the groove, while the assistant draws the prepuce farther back, the internal layer is slit up close to the frænum, as far as the corona glandis. A notch only being made in the external layer, the retraction of the prepuce is effected by the complete division of the inner layer. Some tension, however, of the inner layer, still remaining, the director is passed close to the other side of the frænum, between the glans penis and the inner layer of the prepuce; and upon it on this side, too, the inner layer is cut through, close to the frænum, up to the corona glandis: the external layer, being drawn far back, is beyond the reach of the knife. By directing the incision in this manner, we find the frænum and glans penis fully exposed, and a cut on each side of the frænum, in the internal state of the prepuce, running in an outward direction from each side of the frænum. After arresting the bleeding, which is generally trifling, both lips of the wound along the frænum are united over it with two or three stitches by a fine needle and thread. This done, the wound on each side of the frænum, in the internal layer of the prepuce, is accurately united by several sutures to the external or dermal layer. All threads being cut off, and the glans penis covered with a fine piece of oiled muslin, the prepuce is returned to its natural position over the head of the penis. Adhesion between the cut surfaces of the internal layer of the prepuce and the frænum being thus prevented by accurately adjusted sutures, there can be no apprehension of a return of the deformity. Beyond an œdematous swelling of the prepuce—the consequence of the operation—lasting for a few days, and easily relieved by lukewarm fomentations of chamomile and Goulard's lotion, while the patient is at rest, no untoward symptoms will follow. The sutures, being very fine, need not be removed till all swelling of the prepuce has subsided, which will take place in the course of a week or two.

By operating in this manner, the prepuce retains its natural appearance; no scar is visible on its external face; it allows of easy retraction; and continues to cover the glans, as nature had designed.

Having repeatedly practised this method both for acquired and congenital phimosis, I feel anxious that other surgeons should give it that consideration which it merits on account of its simplicity and certainty of cure, leaving no trace whatever of either deformity or mutilation.

INTERNAL STRANGULATION OF INTESTINE RAPIDLY FATAL.

By Henry Ewen, Esq., Long Sutton, Lincolnshire.

On August 18th, 1856, L. F., a girl, aged 14, complained at noon of being unwell. She had pain in the left side, but took her dinner as usual; she walked out with the children of her charge for an hour in the afternoon, but on her return complained of being exceedingly unwell, the pain in the left side having increased; she could not take her tea. She went to bed at 10 P.M., when copious vomiting came on, with great increase of pain in her left side. The vomiting was not stercoraceous. There was no hiccough. Fomentations and other domestic remedies were used with partial relief, but she was restless and in great pain all night; there was frequent and urgent desire to pass urine, but very little was voided. At 6 A.M. on Aug. 19th, complete collapse had come on. She had never menstruated. I was sent for about 7 in the morning, and reached the house about 8; she was then dead.

An inspection of the body was made seven hours after death. She was a short, delicate young woman. The abdomen was hard and distended; there were about two pints of bloody serum affused into the cavity. The whole of the jejunum and ileum had passed through an aperture in the mesentery behind the middle third of the duodenum; the last portion of the ileum had drawn upwards the cæcum with the vermiform appendix, which were seen just below the edge of the liver. The cæcum and ascending colon were much distended with gas. All that portion of intestine which had passed through the aperture in the mesentery was of a dark chocolate colour, and much distended with gas, and there were many patches of blood extravasated in the corresponding portions of the mesentery. The stomach was healthy, and contained about a pint of milky fluid. The bladder was empty. The lungs with their pleuræ, and the heart with the pericardium, were healthy.

CASES OF SUDDEN DEATH AFTER PARTURITION, WITH AIR IN THE VEINS.

By GEORGE MAY, jun., Esq., Surgeon to the Royal Berkshire Hospital.

[*Read before the Reading Pathological Society.*]

THAT death may result from the entrance of air into the veins during surgical operations, has long been known to the profession; but that it might be a cause of danger after parturition (as suggested by Legallois in 1829), did not obtain the notice it deserved, until Dr. Cormack read a paper on the subject before the Westminster Medical Society in 1850. I propose to allude briefly to the cases narrated by Dr. Cormack, and then to give the details of three that have occurred in this neighbourhood.

In 1841, Dr. Bessems attended a labour, in which there was hæmorrhage with retention of placenta. On the fourth day after her confinement, whilst an injection was being thrown into the uterus, she suddenly exclaimed that she was suffocated, and died in three minutes. Air was found in the heart and veins.

M. Lionet, of Corbeil, attended a lady, aged 27. She was much frightened during the last month of pregnancy, and did not completely recover her strength; but her labour was natural, and not attended with hæmorrhage. She soon, however, became faint, breathed with difficulty, and expired five hours after delivery. Air was found in the heart and in the cerebral veins.

Dr. Wintrich, in 1848, published a case of rapid death after parturition. Convulsive movements and suffocation followed the expulsion of the infant and partial separation of the placenta. Air was found in the venous system.

Professor Simpson mentions a case in which death occurred a few hours after a delivery, accompanied with hæmorrhage and alternate contractions and relaxations of the uterus. Air was found to have entered through the uterine veins.

Dr. Lever mentions three cases; in all of them there was hæmorrhage, and death a few hours after labour. Air was found in the uterine and other veins.

In 1850, Mr. Berry, of Birmingham, attended a primipara, aged 22. There was little hæmorrhage, and she appeared to be going on well for six hours; she then became affected with difficulty of breathing and faintness, and expired in less than an hour. Air was found in the heart. The uterine veins were patulous.

CASE I. The case of which an abstract is here given, was read before the Reading Pathological Society, by Mr. Taylor, of Wargrave.

In September 1841, Mrs. —, aged 30, was taken in labour with her third child. The labour progressed naturally; but no urine having been passed, Mr. Taylor was in the act of introducing a catheter, when a severe pain occurred. The liquor amnii was discharged to the amount of three-fourths of a pint. The woman suddenly exclaimed, "Oh! how faint I feel", was convulsed for a moment, and expired. By the last pain, the head had been forced partly from the outlet. An attempt was made to remove the child without success.

A *post mortem* examination was made forty-eight hours after death. The uterus extended above the umbilicus. The placenta occupied the anterior surface from pubis to umbilicus; no portion was separated. A few days before her labour, she had a copious discharge of blood. There was little blood in the uterus. The bladder was empty. The lower vena cava was empty. The heart was healthy. The right auricle was thin, almost transparent, and distended with air. Hardly a trace of blood existed in the heart. The brain and membranes were healthy. In the spine, between the theca and the cord, there was considerable effusion of fluid blood, but none within the sheath.

CASE II. I am indebted to Mr. Smith, of Whitchurch, for the details of the following case.

Mrs. T., between 38 and 40 years of age, was confined of her sixth child, a male, on the morning of May 7th, 1852, about 8 A.M., and her attendant left her shortly afterwards, as he said, very comfortable. As, however, she had severe after-pains, an opiate was sent her. Mr. Smith was summoned to her about 2 P.M.; and on his arrival, he found she had just died. She complained of excessively severe after-pains, together with great oppression about the chest, and feelings of sinking and exhaustion and extreme restlessness. In answer to inquiries as to whether there had been any hæmorrhage, the attendants stated that there had not.

A *post mortem* examination was performed the same evening, the body not being quite cold. The abdominal viscera were all free from disease. On opening the uterus, which was large, there was found a considerable quantity of coagulated blood; but not by any means enough to satisfy one that loss of blood was the cause of death. The uterus contained also a considerable piece of the placenta adhering to its internal surface. In the chest were old adhesions between the pleura costalis and pulmonalis. The heart appeared distended; not that it was enlarged, properly so called, but that it had an appearance of distension, which was evidently on the right side of the organ. On opening the right auricle, a quantity of air escaped with a sort of little puff, and the organ was at once reduced to its proper dimensions. No disease was found in its substance or valves. The left ventricle contained a small clot.

CASE III. In the autumn of 1855, Mrs. E., aged 28, was delivered of her third child, after a natural labour. She had become sufficiently convalescent to resume her household duties; but on the eighth day, she was taken suddenly ill, and expired before Mr. Walford arrived.

I assisted at the *post mortem* examination the following day. No unusual appearance was observed, until the liver was sliced; it was then noticed that frothy blood escaped, and, a further examination being made, air was discovered in the vena cava inferior and vena portæ; and the right side of the heart was distended with frothy blood. The uterus was of its usual size for the eighth day. There was no sign of decomposition about the body.

REMARKS. It does not appear to be generally admitted that the entrance of air through the uterine sinuses can cause death; but if we recollect that Dr. Cless, of Stutgard, examined the bodies of 1,200 patients, who had died of various diseases, without finding air in the heart; that in the eleven cases here alluded to, death was more or less sudden, and could be explained by no *post mortem* appearances; that the development of gas from putrefaction was quite out of the question, some of the bodies being warm at the time of examination; and that these cases present an analogy with those in which air enters the veins during operations and experiments; I think we are forced to the conclusion that the entrance of air through the uterine veins was the cause of death.

I will, however, shortly send some examples to prove that the local generation of air may in some cases prove fatal.

British Medical Journal.

SATURDAY, JUNE 6TH, 1857.

MEDICAL REFORM.

AT the moment of going to press (Thursday night) Lord Elcho will move, in accordance with the notice paper, that Mr. Headlam's Bill, supported as it is by the great bulk of the profession, and by most of the Universities and Colleges, "be read a second time this day six months." Of course, under these circumstances, it will be inexpedient on our part to say much with respect to a Bill, which may possibly be thrown out long ere this JOURNAL reaches the reader. It may not be amiss, however, for us to repeat a fact which has not been, we think, sufficiently noticed in any discussion which has yet taken place with respect to Lord Elcho's rival Bill. That Bill, to all intents and purposes, will, if passed, throw the entire government of the profession into the hands of the Board of Health. Yet, strange to say, nobody knows what will in future be the position or authority of the Board of Health itself. That it will lose its president if Sir G. Grey's scheme is carried out is certain—that it will migrate from Richmond Terrace to the depths of the Privy Council Chamber is also certain. Into that retreat we do not wish to follow it; and we must say that we

should deeply regret to see the government of the profession taken from the full light of day and plunged into its obscure depths.

If Lord Elcho should manage to defeat Mr. Headlam's Bill, he does not necessarily, by that obstructive course, pass his own in its present shape. The profession will have to decide if a Scotch lord, pushed forward by hidden and private interests, is to bind medicine to the car of the State without one struggle for its freedom. Our readers will perhaps remember that last year several letters were published in the *Times*, denouncing Mr. Headlam's measure, and that, on the moving of its second reading, a leader appeared which without doubt gave it its quietus. Precisely the same tactics have been pursued this year by those persons interested in the Government Council or Board of Health plan. A letter appeared a day or two ago from a member of the College of Surgeons, complaining that the corporations do not represent the members of the Colleges; and on the morning of the reading of the Bill, when it is too late to answer its statements, another leader appears in the *Times*, which throws all its weight in the most artful manner into the scale of Lord Elcho's Bill. The *Times* takes the popular line of argument: "These two Bills are bidding for public support; they are both very much alike, but Lord Elcho's gives the highest bid of the two for public support." Therefore "Hurrah for Lord Elcho!" The editor quite keeps out of view the fact that this Bill proposes that Government shall put its paw upon one of the most enlightened and liberal of the professions. What would the bar say, if some noble lord were to attempt to have law affairs regulated by a clerk of the Privy Council? or what would the clergy do, if it were to be coolly proposed that the discipline of the church should be submitted to the hands of one of Lord Granville's secretaries? What would the *Times* say? Why, that this bureaucratic system did not suit the English mind, and that Englishmen would not submit to it. If any section of the British community is fitted for self-government, surely the most educated section is; and we trust that, whatever may be the fate of Mr. Headlam's Bill, the profession will not submit to see the governing council of medicine managed in a back government office, by individuals whose interests are to keep things snug, and to exclude the vulgar popular element as a thing too honest and untameable for the dignified repose of official routine.

MEDICAL SOCIETIES AND MEDICAL ETHICS.

The age in which we live is certainly in its predominating character the very opposite of the elder years of chivalry. All our modern proceedings tend to crush the spirit of enthusiasm, and to set up in its place a prosaic utilitarianism, to make romance give way to reality, and to build model washhouses instead of castles in the air. All this would be very desirable if the effect were only to get rid of the transient sophistications of time, and to establish sound principles for governing our social or domestic concerns, in the room of those wild schemes of utopian polity which distinguished the earlier days of Christian civilisation; but, with the sober regularity of modern institutions, has come a tame, almost an apathetic, disregard of those nicer feelings of honour which our forefathers cherished, and sometimes exaggerated, and for which they have bequeathed us no equivalent. If now-a-days a minister of state commits a solecism in the good breeding that gentlemen hold sacred, he shelters himself behind the ever ready platitudes of the armourbearer, his secretary; if a barrister, either directly, or indirectly by insinuation, attacks the private concerns or character of a witness, he meets with no reproof from the judge for all weapons are considered fair in the hands of an advocate: yet there is a remnant in all classes which has not bowed the knee to the god of a gentility so complacent, or refused to acknowledge the subtle laws of those good manners that have now become almost obsolete: and, more than this, there will always be found in every community a large number of persons who will ever be alive to the reality of such sound principles, and be ready to adopt them, provided the proper formularies for making them manifest can be supplied.

These thoughts have been suggested to us by observing the spirit in which the profession has of late dealt with certain ethical questions that have arisen out of disputes among Poor-law medical officers; and in no instance that we are acquainted with have the points at issue been more thoroughly sifted, or more calmly handled, than in the case of Fox *v.* Taylor, by the Medical Society of Southampton, as noticed in our last week's impression. We do not propose to weary our readers with a repetition of the facts of the case, which have already appeared fully in our pages; our principal object now is to show that a society of gentlemen, actuated by a desire to bear with each other's infirmities, yet taking very opposite views of the merits of the cause that is brought before them, may so "agree to differ" as to bring out of that very difference the elements of future stability. The Quixotic members who profess to believe in the morality of gentle breeding, have their abstract speculations in this direction materially modified by the hard disciples of the Bentham school, who teach systematically that men's actions are governed by their interests; and again, the latter class of philosophers, who are not absolutely chained by the fundamental error of prejudice, will in some degree escape from the influence of their inflexible principles into the pure air of a higher moral science, through the teaching of those who see, though they may not always be able to define, the chivalrous spirit that is directed by "good taste" in everything.

In arriving at just conclusions from the conflicting evidence that may be submitted to such a tribunal as a medical society, it is neither necessary, nor consistent with its acknowledged laws, to pass either libellous or condemnatory resolutions: in nine cases out of ten, as in the present instance, a general expression of opinion in temperate language is all that is required; and we heartily congratulate the Medical Society of Southampton on the result of the late inquiry, and on the sound judgment that has been exercised throughout.

If it be objected by one class of thinkers that the middle course we have here pointed out as the true one is too feeble for the purpose, and by another class that our "higher flights" are chimerical, all we can say is, that as we are not engaged in a trading speculation, but represent the opinions of a large and influential body of gentlemen, we are content to advocate a transcendental theory of forbearance such as gentlemen can sympathise with, rather than that so-called practical system of the plebeian mind, which is too often unmeasured in its language and vindictive in its effects.

THE WEEK.

As we anticipated, the Pharmaceutical Society, under the presidency of Mr. Jacob Bell, have declared against the Bill now under discussion in the House of Lords, with reference to the sale of poisons. We are not aware who were the advisers of Government with respect to the provisions of this Bill, but whoever they were, it is evident they knew little of the real working of the question. As the *Times* observed the other day, it errs decidedly on the side of rigour, and we do not believe that it would work if passed in its present form. We trust that when the third reading comes on in the Lords, on which occasion the merits of the measure will be for the first time discussed, that those restrictive clauses which will not allow a person to procure certain proscribed drugs without the warrant of a magistrate or a clergyman (!) will be struck out. With this amendment, and probably with a slight curtailment of the number of prohibited poisons, the Bill will prove an immense public boon. We certainly trust some means will be taken to prevent access to virulent poisons by raw apprentices. It is certainly remarkable that within these last few weeks several lamentable deaths have resulted from this very cause; and, as we write, we find in the *Times* a report of a death which occurred in a manner to alarm young mothers. It appears that the powder used for powdering infants is sometimes made of white lead! In the case before us, the white lead drawer was empty, and the chemist's youngest apprentice, who had not been apprenticed more than four months, filled it with arsenic from the cellar, where both were kept in barrels. The first unfortunate mother who wished for some of the white lead to powder the sore places of her infant, was served with the powdered arsenic in its stead; and, of course, the child died. The question naturally arises, what business had the chemist to keep arsenic or white lead in open barrels in his cellar? Until raw lads are absolutely forbidden to touch deadly poisons, we fear that accidents of this kind will recur, notwithstanding any Act of Parliament. But this singular accident opens up another question of vast importance. Is the violet powder used by all the infant world composed in any part of white lead? If so, we fear this pernicious compound has led many of them along "the road to dusky death."

Certain portions of Paris were, it appears, water-logged during some parts of last year. A subterranean inundation filled the cellars and did immense damage. The Paris Board of Health instituted an inquiry into the cause, which appears to have been in operation for a century, as similar inundations took place in the years 1740, 1783, 1818, and 1837. Popular opinion attributed it, at one time, to the heavy rainfalls; at another, to the infiltration of the great reservoirs of the fire-engine at Chaillot; at another, to the leakage of the great main sewer which runs from the Rue des Filles du Calvaire, and empties itself into the Seine to the right of the Quai de Billy; and lastly, the reservoir of La Villette and the canal of St. Martin have been designated as the source of the infiltration. In this opinion the Board of Health, after a careful examination, have been led to concur. Accordingly, the canal and reservoir were emptied, and the cracks found in their beds thoroughly cemented. Simultaneously with this operation the inundation disappeared.

It is very rarely that we have to record the Medical Apostasy of any members of the profession of known character and ability. Scores of disaffected practitioners have, of late years, drafted themselves off to the ranks of Homœopathy without making any sign, or without being inquired after. We have the pain this week, however, to state that Dr. Horner, the senior Physician to the Hull General Infirmary, and one of the Vice-Presidents of this Association, has taken leave of legitimate medicine and gone over to the arch-imposture. Of course Dr. Horner could not conscientiously expect to hold his appointment any longer, with his changed views with respect to the healing art; and he has, consequently, addressed a letter to the Governors of the Infirmary, announcing his conversion to the Homœopathic system. The weekly board of that Institution have, according to the *Hull Advertiser*, "called a Special General Meeting of the subscribers to consider and determine what is to be done in the matter, and whether it may or may not be necessary to declare the office of Senior Physician of the Infirmary vacant." Of course, the decision of this Board must be to declare the office vacant; otherwise, the whole medical staff would have no other alternative but to resign. We do not for one moment anticipate, however, that any other course than that of the instant dismissal of the offending physician will be taken by the Board, as it must be well known to every member composing it, that no legitimate practitioners could, in honour, continue the colleagues of a man who had declared his disbelief in the principles of practice as pursued by them. To take any other course would be to reduce the Infirmary at once to the position of an Homœopathic establishment. Of course, this apostasy on the part of Dr. Horner must come under the notice of the Association.

The nature of the Cancer-cure of Dr. Fell is no longer a secret. In a *Treatise on Cancer and its Treatment*, which he has just published, he states his remedy to be the powder of a North American plant termed by the Indians *puccoon*, and by botanists *Sanguinaria Canadensis*. This plant, which grows in abundance in the western parts of North America, is said to be successfully used by the Indians on the shores of Lake Superior in the treatment of cancer. It is stated by Wood and Bach (*United States' Dispensatory*), to act as an escharotic when applied to a fungous surface in the form of powder. Dr. Fell administers the powder both internally and externally; but we notice that he combines with it other potent agencies, as chloride of zinc, sulphate of zinc, and iodide of arsenic. This circumstance obscures the view which is to be taken of the real efficacy of the drug. A more careful examination of Dr. Fell's book must be deferred to an early opportunity; in the meantime, we have stated the main fact, the announcement of which has been anxiously looked for. It is but fair to Dr. Fell to state, that he has kept the engagement which he made with the surgeons of the Middlesex Hospital to publish an account of his treatment within six months. His first applications were made to patients in the hospital on January 22nd.

[Erratum. In our leader of last week on the Victoria Hospital at Netley, by a printer's error we were made to say, that many of the ward windows "command *dull army camps in the rear*"—instead of "*dull airing courts.*"]

Association Intelligence.

COMMITTEE OF COUNCIL.

The Committee of Council will meet in Birmingham, on Tuesday, the 16th instant.

The principal business will be the consideration of the Report to be presented by the Council at the next Annual Meeting.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 1857.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East Anglian. [Annual Meeting.]	Norfolk Hotel, Norwich.	Friday, June 12, 1 P.M.
Midland. [Annual Meeting.]	Town Library, Leicester.	Thurs., June 18th, 2 P.M.
Lancashire and Cheshire. [Annual Meeting.]	Council Chamber, Town Hall, Preston.	Wednesday, June 24th, 11.30 A.M.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 14, 12 noon.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

Worcester, May 12th, 1857.

NORTH WALES BRANCH.

RESOLUTION OF THE COUNCIL REGARDING MEDICAL REFORM.

At a meeting of the Council of the North Wales Branch, held at Rhyl, on May 29th, it was suggested that each member should (without delay) petition the House of Commons in favour of Medical Reform; and that Mr. Headlam's Bill presented the best grounds for a speedy and final settlement of that long agitated question. It was deemed preferable to suggest this course to waiting for the Annual Meeting of the Branch, which could not be conveniently called together before the 14th of July next.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Saturday, March 28th, 1857.

Francis Hird, Esq., President, in the Chair.

TREATMENT OF LATERAL CURVATURE OF THE SPINE.

BY B. E. BRODHURST, ESQ.

The author stated the various cases of lateral curvature, and showed that some varieties of curvature are alone amenable to treatment. He affirmed that it was not difficult to discover the cause of curvature, and pointed out the means by which an accurate diagnosis might be made. He alluded to primary and secondary curves, and explained how to distinguish the primary curve. Through ignorance of these questions, it was customary to treat the dorsal curve alone, whether a primary or a secondary curve; and, consequently, the lumbar curve was frequently increased by attempting to remove a compensating dorsal curve. A compensating curve was an effort of Nature to restore equilibrium; and, though it were removed, the primary curve and the cause of distortion would remain. Much scepticism existed with regard to the utility of spinal instruments, which had been occasioned by the application of instruments to every form of curvature, without inquiry as to the cause of distortion. To remove a rigid spinal curve by lateral pressure was a physical impossibility; the result of such treatment was only to induce flattening of the ribs. Instead of lateral pressure alone being employed, it was necessary to unbend a spinal curve; and, although slight curvature might be removed by support only, a rigid curve required to be unbent. The author then described the manner in which this was to be effected, and explained the spinal apparatus and its action as follows. The instrument consists of a band fitting accurately to the pelvis, from which rise two lateral uprights, the heads of which rest in the axillæ, and support the shoulders. These uprights elongate, so that they may be raised to any desired height; they also move in the segment of a circle, at their junction with the pelvic band: consequently, one or both may have a perpendicular or an oblique direction. Springing from the centre of the pelvic band is a perpendicular steel bar (vertebral stem), which rises to the upper extremity of the dorsal curve. This stem is united by a transverse band (scapular band) with the crutches. Thus a solid frame is produced, which cannot be tilted by any amount of pressure. The vertebral stem supports three levers, all of which are moved by rack-and-pinion joints. The lowest of these gives attachment to the lumbar webbing band; to the middle lever is attached the dorsal webbing band, and the upper lever is connected with the shoulder-ring. The lumbar and dorsal webbing bands are further attached in front to two perpendicular levers, which are placed on the anterior surface of the pelvic band, and which, as the other levers, are moved by rack-and-pinion joints. Now, when the lumbar is the primary curve, its concavity is supported by the lowest webbing band, and the dorsal band is applied obliquely in such a manner that it shall act on the inferior extremity of the dorsal curve by uplifting it. This action of the instrument will tend to depress the pelvic band. A webbing band, fastened to a lever in front, and to the pelvic band behind, passes over the highest ilium. This, by its action on the lumbar curve, tends to restore the horizontal position of the pelvis; and the combined action of these four bands is to unbend the lumbar curve. When the dorsal is the primary curve, its convexity is also supported by a webbing band, while the lumbar band is applied to the upper extremity of the lumbar curve, to act upon it obliquely in a downward direction; and the upper extremity of the dorsal curve is equally acted on by the shoulder sling, which, embracing the scapula, and lying upon the ribs which correspond to the extremity of the dorsal curve, acts upon them to unbend the curve. Thus the convexity of the curve being firmly fixed, there is power to uplift and depress the extremities of the curve, which cannot fail to unbend it, if the positions now laid down are attended to. When much rotation of the vertebræ is superadded to lateral curvature, a metal plate, movable with rack-and-pinion joints, is attached to the perpendicular vertebral stem of the instrument; by means of which adequate pressure can be made from behind forwards.

Mr. Hunt observed, that the age had not been mentioned by Mr. Brodhurst at which he believed treatment to be no longer practicable; and he inquired the ages of the several patients to which reference had been made, and from whom the casts which were exhibited had been taken.

Mr. Harrison remarked, that it had been stated by the author of the paper that three-fourths of the cases of lateral curvature of the spine arise from increased muscular action, and from debility. He inquired if such cases could with safety be treated at any period without mechanical support, or, if not, how soon support ought to be employed.

Dr. Ryan had used a similar instrument to that now exhibited with great advantage; and he remarked that the health of the patient was not injuriously affected by a portable instrument, as was too often the case when the recumbent position was long maintained.

Mr. Adams doubted whether spinal instruments of any kind were useful after twenty-six years of age; and he believed that a pliable curve alone could be acted on by mechanical means. He had no faith in any power to unbend a rigid curve, or to act upon such a curve by lateral pressure; and he thought that gymnastic exercises and the recumbent position were more useful than any instrumental means that might be adopted. Yet he admitted that cases existed in which support was necessary to relieve pain; and he cited a case in which considerable pain had been relieved by uplifting the depressed ribs. He doubted if pressure could ever be borne in

the axilla, for he had always found that such pressure was followed by swelling of the limb. He observed that the instrument now exhibited was different to that originally constructed by Mr. Errard, and inquired whether the alterations had been made by Errard.

Mr. Potts could not subscribe to the opinion of Mr. Adams, that instrumental interference was useless. He had seen cases, especially from fifteen to twenty years of age, in which great advantage had been derived from the use of spinal instruments.

Mr. Adams remarked, that slight pliable curves might be removed by means of apparatus, and reiterated his opinion that rigid curves could neither be unbent nor affected by lateral pressure. He had lately examined a spine in which four curves existed, where neither pain nor other inconvenience had ever been experienced. The treatment with which he should be content, in the instance of a single curve, would be, if possible, to transform it into four short curves. He thought that, if such a result could be obtained, more benefit would be derived than from any other mode of treatment. No ill result could occur except some shortening of the trunk.

Dr. Chowne was sorry to have heard so much said against the utility of spinal instruments. He had seen much advantage from their use; and thought that, although the correct form of apparatus might not yet perhaps have been discovered, that apparatus was likely to prove most useful which encased the patient in the most efficient manner, and which afforded the most support.

Mr. Brodhurst replied, that the ages of the cases to which he had referred varied from sixteen to twenty-eight years, and that the three cases to which he had especially directed attention were taken at eighteen years of age, thirty-three years, and thirty-two years respectively. The improvement which had taken place in these cases was shown by the photographs which had been subsequently taken, after eight months and after fourteen months of treatment. These cases were instances of very severe distortion, and yet it was shown what treatment had been able to effect. He was surprised to hear the opinion expressed by Mr. Adams with regard to the benefit which might be expected from mechanical treatment; and expressed his belief that, when the several curves were properly acted on, distortion might generally be overcome, but that distortion could not be removed by acting only on one curve. Support could not be applied too early when a spinal curve had been formed; but it was not necessary to use an elaborate instrument when curvature was very slight. Support to the spine, and to remove the weight of the shoulders, was in such cases sufficient. All the cases referred to had been treated on the principle of unbending the curve, by means of an instrument of excellent construction made by Mr. Bigg. This instrument was elaborated from one far less perfect, which was constructed by Mr. Errard. Age was a very imperfect indication as to the rigidity of spinal curves. At sixteen, or even earlier, much rigidity might exist; whilst, on the other hand, a curve might remain pliable until thirty or thirty-five years of age. Pain also was very variable; it existed both with long and with short curves.

Saturday, April 4th, 1857.

Francis Hird, Esq., President, in the Chair.

prolapsus of the uterus, and its cure by operation. by i. b. brown, esq.

The case was that of a woman, aged 45, and the mother of several children. Upon examination, Mr. Brown found that the perinæum had been partially ruptured, and that three-fourths of it had healed up again, leaving about an inch of the *fourchette* still absent. About five years ago, the woman began to suffer from prolapsus of the uterus, which gradually increased, and at last rendered her quite incapable of following her usual employment of field labour. The constant and unremitting pain completely destroyed her health. Her hips and thighs were in a state of excoriation from the habitual discharge. The uterus protruded completely through the external parts, to the size of a six-months' fœtal head. She was desirous to undergo any operation which would give her relief. He therefore pared off the mucous membrane in a horse-shoe shape from the posterior and lateral parts of the vagina, for about an inch (in some cases even two inches in depth), and brought the raw surfaces into apposition, with deep quill sutures, and the edges with interrupted sutures. He also took off a portion of mucous membrane, about an inch and a half long, and three-quarters of an inch in breadth, on each side of the anterior portion of the vagina in the labia, and drew their edges together with interrupted sutures. The object of the former part of the operation was to increase the length and depth of the perinæum, thereby contracting the orifice and calibre, as well as giving increased basal support to the column of the vagina. The operation (which was the usual one performed by Mr. Brown) succeeded perfectly, and she was discharged quite cured in five weeks. He had since heard that she is as well as ever she was in her life, and following all her usual occupations with perfect comfort. He had brought this case under notice, particularly because he had observed that an eminent surgeon of one of the London hospitals had recently performed it, and in his observations appeared to claim the operation for another gentleman, whereas he (Mr. Brown) was entitled to the credit of having been the first to perform it in this country, his example having been followed by many. The present was his seventieth case.

Mr. H. Smith remarked that Mr. Fergusson had had no wish in his remarks to detract from the merit of any one. Dr. Savage's name was mentioned as he was present.

Mr. Hird inquired whether the operation would be advisable in a woman not past child-bearing.

Mr. Brown did not contract the vagina to such an extent as did Mr. Fergusson. It was not necessary. He (Mr. Brown) had had cases in which pregnancy had occurred after the operation, and delivery effected without injury to the new perinæum.

Saturday, April 11th, 1857.

Francis Hird, Esq., President, in the Chair.

arcus senilis in youths. by edwin canton, esq.

Mr. Canton introduced to the notice of the society three youths, of the respective ages of eleven, fourteen, and twenty, with well marked arcus senilis. The cases were peculiar in respect to the question of their hereditary character. The father and mother had the arcus at the respective ages of fifty-three and forty-nine.

condylomata. by victor de méric, esq.

The author sought to establish, first, that the so-called condylomata belong to the class of secondary, and not primary, symptoms; secondly, that they are therefore neither physiologically nor artificially contagious; thirdly, that the treatment adopted by him is effectual, and worthy of imitation. Mr. De Méric discarded altogether the word *condyloma*, and showed that it would be advantageous to adopt the term *muco-cutaneous papules* to designate the clustered or disseminated tumours which appear about the vulva and anus in secondary syphilis; he would call *mucous papules* the same growths on purely mucous membranes, and *mucous patches* when the epithelium is destroyed. The first and second of the three propositions were supported by arguments based on facts; and the treatment was shown to have been successful in numerous cases. It consisted in the administration of iodide of mercury, emollients, and cleanliness locally, followed by a lotion of hypochlorate of soda, and dusting with calomel. The author was giving chlorate of potash along with the mercury, to forestall any unpleasant effects of the metal. A careful distinction was drawn between muco-cutaneous papules and mere non-syphilitic vegetations or warts; and Mr. De Méric concluded by reading short notes of cases treated at the Royal Free Hospital, accompanied by some good drawings of the pathological appearances.

Mr. Henry Lee was inclined to agree in the main with the proposition of the author, that all condylomata were secondary; but cases sometimes occurred, in which no other secondary symptoms presented themselves, and the condylomata went away by simple local treatment. Mr. De Méric had said that one of the proofs of the secondary character of these affections consisted in the fact that they could not be inoculated. He (Mr. Lee), however, thought this test a fallacious one, inasmuch as the same quantity of fluid that would inoculate well whilst the sore secreted pus, would fail to do so in most instances when the sore had become of the adhesive kind. But it must be remembered that sores of the adhesive kind, though not inoculable by the lancet, might be so by other means. He had seen such cases. Mr. De Méric's argument, therefore, on this point, in favour of condylomata being of a secondary character, was incomplete. He (Mr. Lee) had found this affection best treated by calomel fumigations.

Mr. Hancock differed from Mr. De Méric as to the capability of propagating syphilis from secondary symptoms. He

was sure he had seen the disease so propagated. He had seen it communicated also from the induration remaining after chancre, where there was no sore or abrasion whatever. He would ask if inoculation would succeed in a system saturated by syphilis? He admitted that condylomata were always of a secondary character; and he agreed with the treatment recommended in the paper. If an individual was under the influence of the virus of syphilis, it was not necessary for him to have an external sore to enable him to propagate the disease.

Mr. Dendy regarded the doctrine enunciated by Mr. Hancock as paradoxical. He thought, in opposition to Mr. Lee, that, if the disease were inoculable at all, the same result would be obtained whether the matter were inserted by a lancet or by any other means.

Dr. Gibb had seen a case in which numerous condylomata surrounding the anus had been shaved off by Mr. Curling, at the London Hospital, no constitutional treatment being adopted.

Mr. Henry Lee inquired if, in those cases in which the pus had been examined by the microscope previously to inoculation, acetic acid had been added previous to testing it?

Mr. De Méric stated, in reply, that he was much pleased that Mr. Lee, whose opinions were entitled to so much attention, had taken a share in the discussion. Mr. Lee, he found, was inclined to consider muco-cutaneous papules as secondary symptoms; but he had some doubts, because such papules disappear rapidly. This latter circumstance is, however, of slender importance, as regards distinction between primary and secondary symptoms, as we all know that secondary eruptions will often disappear very rapidly without any treatment at all. Mr. De Méric thought that Mr. Lee's theory of adhesive and purulent sores was entitled to every respect; he was not aware, however, that in his paper he had made a confusion between papules and pustules. When he spoke of pus connected with papules, he alluded to that secretion as the result of a highly inflamed and ulcerated state of the papules, which state was often brought on by much walking combined with neglect. Mr. Lee and Mr. Hancock, arguing from cases they had seen, both believed that secondary syphilis could be communicated to a female by a man whose sexual organ presented only an indurated cicatrix from chancre. He (Mr. De Méric) thought this view inadmissible, because complete reliance could never be placed on cases where patients have an interest in concealing circumstances which might reflect unfavourably upon themselves, and because the mechanism of infection by an unbroken surface is contrary to all known pathological phenomena. Mr. Hancock, on considering the matter, would perhaps be led to concede that the fact of mercury being easily rubbed into the system was not sufficient to prove that secondary exudations may also be introduced into the economy by friction. Mr. Hancock's question, as to the effects of inoculation with the matter secreted by muco-cutaneous papules, could hardly be thoroughly answered but by inoculation of the secretion upon a perfectly healthy individual. This, however, he (Mr. De Méric) was not prepared to do. As to the iodide of mercury, he was in the habit of prescribing it in pills, and the chloride of potash in solution. Mr. Dendy had, in his remarks, answered the various objections brought forward by the gentlemen who differed in opinion with the author. As to the shaving off of muco-cutaneous papules by Mr. Curling, mentioned by Dr. Gibb, Mr. De Méric was inclined to think that Mr. Curling must have considered the growths he thus removed as mere vegetations.

Editor's Letter Box.

MEDICAL REFORM: THE PRIVILEGES OF COLLEGES AND UNIVERSITIES.

Letter from E. W. Murphy, M.D.

Sir,—In the not very accurate report of my remarks at the "Adjourned Meeting of the Metropolitan Counties Branch of the British Association," I am made to say, "But the right to give licenses to practise should not be exclusively confined to the Colleges: the Universities should be permitted to license as well as to educate and grant degrees in medicine, if they do so rightly". I beg to state, that the whole of my observations were intended to prove exactly the reverse, that the right of licensing to practise belonged to a College, and not to a University; because a University can exercise no superintendence over the profession, which is the chief, and, in my opinion, should be the sole object of a College. On the other hand, the right of educating and qualifying, by examination, for that license belongs to a University; and if Oxford, Cambridge, and Dublin please to delegate that part of their duty to a College of Physicians, that is no reason why other Universities should be compelled to do the same. If a University educate a student efficiently, both in general knowledge and in medicine, if the degree of M.D. or M.B. be obtained, after an approved curriculum of medical education and a competent examination, I assert *that the University graduate has the right to a license to practise without further examination.* The College of Physicians insist upon retaining this power, which completely makes entrance into the profession, as a Physician, "a one-portal system," and under the disguise of reform, perpetuates an old and long-standing abuse. Permit me, therefore, to repeat, that my objection was not that "Universities should be permitted to license as well educate," but that having educated, and that efficiently, they should have the right to demand a license without further examination.

I am, etc., Edward W. Murphy.

London, June 1857.

PROXY VOTES IN ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from W. Allison, Esq.

Sir,—In your number for May 30, p. 467, Mr. R. W. Jones, upon good authority, says, "The mode of voting will be altered" before the next election; but I fear that will not prevent the complaints of the Governors, and shall therefore venture to ask you, Mr. Jones, or any of your readers, *Who elect* the pensioners and foundation scholars? Having acted as a local secretary, letters have been addressed to me for information, which lead me to regret the want of a general statement of the College funds, and of their application, since the first occupation of the buildings. The unsuccessful candidates in 1855 were, Fletcher, 1,066; Wood, 1,014; Tait, 672, etc. In 1856, Fletcher, 1,956; Tait, 1,701; Wood, 1,273, etc. In 1857, Fletcher (200 above any other) ended his canvas with 3,202; Tait, 2,759; Wood, 1,453. How did it *happen* that Fletcher and Tait stood about the same every year, just below the successful candidates? Neither of the six elected this year have been able, on former occasions, to poll so many as Tait. Kettle entered the room on the 21st of May, 70 below Tait, and polled 3,057 votes! and so in proportion did the other successful candidates. How many Governors are there, and how many did the room contain on the 21st? Complaints are not made of the objects selected, but of a mystery which requires an explanation. Perhaps the publication of a full account of the means by which 3,000 votes may be obtained, during the day of election, might prevent widows (especially in country towns) from raising their hopes to be blighted, or from being induced to contract useless debts when they have no chance of success. I may have misunderstood my correspondents; but, to the best of my knowledge, the foregoing is a faithful representation of some of their impressions and perplexities. If I have made any misstatement, no one will be more desirous than myself to have it corrected, or more thankful to any one who can inform me of the error.

I am, etc.,
W. Allison.

East Retford, May 30th.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, May 29th.

LUNATIC ASYLUMS IN SCOTLAND.

Mr. E. Ellice called attention to the report of the Commissioners of Inquiry into the State of Lunatics in Scotland, and the necessity of securing to pauper lunatics better protection and maintenance, the treatment of this class in Scotland (4,600 in number) evincing in many cases great neglect and cruelty as regards their reception, their custody, and their removal from one place to another. These details were of a most painful and even repulsive character; and Mr. Ellice did not hesitate to charge the authorities with culpable complicity, and asked the Government to visit them with direct condemnation.

Sir G. Grey was not surprised at the indignation manifested

by Mr. Ellice at the gross cases of abuse and neglect revealed in the report of the commissioners, and hoped that the perusal of that report would evince the hearty co-operation of Scotch members in providing a remedy for a radically defective administration of the law. He differed from Mr. Ellice only in one respect. The law had provided safeguards against these evils; the great defect was in the administration of the law. As soon as the report was in the hands of the Government (only fifteen days ago), his attention was immediately given to it; he conferred with the Lord Advocate, and called the attention of the Board of Supervision to the gross neglect and abuses in the administration of the law disclosed in the report. Some of the cases of illegal neglect and cruelty were under the consideration of the Lord Advocate, who would in due time propose to Parliament a Bill for remedying the present state of things in regard to pauper lunatics in Scotland.

Mr. Drummond, Mr. F. Dundas, Sir T. Colebrooke, Mr. Kinnaird, and Colonel Sykes, having spoken upon the subject,

The Lord Advocate said the state of things disclosed in the report had been a disgrace and scandal to the country. Every one of the suggestions of the commissioners had been introduced into the Bill of the Lord Advocate Robertson in 1848; and, if that Bill had passed, these abuses would have been put an end to. It was, however, resisted in Scotland, and large counties had petitioned against it; but now he believed, if he proposed these remedies, the Bill would pass both Houses.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Black. On June 1st, at 6, Amelia Place, Southgate Road, the wife of Robert J. Black, M.D., of a daughter.

Browne. On May 24th, at West Bromwich, Staffordshire, the wife of Benjamin S. Browne, Esq., Surgeon, of a son.

Cobbold. On May 23rd, at 21, Upper Seymour Street, Portman Square, the wife of Thomas Spencer Cobbold, M.D., of a daughter.

D'Olier. On May 31st, the wife of Isaac A. D'Olier, M.B., of York Place, Mile End, of a son.

Jackson. On May 26th, at Brussels, the wife of Nevill Jackson, M.D., of a son.

*Laycock. On May 26th, at 4, Rutland Street, Edinburgh, the wife of Thomas Laycock, M.D., Professor of the Practice of Physic in the University of Edinburgh, of a daughter.

Massy. On May 31st, at Canterbury, the wife of — Massy, M.D., 2nd Drogoon Guards, of a son.

Paley. On June 1st, at Halifax, the wife of William Paley, M.D., of a son.

MARRIAGES.

Fraser—Cooper. Fraser, John, M.D., Rifle Brigade, to Emma Caroline, eldest daughter of the Rev. Mark Cooper, vicar of Bramshaw, Hants, at Bramshaw, on May 28th.

*Jordan—Watson. Jordan, Robert C. R., M.D., of Edgbaston, Birmingham, to Elizabeth, third daughter of the late Robert Watson, Esq., of Mansfield, at Mansfield, on May 26th.

DEATHS.

Anderson, Alexander, M.D., at Jedburgh, on May 28th.

Dowling, —, M.D., at Mountmellick, Ireland, aged 50, on May 12th.

Gibb, John H., Esq., Student of Medicine in University College, London, at Dover, on May 28th.

Gill, William George, Esq., Surgeon, of Islington, aged 32, on June 2nd.

*Gruggen, H. March, M.D., at Chichester, suddenly, on May 20th.

*Marriott, Peter, Esq., Surgeon, of Fair Lea, Malvern, after a long illness, aged 63, on May 31st.

Stewart, Horatio, M.D., Professor of Materia Medica in Queen's College, Belfast, aged 36, lately.

Stewart. On April 16th, on board the *Blenheim*, near St. Helena, Ludovick, only son of L. C. Stewart, Esq., Surgeon 61st Regiment, aged two years and nine months.

Tritton. On April 4th, at Kidderpore, Calcutta, Ensign Edmund Flemyng Tritton, son of Superintending Surgeon E. Tritton, of the Bengal Establishment, aged 20.

Wood, Thomas, M.D., at Sunday's Well, Ireland, aged 90, on May 13th.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 29th, 1857:—

Bright, Richard Stonhewer, Richmond, Surrey
Buss, Henry, Bainsbury Grove
Chandra, Rajendra Chandra, Calcutta
Cromarty, James Pattison, Aberdeen
Gull, Frederick, Stanway, near Colchester
Hepworth, Francis, Croftsbank, near Patricroft
James, Herbert, Merthyr Tydvil
Rowlands, Isaac, Llanfer
Trimnell, Thomas James, Cape of Good Hope
Watts, Stephen William, Army
Wright, Richard, Dublin

New Fellows. The following members of the College, having undergone the necessary examinations on May 19th and 21st, were admitted to the Fellowship at the last meeting of the Council:—

Allingham, William, Finsbury Square: diploma of membership dated March 6th, 1855
Bowden, Stephen, Royal Navy: April 28th, 1843
Clapton, Edward, St. Thomas's Hospital: April 4th, 1853
Flower, William Henry, Queen Anne Street: March 27th, 1854
Hulke, John Whitaker, King's College: July 16th, 1852
Jackson, Thomas Carr, Hamilton Place, New Road: May 30th, 1845
Maunder, Charles Frederick, Finsbury Place South: March 10th, 1854
Nolloth, Edward, Royal Navy: May 5th, 1845
Nunn, Thomas William, Stratford Place: December 18th, 1846
Ross, James Tyrrell Carter, Bengal Medical Staff: April 14th, 1845
Rudall, James Thomas, Rochester Square, Camden Town: March 27th, 1854
Sibley, Septimus William, New Burlington Street: February 27th, 1852
Taaffe, Richard Patrick Burke, Pavilion Parade, Brighton: August 4th, 1852
Teale, Thomas Pridgew, Leeds: March 28th, 1855

Apothecaries' Hall. Members admitted on Thursday, May 28th, 1857:—

Davis, William Haslam, Shelton, Staffordshire
Davy, Francis Jefford, Knighton, near Newton Abbott, Devon
Edwards, Edwin Thomas, Newcastle, Staffordshire
Hart, Gratian Charles Barry, Bristol
Hind, Albert, London
M'Whinnie, John, Royal Navy.
Maudsley, Henry, Settle, Yorkshire
Whitefield, Arthur, Barnstaple, Devon

HEALTH OF LONDON:—WEEK ENDING MAY 30TH, 1857.

[*From the Registrar-General's Report.*]

The returns from the metropolitan districts exhibit a further decrease in the weekly mortality. The deaths which in the two previous weeks were 1,050 and 948, were in the week that ended on Saturday 915. In the ten years 1847-56, the average number of deaths registered in the weeks corresponding with last week was 972; but as the deaths of last week occurred in an increased population, the average must be raised for the purpose of comparison in proportion to the increase, in which case it will become 1,069. Hence it appears that last week was so favourable to the health of London, that the number of its inhabitants who died was less by 154 than that which would have been placed on the registers if the average rate of mortality had prevailed. During the last three weeks the mean temperature of the air has been 58°, or nearly 14° higher than it had been in the three weeks preceding.

The deaths arising from diseases of the respiratory organs continue to decrease; the numbers returned in the last three weeks were 202, 167, and 139. Bronchitis, one of the diseases

in this class, was fatal in the same times in 102, 84, and 67 cases; pneumonia (or inflammation of the lungs) in 75, 66, and 56 cases. The deaths referred to phthisis (or consumption) which is placed in the tubercular class of diseases, were in the last three weeks 153, 118, and 124. This disease was less fatal last week than usual, for under the average rate of mortality the number would have been 150 instead of 124.

With reference to diseases of the zymotic character, it may be stated that hooping-cough is decidedly more fatal than is usual at the end of May. The deaths caused by this complaint rose again last week from 56 to 71; the average is 46. Only one death from small-pox is recorded; and not more than 16 from scarlatina; 30 from typhus and common fever; 17 from diarrhœa; 3 infants from syphilis.

Two persons died from lead poison. Six nonagenarians are returned, all women except two. The age of the oldest did not exceed 92 years.

Last week the births of 846 boys and 856 girls, in all 1,702 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,436.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·597 in. On Saturday the reading reached 29·91 in., the highest in the week. The mean temperature of the week was 56·9°, which is 1·9° higher than the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature exceeded the average on every day of the week, though generally only to a small extent. The highest reading of the thermometer in the week was obtained on Thursday, and was 74°. The lowest occurred on the same day, and was 42·9°. The entire range of that day, and also of the week, was 31·1°. The highest in the sun occurred on Saturday, and was 95°. The mean dew-point temperature was 48·2°, and the difference between this and the mean air temperature was 8·7°. On the first five days the wind was generally in the south-west; on the last two in the north-east. The rain in the week was 0·12 in., all of which fell on Monday.

Report on the Murrain of Cattle. The report of Dr. E. Headlam Greenhow on the murrain in horned cattle, and the effects of the consumption of their flesh on human health, has been sent in to the General Board of Health, and since printed. It forms a blue-book of 60 or 70 pages. The result of his inquiry is, that the cattle disease has prevailed in the United Kingdom among horned cattle for the last fifteen or sixteen years; that it is not peculiar to London; that it is probably infectious, but is also developed spontaneously in consequence of some unknown peculiarities of breed, management, season, or locality, and is not supposed to have been imported from abroad; that it is identical with the *Lungenseuche*, or pulmonary murrain, now prevalent in Mecklenburg, Holstein, and elsewhere; and that it has no affinity with the *Rinderpest* or steppe-murrain, with which it has been confounded by some English writers. The doctor suggests that the importation of the steppe-murrain (which would be most probably by way of Prussia) should be prevented by the prohibition of the importation of cattle except from countries which have clean bills of health. It appears that meat derived from animals suffering from the pulmonary murrain, and probably other diseases, is commonly and extensively sold in London and elsewhere for human food, but that there is no satisfactory proof that the consequences of consuming it are directly injurious. There are reasons to suppose that the use of meat from animals suffering under diseases unknown among the cattle of the United Kingdom has, abroad, been frequently attended with severe consequences on human health. The consumption of meat undergoing decomposition has frequently been injurious, and such meat cannot be eaten with safety even when cooked.

A Fortnight without Food. Some time ago, a paragraph appeared in *The Times* stating that a man had been discovered in Stockton's Wood, near Speke Hall, in the neighbourhood of Liverpool, in a state of complete exhaustion, and suffering from partial gangrene of the legs; that, on being somewhat revived, he stated that he had been a fortnight in the wood without food, living on grass and water, which he obtained at a running stream; and that he was a native of one of the Bermuda islands, and was a captain of a vessel, but that he had lost his certificate. He was taken to the Royal Infirmary, where he lingered until May 28th, when death put an end to his sufferings. An inquest was held on the body last Saturday. His name was Paul Outerbridge, and he was 40 years of age.

MEDICAL REFORM.

I. PETITION OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

The following Petition has been agreed on by the Royal College of Physicians in London:—

"*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled,*

"The Humble Petition of the President and College or Commonalty of the Faculty of Physic in London, under their Common Seal,

Sheweth,—That your Petitioners have been informed that Two Bills are now before your Honourable House for altering and amending the laws regulating the Medical Profession.

"That both those Bills profess, amongst other objects, to provide for the general and professional education of all Medical Practitioners, and for the Registration of all persons legally entitled to practise. But they differ widely as to the manner in which they propose that these objects shall be attained, and consequently in their bearing upon the interests of the Profession and the Public.

"The Medical Profession Bill (No. 1) brought in by Mr. Headlam, Sir Wm. Heathcote, and Mr. Napier, in providing for registration, provides that the recognised division of the Profession into Physicians, Surgeons, and General Practitioners shall be respected and preserved: and with good reason, since otherwise there will be no sufficient security that any class or portion of the profession shall have the best and highest education which this country can supply. This Bill also encourages education at the Universities in every branch of study preliminary or collateral to that of Medicine. But it requires that the actual competency of Students to enter upon practice shall be tested by those Corporations which were founded expressly for this purpose, and which we may therefore assume to be, as they might readily be shewn to be, the Bodies best adapted to perform this important duty.

"The Medical Profession Bill (No. 3) brought in by Lord Elcho would fix a minimum of professional qualification, to be ascertained by a new board formed for this purpose, and without which no one shall be allowed to practise; but with which any one may practise in every capacity. Hence this Bill would, to a great extent, destroy the inducements which now exist to seek higher qualifications than those which are merely sufficient for practice. Such an enactment would be fatal to the interests, and perhaps to the existence of all the Medical Corporations, including the Colleges of Physicians and Surgeons of England, Scotland, and Ireland, and the Society of Apothecaries of London. For who would seek the Licenses and Diplomas of these Bodies, when they could confer no additional privilege? Especially would such legislation be injurious to the Colleges of Physicians, whose Diplomas are burthened with heavy stamp-duty. And as it would be left, by this Bill, open to every Practitioner holding the minimum qualification to obtain the Degree of M.D. from some one of those Universities which have been in the habit of granting such Degrees on much too easy terms, there would be nothing to prevent his passing as a Physician, without admission into a College of Physicians, whilst the credit of that Order would necessarily be lowered.

"The College of Physicians of London is ready to concede, in favour of the Universities, the right which it has always possessed of granting its Diploma to any competent person, whether a Graduate or not. Accordingly, by the Bill of Mr. Headlam, it will in future grant its Diplomas to none but Graduates of the Universities. It asks in return that it should have its due share in testing the competency of Physicians to practise.

"There would seem to be no plain reason why a Degree from an University should confer admission into the Medical, more than into the Clerical and Legal Professions. On the contrary, Divinity and Law may be better studied than Medicine at an University. Therefore, it would be more reasonable and consistent that, as in the last-mentioned Professions, so also in the former, the general course of education should be passed at an University; but that the License and Admission to practise should proceed from the Profession, that is, from the Medical Corporations, which ought to comprise all, and do in point of fact comprise almost all, legally qualified practitioners of every grade.

"Because the Bill of Lord Elcho would supersede these

Corporations in their proper functions; and because, in the opinion of your Petitioners, it would have the effect of lowering the standard of medical education in this country; therefore, they humbly pray that it may not pass into a law. But that, on the contrary, your Honourable House would be pleased to pass the Bill of Mr. Headlam, which, as they think, would correct and amend the present defective and anomalous state of the laws regulating the Medical Profession, would introduce order into the Profession without imposing any improper restrictions upon Practice, and would uphold the education, character, and efficiency of all orders of medical men, in which important objects the interests of the Public are deeply involved.

"And your petitioners will ever pray, etc."

II. DEPUTATION TO SIR GEORGE GREY, HER MAJESTY'S SECRETARY OF STATE FOR THE HOME DEPARTMENT.

On Friday, May 29, an influential deputation of the Heads of Houses of the medical profession had an interview with Sir George Grey at the Home-office.

The deputation consisted of Dr. Mayo, President of the Royal College of Physicians, London; Dr. Alderson, Treasurer of the College; Dr. Hawkins, Registrar; Dr. Burrows, Member of the Council and Senior Physician to St. Bartholomew's Hospital; Mr. Travers, President, and Mr. Joseph Henry Green and Mr. Stanley, Vice-Presidents of the Royal College of Surgeons of England; Dr. Williams, Dublin, President of the Royal College of Surgeons in Ireland; Dr. Neligan, Senior Censor of the King and Queen's College of Physicians in Ireland; Dr. Hunter, President of the Faculty of Physicians and Surgeons of Glasgow; Dr. Wood, President of the Royal College of Surgeons of Edinburgh; Mr. Tegart, Chairman of the Court of Examiners of the Society of Apothecaries, London; Mr. De Vere, of the Court of Assistants, etc.

Dr. Mayo introduced the deputation. He said he trusted that the profession at large had arrived at such an amount of unanimity as was possible, when it was considered into how many sections they were divided—an unanimity greater than had ever obtained before. They had come to support the Bill of Mr. Headlam, a Bill that had the whole profession and the public with it in its favour. He was aware that there was another Bill before Parliament, that of Lord Elcho, which contained a provision for the nomination of all the members of the new governing council by the Crown. Mr. Headlam's Bill, which had been adopted by the deputation, had the same provision for six vacancies, and it was reasonable to conceive that a large portion of the council to be elected should belong to the medical body. Their proposed Medical Bill far surpassed Lord Elcho's, as it would tend to improve the *status* of the body in general, giving large opportunities to every section for that preliminary education which was so essential to every section of the profession.

Sir G. Grey said that it appeared to him the dissentients from Mr. Headlam's Bill and its supporters held similar views with respect to general principles, but different only on matters of details.

Dr. Mayo said, that the points of each differed, and it appeared to a great majority of the profession that those points were of vital importance.

Sir G. Grey was glad to hear that the medical profession was so unanimous now, as Dr. Mayo had stated. He understood that the Bill brought in by Lord Elcho was not his own Bill, but one that he had taken up from some other person since last session.

The Hon. W. F. Cowper said, with regard to unanimity he had waited for that opinion, and therefore he took it for granted that it was settled among the profession to support Mr. Headlam's Bill.

Dr. Williams, President of the College of Surgeons, Ireland, said, that he had come expressly from Dublin, in company with his colleague, Dr. Neligan, to express the approval of the bodies with which they were connected of Mr. Headlam's Bill. Ten medical corporations were unanimous in their support of it and in condemnation of the measure of Lord Elcho. His lordship's Bill confiscated the revenues of the corporations, and took the management of their affairs away altogether, vesting that power in nominees appointed by the Crown. They had twenty-one licensing bodies agreeing with them. The Universities of Oxford, Cambridge, and London had not declared; but as far as they had spoken, they were in favour of the Bill of the deputation.

Dr. Wood, President of the College of Surgeons, Edinburgh, and Dr. Hunter, President of the Faculty of Physicians and Surgeons, Glasgow, followed with arguments on the same side, saying that their respective institutions had unanimously agreed to support the Bill of Mr. Headlam as the best, and, in fact, the only Bill of the profession.

Sir G. Grey, having asked some questions, thanked the gentlemen for the information they had given him, and the deputation then retired.

III. STATEMENT OF THE UNIVERSITIES OF EDINBURGH, GLASGOW, AND MARISCHAL COLLEGE, ABERDEEN, RELATIVE TO DEGREES IN MEDICINE.

This document appears in the *Edinburgh Medical Journal* for the present month. The Universities object to Mr. Headlam's Bill, although in many respects to be commended, that it asks for the incorporated Colleges of the United Kingdom *exclusive* privileges—the rights of University graduates are not recognised. The Universities have been led to confer, with the view of inquiring whether they could come to one agreement by which the medical degrees granted in Scotland, the education for them, and the necessary examinations, might be so assimilated in all the Scotch Universities, and so accommodated to the practice prevailing in England, as to do away with the only reasonable objections which have been hitherto made to a State Medical Reform, in so far as the Scotch Universities are concerned. If they succeed in this endeavour, the Universities of Scotland feel that they can justly claim for their graduates a legislative enactment—not an exclusive right—entitling them to practise medicine unfettered in all parts of Her Majesty's dominions. After some remarks on the existing rights of Scotch graduates to practise, the document states that the Universities have come to an arrangement, of which the leading features are the following:—

"1. To grant the two degrees of Bachelor and Doctor of Medicine.

"2. That the degree of Bachelor of Medicine shall be granted only after such education and examination as shall qualify its possessor to practise equally surgery and medicine,—and midwifery as a branch of medicine. For such graduates the Universities are entitled to claim the right of practising all branches of the medical profession.

"3. That all students, previously to undergoing their first professional examination for the degree of Bachelor, shall give proofs of having obtained a good general education, and shall pass an examination in arts and philosophy. The Universities feel the difficulty of deciding how far this education and examination ought to extend. They are inclined to specify a comprehensive list of subjects of study in languages, physics, and philosophy, to require a stated number from all, and to demand that each candidate should profess others at his option for examination. They consider this the best method of avoiding either a superficial knowledge of many subjects, or such an extended course of preliminary education as ought not to be demanded, considering the long period necessary for purely professional study. A degree in Arts shall be considered as equivalent to this examination, provided it has been taken at a University in Great Britain or Ireland, where satisfactory evidence can be produced of the degree being given after a full curriculum of study in arts and philosophy, and after faithful examinations in all departments.

"4. That the curriculum of professional study for Bachelors should be as nearly as possible that required at present for doctors by the University of Edinburgh.

"5. That students should be allowed to appear for the Bachelor's examination after four years of professional study, and at the age of twenty-one. It is ascertained, indeed, that few now obtain the degree of Doctor of Medicine at the Scotch Universities at the statutory age of twenty-one, and that many take five years of professional study. This will continue to be the case with Bachelors, whose professional education will be the same as that of the present Doctors of Medicine. But the Universities see no reason why the medical profession should be differently circumstanced as to age from other learned professions; or why a student of superior talents, who from his endowments is able to graduate at twenty-one, should not be allowed to do so.

6. That the professional examinations shall consist of at least two distinct parts; first, on the fundamental medical sciences, and, secondly, on the practical branches, to be taken in different years, if the candidate chooses; and that on both occasions there shall be written and oral answers to questions,

and practical examinations, whenever the subject admits of them.

"7. That candidates in Scotland shall have studied medicine at a recognised University for at least two years, and during one academic year at the University which grants the degree.

"8. That the degree of Doctor of Medicine shall be granted only to those who have studied medicine for not less than two or three years in addition to the curriculum required for the degree of Bachelor of Medicine. Doctors of medicine only shall rank as physicians.

"9. That candidates for the degree of Doctor shall undergo an examination on branches of general education, and on the practical departments of medicine, in addition to those required for that of Bachelor.

"10. That the Universities of Scotland should grant annually a limited number of Doctor's degrees to qualified practitioners of the age of forty, and who have been engaged in general practice for not less than fifteen years, although they may not have studied at any University—the annual number of such graduates by each University not to exceed three,—the regulations to be settled afterwards.

"11. That a register of the graduates of the Scotch Universities, engaged in medical practice, be published annually.

"12. In any legislative measure the Universities of Scotland claim equal privileges and rights of practice for their graduates with those conceded to the licentiates, members, and fellows of the incorporated Colleges, and that Doctors of Medicine only shall be recognised as physicians."

IV. STATEMENT BY MEDICAL LECTURERS IN EDINBURGH IN REGARD TO MEDICAL REFORM.

The lecturers in the Extra-Academical School of Edinburgh have also issued a declaration, which is published in the same *Journal*. We here give an abridgment of it. They urge that the Medical School of Edinburgh has, at different times, owed much of its celebrity to extra-academical teachers. The present lecturers have made strenuous efforts, according to their ability, to support the reputation of Edinburgh as a centre of medical instruction. They trust, therefore, that representations on their behalf, though not founded on any corporate privilege, may meet with that attention which is due to the plea of simple justice. The Universities of Scotland generally are characterised by a peculiar feature of exclusiveness. They exercise the legal privilege of granting the degree of M.D.; but the powers originally confided to the Senate of the University have been set aside, and the medical professors, always a small body, and even in Edinburgh only amounting to twelve, have for many years taken into their own hands the entire control of the machinery by which this honour is conveyed. The rule is, that each professor examines upon the subject which he teaches; and that his decisions are, upon that subject, practically uncontrolled. Hence the degree of M.D. in the University of Edinburgh is either a certificate of approval, given by teachers to their own pupils; or it is a verdict passed by a body of teachers upon the pupils of competing teachers, or of a rival institution. The framers of this document are most anxious to record their opinion, that, with rare exceptions, the power of the professors in their double capacity has been fairly and honourably exercised. But a power so liable to abuse, and so arbitrary, is an anomaly too dangerous, and too indefensible, to remain much longer without challenge from those to whose disadvantage it operates. That a remonstrance on the subject should come from Edinburgh cannot be surprising. Although two universities granting degrees in medicine—one in London and one in Ireland—have received charters from the Crown within the last quarter of a century, in neither of them has the power of examination been entrusted to a small and virtually irresponsible body. The state of the Scottish universities, in this repect, is not that of any similar institution known to the framers of this document. Even in the universities of France and of Germany, where the examinations for the degree are conducted by the professors of medicine, the examining board includes the assistant and extraordinary professors, a large and important body, corresponding very much in actual position with the extra-academical lecturers in Edinburgh. It is understood that the University of Edinburgh claims for its medical professors, under Lord Elcho's Bill, a share in the examination for the diploma of the general practitioner. It proposes, in other words, that the influence which the Medical Faculty exercises, as an examining body, over the students of the Edinburgh school, shall be still further extended. It must be remembered, that pupils are guided in selecting their teachers, to a considerable extent, by the power those teachers are able to exercise over their future fortunes. No proposition has ever been made to admit extra-academical teachers, *as such*, to the examining board for the diploma of general practitioner. On the contrary, so jealous has the Royal College of Surgeons of Edinburgh been on this point, that up to a late period all teachers were formally excluded from its examining board. This regulation has now been relaxed; and teachers of medicine, whether intra or extra academical, are eligible. To admit, therefore, the professors of the University, *as such*, seems to be in a high degree unfair towards the rival lecturers, who have already reason to complain of the predominating influence of the professors, in virtue of their being the exclusive examiners for the degree of M.D. The extra-academical lecturers believe that the best interests of the science and art of medicine require rather the removal of the monopoly, which the professors of the University at present enjoy, of examining for the degree of M.D., than that these professors should, to the exclusion of the extra-academical lecturers, acquire a new privilege as examiners for the diploma.

V. MEETING OF THE APOTHECARIES OF DUBLIN AND ITS VICINITY.

At a numerous Meeting of the Apothecaries of Dublin and its vicinity, held at the Apothecaries' Hall, on Thursday, the 28th May, the following Resolutions were agreed to:—

"That the Medical Bill introduced by Lord Elcho, Mr. Fitzroy, and Mr. Crauford, is entitled to the support of the Apothecaries and General Medical Practitioners of Ireland, inasmuch as it recognises and preserves to them the existing rights, privileges, and status of their profession, and makes provision for the due cultivation of those sciences which are collateral and essential to Medicine—as Chemistry, Pharmacy, Botany, Materia Medica, and Toxicology.

"That this Bill is further entitled to the support of this meeting, because it has respect to the honour of Kings and Charters, by preserving the faith which has been solemnly pledged under their word and seal, to those who have by severe study and education obtained the rank and privileges of University Degrees.

"That the Medical Bill introduced by Mr. Headlam, Sir William Heathcote, and Mr. Napier, merits the denunciation of the qualified Apothecaries and General Medical Practitioners of Ireland, inasmuch as it entirely confiscates their personal rights and privileges, and gratuitously, and without their consent, transfers these rights and privileges to another class of practitioners without rendering an equivalent advantage, as has been agreed upon in the case of the English Apothecary.

"That this meeting, in seeking for the right of registration for the existing Licentiate Apothecaries of Ireland, and for the due representation of their corporation upon the Board of Examiners under the Bill, is only requiring an act of common justice, and one also indispensable to the public safety, which has been conceded to the Apothecaries of England, and which all the other Medical Corporations and Colleges and a Committee of the House of Commons have admitted to be theirs by law and right.

"Therefore, that it becomes the duty of the Licentiate Apothecaries of Ireland to forward petitions from every quarter to their representatives in Parliament in favour of Lord Elcho's Bill, so that they be presented on or before the 4th of June next, the day appointed for the second reading of the Bills, and at the same time to call upon their members to give every support in their power to the prayer of their petition."

By order, etc., John Ryan, M.D.

The Ethnological Society. This society held its anniversary meeting on Friday, May 29. The Council's Report announced various changes, and a considerable improvement in financial and other prospects. The following gentlemen were elected officers and Council for the ensuing year:—*President*, Sir James Clark; *Vice-Presidents*, the Archbishop of Dublin, Sir Benjamin Brodie, the Hon. Mountstuart Elphinstone, Mr. Beriah Botfield, M.P.; *Treasurer*, Mr. Frederick Hindmarsh, F.R.G.S.; *Hon. Secretary*, Mr. Thomas Wright, M.A., F.S.A.; *Council*, Mr. W. F. Ainsworth, Mr. L. J. Beale, Mr. C. H. Bracebridge, Major-General Briggs, Mr. J. S. Coleman, J. Conolly, M.D., Mr. R. Dunn, Mr. R. N. Fowler, Mr. James Heywood, T. Hodgkin, M.D., Mr. R. Ingham, M.P., Mr. James Kennedy, R. King, M.D., Mr. Malcolm Lewin, Lieutenant-General Sir Charles Pasley, Rev. E. J. Selwyn, Messrs. J. J. Stainton, R. Tait, C. D. Tolmè, T. H. Tuke, M.D.

POOR-LAW MEDICAL REFORM.

MEETING OF THE PROFESSION.

A public meeting of the Poor-law Medical Officers of England and Wales, and of the profession generally, was held on Thursday, May 28th, at Freemasons' Hall, for the purpose of adopting a petition to Parliament, having for its object the amelioration of the condition of Poor-law surgeons. The Right Hon. the Earl of Shaftesbury occupied the chair.

The Chairman, in opening the proceedings, stated that the condition of things was much the same as when he attended a meeting in 1841. He entirely concurred with the terms of the petition about to be submitted to them. The status of the Poor-law medical officer was not what it ought to be, and he thought such a state of things should not be permitted to continue. He looked upon the question as one in which the poor were very much interested, for they greatly depended upon the facility with which medical relief could be obtained. When the state of the working man was taken into consideration, with bad drainage, unventilated houses, etc., they could not attach too much importance to the way in which the medical officers of the poor were treated. If they wanted a sober, loyal, and healthy population, and one which could recognise not only their own rights but the rights of others, means must be taken whereby poor people would be able to obtain that proper medical treatment to which they were entitled. He looked upon the present condition of the gentlemen practising under the Poor-law Board as indeed most disgraceful; and he would not fail, either there or in his place in Parliament, in unceasingly advocating that those gentlemen should occupy that position which was necessary to the onerous duties they had to perform. [*Hear, hear.*]

Mr. C. F. J. Lord, the Hon. Secretary, then read the Report of the Central Committee, the recommendation of which will be found embodied in the draft of the petition itself.

Mr. Propert moved the adoption of the report with great pleasure; and, although not connected with the Poor-law service, he could not but feel as a Christian and a man upon this subject. Unless some considerable improvement in the condition of Poor-law medical officers were shortly made, the Benevolent Institution at Epsom would not hold one-tenth of the number that would require admission. [*Hear, hear.*] He begged the profession to urge on this matter; for, unless they did, nothing would be done. He regretted to say that, so far, not more than 500 out of the 3,000 gentlemen engaged in Poor-law practice had joined in the present movement.

Dr. Sibson seconded the motion, and, in doing so, referred to the melancholy fact that men were found base enough, from ruinous competition, to do that which destroyed the interest of their medical brethren. He thought that the dignity of the profession was seriously involved in the question; and the welfare of the poor themselves was sadly compromised by the present state of things. He trusted that the medical profession would never fail to give to the poor its medicine, its care, and even its medical comforts. [*Cheers.*] He called upon every one who heard him to unite and put an end, if possible, to the present scandalous condition of Poor law surgeons. He held that no permanent good will be effected until the union medical officer is made perfectly independent of boards of guardians. [*Cheers.*]

The report was then adopted, when, the Chairman being compelled to attend to his legislative duties in the House of Lords, Mr. Propert was unanimously called on to preside.

Mr. R. Griffin addressed a few observations to the meeting, and dwelt with particular emphasis on the various anomalies existing under the Poor-law Board with respect to operations of a serious character, where a limb was preserved, and for which no remuneration was allowed, whilst for amputations surgeons were paid. Having detailed some peculiar cases, and criticised the absurdity of some of the regulations and standing orders of the Poor-law Board, he proposed the adoption of the following petition in the resolution which here accompanies it:—

"*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.*

"The Petition of the undersigned Medical and Surgical Practitioners assembled at the Freemasons' Hall, Great Queen Street, Lincoln's Inn Fields, on Thursday, May 28th, 1857, the Right Hon. the Earl of Shaftesbury in the chair,—

"Respectfully showeth,—That the Poor-law medical officers of England and Wales, numbering upwards of 3,000, do, as a class, suffer most grievous injustice. That they have the care, during sickness, of 897,681 paupers, and a large proportion of the labouring population, estimated at about 4,000,000.

"That the system at present in operation for affording medical and surgical relief, under parish authority, to the suffering poor, is grievously defective, being signally repugnant to the principles which should adapt remuneration to service, and so palpably inadequate to fulfil the purposes for which it is ostensibly designed, that it has become both a cruelty to the suffering objects of parochial care, and a grievous and intolerable injustice to the members of a profession which may without arrogance be asserted to deserve better things of their countrymen.

"That, from a careful analysis of returns, laboriously collected by Mr. Griffin, Chairman of the Poor-law Medical Reform Association, it appears the average payment of 500 medical men, not selected but taken promiscuously, is at the rate of 2*s.* 9¾*d.* for each case of sickness which they attend, the payments varying from 3*d.* to £1 : 16 : 8 per case.

"That this sum of 2*s.* 9¾*d.* is to cover the cost of drugs, instruments, pharmaceutical utensils, servants, horses and carriages, tolls and taxes, besides numerous other incidental but inevitable expenses.

"That the surplus which these expenses may leave out of the aforesaid sum of 2*s.* 9¾*d.* is all that is afforded to repay the professional portion of the service required.

"That, rightly to estimate the value of the professional services, it must be kept in view that the education required to qualify and render eligible for the important and responsible duties of a medical man, charged with the care of the sick and injured poor, is laborious, dangerous, and expensive, and involves the sacrifice of several years for its attainment.

"That the performance of these duties is still more arduous, demanding attendance by day and by night, and exposure to every variety of weather which the recurring seasons can produce, and to every morbid poison and source of infectious and epidemic disease by which life can be shortened.

"That the manifest fact that a tax is levied instead of a payment made is rendered most conclusive and striking by collateral circumstances:

"1. That the bare cost of drugs and appliances in hospitals, dispensaries, and asylums, is on an average more than 3*s.* per case.

"2. That the remuneration for medical attendance on the inmates of prisons is at a far higher rate per head than that allowed to the sick pauper, clearly showing that more care is paid for professional aid and medicine to the convicted offender than to the sick and innocent pauper, and that this attention in the former case is recognised as worthy of its reward, whilst in the latter it is apparently deemed so unimportant that it may with perfect indifference be the occasion of loss.

"That it is the very natural result of this system that the public suffers both in the diminished service it receives from the labouring class, and in the increased amount of poor-rates required to be paid; in confirmation of which it has been stated in evidence that the number of paupers made paupers by sickness constitutes 72 per cent. of the total paupers.

"That this grievance has been made the repeated subject of complaint and remonstrance, and been recognised both by a Select Committee of your Honourable House and also by the Poor-Law Board itself, but no adequate amendment has taken place in consequence.

"That the present system of under-payment works injuriously to the medical man and the poor, is proclaimed by the incessant changes that it necessitates—as in 1855, 290 medical men resigned; and in 1856, 249 retired from the service—which would not have been the case had a reasonable reward for their services been made.

"Your petitioners respectfully submit that the spirit of mercantile competition which has been brought to bear on a redundant and overstocked medical profession is not justly applicable for securing medical attendance and qualified skill, with proper medicine to the sick poor; not only because such a system is revolting to the feelings and hard upon the peculiar position and interest of the medical men, but more especially because the very nature of the duties or sacred trusts which devolve upon him cannot be clearly defined or measured by the parties who would fain buy or examine them in the competitive market.

"Your petitioners beg to draw attention to the significant facts and arguments established in Mr. Griffin's published letter, addressed to the Right Hon. Viscount Palmerston, K.G., G.C.B., based on the returns made by 500 medical officers of Poor-Law Unions.

"In this pamphlet is illustrated the loose and unjustifiable mode in which payment is made for Poor-law medical relief, as will be seen by the following quotation:—

				s.	*d.*		£	*s.*	*d.*
"23	medical	officers	receive	between	0	3	and 0	1	0 per case.
35	"	"	"		1	0	"	0	1	6	"
48	"	"	"		1	6	"	0	2	0	"
69	"	"	"		2	0	"	0	2	6	"
71	"	"	"		2	6	"	0	3	0	"
55	"	"	"		3	0	"	0	3	6	"
49	"	"	"		3	6	"	0	4	0	"
32	"	"	"		4	0	"	0	4	6	"
24	"	"	"		4	6	"	0	5	0	"
14	"	"	"		5	0	"	0	5	6	"
10	"	"	"		5	6	"	0	6	0	"
10	"	"	"		6	0	"	0	6	6	"
7	"	"	"		6	6	"	0	7	0	"
12	"	"	"		7	0	"	0	8	0	"
10	"	"	"		8	0	"	0	9	0	"
8	"	"	"		9	0	"	0	10	0	"
3	"	"	"		10	0	"	0	11	0	"
2	"	"	"		11	0	"	0	12	0	"
3	"	"	"		12	0	"	0	13	0	"
4	"	"	"		13	0	"	0	14	0	"
2	"	"	"		14	0	"	0	15	0	"
1	"	"	"		15	0	"	0	16	0	"
1	"	"	"		16	0	"	0	17	0	"
1	"	"	"		16	0	"	0	18	0	"
1	"	"	"					1	16	8	"
500											

"Your petitioners pray your Honourable House will direct:

"1. That a uniform scale of payments for medical attendance on the poor shall be adopted throughout the entire kingdom. Its rates vary at present from 3*d.* to upwards of 20*s.* for each case of sickness, and in individual Unions great disparity exists in the payment of the various medical officers—*e.g.*, in the Weymouth Union it ranges from 1*s.* 4½*d.* to 16*s.* 3¾*d.* per case, irrespective of severity of duration, the paupers on an average being equally distant from the medical officer's residence, and though repeated complaints on the subject have been made to the Poor-law board of guardians, it still continues.

"2. That a fixed salary, founded on the average number of cases attended during the last three years, be adopted; the sum to be calculated at not less than 5*s.* per case, where the medicines are found and dispensed by the medical officer, or 2*s.* 6*d.* per case when the medicines are found and dispensed at the charge of the guardians, with at least 1*s.* extra for each mile the patient resides from the medical officer's house, the journey to be paid for once only during the illness. [The duration of sickness averages twenty-eight days one hour.]

"That the scale of extras allowed by the Poor-Law Board (including the fees payable for midwifery) shall be extended, and embrace many operations and bad cases in surgery not now paid for; and that the medical officer in charge of the Union-house shall participate in this arrangement as well as the district officer, and there shall be no discretionary power to give a fixed salary instead of extras, as is now exercised in several Unions with the sanction of the Poor-Law Board, although in direct opposition to Act 177, which says:—'No salary of any district medical officer shall include the remuneration for operations, etc., etc.'

"From the returns of 500 district medical officers, it appears that 436 have extras, which average 6¾*d.* per case; these, with their salaries of 2*s.* 3*d.* each, make 2*s.* 9¾*d.* per case. The salaries of 64 whose extras have been commuted, amount only to 2*s.* 4½*d.* per case, showing that the commutation has not raised their salaries to the ordinary average, and proves that uniformity of system is most desirable.

"4. That all Poor-law medical appointments, now only now in force, but hereafter to be made, shall be declared permanent, as was recommended by the Select Committee of your Honourable House, which sat in 1854. This, your petitioners regret to say, has been only partially carried out by the Poor-Law Board, who have made residence in the district a *sine qua non* for permanency of office; thus some medical men living only a few yards out of their district whose furthest patient may not be two miles from their residence, are still subject to annual election. The inconsistency of this order will be apparent when it is considered that the medical officer of a workhouse, living in some instances five miles from the house, and the resident district medical officer with patients nine miles away are permanently appointed. If there is to be an exception, it should be where the medical officer resides at an unreasonable distance from the centre of the populous part of each district, and outlying parishes should be given to medical men residing near to them, in order that the suffering poor may have a greater facility in obtaining relief.

"5. That the class of persons entitled to medical relief be defined, and not left to the discretion or caprice of relieving officers.

"6. That a revision of salaries take place triennially in each Union, if desired either by the Poor-Law Board, board of guardians, or medical officers.

"7. That medical orders shall continue in force for each case of sickness no longer than three months, and if renewed shall be counted as fresh orders.

"8. That a medical man conversant with Union practice have a seat at the Poor-Law Board, and especial control over the medical department.

"Your petitioners finally pray that the grievances set forth or alluded to in the foregoing petition may receive the prompt and earnest attention of your Honourable House.

"And your petitioners, as in duty bound, will ever pray, etc., etc."

Mr. Griffin moved:

"That the petition to the House of Commons, which has been widely circulated, be adopted, signed, and presented forthwith, and that the union medical officers and other members of the profession be earnestly requested to use their influence with members of the House of Commons in order that general attention may be called to the subject."

Mr. Ransom, of Cambridge, seconded the resolution.

Mr. Brady, M.P., said that the Poor-Law Board having so much power was entirely the fault of the profession itself. He was glad to see so many gentlemen present; but he regretted that none of the authorities of the medical corporations were present. The profession paid their money and had no sympathy. That meeting would appeal to the members of the House of Commons, and they would be told that the heads of the profession were not to be found amongst them. Such a state of things was not to be found either in the church or the law. What was wanted for success was, that the medical corporate bodies should unite with the members of the profession. ["*They won't unite*".] They would, if pressure sufficient was brought to bear upon them; and he implored them to be united, in order to attain that position which was so justly their due. [*Cheers.*]

Mr. White, of St. Andrew's, Holborn, said that such an object as that mentioned by Mr. Brady had been tried fifteen years ago, and failed. The corporations would not unite with them.

Dr. Sparkes, in a few observations, entirely concurred with the adoption of the petition.

The question was then put from the Chair, and carried unanimously.

Mr. Lord, in moving the following resolution, said that it was for the interest of the country itself that the Poor-Law Medical Officers should be properly remunerated. [*Hear, hear.*] He regretted to say that the poor were very much neglected, and even treated much worse, in many respects, than persons in prisons. He could not too strongly urge upon them the value of union amongst themselves. He would conclude by proposing:

"That in order to render the petition of the Association more effective in the House of Commons, it is desirable that the medical officers of every union should forward to their respective representatives a short petition, praying the Legislature to consider the present system of Poor-Law medical relief."

Mr. Colston, of Bishop's Stortford, seconded the resolution, which was carried unanimously.

Dr. West moved—

"That the grateful thanks of this meeting are eminently due to the Right Hon. the Earl of Shaftesbury, for his lordship's attendance on the present occasion, and for the great assistance his lordship has at various times given to the cause of Poor-Law medical relief."

Mr. Joseph Rogers, of the Strand Union, seconded the vote of thanks. Mr. Rogers then remarked that the condition of the Poor-Law section of the profession was very bad. He had £50 a-year for attending one hundred and twenty patients in summer and winter; and he felt bound to say that the treat-

ment medical officers were subjected to by the subordinates in workhouses was such as no gentleman should have to suffer. If the profession was but true to itself, a remedy could soon be found. The speaker concluded by detailing the account of a battle he had had with the Board of Guardians, and the insolence of those who held authority in workhouses.

The motion was carried unanimously, and with cheers.

Dr. Armstrong, of Manchester, rose to move a resolution, to the effect—

"That this meeting deeply regrets the readiness with which some of their medical brethren seek to fill vacancies that have been created by the resignation of medical officers, in consequence of the arbitrary treatment of Boards of Guardians, or through a very low payment for professional services."

Dr. Armstrong said that he represented the officers of the Manchester Union, and he was proud to say that on a recent occasion all the young medical men of the district stood by the officers of the union; the consequence of which was that the Board of Guardians were unable to trample on the gentlemen of the union as they wished.

Mr. Brookes, of Henley-on-Thames, seconded the resolution most cordially; and suggested that if the petition to Parliament had not the desired effect, they should one and all "strike".

Carried unanimously.

Mr. G. W. Richard moved—

"That the recent manifestions by medical students in furtherance of Poor-Law medical relief at the public meeting held in London on the 12th of March last, over which Mr. Layard, M.P., presided, and in Edinburgh on the 30th of March, when Mr. Black, M.P., presided, and similar meetings in other provincial towns, are much to be commended, as evidencing an improved tone of feeling, and a determination on the part of those about to enter the profession to uphold its dignity and character."

The motion was seconded by Mr. J. R. Hutchinson, of St. Albans, and carried unanimously.

Mr. Cooper, of Ixworth, Suffolk, moved the following resolution:—

"That the cordial thanks of this meeting be given to the Weekly Medical Press, for the great assistance it has uniformly given in furtherance of the cause of Poor-Law medical relief; and to the press in general."

Mr. Cooper said he felt some diffidence in rising to address an assemblage of educated gentlemen like the present; but he felt, too, the greatest confidence in the righteous justice of the cause they had met to advocate and advance; and he was convinced if they could fairly set out the merits of that cause it would be attended with success. It was with great pleasure he had heard the recognition from the noble chairman that the Poor-Law medical officers exercised considerable influence over the moral and social, as well as the sanitary condition of the labouring population. It showed the office to be one of an exalted character. He had found it a forcible way of illustrating the amount of remuneration by putting it per week per parish. He had formerly held a district in the Shingoe Union, and the salary was 2*s.* 6¼*d.* per week. He now held one in the Stow Union at 4*s.* 6*d.* per week per parish. He had come there as the deputy of his brother officers. They were indebted to several individuals for cooperation; but there was a body of men they were greatly obliged to, of a most influential character, and they were advocates of the cause—he meant the press. He, therefore, with great pleasure and sincerity, moved the resolution.

Dr. Thurnell, of the same place, having seconded the motion in a few spirited remarks, it was carried by the meeting with acclamation.

Mr. Gannon, of Walworth, moved, and Dr. Marsh, of Newington, seconded—

"That the cordial thanks of this meeting be presented to the Committee of the Poor-Law Medical Reform Association for the exertions they have made in furtherance of the objects of the Association."

Carried unanimously.

On the motion of Mr. Burnett, a vote of thanks was unanimously carried to Mr. Griffin, the Chairman of the Committee, for the very able manner in which he presided over the affairs of the Association.

Mr. Cordwent, of Taunton, moved a vote of thanks to the Chairman, Mr. Propert, which was unanimously carried with all the honours.

Mr. Propert briefly returned thanks, and hoped that he should always be found at his post.

MEETING OF THE MEDICAL OFFICERS OF THE DROITWICH UNION.

At a meeting of the medical officers of the Droitwich Union, held at Droitwich, on May 26th, 1857—present, Messrs. Jaques (chairman), Rogers, Suffield, and Woodward—it was resolved unanimously—

"1. That this meeting feels great pleasure in acknowledging the great exertions made by Richard Griffin, Esq., on behalf of union medical officers, and promises him its cordial co-operation and support.

"2. That this meeting cordially approves of the principles laid down in the petition about to be presented to Parliament, and pledge themselves to sign an abreviated form of the same.

"3. That a subscription of 5*s.* each be entered into, to assist in carrying out the objects of the Poor-law Medical Reform Association; and the amount forwarded to Mr. Griffin.

"4. That a copy of these resolutions be forwarded to Mr. Griffin, and to each of the medical journals."

THE NEWNHAM TESTIMONIAL.

The following letter has been addressed by Mrs. Newnham to Sir John Forbes, the Secretary of the Testimonial Committee:—

"My dear Sir John,—I am at a loss in what terms to express my grateful feelings for the invaluable gift of the portrait of my dear husband. This testimony to his long devoted services in the cause of humanity, and to the high estimation in which his name is held by so many of his professional brethren, is peculiarly dear to me, and will be an object of the deepest interest to me during the remainder of my life, and to our children after us; for it has been settled upon our medical son as an heirloom for ever. Will you have the kindness to insert in the journals, if you think it right, my most grateful acknowledgments to all those gentlemen who have so generously contributed towards this memorial; and assure them that nothing could have been so gratifying to my heart as this truly delicate mode of expressing their esteem and regard for him whose whole life has been devoted to the self-denying duties of their noble profession, and who will never cease to feel the liveliest interest in the welfare of his brethren, as well as in the progress and success of the Medical Benevolent Fund, which for so many years has been the object of his unwearied labours.

"Thanking you for the kind interest you have shown on this and on many other occasions, I remain, my dear Sir John, your very truly obliged, "Caroline Newnham.

"Richmond Villa, Tunbridge Wells, May 28th, 1857."

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Communications have been received from:—Mr. Richard Weekes; Mr. W. M. Thomas; Mr. Henry Dayman; Dr. Barclay; Mr. H. Terry, Jun.; Mr. W. Allison; Mr. George Hodson; Mr. Augustin Prichard; Mr. Charles R. Suffield; Dr. R. U. West; Mr. D. Kent Jones; Sir John Forbes; Mr. Holmes Coote; Mr. T. W. Crosse; Mr. W. D. Husband; Mr. G. M. Humphry; Mr. T. Holmes; Mr. Stone; Mr. J. Parsons; Mr. G. May, Jun.; Mr. H. Ewen; Dr. P. H. Williams; Mr. J. V. Solomon; Dr. McWilliam; Mr. J. A. Locking; Mr. Lawrence Spencer; Dr. Kelburne King; Dr. Sandwith; and Dr. J. W. Ogle.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The English Bread-Book for domestic use, adapted to families of every Grade. By Eliza Acton. London: Longman, Brown, Green, Longmans, and Roberts. 1857.
2. Cases of Paraplegia. By William Gull, M.D. London: 1857.
3. A Treatise on Cancer and its Treatment. By J. Weldon Fell, M.D., of the University of New York. London: John Churchill. 1857.
4. The Treatment of Fevers: with Special Refence to Ventilation. By *T. Herbert Barker, M.D. London: T. Richards. Bedford: Grey & Co. 1857.
5. Homœopathy. Reasons for adopting the Rational System of Medicine. By *F. R. Horner, M.D. Hull and York. 1857.
6. The Licensing System, its Origin and Working, as described in Reports of Select Committees of the House of Commons.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

(INCORPORATED BY ACT OF PARLIAMENT.)

The COUNCIL have the pleasure to inform the Governors, that the following Donations to the College were announced at the Fifth Annual Festival, held at the FREEMASONS' TAVERN, on THURSDAY, the 28th MAY. The Right Hon the EARL GRANVILLE, in the Chair.

	£	s.	d.
Brande, Everard A., Esq., Turnham Green ..	500	0	0
[The interest on this sum to be expended in prizes for the Boys whose general conduct is best.]			
An Old Friend, by J. Propert, Esq.	2	2	0
Coope, Dr. A. F., Surbiton	10	10	0
Lloyd, W., M.D., H.E.I.C.S., Madras	10	10	0
Garfit, W., Esq., Boston, Lincolnshire	10	10	0
Carnegie, David, Esq., Cowes	2	0	0
Lewis, Rev. L. C., Newport, Monmouth	3	0	0
Bowman, Edward Barons, M.D., Highbury New Park	10	10	0
Colman, T. E. T., Esq., Wymondham	3	4	6
Stilwell, George James, M.D., Hillingdon	10	10	0
Yarborough, The Right Hon. the Earl of, Arlington St., Piccadilly	10	10	0
Ditto ditto ditto .. ann.	5	5	0
Tribe, H., Esq., Chatham	10	10	0
A Lady, per John W. Roberts, Esq., Bradford ..	5	0	0
Ransom, Robert, Esq., Cambridge	10	10	0
Smyth, Mrs., 2, Maid's Causeway, Cambridge ..	10	10	0
Ditto ditto ditto .. .. ann.	1	1	0
Halley, Dr., Harley Street .. .. .. 2nd don.	5	5	0
Girvan, John, Esq., Clapham Park, Clapham ..	10	10	0
Lycett, Francis, Esq., Highbury Grove	10	10	0
Ransom, Peter P., Esq., North Elmham, Norfolk ..	10	10	0
Hawkins, Mrs. T., Old Kent Road, collected by ..	2	2	0
Lees, John, Esq., per John Hatton, Esq., Manchester	2	2	0
Summers, C., Esq., Euston Square .. .. 2nd don.	7	7	0
Cholmondeley, Miss, Maidenhead	10	10	0
Margetson, Mrs., Epsom Common	10	10	0
Taylor, Miss C., Dilham	5	5	0
Ackers, Mrs., Congleton	5	5	0
Fayrer, J., M.D., H.E I.C.S., Lucknow	10	10	0
Row, John, Esq., H.E.I.C.S., Meerut	10	10	0
O'Brien, Peter, Esq., H.E.I.C.S., Gwalior	2	0	0
Lara, B. W., Esq., John Street, Adelphi	5	5	0
Gibson, Rev. Arthur, Chedworth	10	10	0
Russell, Miss, Hallgate, Doncaster	5	5	0
Snowden, Mrs., Marr, near Doncaster	5	5	0
Marsland, Charles, Esq., Stockport	10	10	0
Amhurst, W. A. Tyssen, Esq., Brandon	10	10	0
Kaye, Rev. W. F. J., Lincoln	10	10	0
Hebb, Christopher H., Esq., Worcester .. .. 2nd don.	5	0	0
Wall, Miss, Malvern Wells	5	0	0
Lea, Miss, Stourport	5	5	0
Farnell, James, Esq., Isleworth	10	10	0
Farnell, Charles, Esq. ditto	10	10	0
Bryant, Master John Henry, Bathurst Street ..	10	10	0
Bleeck, Rev. A. G., Stourton, Wilts	10	10	0
Drake, Mrs., Clifton	5	5	0
Drake, Miss, ditto	5	5	0
Cox, Miss Agatha Bland, Dulwich	5	5	0
Russell, Mrs. Henry, Clifton Grove, York	2	0	0
Parkinson, Miss M., 14, St. John's Villas, Holloway ..	5	5	0
Leigh, Miss Mary, Hale, Warrington	10	10	0
Pearson, Charles H., Esq., King's College, Strand ..	10	10	0
Gibb, C. J., Esq., Newcastle-upon-Tyne	10	10	0
Allsopp, Messrs. and Sons, Burton-on-Trent ..	10	10	0
Little, Mrs. R. J., Charlton	10	10	0
Spencer, Rev. Dr., Lee, Blackheath	10	0	0
Carr, Miss Mary Louisa, Lee Grove, Blackheath ..	5	5	0
Adams, John, Esq., St. Helen's Place, Bishopsgate Street 2nd don.	5	5	0
Ainsworth, J. H., Esq., Halliwell, Lancashire ..	10	10	0
Graham, Thomas, Esq., Upper Holloway	10	10	0
Holl, Miss L. M., Wandsworth Road	5	5	0
Vickers, Valentine, Esq., Newport, Salop .. .. 2nd don.	5	10	0
Beckett, Rev. W. T., Ingoldisthorpe	2	2	0
Underhill, W. L., Esq., Tipton, Staffordshire ..	10	10	0
Kingsley, Mrs., Stratford-on-Avon	5	5	0
Rice, Miss Alice ditto	5	5	0
Rice, Miss Christiana ditto	5	5	0
Newland, Miss ditto	2	0	0
Brown, Miss, Leamington	10	10	0
Bevan, R. L., Esq , Brixworth Hall, Northampton ..	10	10	0
Parratt, J. E. T., Esq., Royal Artillery, Woolwich ..	10	10	0
Gilpin, Wm., Esq., Christ's Hospital	10	10	0
Bentley, J., Esq., Portland Place	5	0	0
A. T. (per W. B. Stott, Esq., Manchester)	100	0	0
Parry, Miss, Tunbridge Wells .. .. 2nd don.	10	10	0
Parry, Miss S. ditto .. .. 2nd don.	10	10	0
Carthew, P., Esq., St. Mary Abbott's Terrace, Kensington ..	21	0	0
Fallofield, Rev. W., Warren Street, Fitzroy Square ..	10	10	0
McCann, Mrs., 50, Parliament Street	5	5	0
McCann, Miss ditto	5	5	0
McCann, Miss H. ditto	5	5	0
McCann, Miss Louisa ditto	5	5	0
McCann, Miss Laura ditto	5	5	0
McCann, Master Albert ditto	10	10	0
Clark, Miss M. A., Grove Road, St. John's Wood ..	5	5	0
Westall, Edward, Esq., Croydon	5	5	0
Ditto ditto .. .. ann.	5	5	0
Quain, Dr., Harley Street .. .. .. 2nd don.	5	5	0
Gibbs, Dr., Exeter	5	0	0
Peygram, Albert C., Esq., Sydenham	10	10	0
Curtis, Thomas, Esq., Stratford Grove	10	10	0
Craven, the Right Hon. the Earl of, Charles Street, Berkeley Sq.	10	10	0
Buckmaster, Mrs., 81, Piccadilly	5	5	0
Goddard, Miss, Holland Road, Kensington ..	5	5	0
Thomas, Miss, Addison Terrace ditto ..	5	5	0
Clapham, Miss, St. Mary Abbott's Terrace, Kensington ..	5	5	0
Bourlier, Miss M. E., Devonshire Road, Hackney ..	5	5	0
Hardy, Gathorne, Esq., 12, Grosvenor Crescent ..	10	10	0
Williams, Edward A., Esq., Bromley, Kent ..	10	10	0
Ward, Mrs., Clapham Rise	5	5	0
Bleeck, John, Esq., Redcliff Parade, Bristol ..	10	10	0
Sisson, Wm., Esq., Clifton	5	5	0
Powell, Wm., Esq., Clifton	10	10	0
Bright, Robert, Esq., Abbott's Leigh, Bristol ..	5	5	0
Westall, Miss Sarah Jane, Croydon	5	5	0
May, Mrs. and Miss, Fish Hall, Tunbridge	2	0	0
G. S.	10	10	0
Briggs, Mrs., 30, Edgware Road	10	10	0
Irving, Wm. John, Esq., Crown Square, Penrith ..	10	10	0
Mowat, Frederick, M.D., Bombay	10	10	0
Druce, Joseph, Esq., Eynsham, Oxon	10	10	0
Druce, Mrs. Joseph ditto	10	10	0
Dyer, Miss, 25, Park Street, Bristol	5	0	0
Ditto ditto .. .. ann.	1	1	0
Griffith, Edward, Esq., 39, Oakley Square ..	10	10	0
Griffith, William, Esq., 3, Eaton Square	10	10	0
Baxendale, Joseph, Esq., Whetstone	50	0	0
Ballard, George, Esq., Brighton	10	10	0
Ormerod, Edward, M.D., Brighton	21	0	0
Phippen, Robert, Esq., Bedminster	10	10	0
Bleeck, Mrs. Alfred, Bristol	5	5	0
Bleeck, Mrs. John ditto	5	5	0
Collected in the Parish Church of Shorne, after a Sermon by the Rev. John Graham, M.A.	4	7	8
Ord, George, Esq., Brixton Hill	10	10	0
Heathcote, Sir William, Bart., Hursley Park, Winchester ..	10	10	0
Bute, the Most Noble the Marquis of, Mountstuart, Rothesay, N.B.	21	0	0
Rickards, C., Esq., 207, Piccadilly	10	10	0
Wilson, Wm., Esq., Ewell, Surrey	5	5	0
Doxat, Alphonzo, Esq., Leytonstone	5	0	0
Sandeman, George Glass, Esq., 15, Hyde Park Gardens ..	10	10	0
Sandeman, Mrs. George Glass, ditto	5	5	0
Rayner, W., Esq. Uxbridge, Middlesex	10	10	0
Sells, Miss Euphemia, Guildford	5	5	0
Brown, Thomas, Esq., 2, St. Mary Axe	10	10	0
Douglas, Mrs. Alexander Houstoun, 42, Eaton Square ..	52	10	0
Lushington, C. M., Esq., Mansfield Street	5	5	0
Gosling, R. jun., Esq., Gloucester Terrace	5	5	0
Hall, W. J., Esq., 17, Trinity Square	10	10	0
Vivian, Rev. J. W. F., D.D., Guildford Street ..	5	5	0
Cautherley, Miss, Amwell, Herts.	5	5	0
Hancock, H. J. B., Esq., Harley Street .. .. 2nd don.	5	5	0
Grant, Lieutenant-Colonel S. A., 50th Regiment, N. I. ..	2	0	0
Waring, E. I., Esq., Physician to Rajah of Travancore ..	2	10	0
Cullen, Lieutenant-General W., Madras	5	0	0
Preston, Dr. I. B., ditto	5	0	0
Reynolds, J. A., Esq., 45th Regiment, N. I. Moulmein ..	10	10	0
Tailors' Company, the Worshipful the Master and Wardens of the Merchant	21	0	0
Dawes, Henry, Esq., Hyde Park Gardens	10	0	0
Hood, Peter, Esq., Lower Seymour Street .. .. 5th don.	5	5	0
Locock, Sir Charles, Bart., M.D., Hertford Street, May Fair ..	10	10	0
Hastings, Sir Charles, M.D., Worcester	5	0	0
Arden, Joseph, Esq., Cavendish Square	5	5	0
Watson, Honourable Baron, 38, Wilton Crescent	5	5	0
Watson, J. W., Esq., ditto	2	2	0
Boyne, Viscount, Brancepeth Castle, Durham	5	0	0
Astell, Colonel, Carlton Club, Pall Mall	10	10	0
Briscoe, J. I., Esq., M.P., Fox Hill, Chertsey	10	10	0
Craddock, Samuel, Esq., Chapel Place, Cavendish Square ..	10	10	0
Hawkins, Dr. F. Bisset, 29, Upper Harley Street	10	10	0
Lawrence, Mr. Alderman, 94, Westbourne Terrace	10	10	0
Towers, W. C., Esq., 31, Montagu Square .. .. 2nd don.	21	0	0
Channell, Honourable Baron, Clarendon Place, Hyde Park ..	10	10	0
Ingram, Herbert, Esq., M.P., Rickmansworth .. 2nd don.	5	5	0
Grey, W. S., Esq., Lansdown Road, Notting Hill	10	10	0
Churchill, John, jun., Esq., New Burlington Street	10	10	0
Williams, William, Esq., Stamford Hill	10	10	0
Hodgson, Stewart, Esq., St. Helen's Place	10	10	0
Beale, Miles, Esq., 31, Finsbury Square	10	10	0
Wotton, H. R., Esq., Cavendish Square	10	10	0
Hollest, Miss, Midhurst, Sussex	10	10	0
Pugh, Robert, Esq., Clapham Common	10	10	0
Pugh, Miss, South Buildings, Clapham Common	5	5	0
W. F. W.	10	10	0
Pugh, T. B., Esq., Langbourne Chambers, Fenchurch Street ..	10	10	0
Day, Miss, Rothley, Leicestershire	10	10	0
Doxat, L., Esq., 45, Harley Street .. .. 2nd don.	5	5	0
Smith, Miss H. P., Birmingham	10	10	0
Reynolds, Joseph, Esq., Regent Street	5	0	0
Wethered, L. W., Esq., Great Marlow	10	10	0
Tite, Wm., Esq., M.P., Lowndes Square	10	10	

BRITISH MEDICAL JOURNAL:

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Diseases OF SPECIAL OCCUPATIONS.

No. III.

DISEASES OF COLLIERS IN SOUTH LANCASHIRE.

By WILLIAM I. COX, Esq., M.R.C.S., etc., Corresponding Member of the Epidemiological Society.

[*Continued from page* 426.]

IN the present paper, I shall treat only of the prevalent *diseases* of colliers, and not of the disastrous results of any of the *accidents* occurring in coal mines.

II. DISEASES OF COLLIERS.

Class *a*. *Pulmonary Diseases*. *Asthma*, or, more properly speaking, those organic lesions of the lungs and bronchial tubes of which difficulty and shortness of breathing is the necessary concomitant and most prominent symptom, is so common among colliers as to be by some popular writers designated the "scourge of the mine". It is almost always associated with chronic bronchitis, and very frequently with the "black spit"—the characteristic sign of that singular condition of the pulmonary tissue found chiefly* among colliers, and of which I shall immediately speak at large. This asthmatic condition leads ultimately, in the great run of cases, to diseased heart, and its train of miseries.

The *Black Spit* is principally, if not entirely, confined to colliers. The morbid condition of the breathing apparatus, of which the excretion known by the above cognomen is the chief sign during life, would, I believe, be proved to exist far more generally than is now supposed, were the absurd but time-honoured prejudice against autopsies removed, which now prevails among the population in coal districts. In the very few necropsies which I have been enabled to make or witness during my stay in Lancashire, I found on two occasions the whole tissue of the lungs presenting the appearance of being steeped in ink; a perfectly black liquid oozing out, on the substance of the lung being incised in any direction; and the ramifications of the bronchial tubes being also filled with the same unnatural matter. This remarkable pathological phenomenon, first noticed by Pearson, was described by the gifted pen of Laennec in 1806, and afterwards by Dr. William Thomson. It has been called variously, "spurious" or "liquid melanosis", "anthracosis", and "carbonaceous infiltration". I consider "black lung" to be as good a title as the above more learned ones. I am aware that many observers consider this peculiar appearance to be merely the result either of foregone inflammation, or of a permanently embarrassed circulation through the capillary blood-vessels of the lung. On the adoption of either of the above views, the black liquid matter would consist of altered blood and pigment. And such authorities base their opinions principally on two positions; viz.—

1. That a certain amount of induration is often noticed in connexion with the presence of this inky fluid; and,
2. That the lungs of animals which have been kept for a long period of time shut up in a vitiated atmosphere (*i.e.*, containing an abnormal percentage of carbonic acid gas, or an admixture of carbide of hydrogen with a deficient supply of oxygen), are often found, on examination after death, loaded with black deposit, and presenting many of the appearances usually seen after chronic inflammation.

But I am inclined to question the soundness of the inferences drawn, by the observers above alluded to, from these premises. For, first, I have seen the "black lung" in all its intensity, when there has been *no* co-existent hardness; and, secondly, the inky fluid does *not* consist merely of altered blood, as is the case with regard to the lungs of the air-poisoned animals. In fact, I am quite satisfied that the black fluid, or semi-fluid matter found in the lungs of colliers, consists, in principal part, of a foreign body introduced from without, which has found its way through the chink of the glottis, and has accumulated in the air-passages—of coal-dust, in short; although I am willing to admit that the discoloration of the tissue is sometimes in part attributable to congestion or inflammatory action. But then this latter is the *result* of the presence of the foreign body, not the *cause* which has produced the morbid appearance. The results of two *post mortem* examinations which I made fully justify me in drawing such a conclusion. The subjects of these were a man, aged 47, a coal-cutter, and a female, aged 31, who worked at the brow of the pit, "picking and filling," an occupation nearly as much exposed to the cause of this diseased condition as that of those actually at work in the shafts. The disease which proved fatal in the former case, was extensive valvular malady of the heart, with long continued asthma; in the latter case, pulmonary consumption. In each case the black treacly fluid, obtained by cutting into various portions of the lungs (more especially the posterior and inferior portions of the lower lobes), and by slitting up the bronchial tubes, was evaporated to dryness; and the residuum, being broken up and subjected to a red heat in a porcelain tube-retort, behaved precisely as coal under similar circumstances, *i. e.* it evolved a smoke-like gaseous product, which, on being slightly condensed, deposited hydrosulphide of ammonium and coal-tar, and being thus purified, burnt in all respects like the well known compound of the two carbides of hydrogen used in our houses and shops. I cannot, however, claim for this interesting experiment the merit of originality. It but confirms the results already obtained by a previous observer. Dr. Gregory, some years since, tested the black matter from the lung of one of his patients (a collier) with similar confirmation of the hypothesis of a *carbonaceous* deposit. Dr. Hall has alluded to this in his admirable paper on the Sheffield Grinders' Disease in a recent number of the BRITISH MEDICAL JOURNAL. Moreover, the sputa of my two patients (as well as various specimens from other patients labouring under chest symptoms) showed, when subjected to the action of a tolerable lens, the presence of coal in a state of minute subdivision, entangled in masses of grumous-looking mucus.

Tubercular Consumption, and its too well-known career, is very frequently met with among colliers. The local irritation of the tissue of the lung and of the lining membrane of the air-cells and passages, produced by the constant inhalation of coal-dust already spoken of, must contribute very much towards the development of phthisis; by exciting into deadly activity the dormant seeds of tubercular disease, by favouring local congestion around the air-cells, and by the perpetual inducement of bronchial spasm and its perilous results in the effort made to get rid of the offending matter. But whether, as Dr. Watson has suggested in his lectures, the black matter produces disastrous ultimate effects *only* on those, who, by heritage or otherwise, are already unsound in the lungs or prone to decline, may perhaps be properly regarded as an unsettled question. But I think it highly probable that Dr. Watson in this respect is correct in his surmise. For I have stethoscopically examined the chest of many colliers who had had the "black spit" occasionally for years, but who presented no evidence whatever of pectoral mischief. It must be clear, however, that when the deposit has proceeded to any considerable extent, it must occasion a high and serious degree of irritation of the delicate fabric of the breathing apparatus, and hasten the development of disease.

Bronchitis, both acute and chronic, is very prevalent. The chronic form of the malady, often complicated or associated with enlargement of the air-cells of the lung and dilatation of the right cavities of the heart, is, on the whole, the most frequent chest affection.

* I say "chiefly", because I do not certainly know that the lungs of charcoal-burners and sweeps are not sometimes in the same state.

Class *b*. *Diseases of the Pleura*. Acute and chronic *pleurisy*, with its general results when neglected, effusion of serum or pus into the pleural sac, are of frequent occurrence. The people employed at the "brow" as it is termed, *i.e.* in the open air adjacent to the mouth of the pit, suffer more often and severely from this class of affections than the pit-men. This is easy of explanation. These *employés* are almost equally liable with the colliers to the inhalation of coal-dust and mephitic vapours from the pit-fires; and are, moreover, much more exposed to the vicissitudes of weather.

Class *c*. *Heart-Disease*. Maladies of the heart, in their various forms and pathological phases, are also very common; and are, I believe, increasing in frequency and severity among colliers. Pericarditis and endocarditis are frequently seen associated with attacks of rheumatic fever. Changes and disorganised conditions of the *valves of the heart* naturally follow, as the deplorable result of repeated attacks of these dangerous maladies. Among the most common diseased conditions found after death, I may mention enlargement (especially of the right ventricle), and thickening of the free borders of the semilunar, aortic, and pulmonary valves (most probably from what have been termed by writers, vegetations, or granulations).

Class *d*. *Rheumatism* (fibrous and synovial, but most frequently the former variety) is, next to asthma, the commonest of all the diseases of colliers. The *fibrous* form of the malady leads to the structural changes of the heart, described in the last section, and, ultimately, to death by exhaustion or difficulty of breathing: the *synovial* form, to permanently stiff and contracted joints. *Muscular* rheumatism also, in its various phases, especially lumbago, is very frequent.

[*To be continued.*]

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. LITHOTOMY AND EXCISION OF THE ENLARGED THIRD LOBE OF THE PROSTATE: DEATH: DISEASED KIDNEYS.

Under the care of W. Fergusson, Esq.

[*From Notes by* C. Heath, Esq., *House-Surgeon.*]

John R., aged 65, a robust countryman, was admitted April 4th, with the usual symptoms of stone. The operation for lithotomy was performed on April 11th, by Mr. Fergusson. Two stones were found in the bladder, which was reached with difficulty, in consequence of great enlargement of the prostate. The middle lobe of this gland was seized by the forceps, and excised with a blunt pointed bistoury. Very little hæmorrhage took place. The patient passed a very comfortable night.

April 13th. Orchitis came on. He was anxious; thirsty, with dry tongue, rapid weak pulse, etc. The wound looked well. Large quantities of stimulants were given; but he got weaker, the memory began to fail, and he refused his nourishment. The quantity of brandy was increased to 18 ounces on the 20th, and, as he still continued to sink (without any fresh symptoms), to 24 ounces on the 29th. He died on April 30th, of exhaustion.

On *post mortem* examination, the peritoneum was found healthy. The left kidney was soft and much congested; in its substance was a small deposit of lymph, of the size of a pea. Both ureters were much dilated. The bladder was much thickened and inflamed. A small portion only of the middle lobe of the prostate was left projecting into the cavity of the bladder.

Remarks. This case attracted much attention at the time of the operation, as being the first known attempt to effect the permanent cure of enlarged prostate by means of an operation. The progress of the case, though unsatisfactory as far as the recovery of the patient was concerned, was quite sufficiently favourable to show the propriety of another attempt in a similar case. The patient, it will be observed, survived the operation nearly three weeks. The *post mortem* examination showed extensive disease of the kidneys, which would have almost certainly induced a fatal result after the ordinary operation of lithotomy in a man of his age. On the other hand, there were no signs of peritoneal or of subperitoneal inflammation, nor of any diseased condition which could be ascribed to the operation on the prostate. This novel and bold operation will doubtless be followed by others; in which case, our readers may rely on our keeping them informed of the results.

II. TWO CASES OF PNEUMONIA.

Under the care of G. Johnson, M.D.

[*From Notes by* A. Meadows, Esq., *House-Physician.*]

Dr. Johnson delivered a clinical lecture the other day on two cases of pneumonia recently under his charge, which presented some interesting points in physical diagnosis. We shall give short notes of these cases, and endeavour to bring out the points of importance in their progress.

Case I. A man was admitted on May 15th as an out-patient, on account of fistula *in ano*. The usual operation was performed on that day. Two or three days afterwards, he again presented himself, labouring under pneumonia of the right lung. The physical signs were dulness on percussion behind, extending from the spine of the scapula downwards; and also in front, in a lateral direction obliquely downwards, from midway between the axilla and diaphragm. There was scarcely any vesicular murmur to be heard on auscultation. He was spitting an apricot-coloured juice. Some large crepitation was to be heard, but no bronchial breathing. Puerile respiration was heard in the other lung. After some days, the respiratory murmur was found to be returning in the upper part of the lung; while the fulness in front had extended up to the mamma; so that the middle lobe appeared to be engorged, if not really pneumonic. Above this spot, a pleuritic rub was to be heard. Dr. Johnson remarked on the absence of bronchial breathing in this case, and on the presence of the friction-sound in the pleura. This is rarely heard over a lung already hepatised, probably on account of the limited expansion of the latter.

In the after progress of the case, it was found that the pulse rose in rapidity to 114, while the breathing remained stationary. As this increase in the rapidity of the pulse seemed due to debility, he was treated freely with stimulants, chloric ether, and ammonia, with half an ounce of brandy every two hours. The pulse continued, however, to get weaker and more rapid, so that it become necessary to increase the dose of brandy to half an ounce every hour. He then began to improve, and is now convalescent.

Case II. A painter was admitted on May 22nd. He had been suffering for some days with pain in the right side and dyspnœa. On his admission, very marked dulness was found over the whole of the lower lobe on that side. The vocal vibration, however, was diminished instead of increased. This, which is a remarkable exception to what usually takes place in pneumonia, was observed in the former case also; but not to so great an extent as in the present, in which the vibration of the voice could indeed hardly be felt. Another exception to the usual signs of pneumonia was, that there was no expectoration whatever, as far as could be ascertained. It is indeed possible that some fluid might have been discharged from the lungs, and have passed down the pharynx. These negative signs, however (the absence of vocal vibration and of expectoration), were compensated by the presence of positive evidences of pneumonia; viz., hot and dry skin, and dulness, as in the former case, taking exactly the line which marks the extent of the lower lobe of the lung. This line of dulness is, as a rule, well marked in pneumonia, while in pleurisy there is, of course, no such line; unless (which is very rare) there be adhesions along the edge of this lobe. There was also in this case bronchial breathing, which is another diagnostic sign; as, in pleurisy, the effusion prevents any bronchial breathing from being heard. Dr. Johnson also called attention to the relative frequency of the respiration and pulse, as another help in distinguishing pneumonia from pleurisy. In the former, as a rule, the respiration is much quicker, relatively to the pulse, than in the latter. In this case, the respiration was at first as frequent as 60 in a minute, while the pulse stood at 100. As the inflammation receded, however, the breathing fell to 22, while the pulse dropped to 80.

This case was, in the first instance, treated with salines and liquor ammoniæ acetatis; but, as the breathing became more rapid, it was judged advisable to give a quarter of a grain of tartar emetic every four hours. The breathing soon fell in a remarkable manner, and the case has since progressed favourably.

ST. BARTHOLOMEW'S HOSPITAL.

URINARY FISTULA FROM RIDING, SUCCESSFULLY TREATED BY THE GALVANIC CAUTERY.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

We published in the number of this Journal for May 30, the account of a case of urinary fistula produced by riding on horseback, and apparently not preceded or accompanied by any narrowing of the canal of the urethra, in which a plastic operation was performed and succeeded almost perfectly—the success being completed by the application of the actual cautery. The subjoined case presents many analogous features to this, but here success was obtained by more simple treatment, probably in consequence of the smaller extent of the loss of substance. As an instance both of a rare affection and of the success of a plan of treatment, which, perhaps, is less used here than it deserves, the case is worthy of notice.

J. F., aged twenty-three, stated that four years ago, while riding a spirited horse, he was suddenly jerked forward to the pommel of the saddle, alighting on the perineum. This caused him considerable pain at the time. Six months afterwards an abscess formed, which burst and discharged pus; and a little urine also passed through the opening. From that time up to six months ago he had not sought any medical assistance; he then presented himself at the hospital, and was admitted into Darker's ward, under Mr. Stanley. An elastic catheter was passed into the bladder, where it was retained for three weeks, in the hope that the abscess might close when the irritation caused by the passage of the urine had been removed. This having failed, the acetum cantharidis was injected into the sinus every other morning; it was perseveringly persisted in, but no beneficial result followed. Two months ago, after the administration of chloroform, a catheter was introduced into the bladder, and platinum wire, coiled on a thin piece of tobacco-pipe, was passed into the whole length of the sinus, as was ascertained by its touching the catheter. The galvanic current was then applied, and the sinus freely cauterised. The catheter was kept in the bladder for nearly three weeks; the wound had thoroughly healed, and no urine has since passed through it. He was discharged cured on June 3rd.

UNIVERSITY COLLEGE HOSPITAL.

THE OSTEOTRITE.

Mr. Marshall has favoured us with the sight of an instrument recently invented by him for the removal of carious bone from cavities. It is made on the principle of the "millhead" instrument used by the dentists, which in fact it resembles exactly on a large scale, except that the spiral cutting edges (which, however, are not very sharp) radiate from two points on the sides of the vertex of the somewhat conical head. Between these two apices are two or three other spirals which are continued across the head. The advantages of this instrument are, that it can be introduced into a cavity either with slight (or, in favourable cases, with no) dilatation of the original wound, and that the difference of sensation between the softened and healthy bone enables the operator to know when all the diseased bone has been removed. Besides this, the instrument is quite firm, and not liable to the risks attending the use of the gouge, chisel, etc. Thus it is impossible that loose splinters should be left, which must afterwards exfoliate, or that the instrument should slip and wound any parts in the neighbourhood. Mr. Marshall has given to this instrument the name of osteotrite. It is manufactured by Coxeter.

ROYAL FREE HOSPITAL.

ENCEPHALOID DISEASE OF THE RIGHT KIDNEY: OBSOLESCENCE (CURE?) ARRESTED BY INCIDENTAL DEATH FROM HÆMORRHAGE.

Under the care of William Brinton, M.D., Physician to the Hospital.

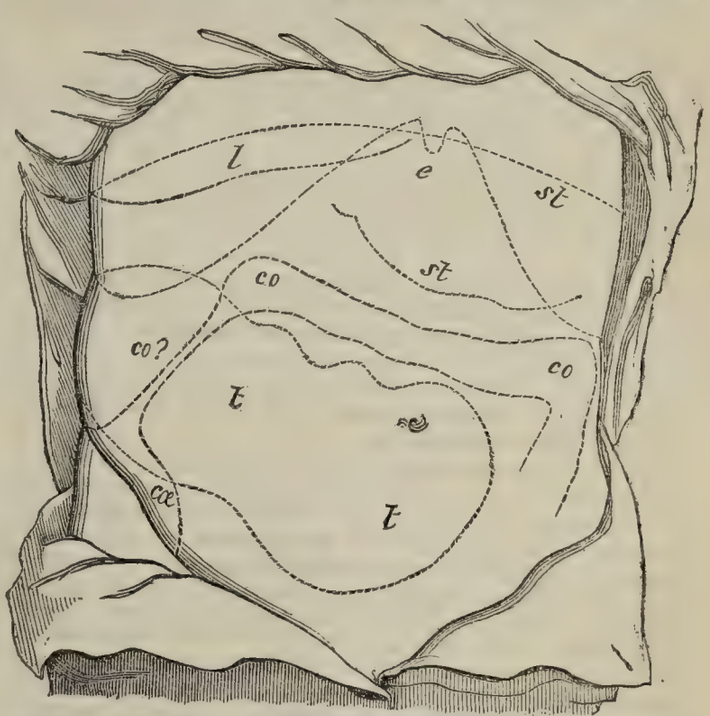
The interesting character of this case may best be illustrated by the paradoxical statement—that it affords an example of a disease which, usually rapid in its growth, had existed some years; which, necessarily obscure in its symptoms, had been accurately diagnosed eight months before death; which, always fatal in its results, seemed to be undergoing a process of recovery; and lastly, which, though justly regarded as incurable, was evidently yielding to treatment.

Case. G. K., a cook, aged 40, while working at a sausage-machine, in January 1854, felt that he had "ricked"* himself in the right side, in a point corresponding to the junction of the anterior parts of the right lumbar and right iliac regions. For two days, his urine contained blood; at first distinct, afterwards barely colouring it. From that time forth he had felt weaker, and less capable of prolonged exertion. In all other respects, however, he had been well; had experienced no pain; and had eaten, drunk, and slept, just as usual: he had always been temperate, and had an excellent appetite. His family history was quite free from any hereditary disease.

In June 1856, he discovered a swelling in his belly, which increased considerably in size prior to his admission as an out-patient in August.

On admission, he appeared to be a rather slenderly built man, of a pale yellow, and somewhat cachectic, hue; but quite devoid of jaundice or emaciation. He stated that the tumour gave rise to no pain, not even when handled or pressed; and was only inconvenient by the feeling of weight and dyspnœa associated with it. During the last month, he had once or twice vomited on rising from bed in the morning—apparently, mere saliva and bile.

An examination of the belly revealed the following state of parts, as represented by the annexed sketch made at the time.



The dotted lines indicate the situation of the following parts, as shewn by palpation and percussion externally.
e. Ensiform process of the sternum.
st st. Upper and lower borders of the stomach.
cœ. Cæcum, merging into the ascending colon (*co?*).
co co. Transverse and descending colon.
t t. Tumour, the umbilicus being near its anterior and upper extremity.

The belly was somewhat enlarged, but free from ascites. The liver, of moderate size, only touched the wall of the belly by a small part of its right lobe, so long as the patient kept to the recumbent posture. The stomach, of rather small size, seemed to have somewhat pushed up the diaphragm on the left side. The packet of small intestine appeared divided into two parts; one occupying the hypogastric region and part of the left iliac; one lying immediately below the stomach. The space it thus vacated was filled by a soft elastic mass, of elliptical shape, which passed downwards and forwards, from the outer margin of the spinal muscles in the right flank to about three inches beyond and below the umbilicus on the left side of the hypogastric region. The long borders of this mass were nearly parallel: the lower, however, somewhat convex, and the upper concave. The latter offered two or three distinct nodulations: the former, a single deepish depression or notch near its middle. The large intestine could be traced in nearly its whole extent.

* It is a pity this word, so much more expressive than "strained", and still used by the lower classes almost all over England, should have dropped out of the conventional language of authors and dictionaries. It is the *ruck* and *verruecken* of the German, slightly modified; and has no adequate equivalent (not even "wrench" is one) in English.

Beginning with the cæcum in its ordinary situation, it passed backwards and upwards a short distance, before crossing the lower margin of the tumour, over which it seemed to become very indistinct (flattened?). Exactly opposite to this point on the upper margin, it resumed its ordinary distinctness; and from hence was easily traceable along the upper margin of the tumour towards its anterior extremity. Continuing the same line, it reached the left lumbar region, immediately below the cartilage of the tenth rib, where it bent down into the descending colon, to be soon lost behind small intestine. The relation of the ascending colon to the tumour thus deduced (that of its crossing the mass at a right angle) was confirmed by the fact that, to the right of this place, there seemed to be no intestine whatever: the tumour thrusting away every thing else, and coming into direct contact with the wall of the belly.

Careful manipulation of the tumour quite satisfied me that there was no fluctuation present. Hence, in spite of its yielding character, I regarded it as solid. But one or two friends who examined it were inclined to regard it as a cyst filled with liquid: having assured themselves of a fluctuation, which, even after direct comparison with a thick-walled ovarian cyst then under my care in the hospital (a comparison confirming me in a conclusive negative), seemed to them to give a perceptible thrill. Tracing it upwards towards the liver, it seemed evidently to come into contact with the under surface of this viscus, but only at some distance from its anterior edge; so that, against the anterior wall of the belly, the tumour and the edge of the liver were separated by an interval occupied by small intestine.

Diagnosis. The variety and complexity of the details which require consideration in cases of this kind almost suggest the application of the old judicial rule—to give a decision, but not to give the reasons for it. In point of fact, the conclusion come to is generally based in a great measure upon the personal experience of the physician; and especially upon such parts of his experience—mere resemblances, analogies, or suggestions—as are, for all practical purposes, incommunicable. It was chiefly from the close resemblance of this case to two or three others which had fallen under my notice during the last ten years, that I felt competent to decide on its nature, and to diagnose it as a malignant tumour involving the right kidney. As regards the steps in that slower inductive process by which this impression was justified and confirmed, they seemed to be the following.

The local injury and the hæmaturia, owned to (but not volunteered) by the patient in telling his story, together indicated a connexion between the kidney and the tumour at the earliest stage of its growth. The consistence of the tumour suggested an elastic softness within a tolerably thick capsule: and this softness (supposing I was right in denying to it all characters of fluctuation) pointed to a malignant or encephaloid nature, which the patient's colour and aspect confirmed, and which the painlessness of the swelling was insufficient to refute. Its extension into the right hypochondrium, its lobulated surface, and its yielding consistence, might perhaps have suggested to some persons a resemblance to a cyst of the liver. But the absence of fluctuation of course negatived such a view: while, even apart from this fact, the mode by which the tumour passed up toward the liver (so as only to come into contact with it posteriorly, leaving an interval in front, where the small intestine came into contact with the wall of the belly) was quite unlike the ordinary relations of a cyst with this organ. Its relation to the large intestine confirmed this view of its renal origin, as did also its extension backwards into the right flank. The ascending colon seemed to cross over the tumour, by a comparatively narrow and undistended portion (*col*). And this apparent course exactly coincided with the fact, that it was impossible to find any trace of this bowel elsewhere—as might have been expected, for example, had it been compressed behind the tumour. This, at any rate, referred the deepest and most fixed part of the tumour to the exact situation of the kidney itself.

Treatment. The patient was ordered to apply, externally, an ointment containing the iodide of potassium, in rather smaller proportion than the officinal ointment. This was to be rubbed in slowly and carefully every night, for about twenty or thirty minutes, before the fire. For internal remedies, he was prescribed an occasional aperient of castor oil, and three grains of the iodide of potassium, with spirit of nutmeg and decoction of bark, thrice daily. His diet—rather a generous one—was left unaltered.

In the course of a single fortnight, he began to speak very decidedly of the improvement which was taking place. The tumour, he said, was much softer, and even smaller; he felt it less weighty; and his dyspnœa had also diminished. The vomiting had altogether ceased.

After another week or two, I became convinced that his opinion was correct: that the tumour was decidedly smaller and more moveable, as well as much softer, than at first. The patient's strength, appetite, pulse, sleep, were all likewise improved. His colour remained as before; if anything, a trifle more pale, and less muddy, than at first.

From this period he remained under my care as an out-patient during seven months; retaining, and, in his own opinion, adding to, the above amendment. Once or twice during this time, he stayed away two or three weeks, having gone into the country for change of air. On two such occasions he returned, insisting that the deprival of his medicine had done him more harm than the fresh air had wrought of good. As, after careful and repeated inquiry, I could find nothing to entitle me to conjecture that the iodide of potassium (thus guarded by stimulants, tonics, and a generous diet) was doing him the least injury, I did not feel justified in suspending it for more than the above few days of its casual interruption.

Early in March, I became anxious for his admission into the Hospital. In spite of his protestations that he was constantly improving; that he was stronger, lighter, and more active; and that the tumour was (which, indeed, I could verify) constantly diminishing in size,—he appeared to me rather paler and more anxious. And finding, on inquiry, that he was threatened with a scantier diet, as a result of the inactivity to which his malady had condemned him, I persuaded him to enter the Hospital as an in-patient.

During the few weeks he remained in the Hospital, there was no change made in his treatment. He was placed on full diet, with a pint of stout daily. His appetite was excellent: he slept well; was cheerful, and even gay, in temper; and active in his movements. A few days after his admission, he had a slight attack of hæmaturia, during which the microscope detected isolated blood-corpuscles, but no casts of urinary tubules, in the urine. In two days, the urine resumed its healthy appearance, but shewed a cloudy albuminous reaction when tested with heat and nitric acid, and a few transparent fibrinous casts of tubules under the microscope. By and by, even these disappeared.

On the 28th of March, he left the Hospital, to avail himself of an opportunity of spending a few weeks in the country. As far as his own feelings or his appearance could suggest, he was much better than he had ever been since first he came under my care. On the 31st he called at the Hospital to see me, before leaving town. He then went home, ate a hearty dinner, and towards evening lay down on his bed to take a nap; and was found dead some hours after, having, to all appearance, died without a pang during sleep.

The Necropsy was made about forty hours after death, after an explicit statement of the nature and relations of the tumour, as diagnosed eight months before; and of the immediate cause of death, as suggested by the termination of the case (hæmorrhage). In the examination, I was assisted by Mr. Curran, whose zeal and ability in arduous pathological inquiries deserve acknowledgment.

The shape and situation of the tumour, as well as its relations to the other abdominal viscera, so exactly corresponded with the diagram of August 1856, that I need only refer the reader to it. The tumour, when removed, weighed 9½ lbs. avoirdupois. On its inner margin, at a little distance from it, the surface of the spine was occupied by a tumour about the size of a small egg.

On further examination, the large tumour (which retained the soft elasticity noticed during life) was found to consist of (firstly) a capsule, nearly one-third of an inch in thickness, exhibiting a translucent fibrous structure when cut, and yielding a milky juice when scraped; and (secondly) a pulpy, irregularly laminated, opaque, dirty yellow mass, of a sticky, partially friable consistence. The two substances, however, merged into each other by gradations of structure at various parts of the periphery of the tumour, chiefly by an increase in the thickness of the capsule. In the centre of the pulpy mass was a coagulum of recent effusion, apparently corresponding to about three or four ounces of blood. Around this were what seemed to be relics of scantier hæmorrhage of older date, lying in close contact with a thick mass which occupied the inner or upper wall of the capsule, and projected inwards almost to the centre of the pulp. This mass was evidently renal structure mixed with new deposit, and gave off an ureter. The opposite kidney

was double the normal size, but healthy, as were all the other organs examined.

A microsopic examination quite confirmed the opinion which the unaided eye had formed respecting the nature of this mass. The pulpy substance turned out to be unmistakable encephaloid; the fibrous, a predominant fibroid development of similar cells, including in its close network a sparing quantity of blastema, and cells precisely identical with those of the pulp. The small masses on the spine were lymphatic glands affected with the same disease.

Remarks. Without venturing to say what *would* have been the results of this case, had the hæmorrhage to which death was immediately due failed to occur, I may at least assert, that the above facts conclusively show a local and constitutional amendment, continuous up to the period of death, and explained (pathologically) by an arrest of nutrition and obsolescence of the diseased mass.

In respect to the *pathology* of this obsolescence, space would fail me to add to this brief record all the various details (not without interest) which this and similar cases that have fallen under my notice suggest. But some of these details are too important to be overlooked; for they seriously modify the practical aspect of cancer by indicating in no very doubtful manner the possibility—whatever may be the rarity—of a cure in some of the most threatening forms of this deadly disease.

And firstly, this obsolescence is, I am persuaded, far more frequent than is generally supposed: at least it is so in those internal cancers which generally fall under the notice of the physician. Of course, in many of these cases the fact of obsolescence is only important in a scientific point of view; the disease being so disseminated throughout the body, or so situated in this or that particular organ, as that the change can exert little or no benefit on the organism, much less influence the termination of the malady. Pathologically, however, the fact is of extreme value. And hence when we find (what I can confidently assert) that, out of a number of secondary cancerous masses sown throughout the lungs, one, two, or more are often in some stage or other of this change, varying from a dryish pulp, to a chalky substance extremely liable to be mistaken for cretified tubercle; or when we deduce—what I think is no very improbable estimate—that about one in every hundred primary cancers of the stomach evinces a still more complete alteration of the same kind, it is evident that we are stating facts which, if true, must seriously react, not only upon our diagnosis, but even upon our prognosis and treatment.

It is no matter that the patient, in the vast majority of instances, dies just as inevitably—in the one case, it may be, of the primary or coincident disease; in the other, of the local effects already produced by the now retrogressive mischief. Any considerations which may not only add accuracy to our knowledge, but may perhaps rescue a malady from the absolutely and necessarily fatal class represented by hydrophobia, are of inestimable importance. If confirmed by further inquiry, they suggest and enforce a resolute and minute attention to the therapeutical details of every case, such as must always conduce to the comfort (and therefore at least to the *euthanasia*) of the patient, at the same time that it constitutes, not only the attitude in which every Art wrings, as it were, its reluctant triumph from Nature, but the means by which we may occasionally help to save life.

The form of cancer most peculiarly liable to this process is, I believe, the encephaloid. And, as in this instance, the presence of a capsule appears still further to favour its occurrence. But it has been once or twice witnessed in colloid. And Rokitansky regards it as more common in the scirrhous variety: a view which at any rate suggests that it affects all three of the chief subdivisions of cancer.

In those cases which have fallen under my own notice, it has certainly appeared to me that the obsolescence itself has been mediated or conditionated by the characters of the tumour. It has been chiefly or exclusively the medullary or pulpy mass which has dried and cretified; and the cretification has so exactly mapped out the limits of a previous differentiation of tissue, that it has seemed probable this differentiation was one of the chief links in the process. Thus a medullary tumour like the above dries up as a mass within its capsule: a colloid becomes obsolete only in the softer masses which occupy its fibrous meshes: or a pulmonary deposit cretifies in a mass, which is shewn by careful microscopic examination to be more or less enclosed in compressed and distorted lung-tissue.

Supposing the capsulated character of the tumour really to favour the process, it would seem probable that this capsule, whether adventitious, like the remainder of the deposit, or normal, like the distorted lung-tissue, exercises such a salutary influence chiefly by its effect—physical, vital, or both—on the vessels that pass through it to ramify in the pulp which it surrounds and encloses. It is the presence of such interstitial vessels which forms one of the most characteristic distinctions between pulpy cancerous deposit and the tubercle it can (at least in the lungs) so well simulate. Hence it is by the detection of these vessels or their relics under the microscope, that we may sometimes best diagnose the true character of the mass, just as it is by their original scantiness, or their complete disappearance, that we are at other times left in doubt. In specimens of long standing, I am not aware of anything in the degree or kind of cretification which would be absolutely distinctive of cancer or tubercle; although the process is not only infinitely more frequent, but far more rapid and complete, in the latter of these diseases than in the former; and is, therefore, on numerical grounds, more likely to be due to tubercle in any given well marked instance.

The liability of such obsolescent deposits to hæmorrhage is well illustrated by the above case. That such a process of change—one might almost say, of degeneration and decay—in the whole mass, is likely to affect the nutrition of the vessels by which it is traversed, and hence to further their lesion under the ordinary fluctuations of pressure to which the circulating blood is exposed, is a proposition which, while it probably understates the directness of the causation, is abundantly confirmed by the hæmorrhage that attends the progress of cancer in general, and of its softer forms in particular.

The diagnosis and treatment demand little further notice; though it seems probable that the peculiar structure (or rather arrangement) of the tumour would go far to explain some interesting features of both.

In respect to the *symptoms*, for instance, it is difficult to avoid connecting the painless character of the swelling with the presence of the tough limitary capsule which surrounded and isolated its pulpy contents, so as to shield the neighbouring tissues from all direct interference.

As regards the results of the *treatment*—even supposing that the amendment actually witnessed was in no degree explicable as one of those coincidences so dangerous in their influence on the art of medicine—there could be little doubt that it was greatly furthered by the same circumstances. So far as I dare conjecture, I should think that the inunction was the most efficient part of the treatment. It is not difficult to imagine that steady and gentle local friction of this kind, continued month after month, might well exercise a powerful action upon a delicate pulp, such as formed the bulk of this tumour. It is probable, too, that the ointment improved the quality of this friction, besides introducing a considerable amount of the iodide of potassium into the system. But, had the tumour been as painful (or even as tender) as such masses generally are, it is evident that no measure of this kind could have been justifiably adopted. Whether, apart from the peculiar arrangement of the tumour, the iodide really exerted any specific influence upon the process of obsolescence, by lowering the nutrition of the mass, is a question which, interesting as it is, no single case of this kind can decide. But the power over the absorption or resolution of tumours, attributed to this drug by the older writers, must surely have some facts to rest upon. And instances of this kind, supposing them now and then to occur, would rarely be capable of being verified by a necropsy, since the patient, once recovered, would generally be lost sight of. Hence it seems of peculiar importance to place on record a case like the foregoing, which is interesting, not only because it confirms (or at least explains) some of those traditional virtues of this drug which are least frequently seen in ordinary practice, but because it indicates under what pathological circumstances they are most likely to be efficacious. It is no small recommendation of such a plan to add, that, unlike some other remedies, such as mercury and antiphlogistics, the use of iodide of potassium is perfectly compatible with the fulfilment of other rational indications in the treatment of cancer; and hence that, with proper precautions, we may feel perfectly sure we are doing no harm, even if (as will too often be the case) this and every other drug fail to do any good.

Brook Street, Grosvenor Square, May 27th, 1857.

BIRMINGHAM AND MIDLAND COUNTIES EYE INFIRMARY.

CASES OF EXCISION OF A DISORGANISED EYEBALL, FOR RELIEF OF AMAUROSIS OF THE COMPANION EYE.

By James Vose Solomon, Esq., F.R.C.S., Surgeon to the Infirmary.

[*Abstract of a Paper read before the Birmingham and Midland Counties Branch, April 9th*, 1857.]

Certain traumatic and chemical injuries of the eye frequently cause sympathetic disorder in the companion organ; and where the internal tissues of the latter assume a chronic congestive or inflammatory condition, the success of medical treatment is very uncertain. The *early* symptoms of the sympathetic disorder vary considerably in character and in pathological significance; and therefore, for practical as well as for didactic purposes, it is convenient to attempt their classification. I would suggest the following, as being, in my experience, clinically accurate so far as it goes.

1. *Erethism of the Ophthalmic Division of the Fifth Pair and of the Retina*, a result of reflected nervous irritation, is manifested by intolerance of light and epiphora; the ocular structures being healthy, with the exception, perhaps, of redness of the conjunctiva, and congestion of the lids. These symptoms not unfrequently appear on the day of the accident, and remit, *pari passu*, with the subsidence of the traumatic irritation. When the pain from the latter is not very great, vision is clear at twilight, indicating that the retina is organically sound. The presence of a cretaceous or osseous formation in a disorganised or collapsed globe is sometimes an excitant of this exalted nervous sensibility; and when the latter has existed a long period, the retina is liable to become enfeebled: it may coexist with a form of ophthalmia not usually attended by photophobia. Allied to the preceding nervous disorder is neuralgia occurring in paroxysms, during which the patient is blind: it is generally symptomatic of mechanical irritation in the fellow-eye.

2. *Disorder of the Adjusting Apparatus of the Eye* commonly occurs six or eight weeks after the injury, and in cases where the primary irritation has apparently subsided. The patient may become permanently long-sighted.

3. *Hyperæmia of the Retina and Choroid* is denoted by a sense of *malaise* in the eye, and intolerance of use when it is directed to small objects, which are seen clearly so long as the patient can bear to look.

4. *Congestion or Inflammation of the Posterior Internal Tissues of the Globe* is indicated by some of the following symptoms:—Muscæ volitantes; clouds intercepting the view of objects; a gauzy mist; impaired vision; sluggish pupil; red or yellow flashes in the dark. This is the congestive amblyopia of authors.

5. *Inflammation of the Retina* is diagnosed by persistent dimness of vision; tolerance of light; a circumcorneal zone; the lens, iris, cornea, and aqueous humour, being at the onset normal, also the external membranes, except the zone. As the disease advances, (*a*) the iris inflames; the pupillary border contracts and adheres to the lens, its sharply defined edge is lost, and its movements are annulled; sight is much impaired: or (*b*) amaurosis supervenes, and the pupil dilates: or (*c*) the vitreous humour softens, the globe sinks: or (*d*) cataract forms.

6. *Iritis*—the arthritic iritis of authors.

7. *Acute Choroiditis* is marked by fever, violent pain in and around the eye, great intolerance of light, fiery spectra day and night, rapid loss of sight, etc.

The diseases classed 4, 5, 6, 7, and any modifications or compounds of them, generally prove rebellious to depletion, medicines, and blisters; and terminate, if the patient have the good fortune to escape complete loss of sight, in a serious degree of impaired vision: they are therefore cases which, in my opinion, should be combated at an early period of their existence by excision of the primarily diseased globe. I would refer those that are sceptical of the soundness of these views to a valuable table of twenty cases, where injury to one eye had resulted in the blindness of both, published by Mr. Augustin Prichard in the Association Medical Journal for October 6th, 1854, p. 909; also to an instructive series of cases recorded by Dr. Mackenzie in the fourth edition of his *Treatise on the Eye*, p. 611; to cases in the volume of the *Lancet* for 1855, by Mr. Critchett; and to those that I shall presently relate from my own practice, in which excision was performed.

The merit of applying excision of the *entire* globe to the treatment of sympathetic internal ophthalmia belongs to Mr. Augustin Prichard of Bristol, who published his first case in 1851 (*Provincial Medical and Surgical Journal*, Feb. 5th, p. 66). The principle of the operation is as old as medicine itself, and has been acted upon from the earliest ages: viz., the removal of the cause of a disease, in the hope that its effects would cease.

I consider that the persistence of the sympathetic disorder cannot be referred in *all* cases to irritation (*e. g.*, an earthy lens), or inflammation in the organ primarily injured (for cases occur in practice where neither of these states exists, and yet excision proves eminently serviceable), but to a disposition in the tissues of the healthy eye to conform their nutrition to that of its disorganised companion. Consequently, the mere evacuation of some of the humours of the diseased globe by incision or excision of the walls of its anterior chamber (partial excision), must ever be a less satisfactory proceeding than ablation of the whole eye. By the latter operation, the case is, on the principle of exclusion, much simplified; and if the intention of it be not fulfilled, the surgeon will know that he has to deal with a constitutional disease, or with a local one where morbid changes beyond the power of nature or medicine have taken place. Moreover, excision performed on the method of O'Ferrall is neither followed by hæmorrhage of any amount, inflammation, suppuration, pain, or constitutional disorder; whereas, after the minor operation, I have in some cases met with severe hæmorrhage, painful distension of the globe from effused blood, followed by sclerotic inflammation, great suffering, and symptomatic fever. Further, the stump of a collapsed eye may become the seat of an osseous or melanotic deposit. An example of the latter has fallen under my care.

Case I. *Excision of a disorganised Eye: Cure of a persistent Dimness of Sight in the companion Organ.* Samuel Spittle, a healthy miner, of short stature, 60 years of age, probably intemperate, residing at West Bromwich, came under my care at the Birmingham Eye Infirmary on August 12th, 1856. He had received, ten weeks before, a blow on the *right* eye, which caused inflammation and blindness. The cornea having sloughed, the front of the eye was flattened and opaque; the globe was neither painful nor inflamed. The *left eye* became dim a week after the accident; it was, at the time of admission, painless, incapable of distinguishing colour, or one person from another; a cloud appeared to be constantly before objects. A few short trunks of red vessels, arranged in a crescented form, were observed on the sclerotic, terminating at about one-twelfth of an inch from the lower and outer border of the cornea. The pupil was small, round, and fringed with pigment at its upper and outer border, insensible to the stimulus of light, and, as I afterwards ascertained, to atropine. The iris, of natural appearance, was adherent to the lens. The globe was of normal tension.

The patient's only complaint was the dimness, which disabled him from every kind of employment. His sight, prior to the accident, had been quite good; he had never worn spectacles, or learned to read.

My *diagnosis* was, slow inflammation of the internal tissues, which had probably commenced in the retina.

The *treatment* consisted in the application of six leeches to the left lower lid, and five grains of blue pill to be taken on each of six consecutive nights. Two tablespoonfuls of a terebinthinate mixture were also given three times a day. Pustular irritation was induced over the left mastoid region. At the end of three weeks, one-sixteenth of a grain of bichloride of mercury, in bitter infusion, was substituted for the turpentine; and the counterirritation was continued. After a month's use of the bichloride, iodide of potassium was given in its stead, and persevered with till December 10th, when, as no improvement had taken place, with the assistance of my friend Dr. Marshall, I excised the globe. The whole of the sclerotic conjunctiva, muscles, and orbital fat, were left in the orbital cavity. The presence of heart-disease precluded the administration of chloroform. The patient, who had a draught of hot brandy and water and some opium after the operation, soon went to sleep, passed a good night, and never afterwards suffered the least pain or inconvenience of any kind. The operation caused the loss of a few drops only of blood, and was not followed by suppuration. There was nothing in the man's condition to contraindicate his discharge on the seventh day after the operation: he was, however, detained till the expiration of his note.

At this early date, he considered he could see large distant objects with greater clearness. In six weeks after the performance of excision, he was able to identify persons, distinguish colours, and the size and form of black objects of the diameter of half a line. As he did not know the letters of the alphabet, it was impossible to test his vision with type of different sizes. The cloud had been exchanged for muscæ volitantes. On March 24th, he was supplied with a pair of thirty-inch double convex spectacles, and directed to come again in a month.

April 28th. My notes state:—No black specks interfere with vision when he wears spectacles. Every object is seen with perfect clearness, even the most minute black spot. Since his last visit, the black specks (muscæ volitantes) have lessened in number and density, which he attributes to the use of the spectacles. On one occasion he got drunk, and his sight became as bad as it ever had been, but cleared after the operation of an aperient dose—the only medicine taken since the day of the operation.

Case II. *Excision of a disorganised Globe: Relief of much impaired Vision of the companion Eye—a Result of Choroido-Iritis.* Wm. Hollins, 31 years of age, a silver-plater, of intemperate habits and an immoderate smoker, suffered four years since an accident to his left eye, from mortar which was thrown into it. Severe inflammation, pain, and loss of sight, were the consequences; but he did not obtain medical aid till a month after the injury, and then because the companion eye had become inflamed, affected by shooting pains, and circumorbital aches: "the globe felt as if it were being thrust out by a crowbar". On the third day of the ophthalmia, a red ring appeared before the eye, and continued day and night; also a cloud, which intercepted the view of objects. The sight diminished daily, and, at the end of six weeks, even artificial light was invisible. In three weeks from that time, the ninth of the sympathetic ophthalmia (choroiditis), the inflammation subsided, and he could identify persons; but neither reading nor writing was practicable. He took work on a coal-wharf, emptied boats, and served customers. Toward evening, men could not be distinguished; and he made his way along the streets by noticing the direction of the gaslights. He remained at the wharf two years.

During May and June 1856 the vision became much worse; and on July 14th he was compelled to become an inmate of the Birmingham Workhouse. The next day my friend Mr. W. T. Fernie, the intelligent house-surgeon of that establishment, sent him to me at the Eye Infirmary in charge of a guide. On that day, July 15th, the following was the appearance of the eyes. The pupil of the *right eye* was contracted, central, and of rather irregular form: its outer two-thirds were occupied by a delicate translucent adventitious membrane. It was insensible to the stimulus of light and to atropine. The iris was bluish gray. On the sclerotic were observed some enlarged vessels of pink colour. The cornea was clear. A guide was essential for his safety in the streets and in the house, little besides light being recognised. This condition of the eye I regarded as due to acute choroido-iritis which had passed away, leaving a chronic postero-internal ophthalmia.

The *left eye* was larger than its fellow. It was insensible to the brightest light; the lens, of earthy consistence, was tremulous, the iris discoloured, the sclerotic was unattenuated, but pervaded by numerous varicose vessels. Occasional pain in the globe and forehead, of insignificant degree, was felt.

The treatment consisted in a good diet, including meat and ale; counterirritation behind the right ear; and bichloride of mercury in bitter infusion used internally for three weeks, when iodide of potassium was substituted for it, and gray powder, with extract of hemlock (five grains of each) given every night. These means were used for more than two months without improvement to the sight.

At the expiration of the thirteenth week of treatment (Oct. 14th) the syrup of iodide of iron was prescribed in the place of the preceding remedies. Under its influence, the general health and the vision of the right eye greatly improved; he could see a barrow at twenty yards, and became the guide of a blind man from the workhouse to the Eye Infirmary, a distance of two miles; but he could not distinguish colours.

No change took place till Nov. 7, when the right eye suffered from choroido-iritis and serious imperfection of sight. The posterior chamber appeared, as on his first admission, to be filled with smoke. For this attack he was carefully treated about six weeks, at the end of which the vision was as imperfect as on the patient's admission, although the eye was not inflamed, and the aqueous humour had regained its transparency. As a forlorn hope I excised the left globe, in which no change whatever had taken place since the patient first came under treatment. The operation was performed on January 21st, 1857, the patient having been rendered insensible by the inhalation of chloroform. Dr. Marshall kindly afforded his intelligent assistance. The chloroform disordered the stomach very much, as was evinced by sickness and loss of appetite, which continued several days. At night the patient was restless and wakeful. The wound healed rapidly without pain, inflammation, or suppuration.

On the seventh day after the operation (January 28th) he was seized with ophthalmia of a similar character to that last recorded, in consequence of having carelessly exposed the eye to cold air, and bright fire-light. The inflammation quickly yielded to the application of a few leeches and the ingestion of eight doses of calomel and opium. He left the Infirmary at the expiration of his note, previous to which the sight was so far improved by the operation that he could find his way in parts of the town to which he was a stranger. Mr. Fernie, in a letter addressed to the secretary of the Eye Infirmary, dated March 3rd, says: "Previously to the admission of this patient (Hollins) into the Eye Infirmary his vision had been gradually failing for four years past; so that, when sent to you, he was quite unable to discern any object at the distance of twenty yards from his person in broad daylight. He now rejoices in the ability of clearly distinguishing houses, trees, and individuals distant two hundred or three hundred yards; he clearly sees the preacher in the chapel (which he has failed to do for four previous years). His sight continues daily to improve simultaneously with his general health, spirits, and appearance."

On April 23rd Hollins read a few lines in a work printed in long primer type. When the day is sunny he can manage to write a little.

Case III. *Traumatic Injury of Right Eye: Sympathetic Erethism of the opposite Organ, followed by impaired Vision: Excision of Right Eye: Great Improvement.* James Smith, aged 32, a soda-water bottler, healthy, but constitutionally feeble, accustomed to a good diet, not intemperate, but a great smoker, suffered on the 1st of August, 1856, a small laceration of the *right* cornea and rim of the sclerotica, from a fragment of a soda-water bottle that burst while he was corking it. The wound, which was uncomplicated by protrusion of the iris, received almost immediate treatment; and on the fourth day from the accident the case came under my notice at the Eye Infirmary. I prescribed closure of the lids, rest of the eyes, meat and beer, and, as medicine, bark and ammonia. A decidedly tonic plan—including quinine and iron—was pursued for fourteen weeks; in the meantime the wound, unattended by inflammation, slowly healed, the size of the globe gradually diminished, the vision became nearly extinct, the cornea, lens, and humours, retaining their transparency. The want of reparative power was more marked in this case than in any other I have witnessed.

The *left eye* became, immediately after the injury, painfully sensitive to light and heat; and in about a fortnight the sight was feeble. These symptoms continued up to November 7th, when I excised the *right* lobe, which was a third less than its companion, by O'Ferrall's method. On that day, the left pupil was dilated, and the contractions of the iris were not sustained when the eye was exposed to bright light. Newspaper type appeared rather indistinct, and could be read for a short time only.

On the day following the operation (which was performed while the patient was under the influence of chloroform), the pupil was contracted to its natural diameter; and on the third day he told me that he read newspaper type clearly—a gain, as respected distinctness, that was not permanent. The immediate and permanent effect of the operation was to render the left eye perfectly comfortable when exposed to bright light or heat. Neither pain nor inflammation followed the excision, and the patient was in every way fit to leave the Infirmary in seven days afterwards.

April 9th. Vision was improving, especially of distant objects. The man was altogether satisfied with the result of the excision. The disorganised globe did not contain a foreign body.

Case IV. *Loss of Sight of Left Eye from a Burn: Sympathetic Impairment of Vision in opposite Organ: Successful Excision of Left Eye.* John Jones, seventeen years of age, healthy, with pale complexion and auburn hair, a roller of hot metal, suffered from a burn in his left eye in May 1855, which blinded it instantly, and for ever. The vision of the *right* became

so seriously embarrassed that he could not decipher type, nor even see persons that were quite close to him. At the end of a fortnight it (the right eye) had improved, and persons could be seen and known at half a dozen yards distance. The sympathising eye was very red, and watered on the morning following the accident, and continued in this state for weeks.

The burnt eye, which was poulticed several times a day under the direction of a surgeon, discharged much matter. There was considerable constitutional irritation, severe headache, great thirst, and loss of appetite, for the relief of which purging medicines were taken.

At the expiration of sixteen weeks from the date of the accident the right eye had sufficiently recovered to allow of a resumption of work, but in a day and a half he was obliged to "knock off"; the sight having "suddenly become dull," he had got entangled by his trousers in the machinery.

Jones was admitted an in-patient of the Birmingham Eye Infirmary in the fourth week of October, 1855, at which time the lids of the *left* eye were adherent to the globe, and the front of the latter was covered by a red and thick mucous membrane. There was no pain. The pupil of the *right* eye was dilated, and feeble in its contractions when suddenly exposed to light, soon relaxing into a dilated condition. Quarter-inch type was the smallest he could distinguish. At times clouds passed before the eye; at others he became suddenly blind for a short period. Anæsthesia having been induced by chloroform the left globe was excised on the 31st of October. No bad symptoms followed. On the thirteenth day after the operation the vision was nearly as good as it ever had been, and he left the house. At a subsequent period he fell into poverty, and the vision relapsed to the state it was in immediately previous to the operation; he got tonics and better living, recovered, and in four months after the operation, the last time he was seen, the sight was as good as it had been before the burn.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

ADHESION OF THE EYELID TO THE EYEBALL, OR SYMBLEPHARON: ITS USUAL CAUSE AND MODE OF FORMATION: EXAMPLE OF THE RARER KIND: ADOPTION OF BLANDIN'S METHOD OF OPERATING: SATISFACTORY RESULT.

By R. Taylor, Esq., Surgeon to the Hospital.

The object of the following communication is to introduce to the notice of the profession a very ingenious operation devised by M. Blandin, for the relief of symblepharon, or adhesion of the eyelids to the eyeball.

For the benefit of those who have not paid much attention to ophthalmic surgery, I may be permitted to make a few remarks upon the nature and cause of this distressing affection. With very few exceptions, it is the result of some injury, as from molten metal, lime, strong acids, etc., by which a portion of the membrane covering the eyelids and eyeball has been destroyed. The raw surface left upon the separation of the slough heals in the usual manner by granulation; the cicatrix thus formed, as in other parts of the body, gradually contracts; and the result is, that the palpebral sinus is obliterated to an extent corresponding with the seat of the injury, and the eyeball and eyelid are bound together by a dense unyielding tissue, by which the movements of the eye are more or less impeded, and a disagreeable sense of constriction attends every motion of the uninjured eye. In the great majority of instances, the seat of injury is the lower eyelid; and not less frequently the cicatrix extends so far over the cornea as to shade a part or the whole of the pupil, and thus to impair or destroy vision.

This explanation of the mode of formation of symblepharon differs, as I am well aware, from that which is commonly offered, which attributes the union to the adhesion of the opposed raw surfaces, as happens in the case of two adjacent serous membranes when inflamed. But the cases appear to me to be altogether different. In the latter, without any breach of surface, lymph is thrown out, which, when organised, becomes the uniting medium; in the former, there is loss of substance, exactly as occurs in a burn in any other part of the body; and the subsequent processes are identical, namely, granulation, cicatrisation, and contraction. It is farther borne out by surgical experience, which shows that here, as in other parts of the body, mere division of the bond of union is unavailing, notwithstanding the most sedulous efforts to prevent contact between the newly formed raw surfaces.

Where the uniting band is but narrow, we have the choice of several operations, each of which offers a fair prospect of success. As a general rule, that proposed by Mr. Wilde is perhaps the best. It consists in dissecting out the cicatrix, and bringing together the edges of the conjunctiva, both on the eyeball and the eyelid, by sutures. But where the adhesion is extensive, this, as well as all of the ordinary operations, is inadmissible; and the unanimous opinion of ophthalmic surgeons declares such cases to be beyond the reach of surgical interference. It is to such, otherwise hopeless cases, that M. Blandin's operation is applicable. Those who wish to refer to the original will find it in the *Gazette Médicale* of 1846.

In August 1856, I had an opportunity of putting it to a trial. A very intelligent lad, 15 years of age, applied for relief at the Central London Ophthalmic Hospital, under the following circumstances. Nearly a year and a half previously, he had received a severe injury in the right eye, and a less serious one in the left, from lime, for which injuries he had been treated for some months at a hospital. His state, when I first saw him, was as follows. The right eyeball and lid were united by a dense firm cicatrix, extending nearly the whole length of the palpebral fissure, and upwards over the cornea so as to conceal the pupil, with the exception of a small chink, which was obscured by a faint milky opacity. Every attempt at moving the eye was attended by a most disagreeable feeling of constriction; and the sight was so far impaired that he could not make out the largest print. In the left eye, the consequences of the injury were so slight as not to require surgical interference. There were a few loose bands of adhesion at the bottom of the palpebral sinus; and, though the lower part of the cornea was obscured by opacity, this did not trench upon the pupil, and vision was unimpaired.

The operation upon the right eye may be described nearly in M. Blandin's words. The cicatrix was carefully dissected from the cornea and sclerotica in its whole extent, until the eyeball was completely free; and the dissection was continued until the bottom of the palpebral sinus had been reached, and the bony margin of the orbit could be felt with the finger. There was thus left a broad thin flap of cicatrix, adhering to the tarsal margin of the eyelid. This was then folded in, in the manner of a hem, so that its smooth surface, which had formerly been external, was now in apposition with the raw surface of the eyeball, and a lining was provided for the eyelid to the very bottom of the palpebral sinus. In this position the flap was retained by two sutures passing through the entire thickness of the lid, and tied externally on the skin of the face.

The subsequent progress of the case may be thus condensed. One of the sutures was, unfortunately, detached by the efforts of the patient, who did not understand its importance; and I was not informed of the accident until it was too late to replace it. The other was removed on the fifth day after the operation. The outer three-fourths of the flap adhered to its new position, leaving a palpebral sinus of the natural depth. At the inner part there was still a narrow elastic band between the eyelid and the lower and inner part of the cornea, which, however, did not interfere with the free movement of the eye. A subsequent attempt to get rid of this adhesion was unsuccessful. The opacity which formerly covered the cornea has been removed, partly by operation and partly by absorption, to such an extent that three-fourths of the pupil are now perfectly clear; and the vision is almost, if not altogether, as good with this eye as with the other. So little irritation was produced by the operation, that the lad returned to his work (that of a plasterer) the day after the second suture was removed.

Although, owing to the unfortunate detachment of one of the sutures, the success of this operation has not been so complete as it might otherwise have been, still the relief afforded in a case which is universally condemned as hopeless has been so striking, that I earnestly trust that this very ingenious and simple operation may have a further trial in this country; this, so far as I am aware, having been the only occasion on which it has been performed. Among the labouring and manufacturing population, who are in an especial manner exposed to the accidents by which symblepharon is produced, there must be many who are suffering from all its inconveniences, who would gladly avail themselves of any chance of relief by surgical means, and who might perhaps ere now have been relieved, had this mode of operating been known and attempted. To speak confidently, from the results of two operations (M. Blandin's and my own), would be premature: all I would wish to enforce is, that the method proposed appears to be founded on just and scientific principles; that it is the only one hitherto proposed which is at all likely to be adopted in this country for the relief of a very distressing affection, hitherto

considered as irremediable; and, finally, that it has proved successful in the only two instances, so far as I am aware, in which it has been performed.

I would merely add that, so far as I have had an opportunity of judging, the operation is admissible only in those cases in which the adhesion is extensive; where the connecting bands are narrow, others, especially that of Mr. Wilde, are preferable. Had I again to operate in a case such as I have above described, I should apply, and apply very securely, three points of suture, firmly fixing the flap in its new position so long as the sutures did not appear to produce too much irritation.

Original Communications.

CASES OF PUERPERAL CONVULSIONS.

By Frederick Mason, Esq., Bath.

[*Read before the Bath and Bristol Branch, April 29th*, 1857.]

Case I. On December 30th, 1850, about mid-day, I received a message to visit Mrs. T., then in the last month of pregnancy with her first child. She appeared to be perfectly sensible, and able to describe all she felt, and complained chiefly of an intense pain in the epigastrium. She had not as yet any symptom of approaching labour. I prescribed remedies for the relief of this pain, and left. At 7 P.M., I received another message to visit her, and found her still complaining of great pain in the epigastrium. I had been in the room a short time only, when she had a violent fit of convulsion, which lasted a few seconds, and then left her in a state of insensibility. The fit was quickly followed by another, which subsided as before. Although the os uteri, which appeared thin and rigid, had not commenced to dilate, yet I found, on placing my hand over the fundus, that uterine action had begun; the convulsion beginning with and subsiding with each contraction of this organ. I now, in addition to other remedies, bled her to ʒxx, which moderated the violence of the attacks, though they still returned with each pain.

The dilatation of the os uteri went on very slowly; and, as the labour advanced, the fits became more severe. I again bled largely; and she also lost a quantity of blood from the slipping of the bandage during her struggles. The violence of the convulsions was again lessened, but they returned with each pain, until the os uteri was fully dilated, and the head of the child descended low in the pelvis. She was delivered of a still-born male child, about 8 o'clock A.M., on December 31st. She remained in a comatose state for two days, and then slowly recovered; but had no recollection of anything that had taken place—not even of the first pain in the epigastrium.

She shortly afterwards removed to London, where she had a second child, without convulsions; but in a third labour, she again suffered from them, and died.

Case II. Mrs. D., a laundress, aged 22, short, but rather stout, pregnant for the first time, had suffered during pregnancy from swelled legs and feet. On the morning of Dec. 3rd, 1851, being in the eighth month, she was in her usual state of health; but towards the middle of the day she complained of pain in the head, which soon became intense. I saw her soon after 5 P.M., and found her complaining of great pain in the head; the face was flushed and slightly swollen; the bowels were costive, although they had been relieved on the previous day; her legs and feet were œdematous. Pulse 90, without much power. She answered all questions rationally, and begged to be allowed leeches to the temples. I ordered her to apply twelve directly, and to take aperient medicine until the bowels were relieved.

At 8 P.M., I was requested to visit her again as quickly as possible; as, soon after I had left her, she became insensible, and her friends were alarmed by her loud snoring. I found her lying as in a fit of apoplexy, with stertorous breathing, etc.; but she soon had an attack of violent convulsion, which lasted several seconds, then left her, and after a short interval returned. On placing the hand on the abdomen, it was evident the convulsions were connected with contractions of the uterus, as they occurred each time a pain commenced, and subsided with it. On making a vaginal examination, I found that the os uteri was dilated sufficiently to allow one finger to pass readily into it, and that the head of a small child presented. The os uteri felt thick, hard, fibrous, and undilatable. She had applied only four leeches. I now bled her to ʒxx, cut off her hair, and applied cold to the head. This bleeding had the effect of moderating the violence of the convulsions, which now passed into a state resembling severe tremor of the whole body.

11 P.M. She had had no return of the convulsions, but had become semi-conscious, cried out with each pain, and at the same time placed both her hands over the abdomen. I applied a blister to the nape, and administered an enema, which soon returned, bringing with it some fæces.

She continued in a semi-conscious state until 2 A.M. December 4th, when she again became violently convulsed. The fits again occurred as violently as at first; and as the pulse had risen, I bled her again to ʒxvj, with an effect similar to the first; the convulsions did not occur again; she became more conscious than before; and after an hour or so, complained of feeling cold.

The os uteri dilated very slowly. At 4 A.M., it was dilated to about an inch and a half in diameter; but neither the membranes nor head appeared to advance; and as the latter seemed to be resting on the os pubis, I passed my finger higher to ascertain the fact, and accidentally ruptured the membranes. The uterus now dilated more quickly, and in another hour dilatation was complete; and at six o'clock I applied the forceps, and finished the delivery; and the placenta immediately followed. The child was dead.

She was in an exhausted condition, and only to a slight extent conscious. She continued much the same until the evening of the 5th, when she became more conscious, and then gradually recovered, but had no recollection of anything that had taken place on the day before her delivery.

She has since had three children, without convulsions in either case.

Case III. On September 12th, 1852, at 1 A.M., I was summoned to attend Mrs. H., then at the full term of pregnancy with her first child. She was a delicate, slightly made woman, a dress-maker, accustomed to sit very closely to her work, frequently without taking any rest at night. I found that labour had just commenced; and with what appeared to be the first pain, she had had a fit of convulsions. No premonitory symptoms had been noticed. With this exception, this case resembled the previous ones—the fits came on and left with every pain. The pains were frequent and regular; yet the os uteri, as in the other cases, dilated very slowly; and it was not until 5 P.M. that it was sufficiently open to enable me to apply the forceps, when she was delivered of a very small female living child. The fits now ceased; but she did not recover consciousness until the afternoon of the next day.

In this case, I took only about ʒviij of blood from the arm.

She has since borne two children without any return of the convulsion.

Case IV. On May 28th, 1856, at 10 A.M., I saw Mrs. B., who was pregnant for the first time. She had been in pain nearly all night. The os uteri was undilated, and had a thin sharp edge.

2 P.M. The os was slightly patulous, but still thin and rigid. The pains occurred regularly; and there were no symptoms to excite apprehension.

8 P.M. The os uteri was dilated to the extent of an inch and a half in diameter, and had become soft and dilatable. The vagina was well lubricated with mucus. Dilatation now proceeded rapidly, and the head descended into the pelvis; when the secretion in the vagina ceased, and it became dry. Still she appeared comfortable, and talked in the interval of pains; when suddenly, without previous warning, and during a pain, she became violently convulsed and unconscious. The fit ceased with the pain. I took ʒx of blood from her arm, and sent home for the forceps. As soon as they arrived, I applied them, and delivered her of a living female child. With the pain that expelled the placenta, she had another attack of convulsions; but within an hour after the emptying of the uterus, she became sensible, and recovered.

June 9. I have since attended her in a perfectly natural and quick labour, from which she has recovered without any adverse symptom.

Remarks. I did not examine the urine in either case; but if I had discovered the presence of albumen, I should have considered it a consequence, and not the cause, of the convulsions. For it must be remembered that true puerperal convulsions seldom occur in other than women pregnant for the first time, and in whom no suspicion has existed of previous disease. I think the cause is to be sought for in great nervous irritability increased by the undilatable condition of the os uteri and vagina.

ON CERTAIN CASES IN WHICH THE FORAMEN OVALE WAS STILL PATENT IN THE ADULT.

By John W. Ogle, M.B.Oxon., F.R.C.P., Assistant-Physician to St. George's Hospital.

In the year 1851, whilst curator of the Pathological Museum at St. George's Hospital, I took the opportunity of examining above one hundred and forty human hearts taken indiscriminately after death, for the purpose of ascertaining the condition of their muscular fibres.* Of this number, I examined sixty-two with a view of discovering the condition also of the foramen ovale, and found that out of the sixty-two, there were thirteen hearts which retained this foramen yet incompletely closed, although to a variable degree; thus giving a proportion of about one in five hearts in which communication of some kind or other existed between the cavities of the two auricles. This is, I believe, a greater proportion than is generally considered to exist in the healthy human adult heart.

These particulars, observed at the period I mentioned, have hitherto not been made available by me; but I have retained them in my note-book, thinking that at a future time some opportunity for their use might occur. Such an opportunity has been offered, in consequence of the observations of my friend Dr. Markham, regarding a case published by him in the number of this Journal for April 4th, 1857. In this case of Dr. Markham's, a loud murmur coincident with the systole of the ventricles, and therefore synchronous with the diastole of the auricles, was heard along the base of the heart and in the entire left subclavicular region. Of some of his remarks in connexion with the case, I shall speak at greater length further on.

Having mentioned the fact of the comparatively frequent occurrence of an incomplete closure of the foramen ovale, I must qualify the observation by remarking, that the patency noticed allowed of very different degrees of communication between the two sides of the heart. In some of the cases, the opening remaining in the septum of the auricles was a mere fissure or oblique slit, arising simply from want of such an adhesion between the valves and the margins of the isthmus, as is wont to exist after the completion of the drawing up of the valvular fold and other preliminary contractile actions of neighbouring parts. This defective adhesion, I may remark, is thought by Dr. Peacock to be the result of unequal pressure in the auricles from the blood, owing to the slow establishment of the pulmonary circulation after birth. The oblique slits, to which I have alluded, were directed variously, as it were, opening in some cases more widely from above, and in others from below, and would have allowed of the blood passing, as it would seem, more freely in some cases from the left into the right auricle, but in the majority of cases from the right into the left auricle. In several of these cases, the communicating opening was not merely that of a chink or slit, but was a decided round or oval aperture; in one case, admitting of the entrance of the tip of the little finger. In one or two cases, the opening was of a reticular character, having the appearance as if it had been produced by a falling short of one part of the margin of the valvular fold, so that it failed to be raised to the level of the isthmus, to which it ought to have been adherent; and as if the deficiency had been in part compensated for by bands passing across the vacancy. I was careful in my search for any trace of ulceration or of rupture which might have accounted for the opening, but this did not in any case exist.

I have lately referred to the life histories of those cases which I have mentioned as presenting an imperfect closure of the foramen ovale, in order to ascertain what physical signs were noticed before death, which might be attributed to this imperfect closure.

I will now enumerate the cases, and describe briefly the condition of the heart and also of the lungs in each of the thirteen cases in which I found the foramen only partially closed. Afterwards, I will add a short statement of the stethoscopic signs as observed during life, whenever I find that they were noted by my friend and colleague Dr. Barclay, who at that time was medical registrar at St. George's Hospital.

Case I. A patient, aged 41, affected by pneumonia, rheumatism, and eventually pericarditis. The chest was carefully stethoscoped when the patient came into the hospital, and special search was made for signs of peri- or endocarditis, but no *bruit* or friction-sound whatever was heard. After a time, when the anticipated pericarditis had appeared and become established, the ordinary murmurs were heard.

Case II. A patient, aged 37, was admitted into the hospital, and died with pulmonary phthisis and vomicæ. After death, the heart, which weighed eight and a half ounces, was found healthy and natural, excepting the patency of the oval foramen. In the life history it is expressly observed that "the only thing made out by physical exploration of the chest was slight harshness of breathing on the right side of the chest." These particulars are given, but there is no mention whatever of any unnatural sounds about the heart.

Case III. A patient, aged 25, was admitted into the hospital with dropsy and other symptoms of diseased kidneys. There were also symptoms of congestion of the lungs and enlarged heart; and a regurgitant murmur was heard at the root of the aorta. In the life history it is expressly stated that there was no double murmur; in other words, that no murmur existed synchronous with the systole of the ventricles. After death, the heart, which weighed twenty ounces, showed small fibrinous granulations upon the surface of the aortic valve-flaps.

Case IV. A patient, aged 38, died in St. George's Hospital of phthisis with vomicæ. The heart, which weighed ten ounces, was healthy, excepting the open foramen. In the life history a careful description of the physical exploration of the chest is given; but there exists no mention of any unnatural heart-sounds.

Case V. A patient, aged 32, who died of acute pleurisy and congestion of the lungs. In the life history, the physical signs, which were observed as connected with the lungs, are given; but no mention is made of any murmurs about the heart.

Case VI. A patient, aged 37, who died of abscess within the brain, connected with disease of the inner ear. After death, the lungs were found to be greatly gorged with blood. The heart, which weighed nine and a quarter ounces, presented small shreds and granulations of recent fibrine attached to the aortic valve-flaps; but otherwise, saving the patent foramen, it was natural. In the life history, it is stated that "the lungs appeared only to be affected with bronchitis."

Case VII. A patient, who died with diseased kidneys and hypertrophy of the heart. After death, the lungs were found to be very gorged with blood. The heart weighed twenty-one ounces. Its walls were thick, and its cavities dilated; and its aortic valve-flaps, which were only two in number, were rigid and unpliable. It is expressly stated in the life history that "the heart's sounds were very feeble, but nothing abnormal was found."

Case VIII. A patient, aged 32, who died of pleurisy, and was moribund when brought into the hospital. Slight scrofulous deposit was found within the lungs after death; and one lung was rendered quite useless by compression, from fluid accumulated within the pleural cavity. The heart weighed fourteen ounces, its walls being thickened.

Case IX. A person, aged 16, who died of peritonitis with bronchitis and pneumonia. The heart was natural, excepting the patent foramen. In the life history, the sounds of the heart are not alluded to directly or indirectly.

Case X. A patient, aged 38, was poisoned by prussic acid, and brought into the hospital dead. Excepting the open foramen, the heart was found to be natural.

Case XI. A patient, aged 60, was brought into St. George's Hospital with disease of the bones of the foot, and died of pulmonary phthisis with vomicæ. The heart was soft and flaccid; but, excepting the open foramen, was quite natural. In the life history, I find nothing whatever bearing upon the sounds of the heart.

Case XII. A patient, aged 45, who died of peritonitis and pneumonia. The heart, which weighed only five and a half ounces, was small; but, excepting the open foramen, natural. In the life history, I find nothing bearing upon the sounds of the heart.

Case XIII. A patient, aged 48, was admitted with a fistula *in ano*, and died of pulmonary phthisis. The heart, which weighed nine and a half ounces, was soft and lacerable; the walls of the right ventricle being thinner than usual. In the life history, I find nothing relating to the sounds of the heart.

Thus, in the preceding cases, thirteen in number, in which the foramen ovale was found to be but incompletely closed after death, there are seven in whose histories it is emphatically stated or to be inferred that no murmur synchronous with the systole of the ventricles, that is also synchronous with the diastole of the auricles, existed; and only one in which there

* The results of the examination for this purpose are detailed at page 68 of the 4th volume of the "Transactions of the Pathological Society".

is notice of any murmur with the diastole of the ventricles, that is, with the systole of the auricles. Consequently, excepting in this last single instance, we have the fact of six hearts in which more or less patency of the foramen ovale existed, but did not give origin to any unnatural sound whatever about the heart. In the solitary instance (Case III), in which a regurgitant or diastolic murmur (so-called) was heard, the heart was very large and soft, and recent granulations and shreds of fibrinous material, deposited from the blood, were adherent to the aortic valve flaps. It may therefore well be believed that this murmur was seated in the left ventricle, and had nothing to do with the septum of the auricles; if it had any such connection it must have been produced during the systole of the auricles, and therefore not at all similar to that in Dr. Markham's case which took place during the ventricular systole, and was supposed by him to be produced during the diastole of the auricles. As regards the last six cases, in which the closure of the foramen ovale was imperfect, I am sorry to say that the life history does not afford data from which any conclusive evidence as to the presence of cardiac bruits may be derived. It will be remembered that in all these thirteen cases the patients were adults. In none of them was there any cyanosis noticed during life, or congenital malformation of the heart or its vessels found after death. Moreover, there was no such condition of the valves or orifices of the heart as should primarily or secondarily tend in any material degree to impede the blood's exit from the auricles, and thus, as it were, throw greater pressure and stress upon the septum along with other parts of their walls, and lead to a mixture of the venous and arterial blood through the foramen ovale. There was, however, in many cases marked and extensive disease of the lungs, such as their occupation by the products of inflammation or scrofulous deposit, which, though to a less extent, would have a similar tendency as regards the right auricle.

I may be permitted here, as I have his sanction, to append a case lately brought before the notice of the Pathological Society by Dr. Ogier Ward, which I will curtail. It bears strongly upon the point I am attempting to illustrate.

The case was that of a child who died eleven days after birth, having been cyanotic and affected with dysphagia and choking on swallowing. The lungs and heart were auscultated during life, and it was noticed that the heart's sounds were natural, no bruit existing. After death, congenital communication between the trachea and œsophagus was found, with enlargement of the pulmonary artery and patency of both the ductus arteriosus and foramen ovale. The preparation is now in the museum of the College of Surgeons. This case, added to those related above, makes the seventh case in which the foramen ovale was more or less patent during life, and in which we have evidence that no bruit was thereby produced.

Having epitomised as briefly as possible all the cases connected with the subject of which I have any accurate note, I will say a few words regarding Dr. Markham's interesting observations.

In the case related by him, which I before noticed, nothing unnatural was found after death in the condition of the heart beyond a patent state of the foramen ovale allowing the blood to pass readily from the right to the left auricle, but not permitting it to pass in the opposite direction, excepting through two narrow slits. Among other remarks in connection with it, Dr. Markham suggests the very important query whether this peculiar state of the foramen was sufficient to account for the very marked and widely extended systolic murmur heard during life; so marked, indeed, that before death it was described as loud, rough, and prolonged, audible over the whole præcordial region and over the upper part and along the right border of the sternum, and in the whole of the upper half of the interscapular space. Dr. Markham supposes that in many cases of open foramen ovale under certain circumstances this state induces murmur during the systole of the heart. If this state of the foramen be accompanied by other unnatural states of the heart producing any murmur, then the murmur caused at the septum of the auricles becomes masked and hidden; and if there be no such disease in other parts of the heart, then no heart symptoms arise, and thus the heart remains unexamined during life, and consequently the aforesaid auricular murmur not detected. He says, "Is it not possible that such a murmur may have been present in many cases simply of open foramen ovale, but was not discovered during life because the disturbance to the circulation produced by the same lesion were not of themselves of a nature marked enough to excite attention." Again: "Cases where the foramen ovale must have been partially open during life, and yet where no symptoms to mark the fact had been observed are frequently met with; and assuredly in the majority of these cases it would be a complete begging the question to affirm that no murmur really existed during life. It is more correct to say that in the very great majority of cases of simple open foramen ovale, disturbances in the circulation do not occur, and therefore no examination of the heart is made during life. Practically speaking, how many cases are there on record where simple foramen ovale has been found after death, in which the observer can affirm that no murmur existed during life? I suspect very few." It is with this last question only of Dr. Markham's that I am now concerned; and though in what I have brought forward I do not say that I have shown reason for supposing that a murmur cannot, under any circumstances, be produced by the passage of blood through an open foramen ovale, yet I have, as I think, shown that there are numbers of cases under ordinary circumstances in which, although facility for the passage of blood from one auricle to another exists, yet no unnatural sound is thereby of necessity produced. This is so, judging from the cases adduced, even when considerable obstruction to the blood's passage through the lungs must in many cases have been present. It may be that with a certain degree of patency, a certain tension of the boundaries of the foramen, a certain quality of the blood as to consistence, and a determinate force with which the blood is propelled by one or other auricle; under all these conditions it may be a murmur might possibly be caused at an open foramen ovale. More extended observations than have hitherto been made on the matter are, however, yet required to establish the fact.

I will not here enter into the question of the greater probility of the blood's passing from one chamber to another through an open foramen ovale during the systole rather than during the diastole of the auricles, a point mooted by Dr. Markham, or *vice versâ;* or whether, again, as Dr. Hope and others have thought, the auricles are always full, a fact which I doubt, but which, if true, would I think seem to show that the circumstances of filling or emptying the auricle during systole or diastole, would be of no consequence in the production of a murmur in cases where the foramen is not fully closed, inasmuch as the septum and the valve would then always be on the stretch, and consequently always in the same invariable state of vibration. Nor will I enter into the question of the abstract possibility or otherwise of vibrations being produced at the margins of an open foramen ovale, or of the valve partially closing it, which might give rise to a murmur. These points and many others, such as the general anatomy and physiology of the foramen ovale, its method of closure, and the hinderances to its closure, might well here be discussed in furtherance of our entire knowledge of the subject in hand; but I have not entered upon them as they do not fall within the character and limits of the immediate question which I undertook in some degree to answer; viz., "How many cases are on record where simple open foramen ovale has been found after death, in which the observer can affirm that no murmur existed during life?"

British Medical Journal.

SATURDAY, JUNE 13TH, 1857.

THE MEDICAL REFORM BILLS.

It was fully expected that the discussion on Mr. Headlam's Medical Bill would take place on Tuesday last. It is reported that Lord Elcho intends to withdraw his notice of motion, "That the Bill be read that day six months," and that the discussion will take place upon its merits. We are inclined to think that such will be found to be the case if it comes on to-night (Thursday), as it most probably will. We call attention to the very important deputation, consisting of delegates from nearly every College of Medicine, and from most of the Universities in the three kingdoms, which waited upon the Prime Minister, at his private residence, on Tues-

day, and spoke powerfully on behalf of Mr. Headlam's Bill and in opposition to Lord Elcho's, which, if carried, will confiscate the power with respect to medicine of most of the Colleges and Universities of Great Britain. It will also be seen that a flood of petitions has been poured into the House in favour of Mr. Headlam's measure, whilst very few have been presented in favour of the rival measure.

THE GREAT NETLEY BLUNDER.

We trust that our cotemporary, the *Medical Times and Gazette*, which appears to be so sore at what it terms our "incessant attacks upon the Army Medical Department", will admit that we had some grounds for our strictures upon the plan of the "Model Military Hospital" approved of by the Army Medical Department, and accepted by the Government. We have never said half the hard things of this building that have been said within the last week in the House of Commons, by gentlemen whom we presume even our cotemporary will admit to have knowledge upon the subject. Mr. Augustus Stafford, who made the tour of the Eastern hospitals in the late war, and who has studied the ventilation of those at home, deals in the following gentle manner with the Netley abortion:—

"*It was begun in utter defiance and ignorance of all those principles of sanitary knowledge which we had learnt by bitter experience during the last few years. Its site was chosen without any reference to medical authorities.* When the building was commenced, the attention of those who ought to have been consulted, and who had the interest of the British soldier at heart, was drawn to it, and it was found necessary *to make so many important and costly alterations, that the Government consented to expend £110,000 more upon it.* Even that increase, he believed, would not be sufficient to build it in the manner in which it ought to be built."

We are told, indeed, by those who wish to keep things quiet, that the highest medical authorities were consulted with respect to this hospital; but they forgot to tell us when. After the plan had been approved, with certain alterations suggested by the Army Medical Department; after the whole foundation had been traced, then, and only then, when it was too late, the medical officers of the various London hospitals were asked their opinion upon the matter. Can it be believed that such a bitter mockery as this is urged in defence of this faulty structure? If the opinions of these medical authorities were worth anything, why were they not consulted at the outset? Why is the country to pay an additional £110,000 to repair the blunders of those who originally planned it? Mr. Sidney Herbert, who knows perhaps as much about military hospitals as any layman, informs us that "the army hospitals at Chatham and Portsmouth are upon one construction, *which has been condemned.* Unfortunately, in the plan first adopted at Netley, *that identical construction was adopted.*"

So much for the deliberation with which the first "Model" Military Hospital was planned. The word "fudge" would be too mild to apply to such "deliberation". It was the deliberation of the merest routine—the *deep deliberation* of officials with large salaries, and far too old fashioned and comfortable to give themselves much trouble about a matter which affected the welfare of our future armies, and our credit in the eyes of foreign nations.

Whilst the utmost science of England, as represented by the Governmental departments, has been contented with approving plans founded on *condemned models*, Belgium and France are in possession of military hospitals of the most perfect construction. St. Mark's at Brussels, the Great Military Hospital at Bordeaux, the Lariboisière at Paris, have been in existence for years, the admiration of military surgeons—and we go on building such miserable abortions as the Victoria Hospital at Netley! We have before sufficiently explained the shortcoming of this great failure, which is to cost a quarter of a million of money. In order to obtain a fine façade, the comforts and health of the future inmates are to be sacrificed. The wards are carefully planned to look out on dull airing courts facing the north-east! they all communicate by means of a common corridor,—these errors we dwelt upon before; but we are helped by the debate to other objections. Mr. Sidney Herbert states, that it is reported that Southampton water rests upon a peat bottom, with a not very thick coating of mud, through which, in hot weather, sulphuretted hydrogen bubbles up. Be this as it may, it is certain that the Southampton estuary is very low, and is skirted by a district notorious for ague—that it is insalubrious there can be no question. Imagine, good reader, a vast expanse of mud, subjected to the heat of the sun for seven or eight hours in the day, and believe, if you can, that a hospital, situated immediately on its banks, is "well placed". Lord Palmerston "never heard that the spot was unhealthy,"—how should he? Mr. Sidney Herbert believes that the "relaxing atmosphere" of the neighbourhood may be beneficial to invalid soldiers returning from India; but this is not an hospital for the Indian army only, but for British soldiers. Why should the invalid from Canada be relaxed at Netley in order that the shattered trooper from one of the Presidencies may be accommodated with a congenial atmosphere? If a special hospital atmosphere is required for Indian troops, let them have it by all means; but do not palliate such a site as Netley on any such one-sided plea.

We must reasonably suppose that the alluvial valley of the Southampton waters was chosen on account of its economic consideration, seeing that on hygienic principles it is so indifferent; but Mr. Sidney Herbert knocks away the last leg it has to stand upon. "It is not", says the late Secretary at War, "in connexion with any existing garrison. If a man falls sick at Portsmouth, you cannot compel that man to be shaken for forty miles over a railroad, because you have built a large hospital and want to fill the beds." Of course you cannot.

We rejoice greatly that our "persistent attacks" have, through the letter of a "Tax Payer" in the *Times* of last Monday, attracted the attention of the legislature and of the leading journal to this matter. We have no fear that official supineness will be able any longer to persist in a plan so faulty as that of the Netley Hospital; and we trust, with the *Times*, that the original error will be entirely rooted out, and that a new hospital, thoroughly well considered *by competent men from the commencement*, will arise in some unexceptionable neighbourhood. Without endorsing the recommendation of the *Times*, that Chelsea Hospital shall exchange its pensioners for invalid soldiers, and become a hospital in the modern acceptation of that term, we do hope that some site in the neighbourhood of the metropolis will be fixed upon for this great national establishment; for we thoroughly agree with the *dictum* of the leading journal, that "all professional skill is enhanced by centralisation." A Military Hospital at

Chelsea (or any other suburban neighbourhood) would be a real school of military surgery, and our invalided soldiers would get the benefit of all that science could accomplish for their relief.

In conclusion, we may state that the Government has, on the motion of Sir D. Norreys, agreed to produce the correspondence which led to the amended plan. We shall accordingly, in a few days, be in the position to show our readers how it was that the Government officials came "not to do it" with respect to Victoria Hospital.

We have been charged by the *Medical Times and Gazette* with making a personal attack upon Dr. Andrew Smith; but we beg to assure our cotemporary that we have not the slightest personal feeling against that gentleman, of whom we know nothing. The British Medical Journal, as long as it is conducted by us, will never condescend to attack individuals. We do not believe that Dr. Andrew Smith would have been a whit more successful in his protest against the original plan of Netley Hospital, had he made it, than he was in his protest against the want of forecast on the part of the War Office with respect to medical affairs in the East. It is, however, precisely because the Medical Department is powerless that we wish to see it entirely remodelled, and made an influential working department, instead of the sham it is at present.

THE WEEK.

We are glad to see that the Government has consented to refer the Sale of Poisons Bill to a Select Committee of the House of Lords. We have no doubt that in Committee this measure will be very much simplified and rendered workable, which it certainly is not in its present form. The Committee will, we hope, seek the evidence of chemists in large towns in order to obtain that practical knowledge of the working of the subject, which they cannot have gained from their own experience.

The Irish Medical Association held its Fourth Annual Meeting at the College of Surgeons, Dublin, under the presidency of Dr. Kingsley, of Roscrea, on Tuesday, June 2nd. From the report of the proceedings which has reached us, it appears that the members of the Association are setting themselves vigorously to work to obtain an improvement in the *status* of the medical profession. The principal topics of discussion were the system of medical relief of the poor in Ireland, and medical reform. In regard to the first of these subjects, several resolutions were passed demonstrative of a desire for reform, for which there seems to be as much need in the sister kingdom as in England. Among the resolutions was one adopting a petition to Parliament for amendment of the Irish Medical Charities Act. A motion in support of Mr. Headlam's Bill having been brought forward, a Dr. Donovan opposed it, and proposed an amendment condemnatory of the measure. After a long discussion, however, and the explanation of various misstatements made by Dr. Donovan, the amendment was withdrawn, and the resolution supporting the Bill was passed. We shall endeavour to notice the proceedings of the Association at greater length in our next.

The fifth annual festival of the Royal Medical Benevolent College, was held at the Freemasons' Tavern, on May 28th Earl Granville in the Chair. The amount of contributions and donations was nearly £2,500, exclusive of a donation of £1000 from the Devon and Exeter Medical Society. The donations included the sum of £500, presented by Mr. E. A. Brande. The much vexed question of the school fees for exhibitioners was alluded to by the Chairman. He said:—

"His being connected with the subject of education gave him, perhaps, somewhat of a right to express an opinion on one point. He saw by a report which had been forwarded to him that the price of the education, which was of the highest possible sort, was £40 per annum. It was a subject of congratulation that education of that character could be furnished for such a sum. If it could be given equally good for £30, it was well; but he trusted it would not be given for that sum if it involved any deterioration in the quality. He could not conceive of anything more calculated than such a course would be to endanger their prosperity, and involve them in no end of difficulty. He believed that the institution would be found of immense utility to those of them who had children; and, moreover, decidedly economical."

It seems to us that there has been some blundering in regard to the price of education. It was a mistake to fix the sum at £30 at all, if there was the least prospect of its being necessary to raise it to £40. Now that the necessity for an increase appears, of course opposition arises. We trust, however, that the institution will go on prospering; and that its council will keep themselves alive to the task of amending the defects which *will* from time to time appear in some parts of its working, however excellent the institution may be as a whole.

We have just received a copy of the *Eastern Counties Herald* of June 11th, containing a long account of the proceedings of a special meeting of Governors of the Hull Infirmary, held on Monday last, for the purpose of considering Dr. Horner's position in reference to the institution. Two motions were first proposed; one strongly condemnatory of the introduction into the Infirmary of a system at variance with legitimate medicine, and calling on the meeting to declare Dr. Horner's office vacant; the other proposing to accept Dr. Horner's resignation, which he had sent to the weekly board, and then withdrawn. At this stage of the proceedings, Dr. Horner (whose conduct in regard to the question whether he should continue in office seems to have been characterised by much vacillation) formally tendered his resignation, which was at once accepted. Thus satisfactorily has ended the connexion of Dr. Horner, as a homœopathic physician, with the Hull Infirmary. This result of the meeting was precisely that which alone could save the usefulness of the institution; for, as we said last week, and as was expressed by Dr. Horner's colleagues in a protest made by them, it would have been impossible for the followers of the two systems to have worked in harmony. We observe that the remarks which we made on the subject last week were quoted by one of the speakers—the Reverend Mr. Kemp—who made some very sensible observations with regard to Dr. Horner's position as a medical officer to a public institution. The governors, he said, had not met to discuss a scientific question—the truth or falsity of homœopathy—but "to take a common sense and practical view of the case, and to come to a decision which they thought was most calculated to carry out with efficiency the object for which the institution was established, and for maintaining its efficient administration. Public institutions must be managed on general principles. Individuals might follow any eccentric, original, or new principle they thought fit; but institutions were in a different position, and could not do so. The only thing that institutions like this could adopt, was that which was recognised by the medical body in the country." At the close of the proceedings, a vote of thanks was, on the motion of the Rev. Mr. Kemp, unanimously given to Dr. Horner for his past services in connection with the Infirmary.

THE LATE CHEVALIER JEAN DE CARRO, M.D.

In the town of Carlsbad, in Bohemia, where he had resided during the last thirty years, died, on March 12th, at the age of 87, the Chevalier Jean de Carro, Doctor in Medicine of the Universities of Edinburgh, Vienna, and Prague. His labours in connexion with the early diffusion of vaccination on the continent of Europe entitle his name to an honourable remembrance.

Jean de Carro was born at Geneva, in 1770, and passed the first twenty years of his life in that town, receiving his education at the College. He came to England in 1790, with the view of studying medicine, which he had chosen as his profession; and, after residing two months at St. Osyth, in Essex, for the purpose of acquiring the English language, he repaired to Edinburgh towards the end of the year, and became a pupil in the university, where he attended the lectures of Black, Gregory, and other distinguished professors who then gave celebrity to the institution. One of his fellow-students, who also lodged in the same house with him, was the venerable Dr. Richard Fowler of Salisbury, with whom Dr. De Carro kept up a correspondence to within a very recent period. On June 24th, 1793, after an examination at the house of Professor Gregory, author of the *Conspectus Medicinæ Theoreticæ*, he received his degree of Doctor of Medicine. The subject of his inaugural thesis was *Acute Hydrocephalus*.

Returning to Geneva, he remained there two months, and then proceeded to Vienna, where he studied during a year at the university. Having obtained his diploma, he married, and became attached to the British legation.

In 1799, having become acquainted with the discovery of vaccination, and being impressed with its value, he sent to England for some vaccine matter, with which he vaccinated his two sons. This is Dr. De Carro's own account; but Dr. Friedinger of Vienna, in a paper on the *Humanised and Original Lymph of Cow-Pock*, translated in the *Dublin Quarterly Journal of Medical Science* for May 1857, gives a somewhat different history. He says that, on March 20th, 1799, Dr. De Carro received some lymph, on threads in a letter, from Dr. Pearson, the friend of Jenner. A month later—on April 29th—State-Councillor Dr. Ferro, then Commissioner of Health, vaccinated his own three children with the matter sent to Dr. De Carro; and, on May 10th, one of Dr. De Carro's four children was vaccinated with matter taken from a child of Dr. Ferro: and subsequently Dr. De Carro's other children were vaccinated. These accounts slightly differ; but in both, Dr. De Carro appears as the introducer of vaccination—a merit which Dr. Friedinger fully recognises. In 1800, he sent through Lord Minto, British Envoy at Vienna (whose physician he was), vaccine matter to the Earl of Elgin, British Ambassador at Constantinople. The operation was performed with success on his lordship's infant son, and with the matter taken from the child several other persons were vaccinated. Under the encouragement and direction of Lord Elgin, Dr. W. Scott, Dr. Auban, a French physician at Constantinople, etc., vaccination made progress, but did not meet with favour among the Turks themselves; so that the matter often became exhausted, and fresh supplies had to be obtained from Dr. De Carro in Austria, and from England. Indeed, it was not until May 16th, 1827, that Dr. Auban vaccinated the children of the Sultan, and some of the ladies of the harem. He communicated the particulars to Dr. De Carro in a letter. This important event, it will be observed, occurred contemporaneously with the reforms introduced into Turkey by the late Sultan Mahmoud.

On November 7th, 1802, Dr. Scott wrote to Dr. De Carro that vaccination had commenced in Athens, and that upwards of eighty persons of all ages had submitted to the operation in that city. In the town of Salonica, a supply of vaccine matter having been furnished by Dr. De Carro to M. La Font, a French physician practising there, 1132 persons were vaccinated within the first eight months. Vaccination soon became general in Greece.

In the meantime, great sensation had been produced in Asia by the news of the introduction of vaccination into Constantinople; and Lord Elgin thus wrote to Sir A. Paget, Ambassador Extraordinary at Vienna, in January 1802:—"They write to me so often from Bassora, the East Indies, and Ceylon, for vaccine matter, that I beg you will immediately engage Dr. De Carro to send me some by all the couriers, until I desire him to desist. That which I have sent produced no effect." Jenner appears to have failed in his repeated attempts to transmit vaccine matter to India; very probably, Dr. De Carro thought, from want of precaution in keeping it fluid. In his despair, he offered a reward from his own purse of £1000. Dr. De Carro succeeded in the attempt to transmit the vaccine matter in an efficient state; but, from most honourable motives, would not accept Jenner's offer of a reward. "He would have been happy to claim it from a sovereign, or from a government; but never from a colleague." In compliance with the request of Lord Elgin, Dr. De Carro sent some fluid vaccine lymph to Bagdad. A child vaccinated there was sent, immediately after the operation, to Bassora; thence another child was sent on to Bombay; and thus vaccination was propagated through India, Ceylon, Persia, etc.; until, in March 1803, it had spread throughout our Asiatic possessions.

The mode adopted by Dr. De Carro for preserving the vaccine fluid was the following. He impregnated with it some *charpie*, which he placed between two pieces of glass, one of which had a small cavity: these were joined hermetically by mucilage, tied with packthread, and sealed with red wax: the whole was then enveloped in candle-wax, under the form of a moderate sized apple.

The priority of Dr. De Carro as the introducer of vaccination on the Continent of Europe is attested by Jenner in his *Continuations of Facts and Observations on the Variolæ Vaccinæ*, published in 1800. Drs. Ballhorn and Stromeyer, of Hanover, who were the first to follow Dr. De Carro's example, dedicated to Jenner and Dr. De Carro the first account of the results of their labours, in 1801. Friese of Breslau, and Nowack of Schmiedeberg, who received from Dr. De Carro their vaccine matter and instructions, also recognised him as "the first vaccinator on the Continent of Europe".

The valuable services of Dr. De Carro soon began to meet with grateful recognition. Jenner sent him a silver snuff-box, on which was engraved "*Edward Jenner to Jean De Carro*": he also sent a similar gift to Dr. Benjamin Waterhouse of New Cambridge, United States, whom Dr. De Carro designates as the "first vaccinator in the New World". In 1804, the success which had attended Dr. De Carro's transmission of vaccine matter to Bagdad having been made known to the East India Company, a committee of the Company voted him two hundred guineas for the purchase of a piece of plate; and, on the occasion of his second marriage, a present of two Cashmere shawls and three pieces of muslin was voted to him by the Honourable the Governor in Council at Bombay. The late Emperor Francis of Austria conferred hereditary knighthood on Dr. De Carro; the Hospodars of Wallachia and Moldavia, Alexander Morusi and Constantine Ypsilanti, many years ago, rewarded him by valuable presents; and Ludwig I, late King of Bavaria, conferred on his eldest daughter the honorary canonicate of the Royal Order of Ste. Anna—a decoration only conferred after proofs of nobility.

Dr. De Carro resided at Vienna during the greater part of the period from 1794 to 1826. In the latter year, he settled at

Carlsbad, in Bohemia, where he practised as a "spa-physician" during the remainder of his life.

In 1843, the jubilee of the fiftieth year of his doctorate was celebrated with much honour. On that occasion, the medical faculty of Prague sent a diploma of congratulation to him as "*viro, scientiâ, scriptis, æquè ac factis clarissimo; immortalis Jenneri amico et proto-apostolo, cujus de vaccinatione merita vastus resonat orbis; medicorum Nestori, juvenili solertiâ insigni.*" In 1850, on December 19th, the order of the Golden Cross with the Crown for Civil Merit, was conferred on Dr. De Carro by the Emperor Francis Joseph. He was conducted to the place where the ceremony was performed, by all his professional colleagues; and the decoration took place in the presence of the authorities of the town, and of numerous spectators. The ceremony was followed by a large banquet, given in his honour by M. Knoll, burgomaster of Carlsbad.

In April 1851, Dr. De Carro was applied to for his aid toward the project, just then started, of erecting a statue of Jenner. He at once cordially assented. "I shall always be happy", he wrote, "to hear respecting the progress of the grand enterprise; for, though an old man, my activity knows no bounds. Dispose of me and of my good-will. Busy as I am as a spa-physician, I shall always find time for answering letters, and for doing everything in my power." In 1852, Dr. De Carro published an earnest address in support of the Jenner monument, the following extracts from which will show the zeal which then animated the aged man. "Although nobody hitherto has ever attempted to contest Jenner's immense claims to universal gratitude, many people wonder that Albion's rich children should seek beyond their three kingdoms and their vast colonies contributions to such an insignificant sum as £4000. As to us personally, we see nothing else in this appeal to all civilised nations but a noble courtesy, without any other view than that of associating foreigners in the honour of erecting a monument to their immortal compatriot. Some people also say: 'If the English apply to us to contribute to Jenner's monument, why do they not share with us the expense of the monuments which have been erected to Gutenberg, to Luther, to Gœthe and Schiller, to Haydn, Mozart, and Beethoven?' Having never been put to the test, nobody can say what the English would have done. However great and worthy of such honours all these men are, none of them has been so universally useful, and done so much undeniable good to mankind, as Jenner." This Dr. De Carro goes on to illustrate, and adds: "Quite different is Jenner's glory! His discovery presents an universal blessing, without any mixture of evil." Some persons in Austria appear to have declined subscribing, under the pretext of dissatisfaction with the British Government. In regard to this, Dr. De Carro confesses his "incapacity to understand what past, present, and future political systems may have in common with the Gloucester cows, who have been kind enough to supply us with an admirable preservative against the dreadful small-pox; or with God's mercy, who sent us the wonderful discoverer of this inestimable virtue."

In about 1800, Dr. De Carro published a treatise entitled *Observations et Experiences sur la Vaccination*, which seems to have been useful in the early diffusion of Jenner's discovery. In 1804, he wrote a *Histoire de la Vaccination en Turquie, en Grèce, et aux Indes Orientales;* a copy of which he forwarded in 1851 to the Jenner Monument Committee; and from which, through the kindness of the Secretary to the Committee, we have gathered some of the information contained in the foregoing notice. The other particulars have been principally taken from the *Almanach de Carlsbad* for 1852, which contains an autobiography of Dr. De Carro, and an account of his proceedings in reference to the Jenner monument.

Association Intelligence.

COMMITTEE OF COUNCIL.

THE Committee of Council will meet in Birmingham, on Tuesday, the 16th instant.

The principal business will be the consideration of the Report to be presented by the Council at the next Annual Meeting.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, June 1857.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Annual Meeting of the BRITISH MEDICAL ASSOCIATION will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

PHILIP H. WILLIAMS, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Annual Meeting.]	Town Library, Leicester.	Thurs., June 18th, 2 P.M.
LANCASHIRE AND CHESHIRE. [Annual Meeting.]	Council Chamber, Town Hall, Preston.	Wednesday, June 24th, 11.30 A.M.
BIRMINGHAM AND MIDLAND COUNTIES. [Annual Meeting.]	Hen & Chickens Hotel, New Street, Birmingham.	Thursday, July 9th, 3 P.M.
SHROPSHIRE. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Friday, July 10, 2 P.M.
NORTH WALES. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 14, 12 noon.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I GIVE notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

PHILIP H. WILLIAMS, M.D. *Secretary.*

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

THE General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the ADMISSION of MEMBERS, and the PAYMENT of their SUBSCRIPTIONS.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the BRITISH MEDICAL JOURNAL, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

PHILIP H. WILLIAMS, *General Secretary.*

Worcester, May 1857.

LIST OF MEMBERS WHO HAVE PAID THEIR SUBSCRIPTIONS FOR 1857.

The following is a list of the Members who have paid their Subscriptions for the present year, up to May 31st.

BEDFORDSHIRE.
Appleton, J. G., Esq., Luton
Barker, T. H., M.D., Bedford
Godfrey, J. J., Esq., Great Barford
Lawford, E., Esq., Leighton Buzzard
Slinn, W. S., Esq., Ampthill
Stedman, R. S., Esq., Sharnbrook
Thurnall, W., Esq., Bedford
Veasey, H., Esq., Woburn
Williams, J. F., Esq., Cranfield
Williamson, J., Esq., Wotton

BERKSHIRE.
Bellis, B., Esq., Maidenhead
Blomfield, T. A., Esq., Reading
Cowan, C., M.D., Reading
Harrinson, I., Esq., Reading
Kidgell, S. W., Esq., Pangbourne
Martin, J., Esq., Abingdon
May, G., Esq., Reading
May, G., jun., Esq., Reading
Powis, H. S., M.D., Maidenhead
Taylor, J., Esq., Wargrave
Walford, T. L., Esq., Reading
Wells, E., M.D., Reading
Woodhouse, R., M.D., Reading
Workman, J. W., Esq., Reading

BUCKINGHAMSHIRE.
Ceely, R., Esq., Aylesbury
Colbourne, R., Esq., Marlow
Collison, R., Esq., Newport Pagnell
Daniell, E., Esq., Newport Pagnell
Heygate, T. N., Esq. Hanslope
Mault, S., Esq., Fenny Stratford
Whitton, C., M.D., Stony Stratford

CAMBRIDGESHIRE.
Adams, D., Esq., Cambridge
Carver, E., Esq., Cambridge
Farrar, C., M.D., Chatteris
Hammond, J., Esq., Cambridge
Humphry, G. M., M.B., Cambridge
Jenkins, J., Esq., Bassingbourne
Jones, T. S., Esq., Ely
Newham, J., Esq., Doddington
Pinchard, B., Esq., Cottenham
Webber, W., Esq., Moulton Paddocks

CHESHIRE.
Blackshaw, J. Esq., Stockport
Blease, T., Esq., Altrincham
Brigham, W., Esq., Lymm
Broadbent, R., Esq., Altrincham
Brooke, J., Esq., Stockport
Bury, J., M.D., Chester
Carruthers, W., Esq., Halton
Cheetham, T., Esq., Stockport
Flint, R., Esq., Stockport
Gibson, A. C., Esq , Birkenhead
Godden, J., Esq., Oxton
Harrison, J., jun., Esq., Chester
Massey, T., Esq., Stockport
Pownall, J., Esq., Altrincham
Stolterfoth, S., M.D., Chester
Vale, J. T., Esq., Birkenhead
Vaudrey, W. C., Esq., Bredbury
Waters, E., M.D., Chester
Wilson, H., Esq., Runcorn

CORNWALL.
King, D. H., Esq., Stratton
Lanyon, E., Esq., Camborne
Lawrence, J. H., Esq., Liskeard
Michell, G., Esq., Redruth
Montgomery, J., M.D., Penzance
Row, W., Esq., Lerrin
Ward, J., Esq., Bodmin

CUMBERLAND.
Arnison, C., Esq., Alston
Irving, W., Esq., Penrith
Lietch, D., M.D., Keswick

DERBYSHIRE.
Baker, J. W., Esq., Derby
Bent, T., M.D., Derby
Beresford, H., Esq., Chesterfield
Black, C., M.D., Chesterfield
Cope, G. A., Esq., Etwall
Evans, S. H., Esq., Derby
Fearn, S. W., Esq., Derby
Gisborne, H. F., Esq., Derby
Goode, H., M.B., Derby
Gregory, J., Esq , Youlgrave
Heygate, J., M.D., Derby
Hollis, W., Esq., Alvaston
Howard, W. W., Esq., Glossop
Johnson, W., Esq., Derby
Jones, J., Esq., Derby
Pearson, J. A., Esq., Buxton
Skivington, J., Esq., Ashbourne
Walker, C., Esq., Wirksworth

DEVONSHIRE.
Baker, A., M.D., Dawlish
Bignell, J. B., M.D., Barnstaple
Brooking, C. H., Esq., Brixham
Cartwright, W. A., Esq., Teignmouth
Chilcote, W. E., Esq., Broadhempston
Collyns, W., Esq., Alphington
Cookworthy, J. C., M.D., Plymouth
Elliot, J., Esq., Kingsbridge
Gaye, C., Esq., Newton Abbot
Haley, P. F., Esq., Witheridge
Harper, T., Esq., Plymouth
Hartley, E., Esq., Ivybridge
Jerrard, J. C., Esq., Honiton
Kilgour, J. S., M.D., Exmouth
Leslie, A., Esq , Newton Bushel
Miller, P., M.D., Exeter
Swain, P. W., Esq., Devonport
Tetley, J., M.D., Torquay
Thompson, J., Esq., Bideford
Toogood, J. B., Esq., Torquay
Walker, D. G., Esq., Budleigh Salterton

DORSETSHIRE.
Clapcott, J. J., Esq., Evershot
Cory, S. S., Esq., Bridport
Emson, A., Esq., Dorchester
Good, J., Esq., Dorchester
Griffin, R., Esq., Weymouth
Highmore, N., Esq., Sherborne
Nott, T., Esq., Bere Regis
West, J. W., Esq., Poole

DURHAM.
Atkinson, J., Esq., West Hartlepool
Brown, J., M.D., Sunderland
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Kenny, M. S., M.D., Halifax
Kirk, W., Esq., Hedon
Leak, T. M., Esq., Hemsworth
Marsden, W., Esq., Skipton
Medcalf, H., Esq., Howden
Milner, W. R., Esq., Wakefield
Milthorp, J., Esq., Topcliff
Morris, W. W., Esq., Gildersome
Ness, John, Esq., Helmsley
Paley, R., M.D., Ripon
Price, W., Esq., Leeds
Reedal, G., Esq., Sheffield
Rhodes, G. W., Esq., Huddersfield
Ryott, W. H., M.D., Thirsk
Sandwith, T., M.D., Beverley
Shann, G., M.D., York
Simpson, T., M.D., York
Skaife, R. T., Esq., Easingwold
Teale, T. P., Esq., Leeds
Tronsdale, T., Esq., Bawtry
Tronsdale, W.M., Esq., West Butterwick
Waddington, E., Esq., Wakefield
Ward, J., Esq., Penistone
Watmough, J., M.D., Pocklington
Weddell, T., Esq., Scarborough
Wightman, J., Esq., York
Williams, C., M.D., York
Williams, H. L., M.D., Beverley

NORTH WALES.

Edmonds, J., Esq., Chirk
Eyton, J., Esq., Overton
Griffith, T. T., Esq., Wrexham
Hughes, E., M.D., Mold
Hughes, H. R., Esq., Bangor
Jones, R., Esq., Conway
Jones, R. W., Esq., Beaumaris
Pierce, E., M.D., Denbigh
Williams, E., M.D., Wrexham
Williams, H., Esq., Llansaintfraid
Williams, J., Esq., Abergele
Williams, R. L., M.D., Denbigh

SOUTH WALES.

Bennett, E., Esq., New Radnor
Bowen, E., M.D., Talgarth
Dyke, T. J., Esq., Merthyr Tydvil
Goulstone, J. G., M.D., Knighton
Haines, W., Esq., Cowbridge
Howell, E., M.D., Swansea
Jones, J., Esq., New Quay
Jones, T. C., Esq., Pembroke
Leigh, J., Esq., Pont-y-pridd
Lyde, J. W. P., Esq., Hay
Nicol, D., M.D., Swansea
Prichard, H. L., Esq., Taibach
Thomas, J., Esq., Llaneigwad
Vachell, C., M.D., Cardiff

SCOTLAND.

Adamson, J., M.D., St. Andrew's
Archibald, D., M.D., St. Andrew's
Bell, R., M.D., Dundee
Carlyle, W. J., M.D., Langholm
Carmichael, D., M.D., Buckie
Christison, R., M.D., Edinburgh
Coldstream, J., M.D., Edinburgh
Craig, J., Esq., Ratho
Day, G. E., M.D., St. Andrew's
Gairdner, W. T., M.D., Edinburgh
Gibson, W. L., M.D., Dundee
Graham, C. W., M.D., Dalkeith
Laing, G., Esq., Ferryport-on-Craig
Lawrence, G., M.D., Crail
Laycock, T., M.D., Edinburgh
Low, A., Esq., Ferryport-on-Craig
Lyell, J., M.D., Newburgh
Macarthur, A., M.D., Anstruther
Manson, A. J., Esq., Inverkeithney
Munro, W., M.D., Dundee
Spence, W., M.D., Letham
Taplin, T., Esq., Edinburgh
Thomson, G. W., M.D., Hawick
Thomson, T., M.D., Inverury
Troup, F., Esq., Auchtermuchty
Weir, W., M.D., Glasgow
Wiseman, R., Esq., Cupar

FOREIGN COUNTRIES.

Fletcher, J. W., Esq., Calcutta
Lund, G., M.D., Madeira
Nicholson, T., M.D., Antigua

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

The first General Meeting of the East York and North Lincoln Branch was held in the Library of the Hull Infirmary, on Tuesday, May 26th; Humphry Sandwith, M.D., of Hull, in the chair. There were also present: John Bell, Esq. (Grimsby); John P. Bell, M.D. (Hull); Sir Henry Cooper, M.D. (Hull); R. M. Craven, jun., Esq. (Hull); Owen Daly, M.B. (Hull); W. H. Eddie, Esq. (Barton-on-Humber); R. Hardy, Esq. (Hull); J. F. Holden, Esq. (Hull); Kelburne King, M.D. (Hull); J. A. Locking, Esq. (Hull); W. J. Lunn, M.D. (Hull); J. Morley, Esq. (Barton-on-Humber). As visitors, there were present: Dr. Gallagher, R.N., H.M.S. *Cornwallis;* Messrs. Carnley, Dix, and R. L. Sleight.

NEW MEMBERS OF THE BRANCH.

F. B. Anderson, Esq. (Hessle); W. H. Eddie, Esq. (Barton); and J. Morley, Esq. (Barton), were elected members of the Branch.

OFFICERS AND COUNCIL.

The following gentlemen were elected as officers of the Branch:—*President:* Humphry Sandwith, M.D. (Hull). *President-Elect:* John Bell, Esq. (Grimsby). *Representative to the General Council:* Sir H. Cooper, M.D. (Hull). *Secretary:* J. A. Locking, Esq. (Hull). *Committee:* J. P. Bell, M.D.; R. M. Craven, jun., Esq.; O. Daly, M.B.; R. Hardy, Esq.; K. King, M.D.; W. J. Lunn, M.D. (Hull); W. H. Eddie, Esq. (Barton).

MEDICAL REFORM.

A letter from Dr. Henry, Secretary to the Medical Reform Committee of the British Medical Association, and the leading article in the Journal of May 23rd respecting the Medical Reform Bills, having been read, it was resolved, after discussion—

"That the Bill brought forward by Mr. Headlam be adopted, and a petition in its favour be presented to the House of Commons."

NECROSIS OCCURRING IN THE NEIGHBOURHOOD OF IMPORTANT PARTS. BY KELBURNE KING, M.D.

[This paper will be published in the Journal.]

Mr. Morley stated that the patient, who was supposed to have been salivated, had been under his care. The man had been poisoned, whilst sheep-washing, by arsenic received through a wound in the skin. He had severe enteritis, being laid up for four months; and had not recovered from the effects of the arsenic when Mr. Morley lost sight of him.

Mr. R. M. Craven mentioned the case of a boy where three-fourths of the tibia had been removed. The bone had been reproduced, so that he could now bear weight upon it.

Mr. Bell (Grimsby), many years ago, saw a case in the Hull Infirmary where the humerus had been reproduced.

CASE OF HEART-DISEASE, IN WHICH A LOUD BELLOWS-MURMUR WAS PRESENT. BY OWEN DALY, M.B.

The murmur was louder and more marked with the systole. The patient was subject to periodical attacks of palpitation, and, after a more than usually severe one, was seized with hemiplegia of the whole of the right side. Sensation remained intact. Four months from the date of the attack of hemiplegia, the patient's heart was again examined, when not the slightest symptom of valvular or other affection of the heart could, after the most careful search, be discovered. The patient died suddenly: there was no *post mortem* examination.

Dr. Daly was of opinion that the case belonged to the same category as those related by Dr. Kirkes in the *Medico-Chirurgical Transactions*, in which the middle cerebral artery was found plugged with a piece of fibrine torn from the valvular interior of the heart.

The next meeting was appointed to be held at Grimsby, in September; and the proceedings of the day were terminated by the members dining together at the Victoria Hotel, under the presidency of Dr. Sandwith.

YORKSHIRE BRANCH: ANNUAL MEETING.

The Annual Meeting of the Yorkshire Branch was held at the Cutlers' Hall, Sheffield, on Thursday, June 4th; Gabriel Reedal, Esq., President, in the Chair. There were also present: James Allen, Esq. (York); F. Branson, M.D (Baslow); C. Chadwick, M.D. (Leeds); J. P. Garlick, Esq. (Leeds); J. C. Hall, M.D. (Sheffield); J. Haxworth, Esq. (Sheffield); W. Hey, Esq. (Leeds); H. Jackson, Esq. (Sheffield); W. Jackson, Esq. (Sheffield); T. Simpson, M.D. (York); H. Y. Whytehead, M.D. (Crayke); H. Williamson, Esq. (Rotherham): also H. G. Allanson, Esq.; S. Arden, Esq.; J. H. Aveling, M.B.; M. De Bartolomé, M.D.; W. F. Favell, Esq.; John Hall, Esq.; G. C. B. Hart, Esq.; J. Nicholson, Esq.; R. Roper, Esq.; W. Skinner, Esq.; R. M. Smith, Esq.; W. W. Tinsley, Esq.; H. J. Walker, Esq. (of Sheffield); R. Harmar, M.D. (Ecclesfield); R. Cooper, Esq. (4th Dragoon Guards); Dr. Stewart (98th Regiment); Dr. Sparrow (98th Regiment).

REPORT OF COUNCIL.

In meeting their fellow-members of the Yorkshire Branch of the British Medical Association, at this their annual meeting, your Council will, in accordance with established custom, proceed to pass in review those subjects connected with the best interests of the profession which, in their opinion, deserve the attention and require the consideration of those present. The Branches now exercise an important influence over the working of the Parent Association; and each Branch is expected to give some indication of the opinions of those practitioners of our art who live within its sphere.

Medical reform at present engages the attention of every one interested in the welfare of the profession. Two Bills are now before Parliament; one introduced by Mr. Headlam, with the sanction and co-operation of our own Association, and most of the medical corporations of Great Britain and Ireland; the other introduced by Lord Elcho, to secure the interests of certain Scotch universities.

Mr. Headlam proposes a Council to a certain extent representative, while Lord Elcho is prepared to vest the entire control of the medical profession in the hands of the government of the day, through a Council entirely consisting of nominees of the Crown. Your Council need scarcely remind you that the President of the Board of Health (the proposed head of such Council) may be a homœopathist or hydropathist, and that he may preside; and empirics may sit at a Board where the interests of legitimate medicine ought alone to be represented.

Mr. Headlam provides that each practitioner of medicine and surgery shall obtain a degree from his respective College, while Lord Elcho only provides for one general degree for medicine and surgery.

The provisions of the two Bills are no doubt familiar to all present; and your Council recommend that a petition in favour of Mr. Headlam's Bill should be presented to Parliament from this Branch.

The Army Medical Department, through the late disasters in the Crimea, has engaged much general and professional attention; and a Commission has been appointed to investigate the working of the department, and to report on the evils of the present system and their remedies. Your Council trust that the evils of which army surgeons have so long had reason to complain will now be remedied, and that medical science will in future direct the sanitary arrangements of camps and barracks.

Mr. Griffin continues his indefatigable labours on behalf of his brethren, the Poor-law surgeons; and your Council hope that, ere long, that ill used body of men will obtain a more adequate remuneration for their labours.

Your Council hope that, when the subject of medical reform shall, by the settlement of the question, no longer demand the attention of the Branch, some means may be devised by which a greater scientific value may be imparted to these meetings, as a free interchange of opinion on many of the difficult problems of medicine and surgery, between the members of this Branch, must lead to a further development of that science whose advancement is so largely bound up with the best interests of man.

Your Council regret that our late excellent Secretary, Mr.

Matterson, was compelled by the state of his health to resign his office in January last, and beg to recommend Mr. Hornby of York to the meeting as his successor.

Dr. WHYTEHEAD moved, Dr. SIMPSON seconded, and it was resolved—

"That the report now read be adopted."

BRANCH COUNCIL FOR 1857-8.

Mr. ALLEN moved, Mr. H. JACKSON seconded, and it was resolved—

"That the following gentlemen form the Council of the Branch for the year 1857-8:—J. Allen, Esq.; B. Dodsworth, Esq.; R. Hey, Esq.; W. D. Husband, Esq.; G. Shann, M.D.; T. Simpson, M.D.; W. E. Swaine, M.D.; Caleb Williams, M.D. (York); J. Ness, Esq. (Helmsley); C. Chadwick, M.D.; J. P. Garlick, Esq.; W. Hey, Esq.; T. Nunneley, Esq.; S. Smith, Esq.; J. P. Teale, Esq. (Leeds); F. Branson, M.D.; H. Jackson, Esq.; W. Jackson, Esq.; G. Reedal, Esq. (Sheffield); T. Sandwith, M.D, (Beverley; H. Whytehead, M.D. (Crayke)."

REPRESENTATIVES IN THE GENERAL COUNCIL.

Mr. H. JACKSON proposed, Dr. BRANSON seconded, and it was resolved—

"That the following members be nominated to represent the Yorkshire Branch in the General Council for the ensuing year:—W. D. Husband, Esq.; Caleb Williams, M.D. (York); C. Chadwick, M.D.; J. P. Garlick, Esq.; W. Hey, Esq.; Thos. Nunneley, Esq. (Leeds); G. Reedal, Esq.; Wm. Jackson, Esq. (Sheffield)."

PLACE OF MEETING FOR NEXT YEAR.

Mr. ALLEN proposed, Mr. H. JACKSON seconded, and it was resolved—

"That the next place of meeting be Leeds; and that J. P. Garlick, Esq., be the President-Elect."

VOTES OF THANKS.

Dr. SIMPSON proposed, Mr. H. JACKSON seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to J. Allen, Esq., the late President, for his services during the past year."

Dr. BRANSON proposed, Mr. GARLICK seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to our late excellent Secretary, Mr. Matterson, of York, for his unremitting services to the Branch; and that Mr. Hornby, of York, be appointed Secretary of the Branch."

Dr. J. C. HALL moved, Dr. WHYTEHEAD seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to W. D. Husband, Esq., for his kind and valuable services as Secretary *pro tempore*."

MEDICAL REFORM.

Dr. J. C. HALL moved, Mr. ALLEN seconded, and it was resolved—

"That a petition be prepared by the President and Council in Sheffield, praying the House of Commons to adopt Mr. Headlam's Medical Reform Bill, and to reject that of Lord Elcho; that it be signed by the President on behalf of this Branch; and that Mr. Headlam be requested to present it."

Dr. CHADWICK moved, Dr. J. C. HALL seconded, and it was resolved—

"That the President be requested to address the Reform Committee of the Association, expressing surprise that the latter part of Clause 24 of Mr. Headlam's Bill should have escaped their notice, and recommending that they should take steps to have it expunged."

MEDICAL DEPARTMENT OF THE ARMY.

Mr. H. JACKSON proposed, Mr. HEY seconded, and it was resolved—

"That the intention of the Committee of the House of Commons, on the subject of Reform in the Medical Department of the Army, over which Mr. Stafford presided last year, having failed in its object, we are rejoiced to find that a Royal Commission has been appointed to inquire into the evils so justly complained of by our military medical brethren; and we most earnestly request the central Council of the British Medical Association to direct their attention to the subject of the claims of the Medical Department of the Army, and to support them to the utmost of their power, by memorial or otherwise to the Commission now sitting on the Medical Department of the Army."

The following papers were ordered to be transmitted to the Central Council:—

1. Copies of Correspondence; 2. Suggestions; 3. Copy of Letter to President of Provincial Medical and Surgical Association, 1855; 4. Abstract of Evidence; 5. Necessity of Perfecting our Military System.

CASES AND COMMUNICATIONS.

Mr. WILKINSON, of Rotherham, read a paper on the Advantages of Blood-letting.

Mr. H. JACKSON gave an abstract of three cases of Irritable Ulcer of the Anus, cured by Incision, by Mr. Tinsley; and also an abstract of a case of Popliteal Aneurism treated successfully by Compression, by himself, in the Sheffield General Infirmary.

Thanks were voted to the authors of the papers.

The members and their friends afterwards dined together at the Royal Hotel, under the presidency of G. Reedal, Esq.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 11TH, 1857.

SIR C. LOCOCK, Bart., M.D., President, in the Chair.

ANALYSIS OF FIFTY-TWO CASES OF EPILEPSY.
BY EDWARD H. SIEVEKING, M.D., F.R.C.P.

THE 52 cases analysed had occurred exclusively under the author's own observation, and the conclusions were limited to points with reference to which satisfactory evidence could be obtained.

Sex. 2, or 46·15 per cent., were females; 28, or 53·84 per cent, were males.

Age. The following was the distribution of the cases throughout the different periods of life:—Under 10 years, 17; from 10 to 20, 19; 20 to 30, 4; 30 to 40, 4; 40 to 50, 7; over 50, 1; or from infancy to the age of 20 years inclusive, 69·23 per cent.; from 21 to 40 years inclusive, 15·38 per cent.; from 41 to 55 years inclusive, 15·38 per cent. Arranged according to sex, there were found during the first decennium, 8 males and 9 females; during the second, 12 males and 7 females; during the third, 2 males and 2 females; during the fourth, the same number of each; during the fifth, 2 males and 3 females; during the sixth, 1 female. The male sex during puberty, therefore seemed to exhibit a more marked proclivity to epilepsy than the female; at later periods the ratio returned to the equality shown to prevail during the first ten years of life.

Causes. Hereditary tendency could be traced only in [illegible] cases, or 11·1 per cent. A definite cause was assigned by the patient or the patient's friends in 16 cases, or nearly one-third of the whole. Amongst these, otorrhœa was mentioned twice; fright, twice; injury to the head, twice. The causes differed in the relation they bear to the occurrence of the seizure.

Premonitory Symptoms. An "aura" (comprising under this term all the premonitory symptoms indicating the approach of a fit) was noted in 27 out of 52 cases. The most common was a sense of giddiness and impairment of vision; sometimes the patient suffered pain in a definite region of the body, or, though unable to explain the sensation, is aware of some change from which they knew that a paroxysm was about to take place. The sensation was never described as a puff of wind or aura in its verbal sense.

Individual Symptoms. Headache was observed in 33 out of 52 cases, or 63·42 per cent. The mode of its occurrence varied; the patient either suffered habitually or very frequently from it, and the symptom bore no immediate relation to the paroxysm; or the headache occurred shortly before the fits, so as to usher them in; or again it affected the individual after they were over. It was constant or frequent in 36·5 per cent.; it occurred before the fits only in 7·7 per cent.; it occurred after the fits only in 17·3 per cent. The tongue was bitten in 17 cases, or 32·7 per cent. The urine was tested for albumen in 19 cases, and it was found temporarily present in one, permanently in another. It was also tested for sugar in 14 cases, and this ingredient was not found once—a result which seems irreconcilable with the observations of Dr. Goolden.

Results of Treatment. The author expressed a feeling of scepticism with regard to the positive certainty of any cure of epilepsy. He believed that, in the majority, no organic lesion, in the ordinary anatomical sense of the word, was present in the commencement of the disease, and that, in a large number, none seemed to result from the recurrence of the fits. It appeared that a diathesis was necessary to its occurrence, and that

this might be suppressed or held in check; but whether it might be eradicated, was a question which he would not venture to answer in the affirmative. He was satisfied of the power of well selected remedies in repressing, and often indefinitely postponing, the paroxysm; and he particularly insisted on the importance of dietetic and regiminal treatment. The number of apparent cures was 15, or 28·85 per cent.; in other instances, more or less benefit was obtained. The duration of the disease before the commencement of treatment had an obvious influence over its curability. Eight of the 15 (apparent) cures were wrought in cases that had lasted one year or under, four were of two years duration, one of three, one of six, and one of eight years. The treatment adopted had varied with the nature of the constitutional affection in each case; but the main indications were to remove local irritation by counterirritants, to promote the healthy action of the secernent organs, and to give a tone to the constitution by vegetable and metallic roborants. The author expressed his belief that there was no specific for epilepsy; the salts of zinc certainly failed to remove it in many cases.

In a postscript he detailed the results of an analysis of the Returns of the Registrar-General with reference to sex in deaths from epilepsy during seven years; which gave 6729 males, and 6149 females, or 52·26 per cent. of the one sex to 47·73 of the other.

TREATMENT OF WOUNDS OF THE PALMAR ARCHES BY FORCED FLEXION OF THE ARM. BY J. GILES, ESQ., M.R.C.S.

[*Communicated by* T. B. Curling, Esq., F.R.S.]

After allusion to the various troublesome complications, and frequent very serious consequences which attend wounds of the palm, when circumstances prevent the application of ligatures at the seat of injury, the author remarked upon the advantages of a method of treatment which should have the advantage of checking the hæmorrhage without either severe local pressure or ligature of vessels remote from the wound; such advantages would seem to be afforded by the plan of flexing the forearm upon the arm with sufficient force to arrest the bleeding, and maintaining it in that position so long as may be necessary. The author related five cases of wound of the palmar arch, and one of wound of the forearm, which were thus treated, and all with success, save one, in which, however, the procedure was not had recourse to until a month after the accident. The merit of originating the mode of treatment was given to M. Durwell, by whom it was proposed in *L'Union Médicale*, tome iii, p. 341.

ANTEFLEXION OF THE UTERUS CONSIDERED AS A NORMAL ANATOMICAL CONDITION. BY J. H. BENNET, M.D.

The author's attention was attracted some years ago, during a series of investigations into the condition of the os internum during life, by the anatomical fact that the uterine cavities and the uterus itself, in women who have never borne children, are generally more or less anteflexed. He thinks it proved that this was misunderstood because stem pessaries are invariably made perfectly straight, and anteflexion has been universally described as an abnormal or morbid condition. M. Huguier, however, published a memoir some years ago, describing anteflexion as an occasional congenital condition, but he described it as accidental and exceptional. The author's researches were begun with a view to determining the value of contraction of the os internum as a cause of sterility. He found that when the uterine sound met with resistance there, a small wax bougie could be passed, which, if allowed to remain for a minute or two in the uterus of a woman who had borne no children, presented when withdrawn a slight anterior curve. The same effect continues in some degree after one or more parturitions. This state can scarcely be recognised by digital examination under ordinary circumstances, but is readily perceived when decided, and may become very great in exceptional bases. The author then adverted to the observations of M. Boullard on this subject, who describes anteflexion as the natural anatomical direction of the uterus. He finds it most marked in the fœtus, less so in the child, and least in the adult; and that it ceases to be perceptible in most women who have borne children. The author thought that M. Boullard had rather exaggerated the degree of curvature. He next pointed out the pathological bearing of anteflexion, believing that it might be treated as a morbid state, especially if the uterus be enlarged by chronic inflammation, which would render the curvature more marked. He thought attempts to straighten the uterus likely to be injurious, and that no treatment ought to be employed except what might be necessary to relieve the congestion of the organ. He did not think it had any definite relation to irregular menstruation, but when both conditions were coincident the general health was much below par, and the anteflexion was commonly very decided.

Mr. J. Wood thought the cases referred to depended upon the degree of fulness or emptiness of the bladder and rectum. He had seen the peculiarity in question in the *fœtus in utero*, and in very young persons, and at such periods there appeared to be less curvature than in after life. He did not consider the curve a permanent one, but one which depended upon the varying conditions of the pelvic regions.

MEDICAL SOCIETY OF LONDON.

Saturday, April 25th, 1857.

Francis Hird, Esq., President, in the Chair.

THE NECROSIS OF CANCER, AND ITS CONSEQUENT ENUCLEATION. BY J. M. MOULLIN, ESQ.

The author gave the history of six cases of cancer of the breast, and showed several specimens which had been enucleated by the action of the chloride of zinc. These specimens were proof of the result of a mode of proceeding which, as far as he could ascertain, was entirely new. The object proposed was not to destroy tumours piecemeal, making layer after layer slough and separate by successive applications, which are each brought into contact with an extremely irritated surface; but rather to induce the slow death of the morbid growth by causing its substance to become day by day penetrated more and more deeply by an agent which coagulates the blood in its vessels, and acts in like manner upon the living albuminous solid; and finally, when completely necrosed, to become enucleated *en masse*. The principle was, to proportion the rate of our therapeutic efforts to that of the disease dealt with. The morbid action that would be exasperated by violent measures, yielded kindly to a mild influence steadily maintained. Such, the author believed, was the *rationale* of the treatment which he fully described in the history of the cases. Mr. Moullin stated that the essential point in his plan of proceeding was the mode in which the remedy was used; and it was quite possible that other remedies used in the same way might produce like effect. The history of the cases furnished a good illustration of the disease in its various stages. One of the cases, of one year's duration, was in its first and by far the most favourable stage for either plan of treatment, being about the size of a nut, perfectly moveable, and rarely causing much pain. The disease, the author thought, at this stage might, with all propriety, be denominated local. Another case, of twelve years standing, was a very good example of the disease in its second stage; the tumour was of the size of an ordinary orange, of stony hardness, well defined, yet moveable; the pain was more of a lancinating character, as if a needle were run in. Next came two cases, the one of two, the other of twelve years growth, where the tumour was attached to the integuments, having the peculiar appearance previous to the commencement of ulceration, and forming the third stage. In two other cases, one of twenty, the other of three years duration, ulceration had taken place, presenting an open, excavated sore, with hardened, everted, irregular edges, uneven base, covered with a grey slough, offensive thin discharge, frequent losses of blood, and all the usual train of constitutional symptoms. It was in such cases that the plan of treatment proposed would be found most advantageous. The object of this plan of treatment was not merely to destroy diseased parts, but to modify the abnormal vitality of the subjacent tissues, without which the disease would reappear. The effect of the chloride of zinc in cancerous cases had long been known to the profession; and it had been largely used on the continent with marked success, and in this country by Mr. Ure. The extirpation of cancer by the necrosing agent never created any serious inconvenience; while an amputation of the breast might not always have the most favourable issue. The chloride of zinc was most useful in open or ulcerated cancers and cancroid growths generally, where the knife was utterly out of the question; also, in the enucleation of tumours of a doubtful nature; and in secondary cancerous formations following operations with the knife. In the treatment of rodent ulcer, the *noli me tangere* of some authors, the author stated that two important questions presented themselves for the consideration of the professsion. The first was the possibility of the enucleation of tumours, malignant or benign, by the action of chloride of zinc. This first point, he thought, was satisfactorily proved, by placing facts before his professional brethren,

and he would leave it to them to declare whether they were satisfied with the result. As to the second point—viz., the liability and probability of a return of disease after enucleation of the tumour—this nothing but time and experience could decide.

Dr. Mackenzie remarked, that the paper could not decide the respective value of the local treatment of cancer by enucleation or the knife, inasmuch as the cases related were too recent on which to form any opinion. It was still a question how far the removal of the local disease did away with the chances of return. Cases had constantly occurred in which the removal of the local disease was followed by internal cancerous affections, and had destroyed the patients.

Mr. Barwell said that it was questionable whether any local treatment would so modify the constitutional taint as to prevent a recurrence of the disease. He was surprised that there had been so little pain in Mr. Moullin's cases. In 1824, M. Cancoin had used the arsenical paste in some cases with a fatal result. He then experimented with seventeen different kinds of escharotics, and he found that of these nitric acid was the least painful in its application, whilst chloride of zinc was the fourteenth on the list. He (Mr. Barwell) had used the tannic acid in some cases of cancer. To be of service, it was necessary that there should be much care in its application. Slits must be made in the slough to enable the tannic acid to permeate through it. Applied in this way, it was productive of little pain.

Mr. Jabez Hogg did not feel satisfied with the evidence produced by the author as to the character of the tumours which had been enucleated by him. In the absence of a microscopic examination, the diagnosis must necessarily be imperfect. Numbers of cases were called cancer, treated as such, and said to be cured, which were in reality benign tumours.

Mr. Birkett had been quite disappointed in the paper, which contained nothing new. Escharotics had been extensively employed, to prevent the natural alarm which patients had on the use of the knife. With respect to true cancer, no case had been recorded as successful after removal which was not eventually followed by death from secondary deposits in some other organs. It was said in favour of escharotics, that they had so much influence on the surrounding tissues as to prevent the recurrence of the disease; but this was a mere assertion, and had not a tittle of proof to rest upon. The question at issue was clearly "caustic *versus* knife"; and he contended, in opposition to the statement of the employers of caustic, that the knife was not uncertain, but that the local disease could be more safely and readily extirpated by it than by caustic. He had tried the caustic; it had been also extensively used by Key, Callaway, and Brodie. Mr. Key had tried it in fifteen or twenty cases. All the cases had terminated with exactly the same results as if the knife had been used. M. Cancoin had operated in four cases in this country, and he (Mr. Birkett) was in a condition to state the ultimate results of these proceedings. The first case was that of a lady, thirty years of age, who had been operated upon three times by Sir Benjamin Brodie, and twice or thrice by Mr. Turner, of Manchester. The case was afterwards treated by M. Cancoin, and did not recur. But it was well known that this was not a case of cancer at all, but was simply one of adenocele. It was reported, however, at the time as a case of cancer, and vaunted as a cure of that disease. The other three cases terminated fatally, just as though the ordinary operation by the knife had been performed. The cases recorded by M. Cancoin in his work might be divided into four distinct classes:—1, cases of chronic abscess; 2, cases of ordinary adenocele; 3, cases of irritable mamma. These, of course, all did well. The 4th were cases of true cancer, all of which had an unsatisfactory termination. He (Mr. Birkett) contended that the use of the caustic had no advantage whatever over that of the knife; and he called upon the author of the paper to state explicitly what was the real influence which the caustic exerted over the tissues surrounding the primary growth, so as to prevent a recurrence of the disease?

Dr. Rogers had seen a case which had been operated upon in the Middlesex Hospital by Dr. Fell. The patient had died, after three weeks of agonising torture, from carcinomatous disease of the chest, and effusion. He had seen a similar case of cancer of the os uteri, but with the same results, under the care of Dr. Pattison. This patient had died after the most intense agony, consequent upon the application of the caustic.

Mr. Weeden Cooke believed that the author's plan of slicing and cauterising a cancerous breast was identical with that pursued by Dr. Fell. It was a most painful and severe operation, protracted for thirty or forty days; and, after all this suffering, did no more than the knife could do in a few minutes, without any pain at all, with the aid of chloroform. The plan pursued by Mr. Stanley, at St. Bartholomew's Hospital, was a much more humane and equally efficacious proceeding; but, in Mr. Cooke's opinion, excision by the knife, if an operation was necessary at all, was the only proceeding that ought to be sanctioned by the profession. Mr. Cooke, however, considered that operations, whether by caustic or the scalpel, were undesirable; that the disease was not eradicated by them, but that the dyscrasia which accompanied the disease was thereby increased, and life shortened. On the other hand, by supporting diet and tonic treatment, the constitution was enabled to resist the progress of the disease, and bring about that resolution by atrophy of the tumour which was observed in so many cases at the Cancer Hospital. Mr. Cooke thought that the whole profession would eventually protest against this revival of a treatment, painful in the extreme, and having no single advantage over the usual mode of excision by the knife.

Mr. Hancock did not see the advantage of Mr. Moullin's application over the use of the knife; in one case related by that gentleman, in which one of the glands of the axilla was enlarged, most surgeons would have either removed the gland, or have refrained from any operative procedure whatever.

Mr. Moullin, in reply, admitted that no microscopic examination had been made in either of his cases; but his opinion that they were cases of cancer, had been fortified by that of others, well able to judge of the nature of the disease, and who had sent them to him as cases unfit to remove with the knife. He did not assert that these cases were cured, nor could he fairly do so, as his experiments had only commenced in December last. He had merely brought them forward as instances of the enucleation of the local disease by caustic. So far he thought they were entitled to the notice of the society. He should watch these cases carefully, and report upon their progress at some future opportunity. He had other cases under treatment, respecting which he should lay the particulars before the profession. With respect to pain, in only one case was it remarkable, and in this the agony was beyond description; but in this instance the nitric acid had not been employed.

ROYAL SOCIETY.

Lord Wrottesley, President, in the Chair.

INQUIRIES INTO THE QUANTITY OF AIR INSPIRED AT EACH FIVE MINUTES, ONE QUARTER, AND HALF-HOUR OF THE DAY AND NIGHT, AND UNDER THE INFLUENCE OF VARIOUS KINDS OF EXERCISE, FOOD, AND MEDICINE, TEMPERATURE, ETC.

BY EDWARD SMITH, M.D., LL.B.

The communication consisted of three parts, and comprised the results of 1,200 series of observations. The first part contained the results of three investigations as to the quantity of air breathed during the whole of the twenty-four hours, and registered every fifteen and thirty minutes. The second part described the influence of posture, riding on horseback, travelling by omnibus and railway, rowing, swimming, walking, carrying of weights, the labour of the treadwheel, ascending and descending steps—also of sunlight and darkness, artificial heat, various diets, etc. The third part was devoted to certain inquiries in relation to the temperature of the body. There were not any records of inquiries similar to those contained in the first part of this paper, and extremely few in reference to any portion of the second. The aim of previous observers had been to determine the chemical effects of respiration.

The author was himself the subject of all the investigations. He is thirty-eight years of age, six feet in height, healthy and strong, and with a vital capacity of the lungs of 280 cubic inches. The instrument employed was Glover's patent dry gas meter of improved manufacture, and arranged to register from one to one million cubic inches. The action was reversed so as to measure inspiration. The mouthpiece employed was Sibson's, and it was connected with the spirometer by vulcanized caoutchouc tubing, and could be fastened upon the head by elastic straps. The determination of the quantity of air inspired in the twenty-four hours was effected by three inquiries. I. By using the spirometer whilst in the quiet sitting posture, during five minutes at the commencement of each quarter of an hour, from five A.M. to half-past six P.M., and of each half-hour from half-past six P.M. to half-past three A.M.

Exercise was taken in the intervals, and food was eaten at half-past eight A.M., one, half-past five, and half past eight P.M. 2. By using the spirometer without intermission during the whole of the twenty-four hours excepting at intervals amounting collectively to forty minutes. 3. By an inquiry similar to the second, but continued through the night only. In all these inquiries, the rate of respiration and pulsation, with the temperature of the wet and dry bulbs, and the barometric pressure, were recorded.

Among the most important and interesting results are the following. The inquiry made during five minutes at the beginning of every quarter of an hour from five A.M. to half-past six P.M., and at the beginning of every half-hour from half-past six P.M. to half-past three A.M., gave the following average quantities in the sitting posture:—after supper, 354 cubic inches per minute; before breakfast, 358; after breakfast, 445; after dinner, 448; and after tea, 454. Mental excitement on several occasions did not influence the quantity of air inspired when the respiration took place only once in five minutes. Sleep occurred with the lowest quantity of air inspired, —viz., with 334 cubic inches per minute, but the quantity increased during sleep to 371 per minute. Posture increased the quantity of air inspired—in the sitting over the lying posture, and in the standing over the sitting posture. The increase in the standing over the lying posture varied from 20 to 96 cubic inches per minute. Riding in or upon an omnibus increased the quantity about 250 inches per minute over that inspired when sitting at rest. Riding on horseback increased it—at the walking pace, 450 cubic inches, cantering 900, and and trotting 1,300 cubic inches per minute. Railway travelling on the engine increased it 200 cubic inches—in the third-class carriages nearly 200, in the second-class 150, and in the first-class 100. The quantity was greatest at the speed of from thirty to forty miles per hour. Gentle walking increased the respiration from 169 to 692 cubic inches per minute; when moderate it increased it about 500, and when fast the increase was from 1,206 to 1,611. Gentle running increased it 1,900, and fast running 2,325 to 2,500 cubic inches per minute. Carrying weights from 20 lbs. to 118 lbs., at the speed of three miles per hour, increased the quantity of air inspired about 1,900 cubic inches per minute. Heat and sunlight increased the rate of respiration from 16·8 to 17·8 per minute. Darkness lessened the quantity of air inspired to the extent of 32 cubic inches per minute. Considerable increase of artificial heat caused increased respiration, and considerable decrease the contrary; and these changes increased by continuance.

The author next gave the effects of a great variety of food and drink on respiration. The most remarkable changes were produced by the following articles. Milk increased the respiration 33 to 49 per minute; potatoes, only 0 to 6; coffee, 19 to 25; tea, 28 to 96; sugar, 60 to 88; rum, 34 to 42; whilst, on the other hand, cod-liver oil decreased the quantity of air inspired 10 to 65 cubic inches per minute, and olive oil 94 per minute. The temperature of the breath varied with that of the inspired air, but not proportionately. It was, on the average, 94°·7 in the room, and 89°·1 in the open air.

In the last part of the paper, Dr. Smith proceeded to notice the most remarkable deductions which might be drawn from his investigations. The detailed and averaged quantities of air breathed by him at various periods of the day, and under certain defined conditions, permitted an approximative estimate to be made of the quantities breathed by various classes of the community, and of the quantities of chemical elements required to combine with the oxygen. Thus an unoccupied gentleman would probably spend nine hours in the lying posture, eleven in the sitting posture, one in walking at the rate of two miles per hour, and three hours in standing, or walking at the rate of one mile per hour. The quantity of air thus inspired by him daily might be estimated as follows:—

9	hours in the lying posture . .	243,000	cubic inches.
11	„	sitting	351,780	„
1	„	walking	66,000	„
3	„	standing	144,000	„

giving a total of 804,780 cubic inches of air breathed daily. An ordinary tradesman might be estimated to pass eight hours and a half in the lying posture, six in the sitting posture, three in walking, and four in standing. He would then breathe a total daily quantity of 958,580 cubic inches. The hard-working labourer would probably breathe 1,368,390 cubic inches of air daily. The three classes thus differed greatly in the quantity of oxygen which they inspire, and therefore in the quantity of food required by them; and if each obtained a suitable quantity of material to unite with the oxygen, the labourer would still have greater wear of system than the unoccupied man.

The estimation of the wear of system from various kinds of labour might be made from this inquiry, if the quantity of air inspired might be regarded as a tolerably fair indication of that result—such, for example, as the hard labour of felons, the marching of soldiers, and the ordinary mode of travelling by the community. Hence might be inferred the amount of food and rest which each condition requires. It is also possible to increase or lessen the needful quantity of food (within limits) with some degree of certainty; and it would be learned how much more costly the maintenance of soldiers must necessarily be in time of war than peace, and that of felons at forced labour than in idleness. We would further learn how to lessen the wear of system arising from such exertion as the carrying of burdens, by reducing the speed at which they are borne.

These inquiries also enabled us to account for the inability of many persons to make an ascent, except at the slowest pace, and for the great inequality in all persons between the effect of ascending steps and walking on level ground at the same speed. From his investigations and experience in Switzerland, the author believed that his views accounted for such accidents as the spitting of blood, which have occurred whilst ascending mountains, without reference to the degree of atmospheric pressure. This was, in part, independent of chemical changes, and was due mainly to the capacity of the lungs and trachea to receive a certain quantity of air in a given time, and of the heart and bloodvessels to carry on the current of blood, and especially to maintain a due relation between the pulmonic and systemic circuits. They also explained the conservative influence of dark rooms in eastern and southern climes, and of night in all climates. In like manner, they indicated the reason of the unhealthiness of buildings with deficient light—as prison-cells and many dwellings of the poor—and also of nervous persons living much in seclusion. It was probable that change of season varied the quantity of air inspired. Heated rooms led to exhaustion indirectly, by increasing the activity of every function. Cold, when applied to the skin, increased respiration, whilst the breathing of cold air lessened the quantity of air inspired. Sleep and quietude were naturally associated with darkness and diminished activity of functions; and therefore wakefulness and labour at those periods of the day must induce more wear of system. Hence the ill effect of night labour. At the same time, the ease with which some persons pursued mental labour at night might be owing to the lessened vital actions at that period.

Breakfast seemed to be the most important meal to the system, since it was taken after a long interval, and produced a greater effect upon the frame than any other meal. The effect of food did not pass away between the meals, or during the working day. Since a due relation between the respiratory function and the food supplied to the system was one of the most important problems of life, these inquiries are of great value, as they served to prove how wisely our natural appetites lead us to a due combination of food, while at the same time they explained the ill consequences of what is termed "high living." Dr. Smith's interesting paper was accompanied by an extensive series of tables and curves illustrating his investigations.

Dr. Theophilus Thompson was unwilling that such a communication should pass without comment, although from the copiousness of material it was difficult to select. The observation of the author, that sugar increased the amount of respiration, was certainly opposed to the opinion he (Dr. Thompson) had been induced to form from other experiments, particularly those made a few years since by Dr. Böcker of Bonn, who, when varying his diet by the addition of two ounces of sugar daily, found the carbonic acid exhaled from his lungs reduced by about one-tenth. Similar results had also occurred under the use of diluted alcohol, and of various alcoholic drinks. Brandy, beer, white Rhenish wine, and still more red Burgandy, occasioned a reduction in the quantity of carbonic acid expired; the average reduction being, probably, about a fifth. Tea, in Dr. Böcker's experiments, did not materially influence the respiratory combustion, but it acted like alcoholic drinks as respected the reduction of earthy phosphates in the urine—a result more observable under the alcoholic experiments, and most of all from the use of sugar, by which the earthy phosphates were reduced one-half; the general conclusion being, that all these agents tended to arrest the metamorphosis of tissue, and thus to enable us to do with a less amount of ordinary food. It would thus appear that Dr. Smith's experiments, except in the case of brandy, and, to a certain extent, tea, were not in har-

mony with the statements of Böcker; for although the quantity of respiration had not necessarily an exact relation to the carbonic acid exhaled, it was reasonable to expect these conditions to increase or diminish together. He (Dr. Thompson) mentioned these points, not as throwing doubt on the experiments of the author, but as proving the necessity for further inquiry. Observations made with such care and zeal were of peculiar value in inquiries not merely affecting the restoration of the sick, but illustrating agencies important to the whole community, because affecting, moment by moment, the comfort and efficiency of persons in health.

Professor Sharpey bore testimony to the careful precautions and patient labour with which the author's experiments had been made, as peculiarly calculated to lead to trustworthy results. It was a curious circumstance that brandy and rum should act differently on the respiration—the former decreasing, the latter increasing it. He (Dr. Sharpey) agreed with the opinion expressed by Dr. Thompson, that with increase of respiration, an increase of carbonic acid must be expected, although not necessarily proportional. The inquiry instituted opened questions of remarkable interest. The different amount of respiration in men and women was curious. Andral and Gavarret, for example, had observed that the amount of respiration in women, particularly after puberty, was much less than that of men. Dr. Smith's remarks on the influence of light confirmed those of other investigators. Frogs had been observed to have their respiration increased by this agent. He (Dr. Sharpey) believed not only through its influence on the skin, but probably also through the medium of the eye. He considered that the harmony between the author's results and those obtained by the best previous observers was evidence of their truthfulness.

Professor Carpenter gave an interesting description of the apparatus employed by the author, and showed the great advantage derivable from a lengthened and continuous series of observations, so contrived as to avoid the restraint and discomfort which some other modes of experiment involved, whilst free from different sources of uncertainty present in observations made in confined chambers without the use of any apparatus. Carrying out such observations continuously for twenty-four hours without fatigue implied normal conditions. Dr. Carpenter referred to the remarks made on light and darkness in relation to respiration. He knew of instances in which persons were affected with laborious and distressing breathing if the candle was extinguished during their sleep. Such instances were extreme, but they were favourable to the opinion that light under ordinary conditions had some effect as a stimulus to the reflex actions concerned in the respiration.

Mr. Babbage had often regretted that such important functions as the circulation and respiration were disregarded in books on natural history. He thought the average rapidity of the pulse and respiration of animals should be recorded as a part of the description in works on zoology, and that every intelligent person might assist, especially as respects domestic animals, in establishing the averages. Mr. Babbage had lately at the Zoological Gardens counted the respirations of various animals. He was understood to say that he found that of the lepidosiren rather more than 5 in a minute, of the flounder, 15, the rhinoceros 17, and the Bengal tiger 25.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—I shall feel obliged for space to inform the Poor Law Medical Officers that I have forwarded their petition to the House of Commons. It received the signatures of 191 gentlemen at the Freemasons' Hall, 114 of whom were Union officers. Of the latter, 93 are resident in various parts of the kingdom, and some of them at great distances from London; indeed, one gentleman travelled nearly 300 miles for the express purpose of attending the meeting: a reproof to his metropolitan brethren, 21 only of whom could spare time to appear at the Hall and sign the petition.

A report of the meeting has been sent to every member of the House of Commons; also one to each Poor-Law Medical Officer. Should any of the latter have been accidentally omitted, a copy shall be immediately sent on application. To all those who have joined the Association an abbreviated form of petition has been sent. I trust they will not only sign it themselves, but endeavour to persuade their colleagues to do the same, and send it speedily to the House of Commons. I have not forwarded petitions to the non-subscribers or to those who signed the petition at the meeting; but should any gentleman desire to have them, and will write to me to that effect, I will send him one or more immediately. I have written to the Council of the Royal College of Surgeons and the Apothecaries Hall, urging them to petition in our favour. I have also written to the Poor-Law Board a copy of the letter I enclose. I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, June 6th, 1857.

"12, Royal Terrace, Weymouth, 6th June, 1857.

"My Lords and Gentlemen,—I have the honour to enclose you a copy of the petition to Parliament from the Union medical officers, and also a report of the meeting held the 28th ultimo. It is not through any want of respect that the Union medical officers have not again memorialised your Honourable Board, but from a feeling that you are fully acquainted with their grievances from the numerous memorials forwarded to you last year, which you promised to take into consideration. No improvement in their position having accrued, it is the general feeling that your Honourable Board require to have your hands strengthened by the intervention of the legislature. They have therefore again petitioned the House of Commons, and trust you will shortly be enabled to carry out that reform in the Poor-Law medical department which is so much needed, and which your medical officers, as a body, so ardently desire.

"I have the honour to be, my Lords and Gentlemen,

"Your obedient servant, "Richard Griffin.

"To the Poor-Law Board."

SPECULUM CASES.

Letter from Augustin Prichard, Esq.

Sir,—Many of us can support with parallel cases the well-timed remarks made by Mr. Soden, of Bath, in the paper published in last week's Journal.

Here, for instance, there was an entertaining story going about a short ago, to the effect that a speculum doctor, of considerable celebrity in that lucrative line of business, had been abruptly prevented from completing his daily inspection of a certain os uteri, by the protrusion of a child's head from the other side of the aperture he was about to cauterise, in happy ignorance that there was anybody within. I cannot vouch for the accuracy of this, but I think it not improbable.

The following outline of a case in point is true, and I had a slight personal acquaintance with the unfortunate subject of it.

A well educated and elegant young lady, about two or three and twenty years of age, having been ailing for some time, was taken by her mother to London for "further advice" from the West of England. There she was advised to consult a speculum doctor, who, I am sure, need not have sunk so low; for at one time he had the superintendence of the practical midwifery class connected with a large London Hospital,—a post, one would think, likely to lead, in point of respectability at any rate, to better things. He diagnosed and discovered uterine disease, and treated the poor girl in the usual way for two or three months, when she was taken home as her health was not improving. She lingered for some time afterwards, and died of consumption. A *post mortem* examination was made, showing the usual appearances of death by tubercular disease of the lungs; the uterus was healthy.

A case of this kind requires little comment. Nobody can say that three months of London air and speculum treatment actually caused the death of this lady; but I think we may say that at an early stage of tubercular disease such a plan would take away the little chance there ever is of arresting the progress of pulmonary consumption.

About the morality of subjecting a delicately brought up young lady to such manipulations, when there was no pretext for it on the score of disease of the uterus, there is no need to say a word.

In conclusion, I wish I could add that this kind of practice did not extend beyond the metropolis.

I am, etc., Augustin Prichard.

Clifton, June 1st, 1857.

[The abuse of the speculum, of the stethoscope, or of any other instrument, forms no argument against its legitimate use. Editor.]

THE EMPLOYMENT OF CALCAREOUS SALTS IN THE TREATMENT OF RICKETS AND OTHER MORBID CONDITIONS.

Letter from W. Budd, M.D.

Sir,—It appears from the Journal of the 23rd May, that Dr. Pidduck has recently read a paper before the Medico-Chirurgical Society, recommending the employment of calcareous compounds in the treatment of certain states of defective nutrition. The value of these compounds in the class of cases referred to has long been fully recognised here. For obvious reasons, it is in children who are being brought up in large towns that their efficacy is the most signal. Of this, perhaps, the most striking illustration is their effect in the cure of rickets. But short of rickets, which may be regarded as an extreme case, there are many states of very common occurrence in which their remedial power is no less manifest. Among the out-patients of the Bristol Royal Infirmary are numbers of children with large heads, tumid bellies, and pasty complexion; whose spines are too weak to support their bodies; who are slow in intellect and backward in teeth and speech, and who have reached the age of sixteen, eighteen months, and perhaps more, without ever having shown any desire to take to their feet. These characteristics, varying, of course, more or less in degree, make up a pathological portrait which most physicians to large hospitals situated in great towns will recognise as the type of a numerous group. In all such cases I have for many years past been in the habit of giving a simple combination, consisting of from five to ten grains of phosphate of lime, three times a day in chalk mixture. Where there is a palpable degree of anæmia, some simple chalybeate is added to the treatment. Theoretically, bone earth would seem to be the more appropriate agent; but when I began this practice, having no bone earth at hand, I adopted as a temporary expedient the mixture I have named, and found it answer so well, that what was first tried as a makeshift has since been purposely adhered to. Nothing can be more satisfactory than this plan of treatment. At the end of a week the improvement in the patient is already very apparent; at the end of a fortnight it is, generally, conspicuous. The result is not only a rapid consolidation of the bones, but, what perhaps is still more interesting, an equally rapid development of the mental and other powers. It is no doubt owing to the nature of the case that this result is as uniform as it is complete. In these two characteristics this method reminds me more of the virtue of lemon juice in scurvy than almost anything else I have seen in physic. The two things have probably this much in common, that, in supplying the one thing needful, they act on the same principle. Remedies which act thus have this paramount claim on the physician, that they admit of no substitute. In scurvy, unless the food or the medicine contain the antiscorbutic, all nature may be ransacked in vain for a remedy. In many of these states of defective nutrition in children, there is reason to believe that the same is true of the calcareous salt.

I have long thought it deserving of the most anxious inquiry, whether the growing deterioration and tendency to early decay which dentists have remarked in the teeth of the rising generation, may not be due to insufficient supply of the inorganic constituents of these important organs in the food by which children are nourished during the period of dental development. In towns especially, the whole mode of living, not only of man but of the animals which minister to man, is so artificial, and so few articles of diet are supplied under the primary conditions of nature, that such a contingency is quite possible. In default of better, Dr. Pidduck's biscuits, which contain lime derived from teeth, would furnish a simple means of meeting it. Rather more than a year ago, I suggested to an eminent druggist here the manufacture of biscuits of precisely similar composition, with a view at once to the teeth-bones of these young subjects.

I may add, that if my experience do not deceive me, the same mixture is a very sure remedy in that anxious and sometimes fatal disorder, *laryngismus stridulus*. At least, in some ten or twelve cases in which I have now tried it, the speedy subsidence of the malady has followed the employment of the medicine. In some instances the cessation of the morbid phenomena has been so rapid, that I have been led to suppose the virtue of this calcareous mixture in this last disease must be due simply to its antacid properties. But this is a question into which I have not cared to inquire.

It may be well to state in conclusion, that I communicated at some length the results here detailed, to a meeting of the Bath and Bristol Branch of our Association in the month of October last, on the occasion of an interesting paper by my friend Mr. Coe, on three cases of a disease allied to rickets. A very abridged account of what I said on the subject was given in the report of the meeting, which appeared in the Journal shortly after.

I am, etc., William Budd.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, June 4th.

THE METROPOLITAN HOSPITALS.

Lord Raynham gave notice that on an early day he should move for a Select Committee to inquire into the state of the Metropolitan Hospitals.

SALE OF POISONS BILL.

Earl Granville moved that the House go into Committee on the Bill: but subsequently, on the suggestion of Lord Redesdale, it was referred to a Select Committee.

Friday, June 5th.

PAUPER LUNATICS (MARYLEBONE).

On the motion of Mr. Kinnaird, a copy was ordered of any communication from the Board of Guardians of St. Marylebone, in answer to the Report of the Commissioners on Lunacy, in regard to the treatment of Pauper Lunatics in Marylebone Workhouse.

Tuesday, June 9th.

LUNATICS (SCOTLAND).

The Lord Advocate obtained leave to bring in a Bill to alter and amend the Laws respecting Lunatics in Scotland.

NETLEY HOSPITAL.

Sir D. Norreys moved for certain returns respecting Netley Hospital, prefacing the motion by observations suggested by the debate of the preceding evening, when the estimate for that hospital was before the Committee of Supply.

Sir J. Ramsden said, there was no intention on the part of the Government to oppose the granting of the returns, and he hoped that, when laid upon the table, they would be the means of removing the misapprehension which prevailed upon the subject.

Mr. Stafford protested against more of the public money being expended upon an ill constructed building, which, according to medical authorities, would prove a hotbed of fever and erysipelas.

Mr. S. Herbert said, that he made no charge against the Government on account of the amount of the vote for this hospital; but he pointed out in what respect its original plan was, in his opinion, faulty, though, as far as the defect in its construction could be remedied, he admitted it had been remedied to a very great degree. The selection of the site, he thought, had been unfortunate.

Lord Palmerston repeated the explanation given by Sir J. Ramsden the preceding evening of the increase in the vote. As to the site, he never heard, he said, that it was at all unhealthy. With respect to the construction of the hospital considerable differences of opinion existed; but the matter had attracted the serious attention of the Government, and the greatest care would be taken to adapt the building to the purpose for which it was intended.

After some observations by Mr. Tite, and Sir F. Smith, the motion was agreed to.

PETITIONS.

The following petitions in favour of Mr. Headlam's Bill have been presented during the past week: from the medical officers and students of St. George's Hospital; from the medical practitioners of Reading and its vicinity; from Sunderland; from Croydon; from Pershore; from Manchester; from Liverpool, one from the medical officers of the Ladies' Charity, one from the Council of the Medical Institution, and one from the members of the Medical Institution; from medical officers of St. Thomas's Hospital; from Robert Pendick of Bristol; from Gravesend and Northfleet; from Plymouth; from Hull; from the President and Fellows of the Royal College of Physicians;

from Liverpool; from the physicians, surgeons, and students of St. Bartholomew's Hospital; from several medical practitioners of London; from Dover; from Wem, Salop; from Maidstone and its neighbourhood; from Dr. Munro of Dundee; from Wirksworth; from Greenwich and neighbourhood; from Weymouth and Melcombe Regis; from Belbroughton; from Guy's Hospital; from Croydon; from Mr. James Stedman of Guildford, and from sixteen medical practitioners; from Wellington; from Oldham; from T. O'Connor, surgeon, of March, Cambridgeshire; from Huddersfield; from J. Roberts of Golcar, R. Allatt of Paddock, and J. Tatterson of Lepton, surgeons; from Brighton; from Enniscorthy (for the council); and from Devonport.

Petitions in favour of Lord Elcho's Medical Bill have been presented from Hertford, Melrose, Falkirk, and Kelso; from the provost, magistrates, and council of the city of Aberdeen, and from the senate of Marischal College and University; from Hatfield, Welwyn, and Whitwell; from Enniscorthy (in favour of the registration clauses); from general medical practitioners of Ireland; from Dundee; from Edinburgh, Greenock, and Alloa.

Petitions for Poor-Law Medical Reform have been presented from the medical officers of Poor-Law Unions in England and Wales, agreed to at a general meeting in London, praying for a redress of their grievances, and that the recommendations of the Select Committee of the House of Commons may be carried into effect; from the medical officers of the Wellington Union; from Mr. Pound, Surgeon to the Hartley Wintney Union; from Mr. L. O. Fox, Surgeon to the Stockbridge Union; from the Salopian Medico-Ethical Society.

A petition in favour of a Bill for Restricting the Sale of Poisons has been presented from the Metropolitan Counties Branch of the British Medical Association.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

*Barrett. On May 23rd, at Wallingford, the wife of Charles A. Barrett, Esq., Surgeon, of a son.

*Sharman. On June 4th, at Birmingham, the wife of Malim Sharman, Esq., Surgeon, of a daughter.

MARRIAGES.

*Harrison—Evans. Harrison, James Bower, M.D., of Higher Broughton, Manchester, to Catherine, only daughter of the late Shaw Evans, Esq., of Chester, at Chester, on May 27th.

*Holmes—Brooksbank. Holmes, Timothy, Esq., M.A., F.R.C.S., of Curzon Street, May Fair, to Sarah, only daughter of Thomas Brooksbank, Esq., of Bentinck Terrace, Regent's Park, at St. Marylebone Church, on June 9th.

*Jeans—Wilks. Jeans, J. W., Esq., Surgeon, of Grantham, to Miss Juliana J. Wilks, of the same place, at St. Martin-in-the-Fields, on June 9th.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 5th, 1857:—

Dix, William Frederick, Smallburgh, Norfolk
Hicks, Charles Cyril, Toddington, Beds
Mackintosh, Matthew, Sleaford, Lincolnshire
McShane, Eugene, Dungannon, co. Tyrone
Magor, Thomas, St. Columb, Cornwall
Maynard, Forster Fowler Martin, Kirk Bramwith, Doncaster
Meyer, Alexander John, Calcutta
Sheraton, George Robert, Sedgefield, Durham
Skinner, David Shorter, Headcorn, Kent

Licentiates in Midwifery admitted at a meeting of the Board, on June 9th:—

Brayton, Jonathan, Whitehaven: diploma of membership dated April 17th, 1857
Griffiths, Richard, Dolgelley, Merionethshire: May 15th, 1857
James, Herbert, Merthyr Tydvil: May 29th, 1857
Jones, John Edwards, Dolgelley, Merionethshire: April 20th, 1857
Jones, William Goodall, Birmingham: April 24th, 1857
Macdougal, Alexander Mason, Guy's Hospital: April 29th, 1857
O'Reilly, John, Ware, Herts: April 7th, 1837
Pope, Joseph John, Hampstead Road: April 6th, 1857
Prall, Samuel, Rochester, Kent: April 20th, 1857
Simpson, Thomas Pemberton, Ebury Street, Pimlico: May 30th, 1856
Taylor, Adam, Norwich: May 2nd, 1856
Thomas, John Little, Carmarthen; April 3rd, 1857
Ward, Isaac Dunlin, Clifton, near York: March 30th, 1857
Winstanley, Robert, Wigan, Lancashire: May 1st, 1857
Winterbotham, Lauriston, Cheltenham: May 2nd, 1856

New Fellows. The following members of the College, having been previously balloted for, were admitted to the Fellowship at a meeting of the Council on June 10th:—

Baxter, Francis Hastings, 6th Enniskillin Dragoons: diploma of membership dated ——, 1841
Evans, Alfred, Walthamstow: June 22nd, 1838
Gillam, Isaac John, Bath: April 26th, 1841
Jones, Arthur O'Brien, Epsom: January 27th, 1837
Kendall, Thomas Masters, King's Lynn: March 18, 1842
Leah, Thomas Cooper, Hyde: December 17th, 1841
Nash, James George, Isle of Man: April 3rd, 1827
Shillito, William, H.E.I.C.S., Bengal: Feb. 2nd, 1838
Spence, John, Otley, Yorkshire: April 5th, 1816
Teevan, James, Chesham Street: October 26th, 1838

HEALTH OF LONDON:—WEEK ENDING JUNE 6TH, 1857.

[From the Registrar-General's Report.]

The returns for the week that ended on Saturday, June 6th, exhibit the gratifying fact that the remarkably small number of 868 deaths was registered in that period in London. There has been a constant decrease of mortality since the temperature rose; and in the first week of June, the deaths are about 200 less than they were in the first week of May. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week, was 979. But as the deaths of last week occurred in an increased population, the average, with a view to comparison, must be raised in proportion to the increase, and in this case it will become 1077. The result is that the deaths now returned are less by 209 than the average rate of mortality at this period of the year would have produced. In the first week of June 1847, the deaths were 786, in that of 1850 they were 844; and these furnish the only instances in corresponding weeks in which the deaths were not more numerous than those of last week, though each successive year has added to the number of persons living within the bills of mortality.

The deaths from the zymotic class of diseases, which in the previous week were 181, were last week 170. Of the six principal diseases in this class, diarrhœa alone shows a tendency to increase: the cases in which it was fatal having been in the last three weeks 12, 17, and 26. Summer cholera has made its appearance as usual, and four deaths are referred to it under the designation "English cholera", "cholera infantum", or "choleraic diarrhœa". A severe case of this complaint manifested itself in St. Ann Street, Limehouse, where a man, twenty-six years of age, died after a day's illness. Small-pox was fatal in only one case, which occurred in Deptford. Measles carried off 24 children; but the only parts in which it seems to be more fatal than usual, are the Goswell Street and City Road sub-districts, in each of which four deaths from it are returned. The deaths from hooping-cough were 47, of which five occurred in the Rectory sub-district, Marylebone.

The deaths caused by diseases of the respiratory organs were last week 125; the corrected average is 134. Those from bronchitis, which a few weeks ago were 100 or more, have declined to 53.

Only three persons whose deaths are returned had attained the age of 90 years or upwards. Two women were 93 years old; and a widow died in Hereford Street, Marylebone, at the great age of 96 years.

Last week the births of 774 boys and 768 girls, in all 1542 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1497.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·877 in. The highest read-

ing was 29·99 in., on the morning of Thursday. the mean temperature of the week was 60·6°, which is nearly 4° higher than that of the previous week, and 3·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was more or less above the average on every day of the week, except Monday, and the excess on Friday and Saturday was 10° and 11°. The mean dew-point temperature was 51°, and the difference between this and the mean air temperature was 9·6°. The highest reading of the thermometer in the sun was 106·7°, which occurred on Friday. The mean temperature of the water of the Thames was 62°; on Saturday, the temperature of the river rose to 64·7°. The wind was in the north-east on the first two days; afterwards, it was for the most part in the south-west. Rain fell to the amount of 0·23 in., most of which fell in the afternoon of Saturday.

MEDICAL REFORM: DEPUTATION TO LORD PALMERSTON.

A deputation of the representatives of the Medical Corporations of the United Kingdom had an interview with Lord Palmerston, on Tuesday last, at 2 p.m. The following bodies were represented: *Royal College of Physicians of London*, by Dr. Mayo, President, Dr. Alderson, Dr. Burrows, and Dr. Hawkins: *Royal College of Surgeons of England*, by Mr. Travers, President, Mr. Green and Mr. Stanley, Vice-Presidents, Mr. Lawrence and Mr. C. Hawkins: *Society of Apothecaries*, by Mr. De Grave, Master, Mr. Simoens, and Mr. Tegart: *University of Oxford*, by Dr. Acland: *Royal College of Surgeons in Edinburgh*, by Dr. Wood, President: *Faculty of Physicians and Surgeons in Glasgow*, by Dr. Watson: *King and Queen's College of Physicians in Ireland*, by Dr. Neligan, Censor: *Royal College of Surgeons in Ireland*, by Dr. Hans Irvine, President, and Dr. R. Williams, ex-President: *University of Dublin*, by Dr. Harrison: there were also present, on the part of the *British Medical Association*, Dr. Ogier Ward, Dr. Wynter, and Dr. Henry; and on the part of the *Extra-Academical Lecturers in Edinburgh*, Dr. W. T. Gairdner; Dr. Kidd and Dr. O'Connor also attended. The deputation was accompanied by the following Members of Parliament: Mr. Headlam; Sir W. Heathcote, Bart.; Sir W. Verner, Bart.; Mr. Neate; Mr. Hatchell; Mr. Vance; Mr. Gore Langton; Mr. Grogan; Mr. Waldron; Mr. D. O'Connell; Mr. Bennet; Mr. F. Crossley; Sir R. Levinge, Bart.; Mr. Somers; Mr. P. O'Brien; Mr. O. Ricardo; Mr. Cooper; Colonel Freestun; Mr. McCann; and Mr. McCarthy.

A letter was received from Dr. Maclagan, President of the Royal College of Physicians of Edinburgh.

Mr. Headlam introduced the deputation. He said that there was a conviction, not only in the minds of the members of the medical profession, but of the House of Commons, that the time had arrived when the subject of Medical Reform ought to be finally settled with regard to the public good. The members of the British Medical Association, as well as the different medical institutions throughout the United Kingdom, had agreed to the principles of a Bill, and in doing so had made mutual concessions. This Bill he had introduced to the House of Commons. They thought it a measure fully entitled to the support of the Government, being one suited for all purposes as far as regards good medical government and the protection and requirements of the public; therefore he felt warranted in not only asking for the support of the Government to secure the second reading, but also their aid in passing it through the House with all just speed, and not referring it to a select committee. The deputation which he had the honour of introducing did not object to any reasonable alteration of the details of the Bill, but they could not and would not consent to any departure from its substantial parts.

Dr. Mayo stated that formerly both Lord Palmerston and Sir Grey had intimated that the Government would support a Bill if sufficient unanimity existed among the profession. Such unanimity existed at present to as high a degree as could be expected; and it was hence with some surprise that they found another Bill brought forward in competition. The only reason that could be imagined for this opposition was the existence of some suspicion that the promoters of the Bill of Mr. Headlam did not favour the cause of Medical Reform. But the College of Physicians had, within the last twenty years, taken the greatest pains to improve their own constitution. The education scheme of Lord Elcho's Bill was moderate and very fit for ordinary purposes, but nothing more; it made no provision for the scientific advancement of the profession. Mr. Headlam's Bill, on the other hand, would give an opportunity of obtaining an education which should maintain the progress of medical science. Lord Elcho's Bill, by a single examination, pitched at a low standard, would raise the importance and dignity of the existing physicians who had passed through higher examinations. He reminded his lordship of the saying of Burke respecting the elevation gained by the nobility of Holland, when no further additions could be made to their numbers.

Mr. Green, on behalf of the College of Surgeons, said that they were not opposed to legislation in a proper direction. That College had existed as the Royal College of Surgeons since 1800; and in 1850 its name was changed into the Royal College of Surgeons of England, by royal charter. Its council was, to a certain extent, elective, and the principle of representation of the Fellows of the College was recognised. They were governed by by-laws requiring the sanction of the Legislature and the Secretary of State; and thereby establishing a security to the profession and the country through that supervision, and if any abuses crept in, it was owing to the neglect of the Secretary of State, and not of the council of the College. For a long time it has been the only recognised body in England for granting diplomas in surgery. Its membership was considered necessary for the public service, and in all Acts of Parliament requiring surgeons in England the College of Surgeons is mentioned. There were 500 diplomas granted last year. From the members' diplomas the income of the College is derived, which is expended altogether on the scientific objects of the institution. They were entitled to the confidence of the profession and the public, which they had, and they had strong claims on the support of the Government. It was true that there was, some years ago, some agitation regarding the College of Surgeons, but that had all subsided, and a better state of things existed. Lord Elcho might find, by reference to Mr. Warburton's committee, that the charges against the College of Surgeons were completely refuted. Some years ago there was a cry among the general practitioners, from a desire not to be connected with a trading company, to have a college of their own; but they did not seek to interfere with or destroy existing bodies. Lord Elcho had taken up wrong principles, for which he had not the slightest grounds; whilst the Bill of Mr. Headlam had in view to establish a proper council of inquiry as to the professional acquirements of all those entering the profession of medicine. There was an outcry against the College without any evidence of the misappropriation of its funds. It might be said that Lord Elcho's Bill allowed the granting of Fellowships of the College after the passing of the ordinary examination. But the College could not educate for the higher branches without the fees derived from admission of members. It had lost, last year alone, by the examination for the Fellowship, £365.

Dr. Williams, representing with his colleague, Dr. Irvine, the Royal College of Surgeons of Ireland, and the surgical profession in that country, felt bound, for the interest of the profession, and still more of the public, to represent the injurious effects Lord Elcho's Bill would have. Speaking in the presence of the Irish members of Parliament present, he could boldly say, that the Irish College of Surgeons had discharged its duties to the great benefit of the public, and was a credit to the country. Lord Elcho's Bill would confiscate its revenues' and annul its privileges. If doing so were for the advantage of the public, he (Dr. Williams) would be ashamed to oppose such a proceeding; but as the Bill of Lord Elcho would seriously endanger public interest, a measure of legislation which ignored the principles of representation and self-government was without a shadow of excuse. Mr. Headlam's Bill was a measure for the promotion and advancement of education, both general and professional; while Lord Elcho's Bill fixed a minimum standard for the general practitioner only. It was necessary to effectually provide for the more extended education of the higher classes of practitioners, not indeed for the sake of the rich class, but to ensure the scientific progress of medicine and surgery. Mr. Headlam's Bill would effectually attain that great object, and on that account it was preferable in itself; and there was no pretext for enacting a measure confiscating the revenues and annulling rights secured by royal charter and Acts of Parliament.

Lord Palmerston could only say that he would give his attention to the provisions of the Bills before Parliament, and he would bear in mind the very important communications made to him. He could not say what course the Government would pursue; regarding the two Bills, they would be guided by the discussion of their merits. He had no desire to support any other course than the one which was satisfactory to the profession and for the public good.

Dr. BURROWS said Mr. Headlam's Bill was supported by all the medical examining boards of the United Kingdom, except the Apothecaries' Hall of Ireland; while Lord Elcho's had only the support of the Scotch Universities, which were not wholly medical.

Dr. HARRISON had been requested by the University of Dublin, to attend this meeting, and to express their approval generally of Mr. Headlam's Bill. The University of Dublin took no part in this medical question in reference to the medical corporations; their only desire was the improvement of medical education. They felt convinced that the improvement of medical science mainly depended on the foundation of a good general education, and therefore they were strongly of opinion that no medical degree should be conferred without a previous education and degree in arts in a university. The great obstacle to any improvement in medical education at present arose from the number of universities giving medical degrees without a previous education and a degree in arts in a university. If a young man could obtain a medical degree in one university without a degree in arts, he would not resort to another, in which that previous expensive step was required. Mr. Headlam's Bill insisted that no man could be registered as a physician unless he had first obtained a degree in arts and a degree in medicine; it also required a good general preliminary education for the other grades of the profession. As Lord Elcho's Bill ignored all distinctions in the profession, it held out no encouragement to pursue the higher grades, or to adopt a university education.

Dr. ACLAND was surprised that a man of Lord Elcho's sagacity and ability should bring forward a Bill of the kind that he is supporting, in opposition to that of Mr. Headlam. Some years ago he (Dr. Acland) felt it his duty to urge the University of Oxford to forego the right to examine for license practitioners in medicine. The general and scientific examination would be best conducted by the Universities; the practical by the corporations, whose examining boards consisted of practical men.

Mr. GROGAN, M.P., expressed a hope that although they could not expect a definite reply from Lord Palmerston, as to the course the Government intended to pursue, that they would aid in the speedy settlement of this important subject.

Dr. WOOD said that if Mr. Headlam's Bill did not support all the legitimate interests of Medical Reform, he would not support it. It established a uniform education throughout the United Kingdom; but more than that, it established a rigid system of tests of the qualifications of candidates under a superior council, so as to prevent any chance of candidates being improperly licensed. It established, too, unrestricted right of practice throughout the kingdom. All this it did by having the present machinery so modified as to meet the requirements of the times. In fact, it reformed without destroying. Lord Elcho's Bill, no doubt, carried out many of the objects of Medical Reform, but not so completely; and in doing so, it sacrificed all existing bodies. It should not be forgotten that those institutions were peculiarly British; they do not exist abroad; they were established in strict conformity with the principles of the British constitution, and with the view of giving to the medical profession the power of self-government. To disturb them, therefore, would be retrograde, and not progressive legislation. To hand over the profession to be regulated solely by a council appointed exclusively by the Crown, as the Bill of Lord Elcho proposes, would be to establish an un-English despotism.

The deputation then withdrew.

ROYAL COLLEGE OF SURGEONS: ELECTION OF COUNCILLORS. The annual meeting of Fellows of the Royal College of Surgeons of England will take place in the Hall of the College, on Thursday, July 2nd, to elect three Fellows into the Council of the College, in the room of two members going out in rotation, and of Robert Keate, Esq., a life member, resigned. The Fellows' dinner will take place the same evening at the Freemasons' Tavern, under the presidency of Samuel Smith, Esq., of Leeds.

TO CORRESPONDENTS.

Communications have been received from:—MR. T. HOLMES; DR. BRINTON; MR. J. V. SOLOMON; DR. J. W OGLE; MR. HOLMES COOTE; MR. FREDERICK MASON; MR. R. TAYLOR; MR. AUGUSTIN PRICHARD; DR. P. H. WILLIAMS; MR. HUSBAND; MR. A. FERNIE; MR. G. KING; THE COUNCIL AND PROFESSORS OF THE LONDON HOSPITAL MEDICAL COLLEGE; MR. R. GRIFFIN; MR. FURNEAUX JORDAN; MR. I. HARRINSON; DR. D. NELSON; MR. J. R. HUMPHREYS; DR. WILLIAM BUDD; DR. BOWER HARRISON; MR. C. A. BARRETT; MR. E. BARBER; MR. W. I. COX; DR. E. SMITH; MR. W. A. EAGLAND; MR. J. B. BARNES; DR. LANKESTER; and MR. STONE.

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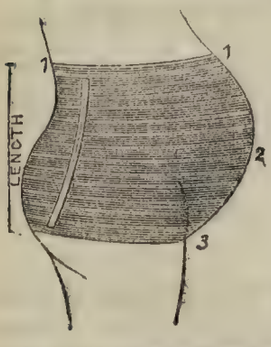
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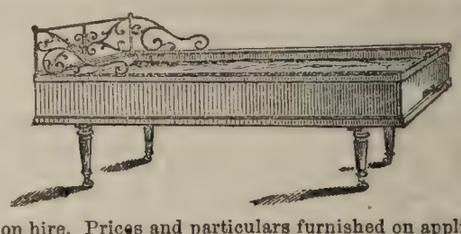
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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

SYPHILITIC ULCER ON THE LIP IN A NURSE WHO HAD BEEN ENGAGED IN WASHING A PATIENT SUFFERING FROM RUPIA AND SCABIES.

Under the care of E. STANLEY, Esq.

[*Reported by* EDGAR BARKER, Esq., *House Surgeon.*]

E. E., aged 30, a nurse in Faith's Ward, gave the following statement. About fourteen days previously, while washing a patient affected with rupia, she distinctly remembered using the same towel to wipe her lip, on which she had a mere crack, and that two days afterwards the sore increased in size. As her health had been suffering in consequence of her arduous duties, and as it was thought that the ulcer had no specific origin, she was put upon a nutritious diet, and took chlorate of potash with disulphate of quinine. Under this plan of treatment no beneficial effect resulted. She was then seen by Mr. Stanley. The sore presented the following appearances: In the centre of the lower lip was an ulcer about the size of a fourpenny piece, somewhat oval in shape, having an indurated base, and covered by an ash-coloured slough: the glands in the neck were tender and slightly inflamed. The same plan was pursued for a few days, when, it being found that the sore was extending, she was ordered a gentle mercurial course, the ulcer being dressed with black wash. From that day the sore improved in character. She soon became salivated; mercury was discontinued, and an ordinary water dressing applied to the sore, which is now rapidly contracting.

ST. GEORGE'S HOSPITAL.

I. ENCEPHALOID DISEASE IN THE THORAX AND CERVICAL GLANDS.

Under the care of T. TATUM, Esq.

[*From Notes by* F. WINTLE, Esq., *Surgical Registrar.*]

JOHN MAY, aged 42, was admitted under Mr. Tatum, May 30th, with a tumour in the neck, supposed to be malignant. He had been an out-patient at the Consumption Hospital for some time previously. The tumour had been coming about five months, and had been increasing rapidly, and at the same time he had become much emaciated. On admission, the swelling was of about the size of a large orange, hard, nodulated, situated nearly about the centre of the sterno-mastoid muscle, on the right side of the neck. At times he had great dyspnœa, and was unable to swallow any solid food, and even with fluids there was some difficulty. His complexion was pale and somewhat sallow, with an anxious expression. He had also a severe cough, which was unremitting, and the expectoration, which consisted of frothy mucus, occasionally slightly tinged with blood, was profuse.

On admission, he was ordered the haustus potassii iodidi three times a day, for which, in two days, was substituted one-sixth of a grain of acetate of morphia, a drachm of oxymel of squills, and pimento water, every six hours; and afterwards a grain of acetate of morphia alone.

The cough continued; and the dyspnœa increased. A blister was applied to the neck and leeches, and a mustard poultice to the chest, each with temporary relief.

June 6th. The cough subsided, but the difficulty of breathing became very great. The mustard poultice and leeches slightly relieved this, but he was unable to take any food, the least attempt at swallowing bringing on most distressing cough. Slight convulsive twitchings of the limbs came on a short time before his death, which occurred on June 8th.

The body was examined twenty hours after death. The tumour in the neck was covered by the sternal portion of the right sterno-mastoid muscle, and by the anterior belly of the omo-hyoid, which was much flattened. It lay on the anterior scalenus muscle, and extended some little distance under the left sterno-hyoid and sterno-thyroid muscles, and was quite unconnected with the thyroid body. The internal jugular vein passed over it; its coats were much thinned: the carotid artery and the pneumogastric nerve were somewhat to the inner side of the swelling. The whole mass was of the encephaloid variety. The right lung was pushed forward by a malignant growth similar to that in the neck, which appeared to spring from the root of the lung, and to pass forward and skirt the right side of the heart. The liver contained a small patch of encephaloid matter.

REMARKS. The lungs of this patient were found quite healthy; nevertheless his rapid emaciation, the cough and dyspnœa, and other symptoms, led those who saw him before the growth had so far advanced to set down his case as one of phthisis. It is perfectly evident that with such a mass of disease pressing on the phrenic and stretching the pneumogastric nerve, any attempt to relieve the difficulty of breathing by an operation on the larynx or trachea would have been a work of supererogation.

II. APOPLEXY.

Under the care of H. B. JONES, M.D., F.R.S.

W. M., aged 50, a cabdriver, was quite well at tea time on May 26th. Afterwards, whilst on his cab, he was seized with vertigo, and came immediately to the Hospital, quite sensible, and able to walk upstairs, but with paralysis of the left arm. His face was flushed, the pulse full and bounding, and there was convergent strabismus of the left eye. Cupping glasses were applied to the neck, calomel and croton oil given, and a turpentine enema administered. The following morning he was bled to sixteen ounces, ice was applied to the scalp, and in the evening the bleeding was repeated to twelve ounces. On July 28th, the facial palsy was well marked, and there was also convergent strabismus of the right eye. A blister was applied to the neck, and followed by mercurial inunction. The urine passed was highly acid, and contained albumen. He continued quite sensible, and even a few hours before his death put out his tongue when told to do so. His death by coma occurred on the evening of June 1st.

On examining the body twenty-three hours after death, the arteries at the base of the brain were found very atheromatous. The right lateral ventricle was filled with a very large loose clot of blood. A part of the blood had also passed into the left lateral ventricle. The right optic thalamus was extensively disintegrated; the striated bodies were perfectly healthy. A minute clot of blood was found in the substance of the left optic thalamus. The heart was large. The kidneys were soft and mottled with smooth surfaces. The rest of the viscera were healthy.

REMARKS. It is curious that the father of this man died apoplectic. One of his sisters is paralysed, and another suffers from epileptic attacks. It is clear that effusion must have progressed very gradually; the only wonder is that with such a large outpouring of blood upon the brain substance, coma did not occur at an earlier period.

III. DELIRIUM TREMENS.

Under the care of HENRY PITMAN, M.D.

J. E., aged 49, a valet, who had been tippling for some time, was first attacked with delirium tremens on May 29th. He came to the Hospital on June 1st, in a very excited state, and was not tranquilised by repeated doses of laudanum; so that, after taking a quantity equivalent to thirteen grains of opium,

chloroform in small doses, with brandy, was given. However, the restlessness and excitement continued during the afternoon of the 2nd; and, about 7 P.M., an epileptic seizure occurred, in which he died.

An examination was made eighteen hours afterwards. The brain was very wet, and there was much fluid under the arachnoid membrane; otherwise it was healthy. The spinal cord and the thoracic viscera were all natural. The liver was large and fatty. A small cyst existed on the surface of the right kidney.

Remarks. Mr. Butcher, in his paper in the *Dublin Medical Press*, alluded to in Ranking's *Abstract*, vol. xvi, speaks of having made use of considerably larger doses of chloroform in delirium tremens than were administered to this patient. Whether the employment of the drug more freely would have benefited this particular case is doubtful. The system had become so much exhausted by the excitement of the four days preceding admission, that the utmost caution was needed to adjust the dose to the powers of the patient.

KING'S COLLEGE HOSPITAL.

CASES OF POPLITEAL ANEURISM.

Under the care of R. Partridge, Esq.

Case I. M. S., aged 36, admitted April 22nd, 1857, had been under the care of Dr. Budd for rheumatic gout, and was transferred on the discovery of the aneurism. He was a paperhanger, not in the habit of taking violent exercise; and had noticed a small swelling in the left ham some time before Christmas, but seemed to have taken little heed of it. Since the same period, he had felt pain in the part. When examined, the aneurism was found to be about the size of a pigeon's egg, with much diffused swelling around; and there was considerable pain from pressure on the nerves.

April 28th. Pressure was commenced on the femoral artery, and kept up for about six hours a day. At the end of three days, all pulsation ceased in the tumour. He still complained of constant dull pain in the part and down the leg; and on May 2nd, the toes, which had been below the proper temperature for two or three days, were observed to be extremely cold; and, towards the inner side of the leg, a patch of purplish discoloration showed itself in the skin. The tongue was covered with a white fur; the pulse was 90; the pupils were dilated. The leg was swathed in cotton wool, and heat was applied.

May 4th. The gangrene had extended; vesications showed themselves over the four outer toes; and sensation was lost over the whole dorsum of the foot. The gangrene spread but slowly over the outer toes, and then invaded the skin of the inner part of the leg.

May 13th. No line of demarcation having formed, and the patient being much weakened by the discharge and the fœtor, the limb was amputated by the flap operation. The hæmorrhage was not excessive, and all the vessels were carefully tied. The femoral artery was seen pulsating up to the ligature. On examining the amputated limb, the sac was found full of softened fibrine on its inner side, and a large nerve was seen stretching over it. Below the sac, the vessel was of the usual size. The integuments of the leg and tissues around the knee-joint, were quite gangrenous.

After the operation, he progressed well. Small superficial sloughs, however, formed over the situation of the end of the femoral artery.

Case II. Arthur G., aged 36, a strong healthy looking labourer, was admitted on November 8th, 1856, under the care of Mr. Bowman, with a large popliteal aneurism in the left limb, which quite filled the ham, and projected on each side. It felt soft, emptied to a great extent when the artery was compressed, and appeared to contain a good deal of fluid. There was a very distinct *bruit*, and a peculiar thrill was felt. On the opposite side was a much smaller aneurism situated in the middle of the popliteal space, apparently entirely fluid, and of the size of a pigeon's egg. The other arteries seemed natural, except that it was thought that the right external iliac near the brim of the pelvis was somewhat dilated. The aneurism on the left side had been observed for two months. No cause for it was known. That on the right side had not been noticed before his admission. He had suffered from shortness of breath and palpitation after exertion for two years.

November 9th. Pressure was first applied to the left femoral artery in the thigh and groin by means of instruments of various kinds, and he was put upon low diet. At first the pressure was badly borne, but he gradually became used to it; and it was continued with tolerable regularity, but without making much impression on the aneurism, until December 8th, when pressure was also applied to the right thigh, in which the tumour was increasing. That in the left limb appeared to be getting more solid, and now, in order to ensure the proper application of the pressure, it was kept up continuously for twenty-four hours at a time, under the superintendence of the house surgeon and dressers. This was done repeatedly during the month of December.

January 14th, 1857. The left aneurism had decreased, so that the limb measured only sixteen and a quarter inches, instead of seventeen inches, and that the ham-strings on either side were detached from the tumour, leaving the latter moveable in the popliteal space, and much harder than before.

From January 17th to 21st, direct pressure with a pad and bandage was applied to the aneurism.

February 21st. The pressure was still kept up; the pulsation in the left aneurism was now very feeble, and the knees each measured fifteen and a half inches in circumference. The same treatment was continued during the month of March, but he was allowed at this date to move about a little, instruments being all the while applied. By this time the outer part of the left aneurism had become quite solid, but the current along its inner side had not diminished.

April 1st. Mr. Bowman endeavoured to break down the firm clot in the left aneurism by pressure with his thumbs; and for a day or two afterwards, the pulsation seemed less.

April 11th. Deligation of the left femoral was performed by Mr. Bowman. No bad effects followed, and on the 15th a note was made of his "very satisfactory state". The wound healed by April 30th; the pulsation in the aneurism was very feeble, and the bulk of the tumour was much diminished. The right aneurism pulsated more strongly, and had increased to the size of a hen's egg.

May 2nd. The right femoral artery was tied; and all went on well until May 5th, when, at about 7 P.M., the patient drew up the left leg so as to bend the knee, and became immediately aware of blood jetting out through a small orifice which had previously discharged healthy pus. Mr. Bowman at once proceeded to tie the artery, which was not accomplished without considerable difficulty, owing to the alteration and consolidation of the tissues by the preceding operation, and the firm union contracted by the artery to the surrounding parts. Some sickness and pain and numbness of the left leg followed, and he had two or three smart paroxysms of dyspnœa.

May 10th. The patient had two rigors; these did not return, but were followed by extreme tenderness on pressure in the right ham and over the leg. An intensely painful swelling appeared towards the lower end of the tibia. The superficial veins over the calf were purplish and very distinct, but not tender. The greater part of the wound in the left thigh remained open and discharged freely.

May 16th. He awoke suddenly in great trepidation, with hurried respiration, and an anxious expression of countenance, and the following day was seized with acute pain in the right calf and ham, which subsided after the exhibition of opium. The right leg and foot were slightly œdematous, and there was a duskiness of the integuments. The left limb appeared natural.

May 20th. This acute pain in the right leg returned; he appeared lower, perspired profusely, and had some return of dyspnœa. The pulsation in both aneurisms was much more feeble.

May 21st. The right great toe became livid, and its temperature, as compared with the foot, rapidly lowered. The adjoining toes soon took on the same appearance. About 6 A.M. the man died.

At the *post mortem* examination, the opening into the left sac was found to be oblong, and about one inch by three-quarters of an inch in size. It was blocked up by fibrine, which also filled the sac. Opposite the sac the artery was uniformly dilated. At the situation of the first ligature, the canal was obliterated, and below this point there was a small clot: further down, for about an inch and a half, the inner surface of the vessel had a greyish white appearance, and the middle coat was soft, white, and separating. After this, the artery was normal as far as the sac. Above the second ligature it was plugged by a firm cylindro-conical plug, the apex of the cone reaching nearly to the origin of the profunda artery.

On examining the right artery, the ligature had not cut through the vessel. Above the ligature was a cylindrical clot, about an inch in length, tapering to a mere thread, and almost touching the profunda. Below the ligature was a very small

clot, and then the artery was normal down to the sac. The sac had burst, and the parts immediately around it were in a gangrenous state, so that it was difficult to understand its exact relations. A large mass of fibrine rested on what appeared to have been the orifice of communication between the sac and the artery. The popliteal vein and its tributaries were plugged with softened fibrinous clots, and around the vessels were small scattered abscesses.

ROYAL BERKSHIRE HOSPITAL.

CASE OF SUPRARENAL CAPSULAR DISEASE.

Under the care of C. Cowan, M.D., Physician to the Hospital.

[*Communicated by* A. Fernie, Esq., *Resident Surgeon.*]

Julia Sayer, aged 14, was admitted into the hospital, under Dr. Cowan, on March 31st, 1857. She was one of a family of five. Her father died of phthisis; her mother is now alive and well. Up to the last three years, her health had been that of ordinary children; but ever since, her mother stated, she had always been ailing, the prominent symptoms consisting in a ravenous appetite, emaciation, occasional headache, frequent vomiting, and a general progressive state of cachexia. She seemed to have been much neglected at home, her food consisting chiefly of bread; and she had been allowed to consume unlimited quantities of sweets, apples, cakes, and similar unwholesome eatables. During this three years of ill health, her spirits had been particularly cheerful, and she had been noticed as a remarkably gay and lively child. No peculiar discoloration of the skin, amounting to a bronzing, appears to have been remarked by her friends; the only observation being that she had gradually assumed a less healthy appearance, and the nails of the fingers were in the habit of occasionally dying away, as was said. Within the last few months, the vomiting had assumed a much more serious aspect, it being constant, and often occurring directly after a meal had been taken.

A few weeks before admission, she had been under treatment at the Reading Dispensary. On March 31st, she entered the hospital, and remained much in the same condition until April 18th; her case being considered at first, I believe, as one of incipient phthisis. She had never menstruated. Upon admission, although there was no such amount of discoloration of skin as to particularly strike the eye, her complexion was of a generally muddy character, far different from that of ordinary children, and unlike that of common anæmia. The nurse of the ward particularly noticed the black colour of the nails, and thinking it caused by dirt, attempted to remove it by washing, but then discovered it to depend on some pigmentary alteration. During the eighteen days she was under treatment, the most marked symptom was vomiting; not one day passed without its occurrence, and frequently it took place several times during the day, generally coming on after a meal, the girl often bringing up the whole of her breakfast and dinner almost directly after it had been swallowed. The bowels acted daily. She moved about the ward in the ordinary way, and seemed tolerably cheerful. There was no decided lung disease detected, excepting a suspicion of some abnormal state of each apex. The urine was tested, and found of a normal character. She complained constantly of pain in the right side. Her pulse continued soft and compressible. During this time, however, there was a general loss of power, with emaciation, not at all to be accounted for, since no special organ could be pointed to as diseased; and she did not improve under any treatment. Upon inquiry, it was found that the nurse of the ward, while attending to her at different times, had noticed an irregular brown patch on the skin of the chest, besides a number of smaller spots of a darker colour, of the size of a sixpence, over both legs; and she described the general colour of the body as much darker in some places than others. This condition of skin was sufficiently marked as to make the nurse of the ward speak of it to some of the other nurses as an unusual thing, although she did not mention it to any of the medical authorities. Eighteen days after admission, the girl began to vomit more severely than before; and this was attended with a sudden and alarming state of prostration, her pulse being small, skin cold, circulation feeble, and the vital powers exceedingly reduced; at the same time, she complained severely of the pain in the right side. She remained for forty-eight hours in this condition, nothing in the shape of stimulating or other treatment appearing to have any effect. The symptoms increased, vomiting being incessant, and she died after forty-eight hours in an utter state of prostration. Dr. Cowan speaks of her condition at this time as resembling that in which some violent poison, as arsenic, had been administered, and death had occurred from the sudden shock to the system.

The body was examined about thirty-six hours after death. The only disease found in the chest was a small deposit of tubercle at the apex of each lung surrounded by some congested lung-tissue, this deposit being in some parts firm, at others diffluent, and in one lung it had degenerated into a calcareous state: the great mass of each lung was healthy and competent. In the abdomen, the liver, spleen, kidneys, stomach, and intestines, were found healthy. In the pelvis, all was healthy, excepting a small cyst connected with one ovary, which was removed more as a matter of interest than as connected with the present case. The brain was examined, but a most careful dissection failed to detect the slightest trace of disease. The suprarenal capsules were both much enlarged. A vertical section of each organ exhibited almost, if not quite, universal disorganisation: the tissue consisting of a yellow cheesy deposit, mottled with occasional narrow streaks of a red substance; this yellow deposit was for the most part firm, about the consistence of Gruyère cheese, and somewhat resembling it in appearance; at different parts in each organ, this tissue assumed the consistence of thick cream, evidently the result of a softening of the solid portion; and at one part the degeneration had assumed a distinctly calcareous character. On the exterior of the left capsule, a shallow cavity existed, as large as a sixpence, full of soft semifluid yellow substance, which had been adherent to the pancreas, but torn away during the removal of the organ. Under the microscope, the tissue was seen to consist of small irregular cells, of different sizes, some with two or more nuclei; a good deal of free granular matter and oil globules; the more fluid part exhibited a large quantity of fat—the character altogether being that of scrofulous matter.

Remarks. Upon consideration of this case, there can, I think, be little doubt of the fact that death resulted from suprarenal disease. The amount of disease which existed in the lungs was trifling, and certainly not likely to so rapidly produce a fatal result. The symptoms also bear so singular a resemblance to many of those cases published in the *Medical Times and Gazette*, as not only to justify but even demand a classification in the same category. The alteration of colour in the skin was not so decided as to draw particular attention to it as a means of assisting the diagnosis; but we probably have yet to learn in what cases this discoloration is present, and how modified. It is, however, another proof of what is now, I suppose, an established fact, that life cannot be maintained after loss by removal or disease of the suprarenal capsules.

Original Communications.

NECROSIS OCCURRING IN THE NEIGHBOURHOOD OF JOINTS OR OTHER IMPORTANT PARTS: WITH THREE ILLUSTRATIVE CASES.

By Kelburne King, M.D.

[*Read before the East York and North Lincoln Branch, May 26th*, 1857.]

In former times, considerable looseness prevailed in regard to the use of the words necrosis and caries, and we find them often employed as almost convertible terms, and applied to nearly all diseased conditions of osseous structures. A more discriminating pathology has, however, limited and defined their use; and we now apply the name of necrosis only to cases in which absolute death of a bone or part of a bone has occurred, while caries is confined to a peculiarly intractable ulceration and softening of the osseous tissues, not malignant in character, but of so low a type as to afford no hope of the ultimate recovery of the affected parts, and but little of their being separated from and thrown off by the surrounding healthy tissues.

The two diseases are of a totally opposite nature, and run a perfectly different course. In the one, there is complete death and isolation, so to speak, of a portion of bone, which

becomes altogether independent of the animal economy, and acts upon, and is acted upon by it, solely in the manner of a foreign body. This receives the name of a sequestrum; and, while it continues in contact with the living parts, there is a process continually going on whose object is to separate it from them, and altogether expel it from the body. This is the process of exfoliation, and is analogous to the separation of sloughs and mortified parts from the soft tissues. In conjunction with this, there goes on usually, but not necessarily, another process, by which a new deposit takes the place of the dead bone.

The formation of new bone is one of the most interesting processes of the living body, and has attracted much attention from physiologists and pathologists, as well as from practical surgeons. I do not propose to enter on the subject here, but may merely remark, that the opinion of Scarpa, and many eminent men of the last age, that bone only recreates bone, has not stood the test of further experience; and it is now regarded as an established fact that the periosteum is the part mainly concerned in the deposition of new bone. This much is proved, that bone cannot repair breaches in its continuity when deprived of its periosteum; and that the latter is capable of recreating new bone when completely separated from the old.

In necrosis, then, we have, first, the death of a bone or defined portion of bone; secondly, the removal of the dead portion from the animal economy; and thirdly, we have in most cases a separate process by which the loss occasioned by necrosis is repaired.

The nature and progress of caries are altogether different. We have not death of a well defined portion of bone, but ulcerative disease, liable to continual extension. The portion of bone which is affected by caries loses the natural firmness and toughness of osseous matter; it becomes soft and friable. The probe pushed into it does not meet the resistance offered by healthy, far less that presented by necrosed bone. If a carious bone be examined after maceration, it presents a porous whitened appearance, much as if the disease consisted of a constantly spreading necrosis of the minute osseous walls which surround the cancelli. The disease has no well defined limit, but passes imperceptibly into the healthy bone. It has no tendency to heal; and, though it is not impossible that, if of small extent, it may be carried away by the suppurative process, the chances are much greater that it will go on involving the previously healthy parts, and finally, unless removed by operative procedure, wear out the strength of the patient. Time, which effects the cure of necrosis, adds only to the intensity of caries; and operative procedures, which in necrosis are required only as adjuvants to natural processes, are necessary in caries, to make up for the want of healthy vital actions, or to supersede disease.

These diseases differ not only in their natures, but as to the portions of bone liable to be affected by them. Necrosis, it is well known, principally attacks the shafts of the long bones; caries, the short bones, or the cancellated parts of the long; and from this there results a great difference in the general prognosis of the two diseases. Necrosis occurring in the shaft of a long bone must usually have a favourable termination. It may tax the patience of the sufferer; it is rare indeed that it will prove fatal to life or limb; and, accordingly, it is a very uncommon thing to hear of amputation for necrosis at all; and rare indeed, unless it have extended into a joint. But the opposite conditions occur in caries. The short bones, or the extremities of the long bones, become the seat of a disease whose tendency is to spread, which does not heal, and which, of a wasting nature in itself, becomes doubly so when, in its progress, it has caused ulceration or absorption of articular cartilages, and laid the foundation of the worst form of articular disease. We find that there is no such fertile source of amputation and resection of joints as caries.

From these facts, taken together, the hopefulness of necrosis when left to itself, or but slightly assisted by the surgeon; the hopelessness of caries, unless the surgeon takes the work out of Nature's hands, and does it for her; the frequent occurrence of caries, and the rarity of necrosis, in the neighbourhood of joints, and in the vicinity of cancellated bones,—it has come that the mere situation of fistulous openings may have at first sight some influence in determining the treatment and prognosis of a case. That more than due weight may not be allowed to these impressions, and to show that we find occasionally necrosis occurring in positions where we should rather expect caries, is the object which I have in view in this paper.

The symptoms are occasionally so masked in the earlier stages, more particularly of such cases of necrosis as I now refer to, that they seem rather to belong to some other disease; and a safe and simple treatment may thus be neglected, to the injury of the patient and the chagrin of the surgeon, in consequence of a false opinion being formed at the outset, and on insufficient data. This is one of the nooks and corners of surgery, which can hardly be treated of in systematic works, but which are every now and then obtruded on our notice in practice; and, on that account, I have thought that a few cases bearing upon necrosis occurring in the neighbourhood of joints or other important parts, and to a certain extent simulating other diseases, might not be uninteresting to this meeting.

My own attention has been lately attracted to this subject, in consequence of having at present under my care two cases of necrosis of the lower end of the femur, so near the knee-joint, and presenting so much the appearance of disease of that articulation, as to have led to the idea that they were cases of white swelling. As an illustration of my meaning, I may narrate the details of one of these cases so far as it has gone.

Case I. On March 12th, 1857, I was asked to see Mrs. B., the wife of a farmer residing near Scaddlethorpe, in consequence of what I was told was a white swelling of the right knee-joint, regarding which I received the following history. Rather more than a year before, when stooping on the ground, she knelt accidentally on a boy's marble. She experienced considerable pain in the knee-pan, but took no particular notice of it for some time. The pain, however, after a little, increased greatly. Considerable swelling took place in the neighbourhood of the joint, the motions of which became weak and limited. The affected limb could not bear the weight of the body, and she had to sit with her leg constantly extended on her thigh. Leeches, cupping, blistering, and the introduction of an issue, were all employed; and at length, after long continued poulticing, an abscess opened on the inner and posterior aspect of the knee, and a quantity of purulent matter was discharged: still the pain on motion and weakness of the limb continued to increase. Finding no relief from scientific practice, she placed herself in the hands of a celebrated female practitioner of this locality, who promised her a speedy cure—with what result, I need not say.

On my seeing her, I found her lying on a couch, with the affected limb stretched out in nearly a straight line. The region of the knee-joint was much swollen, especially at the upper part; and at the anterior aspect, just above the patella, extensive fluctuation was perceptible. At the posterior and inner aspect of the joint, just beneath the condyles of the femur, were two fistulous openings, from which, on pressure, there flowed a sero-purulent discharge. So far, all her symptoms seemed to point to disease of the knee-joint. The history of the case, the general appearance of the limb, and the position of the fistulæ, all indicated, first inflammation, then suppuration of the joint; but, even at first sight, there was a peculiarity in the appearance of the part; and, on examining more minutely, the swelling was found to be situated above the patella and the condyles of the femur, the margins of which could be felt distinct and sharp in their usual situation. On pressing the patella downwards, no pain was felt; nor on gently bending the leg upon the thigh, nor on striking the heel up towards the knee. It was evident, then, that the disease was not within the articulation. A probe was introduced through the sinuses, and, after passing a long way, came into contact with necrosed bone. This was too firm to admit of removal; so I laid open the abscess on the anterior aspect of the thigh, and advised her to return home for a period, until the sequestrum should separate from the living bone.

This case, although as yet without result, I have thought it worth while to bring shortly before your notice, as exemplifying the way in which necrosis near the knee-joint may simulate, both in its history and its symptoms, disease of the articulation itself. It may also inculcate caution in our prognosis of such cases, as I think it very possible that, some months earlier, the diagnostic marks were not sufficiently developed to enable a decided opinion to be formed as to the true seat of the disease.

The following cases have occurred sufficiently long ago to enable me to speak with confidence, not only as to their nature, but as to the result.

Case II. In the winter of 1848, a young man, Wm. Murray, aged 21, resident in Kilmalcolm, a rural village in Renfrewshire, N.B., called upon me, and begged as a great favour that I would amputate his right leg above the knee. He was in the condition of a farm labourer; but, from the time he was a boy, had been able to work but little, in consequence of pain, weakness,

and stiffness of his right knee. He was consequently almost always dependent for support on the parish. So hard is the bread of charity, that this poor lad, with tears in his eyes, prayed me to give him the chance of doing something for himself, by the sacrifice of that limb which had always kept him down. Being at that time surgeon to the Greenock Infirmary, I sent him there for examination and treatment.

He was admitted on November 9th, 1848. His knee was then somewhat bent, and could not be fully extended—stiff and limited in its motions; and there was a good deal of swelling about it, as if from lymph effused among the tendons. There was no pain from pressure of the fingers; but he walked with a limp, and was soon fatigued. The case might have very well passed for one of chronic rheumatism, but that on the posterior and external aspect of the knee there was a sinus, which had existed for many years; that is, a sinus had generally been there or in the neighbourhood; for it would sometimes heal and remain closed for a time—only, however, to reappear in some adjacent part. A probe introduced into this opening passed far downwards and inwards, as if across the joint, and with considerable difficulty was made to strike upon necrosed bone, which felt loose.

On November 16th, he was placed under the influence of chloroform; and, as it was impossible to follow the direction of the sinus with the knife, without cutting across the outer hamstrings, and even dividing the great vessels and veins, an incision, four inches in length, was made along the outer aspect of the lower third of the thigh; and, room being thus obtained, the sinus was followed, and, on getting towards the internal condyle beneath the vessels, two pieces of necrosed bone, about half an inch in length and a quarter of an inch in breadth, were removed with the ordinary dressing forceps. A quantity of rough spicula of new bone was felt in the neighbourhood, but no more loose pieces were found; and the parts were brought together. After this he progressed favourably up to a certain point; the limb resumed more of its natural appearance; and he could walk better, and without feeling so much of the pricking sensation which had before rendered him so helpless. The wound healed kindly, but a sinus still remained, at the bottom of which loose bone was detected by the probe. I was convinced that some necrosed bone still remained, and, on January 17th, 1849, having put him under the influence of chloroform, made an incision still freer than the former one; and, finding some pieces of necrosed bone firmly held in the grasp of new bone, used the bone forceps and the trephine until I was satisfied that no cause of mischief was left. I well remember the formidable nature of the operation, from the length of time which it occupied, and the freedom of incision it demanded; but the object was gained. From that time he progressed rapidly; and, on February 14th, 1849, he was sufficiently well to leave the hospital, his knee being now almost restored to its natural appearance, and being quite capable of doing any ordinary work without fatigue or inconvenience. The wound had not quite healed, but in all other respects he was perfectly cured. I may mention that I saw this lad a year afterwards, and he was then quite well, the wound healed, and he had had no return of his symptoms. I have heard of him since, some years afterwards; and he still continued perfectly well.

This case shows that there may be pieces of necrosed bone situated deep among muscles, too large to be readily brought to the surface, and too small to excite such an amount of irritation as would have necessarily called attention to the true nature of the disease. Yet their existence may produce a train of symptoms which, while they embitter the life of the patient, are apt, at the same time, to call the attention of the surgeon from the comparatively simple nature of the case, and lead him to suspect deep-seated disease of the articulation.

I may mention that the popliteal space is not an uncommon position in which to find such examples of necrosis; but the case I have narrated presented more than usual difficulty, in consequence of the entanglement of portions of the sequestra in the deposit of new bone.

I have now to submit to your notice a case in which symptoms, not unlike those of hip disease, were produced by a small portion of necrosed bone, and at once removed on its extraction.

Case III. On January 2nd, 1855, I was consulted by a young man, R. I. T., aged about twenty years, regarding what he called disease of the hip-joint, and of which he gave me the following history. Some three years before, when engaged in gymnastic exercise at school, he fell and strained his right hip. For six or seven months he did not experience much uneasiness (though the pain never entirely left it). He then had a violent attack of fever, accompanied by great pain and swelling of the hip. Leeches and fomentations were applied; and at the end of a month an incision was made into the posterior aspect of the hip, and a large quantity of purulent matter was evacuated. The wound soon healed, but this was followed by another attack; and matter having again formed, was again evacuated, and a seton put in. This was kept in for some time, and he was sent to the sea side, where he remained for a twelvemonth, but without gaining much ground. The sinuses continued to discharge more or less; walking occasioned "dreadful pain at the hip", to use his own words; and though sometimes better than at others, his lameness did not on the whole improve. Shortly before I saw him another abscess formed at the upper and posterior aspect of the thigh, which also was opened with the lancet. His disease had persisted for nearly three years, and he had no expectation of being anything else than lame for life.

When I saw him he was a good deal emaciated, and had a sickly delicate look. On examination, the right hip presented a somewhat wasted and flattened appearance. He complained of pain on motion of the hip-joint, but it was not of an acute character; and pressing of the trochanter against the acetabulum produced no uneasiness. Two sinuses were open, one midway between the trochanter margin and tuberosity of the ischium; the other lower down at the upper part of the thigh. He had a distinct halt in his walk, and, indeed, had not walked without a stick for two years. From this examination I suspected that the disease was exterior to the joint, and made a careful examination of the sinuses with the probe. After some difficulty, and at a great depth, it came in contact with a portion of necrosed bone, which seemed moveable, and I was then convinced that his idea of hip disease was erroneous, and that it was a case of necrosis of a portion of the os innominatum in the neighbourhood of the articulation. Acting on this idea, on the 4th of January, 1855, I dilated the sinus with a probe-pointed bistoury, and extracted, with the ordinary dressing forceps, a small portion of necrosed bone. From this time he never had a bad symptom. The lameness and pain on walking disappeared. The wound was long in closing entirely, as might have been expected from its depth; but by the 21st of February not only were the sinuses healed, but he had gained flesh, and a feeling of health such as he had not known since the commencement of his malady.

I saw him a year afterwards, and learned that he had never had any return of the pain of the hip or lameness; that one of the sinuses had opened some time after I saw him, and discharged a little matter, but had soon healed up. His health, he said, and his appearance bore him out, had been perfectly good ever since the extraction of the necrosed bone.

I have now to mention briefly the history of a case in which urinary fistulæ were dependent on necrosis of the os innominatum; and though I cannot refer to this as a case successful in result, I may be allowed to bring it before you as proving the remarkable train of symptoms which this disease may produce.

Case IV. On April 12th, 1853, I was consulted by a man named Drewry, a shepherd, residing near Ulceby, Lincolnshire, regarding urinary fistulæ, which had existed for the last four years. He stated that, having been engaged in applying some lotion to diseased sheep, he became very ill; and, from his description, had evidently been profusely salivated. After that he had severe urinary complaints, and finally an immense abscess burst partly in the perinæum, partly in the upper part of the left thigh, from which a great quantity of purulent matter was discharged by several apertures. After a little he observed that when he passed urine a portion of it came away by these openings; and this state of matters had since continued uninfluenced by treatment, and to his great discomfort.

On examination, I found great induration of the parts referred to, and a number of fistulous openings in the perinæum and top of the thigh. As he happened to wish to evacuate the bladder, I had an opportunity of observing that during the act of micturition urine came dribbling through these sinuses. I made an exploration of the urethra, and found that the largest sized catheter passed readily into the bladder, though I thought that there seemed an unusual roughness about five inches from the orifice. I then examined the sinuses with the probe, which passed up to the eye in the femoral apertures without encountering anything. On passing it into one of the perinæal fistulæ, however, it came in contact about an inch and a half from the surface with a portion of necrosed bone, which seemed of considerable size, but moveable. He was a strong, athletic

looking man of fifty years of age, and exceedingly desirous of submitting to anything for the purpose of being relieved.

I came to the conclusion that, in consequence of the mercurial action, a portion of the os pubis had exfoliated; and, as the position seemed to correspond with the margin of the foramen thyroideum, that an abscess had extended from that part forwards through the adductor muscles and inwards to the perinæum, opening the urethra in its course. I therefore advised him to return to Hull and remain there for a few days, that he might have the necrosed portion of bone removed. To this he consented.

Accordingly, on the 30th of April, 1853, with the assistance of Dr. Frazer of the 21st Regiment, then in garrison here, he was placed under the influence of chloroform, and the probe passed down to the sequestrum through one of the perineal fistulæ. The sinus was freely dilated, a catheter having been first passed into the bladder and maintained there by an assistant as a kind of landmark. The necrosed bone could be readily felt; but it was too tightly held in its position to be removed by the forceps, though it was readily grasped, and was, to a certain extent, moveable. The region of the perinæum seeming too limited to afford much scope for extricating the bone, I changed the plan of operation; and passing a probe into the highest of the femoral fistulæ, dilated it very freely. Passing down my finger through the origin of the adductors, I came at last at a great depth upon the sequestrum. This, though readily caught by the forceps, could not at first be removed. The incisions were enlarged, a portion of the origin of one of the muscles was divided; the dead bone was then perceived partially surrounded by new bone. This was divided with cutting pliers, and then a piece of necrosed bone, of about the size of a filbert, was extracted. The operation was long and tedious, in consequence of the great depth from the surface, and the strong muscles through which a way had to be worked; but no ill result followed from the operation. The wounds went on healing kindly; and on May 3rd, the man returned home, the wounds granulating well, but urine still passing from them, especially from that in the perinæum.

About a month afterwards, I heard that urine still continued to pass by the perinæum; and since that time I have heard no more of this patient.

It is not, therefore, on account of the successful result that I have detailed this case, but as an example of the worst form of urinary fistula, caused by a portion of necrosed bone keeping up an amount of irritation that at length involved the urethra, and thus rendered the cure more difficult. I suspect that in this case considerable ulceration of the urethra had taken place. This, of course, could not be cured by the removal of the sequestrum; but the operation was justifiable, as removing the cause of the disease, and thus giving the only chance of ultimate recovery.

I have left myself little time to make any remarks, nor do I know that there is much to be said, except to point out once more that we occasionally have necrosis occurring in connexion with the cancellated extremities of the long bones, or in short bones, where it is not usually suspected; that it produces long-continued wasting discharge, and that (as in the last case) it may induce actual disease of important neighbouring organs, thereby still further obscuring the diagnosis, and rendering treatment less available. The first and last of the cases I have detailed obtained a place in my note book on account of the severity of the operations resorted to for their relief. But I ought to state that in this respect they form an exception to the ordinary run of such cases. The necrosed bone being detected, there is usually no difficulty in dilating the sinus and extracting it; and the second case presents, much more than the others, the ordinary characteristics of this disease, and of the operative procedure by which it is remedied. It is astonishing what an amount of constitutional disturbance the presence of even a small portion of necrosed bone may occasion; and though Nature is often sufficient of herself to throw off these extraneous parts, it sometimes happens, from the great depth from the surface, entanglement among muscles, or other causes, that this work falls to the share of the surgeon. A probe and a probe-pointed bistoury, a pair of dressing forceps are usually the whole of the armamentaria employed; but in case of need—*i.e.*, when the sequestrum is partially enclosed in new bone—Hey's saw, Liston's forceps, and the trephine may all be required, as well as the powerful extracting instruments used by Mr. Fergusson, of London, and named the Lion forceps.

HYDROCELE OF THE TUNICA VAGINALIS: HÆMATOCELE: EFFUSION OF SERUM INTO THE CELLULAR TISSUE OF THE SCROTUM AND PENIS.

By A. G. Walter, Surgeon, Pittsburgh, Pennsylvania, U.S.

Robert Thompson, 55 years of age, of Pittsburgh, a shoemaker by trade, of good constitution, temperate habits, and robust health, had had hydrocele of the tunica vaginalis of the left testis for fifteen years, which had gradually increased to a very large size, without giving him any annoyance but what its bulk occasioned. No cause for its appearance could be ascertained. In December last, whilst at work, preparing with the hammer a piece of sole leather upon a stone resting upon his knee, the stone slipped and struck the left side of the scrotum with violence, producing excessive pain and faintness. The shock, however, soon passed off, but not the pain; and increased swelling of the scrotum soon manifested itself. By evening, both were aggravated; and during the night, more than twelve hours after the receipt of the injury, I was summoned to see the patient. I found him suffering excessive pain in the scrotum, spermatic cord, and lower part of the abdomen; his pulse was feeble and quiet; the hands and feet were cold; he had chilliness of the surface of his body, and nausea. The penis, whole scrotum, the region of the spermatic cord, and of the inguinal canal of the left side, were greatly swollen; the scrotum was hot, and of a brownish erysipelatous-like hue. The skin of the whole scrotum anteriorly, but more of the right side, and of the penis, was hard and indurated, the posterior wall of the scrotum being soft. The left inguinal region was greatly swollen and very painful, but the skin covering it was neither infiltrated nor discoloured.

Knowing that the patient had had hydrocele, and learning that he had been free from hernia, but had received a blow upon the scrotum while in a sitting posture, it was natural to suppose that rupture of the tunica vaginalis had taken place, and that the serum contained in its cavity had consequently been infiltrated in the cellular tissue beneath the skin of the scrotum, inguinal canal, and the penis. This would account for the swelling of those parts, but not for the discoloration of the skin of the anterior part of the scrotum, nor for the increased size of the scrotum, which was twice as large as it had been before the accident occurred. There appeared to be no other plausible supposition but that of extravasation of blood, from rupture of some blood-vessel, in the cellular tissue along with the serum, in the tunica vaginalis testis, and in the inguinal canal; which was verified during the operation.

No doubt could be entertained about the proper treatment of the case. The skin of the scrotum had to be relieved of the excessive tension produced by the accumulated serum and blood, else sloughing would have followed. The tunica vaginalis of the scrotum and spermatic cord had to be opened; the extravasated and coagulated blood had to be turned out, else excessive suppuration would have ensued; and lastly, the bleeding vessel had to be secured, else extravasation of blood to an alarming extent might have taken place, with gangrene of the contents of the scrotum supervening, and thus jeopardising the life of the patient. The operation for hydrocele by incision of the scrotum was resorted to, while the patient was under the influence of chloroform. A free and long incision was made from below the groin to the bottom of the scrotum, over its anterior face, through skin and cellular tissue, which was found infiltrated with serum and coagulated blood. The tunica vaginalis, much thickened, was next divided to the same extent. On opening it, more than half a pint of straw-coloured serum was discharged; but its cavity did not collapse, owing to a large quantity of coagulated blood filling it, as well as that of the tunica vaginalis, funiculi spermatici, and of the inguinal canal. After the coagulated blood had been turned out, fresh and profuse arterial bleeding took place, proceeding from the mouth of a ruptured artery of the tunica vaginalis, which was found rent near the raphe, admitting the finger freely into the cellular tissue of the scrotum. Through this rent the blood had found its way into the cellular tissue of the whole scrotum and penis, causing the brawny appearance which those parts presented. The renewal of bleeding was caused by the removal of the coagulated blood, which had acted temporarily as a tampon upon the bleeding vessel. The spermatic vessels were found healthy and uninjured. Lint being placed upon the bleeding vessel, and into the wound, and a strip of adhesive plaster encircling the scrotum, arrested the bleeding. An

opiate given to the patient after the operation produced comfortable sleep.

The case went on favourably, without further bleeding, with no undue reaction, with moderate suppuration in regular time, and speedy disappearance of the swelling of the penis, groin, and scrotum. The wound was closed in six weeks, and the patient was enabled to resume his work.

Remarks. This case is of particular interest, not only on account of its complicated nature and the alarming and painful symptoms which it offered, but also on account of the speedy success which a simple operation, by freely dividing the skin of the scrotum and the tunica vaginalis, afforded.

Clinical Lecture

ON THE

EMPLOYMENT OF THE OPHTHALMOSCOPE IN THE INVESTIGATION OF MORBID CHANGES AFFECTING THE DEEP-SEATED STRUCTURES OF THE EYEBALL.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital; Surgeon to the British Hospitals at Smyrna and Renkioi during the war in the Crimea, etc.

EFFUSIONS OF BLOOD INTO THE GLOBE.

There can be no occasion, after the repeated examinations with the ophthalmoscope of patients whose organs of vision have been affected with obscure disease, for me to dwell upon the importance of a discovery, which enables the surgeon to detect with his own eye the commencement, and to watch the progress of morbid changes in the choroid membrane, the retina, or any of the transparent structures behind the iris, formerly beyond the reach of observation. Those who witness in Hospital practice only the severer forms of ophthalmic affections can scarcely estimate the full value of any means by which the exact seat may be determined of that class of anomalous complaints, at one time comprised under the head of amblyopia, amaurosis, or disturbed vision.

I trust to live to see the time when these vulgar Greek compounds will be banished from use. When general ignorance submitted to the rule of a scholastic despotism scarcely less ignorant, the public were contented to receive as explanatory of diseases barbaric compounds expressive only of leading symptoms, or of physical changes obvious to the meanest capacity; *e. g.*, amblyopia—dullness of vision; amaurosis—the black dilated pupil: glaucoma—the dull green appearance often seen in a diseased eye. What information do these terms convey? Absolutely none; and the time has now arrived when the profession positively feels a dislike to the use of expressions, which seem to have been begotten illegitimately, or, at all events, under suspicious circumstances. Let us drop them; we have English words as good and far less presuming. Let us speak of dulness of sight, of complete blindness dependent on internal disease; and, ceasing to rest upon the supports of a former age, let us break into the yet unexplored field of special ophthalmic pathology.

Upon the present occasion, I wish to say a few words upon amaurosis dependent on extravasations of blood into the deep-seated structures of the eye; an occurrence which I believe to be far more frequent than has heretofore been believed. The subject may be divided into two heads. 1. The morbid changes produced by such effusions in the tissues wherein they occur. 2. The condition of the bloodvessels preceding such an accident. The treatment must, of necessity, depend upon the scientific solution of such an inquiry.

On May 25th, a pallid boy, aged 9, was brought to the hospital by his father, who wished me to examine the left eye, which had become blind, without any external morbid appearance. There was no fulness of the subconjunctival vessels; the cornea was clear, the iris bright and movable in conjunction with the iris of the opposite eye; there had been no pain in the head, no sickness, nor accident; the child had become blind of one eye, though when and how were alike unknown to the parent, who believed the disease to have been of long standing. He said he had been away on business for some time, during which he could not answer for the amount of care bestowed upon his son. Putting the light in the proper position behind and to the side of the affected organ, which was kept in the shade, I directed the rays reflected by the ophthalmoscope into the natural and undilated pupil, when I became immediately cognisant of a multitude of dark black spots dispersed over the surface of the retina. They were of various shapes—round, triangular, oblong, etc.—and were especially numerous about the entrance of the optic nerve, the papilla of which was flatter than natural, and obscured. Of the branches of the arteria et vena centrales retinæ I may say, that they did not proceed to their usual subdivisions with normal clearness of outline. Very similar appearances are depicted in Ruete's last work (*Krankheiten des Menschlichen Auges*, tabula iv. fig. 6). Now in this case, three points present themselves for inquiry and investigation. First, What was the nature of these opaque black spots? secondly, How came they to be deposited? and thirdly, What was the prognosis and treatment?

Both pathological and ophthalmoscopical investigation have shown that, in the majority of instances, these black bodies proceed from extravasated blood. The probability of such an occurrence has been anatomically proved by Von Ammon (*Klin. Darstellungen*, i. tab. xv. figs. 20, 21; tab. xvi. figs. 8, 18; tab. xix. fig. 7), who has depicted instances of extravasations of blood in the retina; and many years ago I had an opportunity of making the *post mortem* examination of a patient under Mr. Lawrence, who died, while suffering from amaurosis, of acute bronchitis, and in whom there were found extravasations of blood in both eyes in the internal tunics, close to the optic nerves, which were in other respects normal. In recent cases, the ophthalmoscope reveals the existence of the clot of effused blood in its abnormal relations, where it is easily recognised by its red colour; the subsequent changes may then be traced, namely, the disintegration of some of the blood corpuscles; the partial absorption of the fibrine; but the removal of the extravasated fluid goes on very slowly in the posterior part of the globe, especially in a diseased eye, and some of the particles, indeed, become persistent. The only natural structure which might be supposed capable of producing these morbid black deposits is the pigmentum nigrum; but then we must remember that it is composed of polygonal cells containing granular particles, the sudden escape of which would hardly produce those black flakes, like soot, into which effused blood may become converted. It is, however, doubtless quite possible that blood or pigment may be found floating in the softened and fluid vitreous humour of a diseased eye; I do not believe that the appearances are similar, at all events, in the cases now under consideration, the history leaves no doubt as to the diagnosis.

I examined, on May 30, the eyes of a patient under the care of Mr. Lawrence, at his request, with the ophthalmoscope, in order to make out the exact seat of morbid changes which had produced amaurosis, or blindness, complete in the right eye and considerably advanced in the left. The pupil of the former was dilated, and of dull greenish hue; that of the latter was clear and black. The patient had no pain at the present time. The history was as follows: he was a soldier, stationed at Aldershott, on the occasion of a fire last December year, which consumed a considerable number of wooden sheds and huts. In the discharge of his duty, and in endeavouring to extinguish the flames, he became much heated, and upon returning to his quarters, he was suddenly chilled, the night being extremely cold. In a moment he became nearly blind, and continued in this state until the following morning, when the sight partially returned. During the course of the day, however, the dimness of vision increased, and he saw objects as through a red cloud. In consequence he had to obtain his discharge from the army, and has since consulted many surgeons without deriving much relief.

The eyes were examined by me, May 30, by the ophthalmoscope. In the right eye, the vitreous humour was so turbid that the vessels of the retina and choroid could scarce be seen. The iris was healthy and movable, and the pupil was readily dilated by atropine. A multitude of opaque black flakes floated about the vitreous humour, which was evidently much more fluid than natural. A slight oscillatory movement of the globe caused a shower of these dark black flakes to float from one part to another of the eye. In the left eye, the humours, or transparent media, were clear, and the whole of the posterior part of the eye was visible. I could not make out satisfactorily the optic nerve papilla, although its position was indicated by an opaque white patch: the blood-vessels, namely, the branches of the arteria centralis retinæ and vein, could be traced, in no great number, to their second division; the normally continuous red surface of the choroid was covered with a multitude of white patches, and throughout, both in the red and white colours, were spots of black hue, which were diagnosed as the remains of the colouring matter of effused blood.

The case may be thus explained. The man became greatly heated before a large and destructive fire during a cold night. Upon being exposed to a sudden chill, the blood was driven back to the internal organs, and, in this case, burst through the delicate capillaries ramifying in the retina and neighbouring parts. The removal of the effused blood by absorption is, I regret to say, an occurrence both slow and uncertain, and much injury is done to the internal structures of the eye by the mere act of effusion. I apprehend that some good may be effected by proper treatment and by the efforts of nature; but I doubt whether the patient will ever regain any amount of useful vision.

In warm climates the sun's rays may produce a precisely similar result; namely, sudden extravasation of blood into the interior of the eye. Members of our profession have frequently a great amount of experience in atmospheric changes, being stationed in nearly every known quarter of the habitable globe. They well know the value of the thick white turban covering to the head, and the danger of exciting the circulation by indulgence in any stimulating drinks until the cool of the evening, where such a luxury exists. Dr. E. Jäger, whom I have had the pleasure of knowing some years, has lately published an excellent work on the pathology of the eye, as observed by him in the course of very extensive practice in Vienna, a city which, in its climate, habits, and population, indicates an approach to Orientalism. He there mentions the case of a workman, suddenly called from his occupation, during mid-day heat, into the streets, along which he ran, for some distance, without his cap. This imprudent act was followed by extravasation of blood into the posterior part of the globe, and the occurrence was confirmed by Dr. Jäger's ophthalmological investigation.

Now in all these cases there was absence of a certain symptom to which ophthalmic surgeons attach great weight; namely, flashes of light, sparks, and other luminous appearances, before the eyes. We have reason to believe that such phenomena are due to disturbed cerebral circulation, and do not depend on morbid processes within the eye itself; in other words, that they do not constitute essential symptoms of amaurosis dependant on disease of the globe. The only symptom which is constant is dimness, or loss of vision, and we must investigate the immediate source of the affection.

Upon a former occasion I directed attention to effusion of blood from the arteries of the interior of the eye, in cases of nephritis and albuminuria, as first pointed out by Landouzy of Rheims, and I may here remark, that a similar occurrence has been noticed in a case of chlorosis.

The prognosis in these cases is not very favourable. The injury done to the choroid, the retina, or the vitreous humour, by the effused fluid, is often irreparable from the first; and even when this is not the case, its presence excites a chronic, inflammatory disturbance by which further changes, injurious to sight, are produced. The importance of ascertaining the nature of the accident cannot be too highly estimated. The full plethoric, yet healthy man, may be depleted with advantage, and mercury may be given to produce salivation, that subacute inflammation may be stopped, not that absorption may be promoted. In the case of the amaurotic patient suffering from albuminuria, remedies may be applied to the relief of the affected organs, the kidneys, while assurances may be given that time may effect amelioration when the condition of the urine becomes improved. The chlorotic patient will be benefited by the administration of steel medicines, by attention to the digestive organs, and by keeping the head cool and free from excitement. Thus it will be evident that "amaurosis" must cease to be regarded as a disease; but must be taken as a symptom of a group of morbid affections, among which extravasation of blood into the interior of the globe occupies a place meriting attentive consideration.

The late E. J. Scott, M.D. A meeting of the friends of the Portsmouth, Portsea, and Gosport Hospital assembled last week in that institution, presided over by Major-General Whylock, in reference to the presentation of a marble bust of the late Dr. Edmund James Scott. The bust, which is of life size, by Mr. Pepper, of Brighton, is a faithful likeness. The pedestal of black marble on which the bust rests contains the following inscription:—"This bust of the late E. J. Scott, M.D., is presented to the Royal Portsmouth, Portsea, and Gosport Hospital by Sir Charles Ogle, Bart., Admiral of the Red, and other friends, as a tribute of respect to his memory, and to mark their high sense of the important services gratuitously rendered to this institution by him from its formation to the day of his death."

British Medical Journal.

SATURDAY, JUNE 20TH, 1857.

THE IRISH MEDICAL ASSOCIATION.

The report of the proceedings of the Fourth Annual Meeting of the Irish Medical Association, which is given in a subsequent page, will be read with interest by all who can appreciate the endeavours which the members of the medical profession are now making to improve their position as regards their relations with the public and the state.

The Irish Medical Association was founded in June 1853. Its members consist of physicians and surgeons in Ireland, each of whom pays an annual subscription of ten shillings. Its affairs are managed by a President, a Chairman of Council, four Vice-Presidents (one for each province), two general secretaries (one being paid), and thirty-two local secretaries (one for each county). The Council consists of the above-mentioned officers, with two delegates chosen from each county. The principle of district representation is therefore, it will be seen, fully provided for. The rules of the Association provide also for the formation of district Branches, and for the expulsion of unworthy members, in terms similar to those adopted by the British Medical Association. A meeting of the Association is held once a year; and the president has the power at any time of calling a special meeting on receiving a requisition signed by twenty-one members. One of the rules provides that the members of the British Medical Association may be enrolled without payment of subscription as *ad eundem* members of the Irish Medical Association.

The objects of the Irish Association are the same as those of our own body: "to protect the interests, to preserve the respectability, and to increase the usefulness of the medical profession generally." How zealously its members work for the carrying out of these important ends is shown in the reports of the recent meeting, as well as of those held in previous years.

The topics brought forward for discussion at the late meeting were the system of Poor-Law Medical Relief in Ireland, and Medical Reform.

In regard to Poor Law Medical Relief, the report of the Council, and the remarks made by the various speakers, amply shew that the Poor-Law Medical Officers in Ireland labour under grievances equally oppressive and equally calling for removal with those which weigh down their brethren in England. These grievances, however, do not arise so much from the manner in which the Irish Medical Charities Act is carried out, as from the construction of the act itself, which is in several of its provisions defective, and liable to be interpreted to the injustice of the medical man. We must defer to another opportunity a comparison of the English and Irish systems of Poor-Law Medical Relief; but, in the mean time, the nature of the amendments called for are plainly expressed in the third paragraph of the report of the Council, and in the comments thereon in that document and in the speech of Dr. Armstrong. The amendments for which the Association has petitioned are:—

"1. Securing permanency of office; 2. Right by law to payment for extraordinary services; 3. Amendment of the vaccination clause; 4. Protection to the medical officer against persons in comfortable circumstances procuring dispensary tickets; 5. Payments, wholly or in part, from the Consolidated Fund; 6. Claim to superannuation pension."

There is one point on which there is a marked difference between the condition of the Poor-Law Medical Officers in the two kingdoms. While in England the rule has been that applications for redress of grievances have been treated with neglect, in Ireland the remonstrances of the medical officers have in general received courteous attention at the hands of those whom they addressed. With this willingness on the part of the authorities to listen to the account of administrative defects, there ought to be much room for hope that the efforts which the Irish Medical Association is making will be before long crowned with success.

But to this success there is another element wanting—the full co-operation of all who desire relief. Unfortunately, the active men of the Irish Association have the same complaints to make, in regard to the apathy and timidity of their brethren, as have we of the British Medical Association, and our fellow-worker Mr. Griffin and his colleagues of the Poor-law Medical Reform Association. We hope, however, that the profession in Ireland will learn soon to appreciate the labours of those who are so zealously working for their good as Dr. Kingsley, Dr. Quinan, and their colleagues; and that, joining heart and hand, they will work with energy and unanimity, and not cease until every medical man in Ireland enjoys that just recognition of his services, that protection from imposition, and that proper appreciation with the public, which are justly due to him.

In regard to Medical Reform, the Association adopted Mr. Headlam's Bill, after a full discussion, in which the erroneous impressions which had been made on the minds of some of the speakers were shown to be most superficial and groundless. Several of the members were in favour of introducing into the Bill a clause acting stringently on all who disgrace their profession: and that there is room for severe animadversion on the part of respectable men, is shewn in the fact of the advertisements of cheap practice issued in Ireland by some unworthy members of the profession. But such matters as these, and even worse, we are inclined to think, cannot be altogether dealt with by Parliament, desirable though it be that the severest hand should be laid on quackery in all its forms. They must rather be left to the condemnation of all right-minded members of the profession, and to the growing intelligence of the public.

For the present, we take leave of our brethren of the Irish Medical Association. But, before parting, we would heartily wish them God speed. Our profession is one; our objects are identical; the same subjects present themselves to us for congratulation, as well as for sympathy. We can, without reservation, take on ourselves to assure the members of the Irish Association that they have the sincere good wishes of their fellow-workers in England; and that in this kindly feeling the members of the British Medical Association share to the fullest extent.

APPEAL IN BEHALF OF MR. J. H. TUCKER.

The circumstances under which one of our Associates has fallen into adversity, demand that we should this day appropriate a few lines to making an appeal on his behalf.

Most of our readers are probably aware that there was formed in London, about seven years ago, a society having for its object the investigation of facts connected with Epidemic Diseases. The founder of this, the Epidemiological Society, was Mr. J. H. Tucker, a member of our Association; and from the first he acted as one of its honorary secretaries. Impelled by his zeal, he assiduously devoted his time and energy to the promotion of the influence and utility of the institution—not without most encouraging success. His exertions, however, have proved too great a tax for him; and his mental and bodily health gave way about five months ago. He is now an inmate of an asylum, with scarcely any prospect of recovery.

The valuable public services of Mr. Tucker would, in themselves, entitle him to claim our aid and sympathy in his misfortunes: but this claim is rendered stronger by the circumstance, that he has himself in former days taken a prominent part as a man of benevolence. In 1830, a Dr. Nuttall, with whom Mr. Tucker had in the course of his practice become acquainted, died without making any adequate provision for his widow and five children. They were saved from comparative destitution chiefly through the exertions of Mr. Tucker, who, with some friends, succeeded in raising, for the benefit of the distressed family, the sum of £1,200.

To further justify this appeal, it is necessary to state that Mr. Tucker's affliction is rendered still more calamitous by his being wholly without the means of support. It is to be feared that his unselfish liberality to his poorer patients, and his earnest devotion to the good cause he had espoused, have contributed to place him in his present position of need. But as both the public and the profession are likely to derive benefit from his labours, it is hoped that his claims on their benevolence will be met in a spirit of sympathy.

It is proposed to raise by subscription a sum of money, to be appropriated to the benefit of Mr. Tucker in the form of an annuity, or in such manner as may appear best. The following gentlemen have formed themselves into a Committee for the receipt of subscriptions:—

Dr. Benjamin G. Babington, 31 George St., Hanover Square.
Dr. James O. M'William, 14 Trinity Square, Tower Hill.
Dr. William Camps, 40 Park Street, Grosvenor Square.
Thomas Hunt, Esq., 23 Alfred Place, Bedford Square.

Sir S. Scott and Co., Bankers, Cavendish Square, have also kindly consented to receive contributions.

THE WEEK.

Paragraphs sometimes appear in the public papers, which lead us to think that the treatment of lunatics is not altogether so satisfactory, even in this country, as it might be, notwithstanding the ameliorations which have taken place of late years in public ideas with respect to these unfortunates. For instance, the following paragraph appears in the *Times* of Thursday:—

"On Saturday a lunatic named Chaplin was being conveyed by the express train from Exeter, on the Bristol and Exeter Railway, in charge of a keeper, *who had been obliged to fetter the poor demented man's legs and arms with gyves and chain* When near Durston station, he fell down on his knees, apparently at prayer; but in an instant, and before it was possible to prevent him, he sprang out of the window of the carriage,

while the express train was at its full speed. On arriving at Durston, an engine was sent back to look for the poor fellow, and he was found lying on the line apparently uninjured. On being conveyed to the Taunton Hospital, however, it was found that he had sustained a dislocation of his collar bone."

"Gyves and chains"! Do we read aright? We fondly imagined that such instruments of repression were become almost as scarce as racks and thumb-screws—that we might expect to find them rather in the collections of antiquaries, than on the limbs of lunatics. We are no believers in the non-restraint-at-any-cost cry: we know there are cases in which the imposition of a straight-waistcoat is less painful to the patient's feelings, than the "laying on of hands" of a dozen rough attendants. Having said so much, we shall not be accused of a morbid humanity, when we state that we are shocked at such an exhibition of instruments of torture, upon the limbs of a poor lunatic, as this paragraph indicates. Of course, we are taking it for granted that the patient was either a pauper lunatic, under process of removal from one county to another, or a criminal lunatic. In either case, no course could have been taken better calculated than the one adopted to create an impression in the public mind that lunatics are still, as of old, regarded in the light of wild beasts, and treated accordingly. The Commissioners in Lunacy may make their annual report in vain respecting the abolition of every kind of restraint in public asylums, as long as poor patients are conducted through the country chained and handcuffed in this manner, in full view of a train full of people. Of course the condition of the patient is quite unknown to us; but had he been ever so robust, it would have been far better on the part of the parochial authorities to employ three keepers, if necessary, to secure his safe conveyance, than to have used one chain or gyve. We very much fear that this lamentable exhibition, so calculated to revive that unfortunate dread of the asylum which modern philanthropy has laboured hard to eradicate, was brought about by the parsimony of the parochial authorities. Be that as it may, however, we trust some inquiry will be made into the circumstance, with a view to prevent the repetition of such a public scandal.

Of course the belief that government wavers in its design of planting the great Military Hospital at Netley, has naturally alarmed the authorities of Southampton. The neighbourhood of such an immense government establishment cannot but be productive of much material advantage to the town; and therefore the mayor and citizens are extremely anxious to secure its custom. Accordingly, his worship has consulted the Medical Society of Southampton with reference to the charge of unhealthiness brought against the site of the Netley Hospital by Mr. Stafford, M.P., by the *Times*, and by very many leading medical men. The verdict of that Society is as follows:

"The Medical Society of Southampton having been requested by the mayor to make a report on the salubrity of Southampton and its neighbourhood, with special reference to the site of Netley Hospital, agree unanimously that the public statements in reference to its unhealthiness are entirely opposed to their experience, and that ague and other forms of malarious diseases are unknown in the district, excepting when imported. They affirm further, on the authority of Mr. Cooper, the officer of health, borne out by their own observations, that the mortality of Southampton and its neighbourhood is below the average of other towns of equal population and extent."

With every wish to receive favourably this opinion of the Medical Society of Southampton, we cannot help remarking that these gentlemen may be, without their knowing it, prejudiced in favour of their own locality. The objection to Netley Hospital rests upon far weightier grounds than its site. Nevertheless, we think it will be hard to persuade the profession generally, that the banks of a river, which exposes a large surface of mud at low water, can be a salubrious spot for the erection of a hospital. We are told that ague is not indigenous: yet we know it is rife on the opposite side of the river, and we should fear that the westerly and south-westerly winds would waft but too often across the narrow strip of water the miasmata which engender it. It is well known that when the wind blows from off shore, the crews of vessels lying near the fever districts of the African coasts are fearfully affected. Mr. Cooper, the officer of health of the district, states that the "Mortality of Southampton and its neighbourhood is below the average of other towns of equal population and extent." What is this evidence worth, as affecting the particular locality in question? London is notoriously the healthiest metropolis in the world, its size and extent taken into consideration; yet will any medical man venture to affirm that the banks of the Thames are healthy? Why it has just been publicly stated by Dr. Letheby, that a particular form of fever is engendered by the presence of those mud-banks; and one of the chief arguments urged in favour of the Thames embankment, is that it will do away with a pregnant source of disease. We see no reason why Southampton mud should be a whit more salutary than Thames mud; and even granting that no special disease is generated thereby, it cannot be doubted that the relaxing atmosphere of the place is not calculated for invalids coming from India. Our troops, when taken ill in that peninsula, are immediately sent to the hill stations: they want a bracing rather than a relaxing atmosphere. Yet the authorities, well knowing this, reverse a treatment which has proved so efficacious. We have it on the authority of Dr. Farr, that inland spots of high altitude are far healthier than low sea-side watering places; and yet we deliberately ignore the experience of scientific officers specially engaged in investigating the best hygienic conditions for man, and squat a hospital down on the side of the land which fringes an ague district.

Those gentlemen who originated the late agitation against the "Weed," will, perhaps, find some explanation of the effects they have noted to have followed the use of tobacco in the letter of the New York Correspondent of the *Times*. This gentleman states, that Virginia tobacco is fast losing all its original qualities,—that it is becoming, in fact, little better than Camberwell cabbage-leaf. In order to cook it up to market taste, however, it is doctored in a hundred different ways. "A patent has been taken out at Washington for making tobacco, by infusing the leaf of maize in a decoction of quassia and capsicum." The leaf of the sun-flower is also used as a substitute. But a deeper horror lies behind. Inferior qualities of tobacco "*are soaked in a solution of prussic acid, which produces an almond flavour, and the loss of the use of the lower limbs in the smoker if he persists in smoking it after this warning.*" Here perhaps we have the explanation of Mr. Solly's cases of paralysis. His "sad examples" had been smoking, instead of the real thing, a vile compound which seems especially calculated to bring on the very trains of symptoms which have been attributed to the genuine article. Green tea is adulterated like tobacco; we do not suppose, however, that any one will be so foolish to agitate against the use of the purer black kinds on this ground. Smokers need not despair at what we have said,—Havannah tobacco is still unadulterated. The moral of the story is obvious.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Lancashire and Cheshire. [Annual Meeting.]	Council Chamber, Town Hall, Preston.	Wednesday, June 24th, 11.30 A.M.
South Eastern. [Annual Meeting.]	Town Hall, Reigate.	Wed., June 24th, 1 P.M.
West Somerset. [Annual Meeting.]	Castle Hotel, Taunton.	Wed., July 1, 2 P.M.
Birmingham and Midland Counties. [Annual Meeting.]	Hen & Chickens Hotel, New Street, Birmingham.	Thursday, July 2nd,* 3 P.M.
Shropshire. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Friday, July 10, 2 P.M.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 14, 12 noon.
Metrop. Counties. [Annual Meeting.]	37, Soho Square, London.	Tues., July 14, 3 P.M.

[* In place of July 9, as previously advertised.]

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

EAST ANGLIAN BRANCH: ANNUAL MEETING.

The first General Meeting of the East Anglian Branch was held at the Norfolk Hotel, Norwich, on Friday, June 12th; W. H. Ranking, M.D., President, in the Chair. There were also present: E. Adams, Esq. (Bungay); W. Cadge, Esq. (Norwich); B. Chevallier, M.D. (Ipswich); W. Cooper, Esq. (Bury St. Edmunds); E. Copeman, M.D. (Norwich); D. Dalrymple, Esq. (Norwich); H. W. R. Davey, Esq. (Beccles); C. M. Durrant, M.D. (Ipswich); H. Landor, Esq. (Norwich); S. Payne, Esq. (Norwich); J. B. Pitt, Esq. (Norwich); J. F. Watson, Esq. (Norwich): and others. As visitors there were present W. B. Francis, Esq.; and W. B. Nichols, Esq. The late President, W. E. Crowfoot, Esq. (Beccles), was unavoidably prevented from attending the meeting.

NEW MEMBERS.

The following gentlemen were admitted as members of the Association and of the Branch: W. Cooper, Esq. (Bury St. Edmunds); and J. F. Watson, Esq. (Norwich).

OFFICERS OF THE BRANCH.

The following gentlemen were elected officers of the Branch:—*President:* W. H. Ranking, M.D. (Norwich); *President-Elect:* C. M. Durrant, M.D. (Ipswich). *Honorary Secretaries*—for Suffolk, J. B. Chevallier, M.D. (Ipswich); for Norfolk, J. B. Pitt, Esq. (Norwich).

VOTE OF THANKS TO DR. KIRKMAN, LATE SECRETARY OF THE SUFFOLK BRANCH.

Dr. Durrant (Ipswich) proposed, Mr. Davey (Beccles) seconded, and it was resolved:

"That this meeting deeply regrets the retirement of Dr. Kirkman from the Secretaryship of the Suffolk Branch, and tenders him its best thanks for his unremitting and talented exertions during a period of upwards of six years."

Mr. Cadge (Norwich) proposed, Mr. Adams (Bungay) seconded, and it was resolved:

"That Dr. Chevallier be requested to accept the office of Secretary to the Suffolk division of the East Anglian Branch of the British Medical Association, vacated by the resignation of Dr. Kirkman."

PLACE OF MEETING FOR NEXT YEAR.

Mr. Davey proposed, Mr. Landor seconded, and it was resolved:

"That the next meeting of the East Anglian Branch of the British Medical Association be held in Ipswich; and that Dr. Durrant be the President for the year."

MEDICAL REFORM.

Mr. Adams proposed, Mr. Landor seconded, and it was resolved:

"That the prospect of the Medical Reform Bill being speedily passed into a law, is hailed with the utmost satisfaction by this meeting."

PRESIDENT'S ADDRESS.

Gentlemen,—While expressing to you, as in duty bound, my acknowledgments for the honour you conferred upon me in electing me your president, permit me, in my own name and that of our Norwich associates, to welcome the East Anglian Branch to our ancient city.

It is now many years since a meeting of the Association has been held in this locality, for of late the number of our associates has been so small as scarcely to entitle us to that privilege. But this reproach I trust does not now attach to us; the accession of new names having placed us in a more favourable position in relation to the parent society.

It is almost unnecessary to allude to the high and influential position the British Medical Association has now attained. It enrols among its ranks so many of the most distinguished members of our profession, that not to belong to it seems almost a reflection. It is, I firmly believe, only from ignorance of its importance as an engine of medical polity, and of the agreeable interchange of friendly and professional courtesies which it favours, that the entire profession does not enlist under its banner. But this time may yet come; and when it does, it will not fail to vindicate for our calling a higher position among our social institutions than it has yet possessed. I would, therefore, urge upon those gentlemen who have honoured us with their presence as visitors to take this opportunity of joining our ranks; so to do will, I sincerely believe, afford them pleasure as well as profit. Akin to the prosperity of the Association is the character of its Journal. I think you will admit with me that, under its present Editor, it has reached a great degree of excellence. It is still, however, capable of improvement; but for that improvement you must not look so much to the Editor as to yourselves. On the members of the Association, and on the members alone, it depends whether or not our Journal shall be in the first rank of medical periodicals. If they, the two thousand and odd, the cream, so to speak, of the profession in the provinces,—hospital physicians, hospital surgeons, as well as others who, though not public officers, are men of the highest local renown, and of the greatest extent of practice,—if these will but supply the records of their practical observation, and the results of the deliberations of matured and cultivated minds, they would furnish the Journal with a mine of scientific wealth, which, if equalled, could not be surpassed. This is not yet the case. As former Editor I can speak from experience, that the Journal never has had the support from the members of the Association which it has a right to command; and without such aid vain must be editorial efforts, however talented, to raise it to the eminence to which it ought to attain.

In addresses of this kind it is customary to allude to all other topics of current interest. One of these is Medical Reform. What to say, gentlemen, on this threadbare subject, I scarcely know. There are two Bills now before Parliament, each with its supporters and its enemies; one or both will probably be "burked", and this session will find us as far from legislative reform as ever. This, gentlemen, will not distress me; I have never believed in legislation, so far as the internal economy of the profession is concerned. In the meantime there is ample scope for the profession to reform itself; by the examining bodies requiring such a standard of general education as shall ensure that every aspirant to medical practice has had the education, and therefore the chances of acquiring the feelings, or I might say the *instincts*, of a gentleman; by every one, when once enrolled in our ranks, remembering that he has entered an honourable and dignified *profession* and not a *trade;* by each offering to the other a high minded and fraternal regard, and avoiding every unworthy artifice to elevate himself at the expense of his neighbour. Were these feelings more generally distributed we might, as regards our internal economy at least, safely trust to the impulses of a

generous *esprit de corps;* and whether Parliament did or did not accord to us the consideration which is unquestionably our due, we might hope for the prospect of fulfilling our arduous duties, without the occurrence of those unhappy bickerings and differences, which have so often placed our profession in an unenviable light before the public.

Another medical question of much interest at the present time, is the position and treatment of Union Surgeons. These gentlemen cannot fail to have the sympathy which is accorded, in every class of society, to overwork and under-pay; but while feeling for the hardships they endure, and the insults and annoyance to which they are subjected, we cannot entirely forget that they are their own worst enemies. Had they not so long estimated their services at a low figure, the Guardians of the poor would long since have paid them the compliment of valuing those services as they really deserve to be valued. But while every vacancy is eagerly sought after with the often chimerical idea of gaining a footing in a district, or for the less creditable motive of keeping some one else out, what are the Guardians to think, but that an office so sought after must be worth having, and that the demand for increased salary is uncalled for. Low as the remuneration may be, there is too often some one ready to oust his neighbour by offering to work cheaper; and thus the independent and conscientious surgeon, if he remonstrates on the indignities and losses to which he is subjected, is superseded by some mean spirit who, in entering an honourable and liberal profession, has mistaken his vocation. While such things are done,—and that they are done the past year will proclaim,—Mr. Griffin's praiseworthy efforts will, I fear, do but little to advance the cause he has so unflinchingly advocated. What is wanted is, that the profession should be true to itself; were this so, society would no more dare to tamper with its interest in this or in any other matter, than with those of the law or the church.

Some of the journals have recently been occupied with a discussion on the propriety of orthodox medical men meeting a certain sect called homœopathists in consultation. As the readers of the *Provincial Medical and Surgical Journal* well know, my views have been, while Editor, expressed without reserve, to the effect, that homœopathy should be treated by us as any other absurdity or imposture. These views I still entertain; and though such a disgraceful compact is occasionally entered into by those from whose professional standing we might expect better things, I unhesitatingly avow my conviction, that for a practitioner of the regular and true system of medicine to co-operate with a professor of homœopathy, is a dishonest and a degrading act. It is dishonest, because he lends his countenance to what he knows, to say the least of it, to be a dangerous fallacy;—it is degrading, because he does so either for the miserable object of a paltry fee; or because he has not the moral courage to discountenance the capricious vagaries of some wealthy or titled patient.

The subjects briefly alluded to seem to be those of most general interest, and therefore entitled to passing notice at this meeting. As regards the *science* of medicine itself, we have sufficient ground for congratulation. While the public mind is led away by follies which might cause the credulity of the dark ages to blush for shame, our profession works on steadily and unselfishly, enlarging the limits of medical knowledge, and thus alleviating human suffering and adding to the sum of human happiness. No labour is too exhausting, no sacrifice too great for the many energetic spirits amongst us, so that disease may be combated and its causes abolished. The dens of infamy, the squalid abodes of poverty, the reeking hotbeds of fever and cholera, are all in their turn looked into and ameliorated; and though others have largely participated in the good work, it can truly be said, that medical science is the great engine which has elaborated these unappreciable benefits, and medical practitioners have been the pioneers.

CASES AND COMMUNICATIONS.

Mr. Landor read a paper illustrating cases of Moral Insanity.

Mr. Cadge exhibited some specimens of Fibroid Tumours which he had removed from the abdominal region.

It was the unanimous request of the meeting that the papers of Mr. Landor and Mr. Cadge be published in the Journal.

Mr. Durrant made a few remarks on carcinoma of the stomach.

The proceedings of the day were terminated by the members dining together at the Norfolk Hotel, under the Presidency of Dr. Ranking. The Vice-chair was occupied by Mr. Pitt.

IRISH MEDICAL ASSOCIATION.

FOURTH ANNUAL MEETING.

The fourth annual meeting of this Association was held on Tuesday, June 2nd, at half-past twelve o'clock, in the Board-room of the College of Surgeons of Ireland: H. Kingsley, M.D. (Roscrea), President, in the chair.

The President, on taking his seat, said that the object of the Association was to protect the interests, to preserve the respectability, and to increase the usefulness of the medical profession generally. Several deputations from local associations throughout Ireland were present.

The Secretary (Dr. Quinan) stated that within the last two days seventy-six letters of apology had been received from medical men who had been unable to attend the meeting, but who were most desirous of doing everything in their power to promote the object of the Association. Several local meetings in aid of the objects of the Association had also been held. At a meeting held at Middleton on the 29th of May, a resolution was passed pledging the assembly to cooperate most strenuously with the Irish Medical Association in its efforts to obtain redress of the grievances under which the profession laboured. At a meeting of medical officers of unions held in Limerick, an association called the Medical Protective Society was formed, to protect the interests of the profession, and to cooperate with the Irish Medical Association and the Cork Protective Association; and at a meeting held at Mountmellick resolutions were passed deprecating the abuse of the dispensary ticket system, and a deputation was appointed to attend the present meeting. The Secretary then read the

REPORT OF COUNCIL.

"At the termination of this the fourth year of the Irish Medical Association, your Council, in submitting their report, do not hesitate to express their increased confidence in the success of its operations, and their belief that the combined efforts of its members must ultimately achieve the several legitimate objects for which your Association has been organised.

"Your Council continued throughout the past season to hold their monthly meetings with regularity, and to devote their earnest consideration to the various topics in which your Association is so deeply interested.

"Your Council prepared, and caused to be presented to both Houses of Parliament, petitions embodying the leading grievances of which the medical officers of dispensaries have such just cause to complain, and seeking for such a change in the Medical Charities Act as might lead to their redress. These grievances may be classed under the following very important headings—viz.: 1st. Securing permanency of office. 2nd. Right by law to payment for extraordinary services. 3rd. Amendment of the Vaccination Clause. 4th. Protection to the medical officer against persons in comfortable circumstances procuring dispensary tickets. 5th. Payment, wholly or in part, from the Consolidated Fund. 6th. Claim to superannuation pension.

"Your Council would here, in justice to themselves, remark, that as regards the payment of salaries of medical officers out of the Consolidated Fund, they do not, on more mature reflection, feel now disposed to press for its adoption, for the following reasons:—1st, the request is one not likely to be conceded; 2nd, assimilation to the precise status of the union medical officers of England is not desirable; 3rd, salaries might be curtailed, but not augmented; 4th, loss of caste, to a certain extent, would inevitably result from being classed, as in England, with schoolmasters and midwives; and, lastly, several of your members who had at first been in favour of the amendment in question, have since seen reason to modify their opinions.

"Your Council, owing to the untimely and unexpected dissolution of Parliament, have hitherto failed in obtaining the desired changes in the law. Pending the general elections, however, your Council, taking the initiative from their able and energetic brethren of the Cork Association, issued circulars calling on all the members of your body to exercise their franchise in favour of such candidates only as would pledge themselves to watch over the interests of the medical profession if returned to the new Parliament, and they are happy to record that many such pledges have thus been obtained.

"Your Council at their various meetings were led to discuss many subjects of vital interest to your members as well as to

the medical profession at large. The manifest unfairness of conceding to dispensary patients, at the expense of the medical officer, privileges which would scarcely be claimed by the better classes of society, occupied their attention. Visiting tickets are constantly issued in cases of trifling illness where patients are well able to attend the dispensary, and where they do not even always take the trouble of sending for the medicines, or using them after the visit has been paid. Guardians also, committee men, and the gentry, mistaking their duties for their patronage, very often in the case of domestic servants and dependents, if not of friends and neighbours, command the services of the medical officer, as if the dispensary act had been framed rather for their private convenience than for administering relief to the poor and destitute. When patients thus able to attend the dispensary apply for visiting tickets, your Council would suggest that they ought to incur the risk of for ever after forfeiting their claim to relief; and your Council are of opinion that the growing abuse of persons in comfortable circumstances imposing themselves on a dispensary as paupers, may best be obviated by granting to the person issuing the ticket the immediate power of cancelling the same on remonstrance of the medical officer, or, in default of compliance, that such party should be held conjointly liable with the patient for both advice and medicine.

"As a general rule, your Council maintain that the medical officer of a dispensary should not be required to perform any service which would compromise self-respect, or be contrary to the etiquette of an honourable profession; and they are, therefore, of opinion, that when in any given case additional advice is sought and specially paid for by a dispensary patient or his friends, the dispensary officer should be thereby exonerated from any further responsibility in the case unless *his* services are specially paid for likewise. They apprehend, also, that where the medical officer's advice is wilfully set aside or neglected, it should remain optional with himself to give further attendance or not as he may think proper.

"Your Council contemplate with satisfaction the prospect of the Medical Reform Bill being speedily passed into law, and, so far as it is possible, to prohibit disreputable and dishonourable practices, which are admittedly unbecoming the members of a liberal profession, such as accepting degrading tenders, with the effect of displacing professional brethren from office, or advertising for practice in the public newspapers, or by handbills.

"Your Council suggest that the General Medical Council should be given the power of removing the names of such delinquents from the proposed 'Register of Qualified Practitioners;' and that the office of the Council might in this respect, with the greatest advantage, be assimilated to that of the Benchers of the Queen's Inns.

"It is with the utmost pleasure and satisfaction that your Council can now point to the flourishing associations in Cork, Belfast, Waterford, Wexford, Limerick, and Carrick-on-Shannon, etc., and they trust that ere long, in every part of the kingdom, their medical brethren will form similar associations, and co-operate with your Council.

"It is the earnest hope of your Council, that the whole of the medical profession of this kingdom, whether holding Poor-law appointments or otherwise, will now make common cause with their oppressed brethren in urging their claims for relief on the attention of the legislature, and that, joining heart and hand with them in denouncing the unwarrantable and unjust inroads made upon the rights and privileges of their common profession, they will not relax their efforts until ample and comprehensive measures of relief from the wrongs from which they at present suffer have been conceded.

"Your Council are deliberately of opinion that in no other profession or calling in life are men of the same intelligence, education, and acquirements subjected to the same petty tyranny and insults, while the singular anomaly exists that scarcely any other class in the community possess a greater amount of dormant power and influence. The unaccountable apathy which pervades all ranks of the profession has, your Council believes, been often seized on with avidity, as affording fair opportunity for the exercise of private pique, personal dislike, or party prejudice, in illustration of which your Council need only refer to the long array of investigations, trials, reprimands, and acquittals so prominently set forth in the recent report of the Poor-law Commissioners.

"Your Council, without impugning for a moment the perfect fairness of the Commissioners in conducting such inquiries, nevertheless cannot withhold an expression of their regret that their brethren, whose obvious interest it has ever been faithfully and honourably to fulfil the trusts committed to them, should have their comfort at least temporarily destroyed, and their respectability jeopardised by the facilities which the present system affords for prosecuting often unreasonable complaints and groundless accusations."

Dr. Purefoy (Lucan) moved—

"That the report be adopted and circulated."

The respectability which the profession so justly merited never could be attained without becoming unanimity. It was unfortunately too true that daily instances were occurring which gave the public abundant opportunity for coming to the conclusion that there was no such thing as unanimity or extensive good feeling amongst the medical profession; and as long as such a state of things continued, and until gentlemen made greater efforts on behalf of the Association, they could never succeed as they wished or deserved.

Dr. Quin (Nenagh) seconded the resolution.

Dr. Waddy (Wexford) said that a part of the report was wholly inapplicable to the county he represented. In no instance had the medical officers in the Wexford union ever had reason to complain of the salaries they received, of the treatment of the guardians, or of the conduct of the dispensary committee. On several occasions attempts made by uninfluential persons to control their salaries had been scouted by the majority of the guardians of the Wexford, Enniscorthy, and Gorey unions. All the medical officers in these unions had salaries of £100 a year each, and every reasonable request that they had made to the dispensary committee had been granted.

Dr. Quin could make a similar statement with respect to the Nenagh union.

After some further discussion it was agreed that the following addition be made to the report:—"Your Council, however, have much pleasure in stating that they are aware of many honourable exceptions to such cases."

The report was then unanimously adopted.

MEDICAL CHARITIES ACT.

Dr. Armstrong moved—

"That, strictly adhering to the points specified in the report, we adopt a petition to the House of Commons founded thereon; and that we also request that every member of the Association will use his influence with members of the House of Commons, in order that general attention may be directed to the subject."

The petition specified six points, in respect of which it urged that the Medical Charities Act was defective and unjust. The first was, that there existed no security for permanence of office, a medical officer of a union being obliged, no matter how long his tenure, to undergo a new election, and to be subject to the opposition of other candidates on the recasting of dispensary districts. Instances had come to the knowledge of the Council, of men of long standing being dismissed without any fault of their own, in consequence of this defect in the law. The second point was, that the law in reference to vaccination had proved a signal failure; and that the thirteenth section of the Medical Charities Act, which obliged dispensary medical officers to vaccinate gratuitously all applicants without distinction, formed a just cause of complaint and dissatisfaction. In the city of Cork lately the small-pox broke out, and the public authorities were at a loss what to do; and nothing could be done until the mayor of Cork and others joined in establishing a system of vaccination out of their private resources. The third point was, that the existing power of cancelling tickets for medical relief obtained by persons in comfortable circumstances was imperfect, because, pending the meetings of the dispensary committee, which only took place once a fortnight, the medical officer was bound to visit the party. He was happy to find that the prevalence of abuses in the distribution of such tickets was not altogether general. The fourth point was, that as in England half the salaries of medical officers were paid from the Consolidated Fund, a similar arrangement should be adopted for Ireland. The fifth was, that no legal provision was made for extraordinary services to which the dispensary physicians of Ireland were liable from the outbreak of alarming epidemics which so often occurred in this country. The last point was, that in no branch of the public service was a claim for superannuation or a pension stronger than in that of the dispensary medical officer, whose public duty was one of continued toil, responsibility, and hazard. He (Dr. Armstrong) would urge upon the members the necessity of applying to members of Parliament to get them to support their views. All the members returned by the city and county of Cork had promised to uphold in

every way the rights and privileges of the profession in Parliament.

Dr. Nicholson (Vale of Avoca) seconded the resolution. He had suffered like his brother members of the profession, though not to the same extent as others. His committee had been very kind to him. He knew nothing at all about the Poor-law Commissioners, but he believed them to be all honourable men. As to the Poor-law guardians, they were an exemplification of human nature, for they wheedled, coaxed, coerced, or bullied the medical men to do their work as cheaply as possible. The public in general were disposed to take the same advantage of them that the guardians sought.

The motion was put and carried.

Dr. Smith proposed—

"That we are of opinion that £100 a year should be fixed by law as the minimum salary to any man in charge of a medical district."

Dr. Macnamara seconded the resolution. It was a ridiculous and degrading thing for any medical practitioner to be forced to accept less as his yearly stipend, than was given to a walker in one of the large establishments in Dublin, who was not required to possess any great amount of education. About an hour ago he was coming from Kingstown with a guardian of one of the districts in the west of Ireland, who told him of the case of the doctor of his dispensary. The medical gentleman in question was coerced to live in the district, and was obliged by the terms of his agreement to keep a horse, having to support in addition a wife and eight children upon a salary of £80. "Had he any practice?" "None whatever," was the reply. "But could he possibly support himself on such a sum?" "He did not support himself; he vegetated," was the reply. The fact was, he kept a couple of acres of ground, by which he managed to subsist, for one could not call it living. "But how about the horse?" "Oh, he keeps a little pony which he allows to feed about the roads, but he never puts his legs across it, and only has it to fulfil the terms of his contract with the guardians." This gentlemen had been connected with the dispensary district for twenty-five years. This was a state of affairs that should be put a stop to at once, and the only way in which it could be stopped was by forming associations such as theirs amongst the profession throughout the length and breadth of the land. There was a great deal of blame attaching (and he himself was willing to take share of it) to the profession generally in Dublin, and to every man who hung back from this Association. They were all well off in town—he was glad of it, and he wished it were better; but because they were well off, they owed a debt to the profession which had given them that position; and he should like to see all their professional brethren, from Sir P. Crampton to the youngest practitioner who had passed the College of Surgeons on the last day, bound, as it were, to come forward and join the Association. He wished they could drive or induce the profession at large to join the Association; the subscription was a mere nothing, and practitioners threw away the sum in a thousand ways.

The motion was then put and carried.

Dr. Walsh proposed the following resolution:—

"That the medical officer of a dispensary ought not to be required to perform any service which would compromise his self-respect; and that when their advice is wholly set aside or neglected, some discretionary power should be left to him to afford further advice or not, as he may deem expedient; and that where in any given case additional advice has been sought and specially paid for by the dispensary patient's friends, the dispensary officer, in justice to the ratepayers, should be thereby exonerated from further responsibility."

The experience of every medical man would furnish instances in which the dispensary officer had been called on to visit the servants in families whom he did not attend.

Dr. Ledwich seconded the motion, which passed.

MEDICAL REFORM.

Dr. Tabuteau moved—

"That we beg to express our warm concurrence in Mr. Headlam's Bill, calculated as it is to improve and elevate the status of the profession generally."

This Bill was of even more importance to the public than it was to the profession. It was a fact known to many that by want of early education and of subsequent professional instruction, many had been left in a state totally unfitted to occupy the place of professional men. The Bill under consideration proposed to amend that defect, and called for early education and a proper curriculum of professional instruction. Some apprehension existed that this Bill would not be carried into law, arising in a great measure from the apathy of some of the Irish members, the total ignorance of the subject by which others were possessed, and the absolute opposition that arose in the minds of many of the English members at the name even of anything that was Irish; and as a member of the College of Surgeons, he might mention that they had been at immense trouble and expense to frame a measure that in the opinion of those best calculated to form an opinion would be for the respectability of the profession and the good of the public.

Dr. Brodie seconded the motion.

Dr. Donovan had been instructed by the parties that he represented to bring forgard their objections to Mr. Headlam's Bill, in which he fully concurred. The first objection was to the constitution of the Council under it, which was to sit in London, and to be composed of thirteen English and six Irish members, while he presumed that all the members named by the Secretary of State would be English. If such a centralising plan were carried out, the Irish College of Surgeons would share the fate which was intended for the Lord Lieutenancy and the law courts, and would, before many years should have elapsed, be, like the Parliament House, merely a memento of bygone greatness.

Dr. Jacob explained that full power was given by the Bill to any person to register, if he pleased, as a licentiate in medicine or surgery, qualified to practise in medicine, surgery, pharmacy, and midwifery, to recover his fees, and to retain any situation he filled at present. But no one would be permitted to register purely as a physician unless he abandoned pharmacy; and the reason was, that the College of Physicians desired, on principle, that their members should not claim a power of recovering their fees. They wanted to stand in the same position as members of the bar.

Dr. Donovan considered Clause xxiii as a very stringent and penal clause, destructive of all freedom of action. He objected also to the latter part of Clause xxiv, on the ground that its object was obviously the protection of quacks of the very worst description. Clause xxxii provided that "after the passing of the Act, no person who was not registered under it should be deemed to be a legally or duly qualified physician, surgeon, or medical practitioner," etc. Now, before the passing of the Medical Charities Act, a great many practitioners held no qualifications at all, and yet those persons had their rights protected. The present Bill would ignore their rights, and treat them as unfit to hold any appointment. The right of the University of Glasgow to grant the degree of Magister Chirurgiæ was ignored; and a vast number of persons in Ireland held situations in virtue of that degree. He moved the following amendment:—

"That the Bill introduced into Parliament by Mr. Headlam is cumbrous in its machinery, irksome to the profession at large, unjust to physicians engaged in pharmaceutical pursuits, unfair to students and private lecturers, and in no degree subversive of quackery or illegal practice."

Dr. Ffolliott seconded the amendment.

Dr. Williams had been present during a portion only of the observations made by Dr. Donovan, but he would show that the objections which had been made to the Bill had no foundation. The first statement which he had the opportunity of hearing was to the effect that the Bill would operate harshly and injuriously upon existing students and private teachers. In the first place, one of the objects which had all along been kept most prominently in view was, that the measure was to have no retrospective operation. It was perfectly possible that it might not be perfect in all its details, and gentlemen with local knowledge of different parts of this great empire might have experience of particularities and individual cases which were not known to the framers of the Bill, in which it might be attended with a retrospective operation; but the way to remedy this was, not to condemn the whole Bill for a trifling oversight in detail, but to point out the defect, and to suggest an amendment. He next came to Dr. Donovan's assertion, that the rights of persons holding diplomas of Magister Chirurgiæ from the University of Glasgow were not recognised. In the same way, reference to the Trinity College diploma had been omitted, but they sent up a suggestion to the Committee of Conference, pointing out the oversight, and requesting that it might be remedied; and forthwith Mr. Headlam was written to, and in the next edition of the Bill that was published the matter was set right. It was somewhat remarkable that the deputies from Glasgow, who had assisted in preparing the draft, should not have observed the matter to which attention was now called. It had been suggested to him that that iden-

tical degree had been decided not to be a legal qualification at all. But was this any reason for disqualifying the holders of it? No; they had placed belief in the assumption which a public body held out that they had power to grant this license, and on the faith of that representation they armed themselves with what proved to be an illegal qualification; but this was no fault of theirs, and, illegally qualified though they were, he would nevertheless be a strenuous advocate for their registration. Dr. Donovan had said that a fee of six guineas would be exacted from every body; but the operation of the Bill was to charge every existing practitioner a sum of ten shillings only for registration, and, that once paid, never to call upon him any more. It was true that a further charge of ten shillings was sanctioned when a change took place to another division of the United Kingdom; but he did not think this any very serious annoyance, when it was remembered that for this amount an Irish practitioner choosing to settle in England would be legally qualified in every respect, whereas before he was illegally qualified in every respect; and ten shillings for such a privilege was about the cheapest purchase he had ever heard of in his life. He could conceive a measure under which more advantages would be given to the profession, if it were possible to get a House of Commons to pass it—such, for instance, as one by which quackery would be abolished; but, were he himself returned to the House of Commons, and were he to act, not as a medical man, but as a member bound by the spirit of the age, he dare not propose such an enactment. Wherever Parliament and the legislature were the paymasters, Parliament and the legislature had a right to define the qualification of the medical officers in their employment. But they had no right to enter the sick chamber, and pry into its recesses, and to say to the sick person, "You shall have such a man to attend you, and you shall not have such another." They could not conflict with public opinion by the passing of such a Bill; and such a clause would be scouted out with derision by the House of Commons. But what were the advantages that the Act did confer? In the first place, it conferred one great advantage, which would be felt but by few of the existing generation: they were not to think for themselves alone, however. One of the greatest grievances under which the profession suffered was the too facile admission that was afforded to persons who had not obtained that amount of education which was desirable. He would ask whether, if proper preliminary education, not alone in professional attainments, but in general literature and acquirements, had been exacted from persons before obtaining their profession during the last quarter of a century, would not the profession be in a sounder, safer, and more wholesome condition than at present? The Bill would give the existing members of the profession the enormous advantage of uniformity of privilege throughout every part of the United Kingdom; it would be no longer in the power of persons, if an Irish physician went to settle in England, to flout him with the remark, "You are violating the law." With regard to the hardships spoken of by Dr. Donovan about existing students and private lecturers, all that could be said on that score was, that there was an express clause enabling the Council to make rules and regulations for the existing students. The private lecturers would remain in precisely the same predicament they were in at present. It had also been said that this Bill tended to centralisation, and gave undue and inordinate power to the Central Council. It was right to state that great care had been taken to give considerable powers to the Local Council, which must of necessity consist of representatives of this division of the United Kingdom; and the working of them would, therefore, be chiefly in the hands of the Irish members upon that Council, with an appeal to the Central Committee, of course, in case their acts were objected to. Consequently, he believed the objection on the ground of centralisation fell to the ground in like manner.

Dr. Jacob said that they were all greatly indebted to Dr. Donovan for having raised the discussion on the Bill. It was the desire of the Council of the College to meet every suggestion that might be made, or to explain if possible any difficulty that might be suggested to them in reference to it. With reference to the degree of magister chirurgiæ, the Council were not in any way responsible for the operation of the Bill. The subject had been brought before the House of Lords; it was still a vexed question in Glasgow; and it was not one for that assembly to concern itself much about. During the last two years, the Council had been hammering with all their brains at this Bill. There was not a point that Dr. Donovan had alluded to that had not been well threshed, and every effort had been made to effect the very objects that he had suggested. Lord Elcho's Bill was designed to place the Irish profession under the government of a medical board without a single representative member of their body on it, and whose powers would be worse than anything that had been given to the Poor-Law Commissioners. They might imagine to what a length it went when it proposed to seize the whole income of that College—to take the £25 fee paid by the students, and to put them into the pocket of a treasurer, and merely to allow the College so much towards helping its museum. Dr. Donovan had complained before Dr. Williams came into the room, that too small a number of Irish members were proposed by Mr. Headlam's Bill to belong to the "General Council". Why, the Council had been fighting to get a larger number than that fixed by the Bill. Lord Elcho's Bill would give only two councillors for Ireland; so that if that Bill were to pass, they would have two government nominees to deal with them in any shape or form they pleased.

Dr. Donovan withdrew his amendment. He had moved it to discussion, and he hoped by doing so he had done no injury. So far as he was individually concerned, he did not like either Bill.

Dr. Hynes (Kinvara) moved—

"That the prospect of the Medical Reform Bill being speedily passed into law is hailed with the utmost satisfaction by this meeting; and that the investing the General Medical Council with powers similar to those of the Benchers of the Queen's Inns, by enabling them to remove from the national registry the names of parties guilty of unprofessional practices, would be a further benefit to the medical faculty and an advantage to the public."

The resolution was applicable to every person that practised unprofessionally. In order to see the necessity for the power referred to, it was only necessary to read certain advertisements. Hitherto, they had thought it disgraceful to have a medical practitioner advertising to give professional advice and medicine for five shillings; but lately a gentleman had come forward, advertising to give these things for three shillings; so that by and by it would probably be down to the porter's fee of one shilling.

Dr. Faussett seconded the resolution. The entire community were interested in the moral purity and dignity of the medical profession being maintained at a high standard; but the man who got rid of solemn obligations by a side wind, and descended to such low practices as those alluded to, tarnished his own character, and deserved to be expunged from the roll of practitioners. Unfortunately, it happened that if any medical man from a high sense of honour threw up a medical appointment, owing to pressure put upon him by guardians, too frequently he had twenty persons, members of his own profession, coming forward to take the situation. £100 a-year ought to be the minimum salary to every medical man holding a public appointment.

The resolution was then put and carried.

THE CORPORATE BODIES AND THE POOR-LAW MEDICAL OFFICERS.

Dr. Darley proposed—

"That we beg to express our regret at the apparent indifference hitherto shown by some of the corporate bodies towards the interests of their alumni—the Poor-law Medical Officers; and that the medical and corporate bodies of this country be respectfully and earnestly requested to support the petition of this Association."

They were, doubtless, under obligations to the College of Surgeons, who had assisted their efforts, and allowed them to hold their meetings in that building; but there were others, and amongst them those in high places in the city, who had not assisted them as they might: and this resolution was brought forward with the object of endeavouring to obtain their aid and countenance in their efforts to right themselves, which, though it might take time, they would eventually succeed in doing.

Dr. Jacob seconded the motion, and wished to know what excuse those could give who hung back from the Association. Was the terror of the Poor-Law Commissioners, or of any other party, hanging over them, that made them chary of their efforts in behalf of their own cause and profession? Some said the attempt was of no use; but on no occasion on which the profession had stood out in numbers, with energy and activity, had they ever failed in gaining their point.

The motion was put and carried.

VOTES OF THANKS.

Dr. Donovan moved a vote of thanks to the President and Council of the Association.

Dr. Barrett (Castlebar) seconded the motion, which passed unanimously.

Dr. Macnamara moved a vote of thanks to the press for its assistance to the society.

Dr. Quin seconded the motion, which was adopted.

Dr. Hynes moved—

"That the special thanks of the Association are due, and are hereby given, to Dr. Quinan, for the great zeal and ability with which he has discharged the duties of secretary, and for his anxiety to promote the welfare of the profession."

Dr. Walsh seconded the motion; which was put from the Chair, and unanimously adopted.

Dr. Quinan could only say he was most grateful, and that he had done heretofore all he could for the advancement of the profession. He would wish that each gentleman, when he went home, would assist in forming in his own locality a nucleus or centre with which he could communicate on the part of the Association. In this way, their resolutions could be scattered through the different districts, and matters of importance communicated to the various members.

Dr. Hanrahan moved—

"That the thanks of this meeting are due, and hereby given, to the local medical associations established throughout the country, particularly the Cork Medical Protective and Limerick Associations."

If the Cork Association had done nothing beyond getting a medical man reinstated who had been dismissed by a sealed order of the Commissioners, he thought they would be deserving of the thanks of the profession.

Dr. Walsh seconded the motion, which passed.

After the appointment of officers for the ensuing year, the meeting adjourned.

Editor's Letter Box.

THE UNIVERSITY OF ST. ANDREW'S.

Sir,—I was glad to see your name amongst those who waited on Lord Palmerston on Tuesday, the 9th inst., in favour of Mr. Headlam's Bill on Medical Reform; and although you are stated to have been there as the representative of the Association, I fain would hope that you were not, and will not be, unmindful of the interests of the graduates of St. Andrew's. I need not point out to you the difference between St. Andrew's *now* and St. Andrew's *fifty years ago*; nor need I allude to its present published examinations to illustrate the respectability and practical value of its degrees; yet it would seem by Lord Elcho's Bill, that those of our legislators who formed the Select Committee of the late House of Commons, to whom was delegated this much vexed question, ignored altogether the admissibility of St. Andrew's to a representative seat at the council, and thus cast an unwarrantable slight on the very many gentleman who emanate from that University.

Even in Mr. Headlam's Bill, I do not think we are justly dealt by when I find that *one* only is to be nominated as the joint representative of Glasgow, Aberdeen, and St. Andrew's; and considering that at the last meeting of the Medical Reform Committee of the Association, it was proposed and carried, that the University of Durham and the Dublin Apothecaries' Company be excluded from the council; I would urge that Glasgow, Aberdeen, and St. Andrew's should each send one representative, thus leaving the council in number as before. I may be excused, I hope, in thus calling your attention to this matter, when it is apparent how earnestly all interested parties endeavour to exclude us. In a late manifesto of three Scottish Universities, St. Andrew's is not named: and not long since it was found necessary for Mr. Ellice to ask of Mr. Cowper whether he had asserted, that degrees were granted at St. Andrew's without examination. Now, although this was denied, the mere asking the question and simple denial would imply, that the discipline is still lax and very different from what it is.

It would not be difficult, were it necessary, to name other universities and colleges *south* as well as *north* of the Tweed, where, in times past, the shortcomings were sufficiently manifest; and therefore it is somewhat hard that St. Andrew's should be singled out as a scapegoat, despite of the very improved character of its examinations, as may be known to all who are not wilfully ignorant. Thus, Sir, whether Medical Reform be obtained or not this session, I do hope that those who, like yourself, are so placed as to be useful, will not shrink from advocating our claims for further consideration, and for securing to so large a body of graduates a sufficient and legitimate representation. I am, etc., M.D. St. Andrew's.

June 15th, 1857.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—I shall feel obliged for space to inform the Poor-Law Medical Officers that all the reports of our late meeting were circulated agreeably to the new postal regulations, which require only one penny to be paid for each packet under four ounces; and that the petition to Parliament, though written and enclosed with the report, is treated as printed matter. I mention this circumstance, as I regret to find a great many medical officers have been surcharged twopence, through the ignorance or cupidity of the local postmasters, who could not, or would not, understand that an envelope with the ends cut open is the same as a piece of paper wrapped round the report. Previous to their transmission, I enclosed a specimen of the documents to the General Post-Office, and was informed that one penny would free them; the overcharged twopences are all recoverable.

Since our meeting on the 28th ult., thirty-six unions have joined the association; and I have accounts of one hundred and twenty-five petitions already presented to Parliament in support of our general petition, and others are going in daily.

Mr. Drummond, in his address to the House on Friday, June 12th, said:—"The same principle regulated the allowances made to the doctors, which were reduced to so low a sum, that it was utterly impossible for those gentlemen to attend properly to the duties of their position upon such terms; and everybody accustomed to attend these boards must have noticed that when physic was prescribed to a sick man in the workhouse, the guardians had no objection to it; but when wine or other nourishment was ordered, they usually rose against it." (See *Times*, January 13th.)

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, June 16th, 1857.

PROXY VOTES IN ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from E. Barber, Esq.

Sir,—Mr. Allison expresses surprise at the number of votes polled on the day of election at the Medical Benevolent College, and asks for information. If I mistake not, the art of success consists not so much in the number of friends each candidate may have, as in the multiplication of votes; canvass not for votes only, but for the voting papers also, and relieve the governors of all further trouble about them by undertaking to forward them to the secretary. We will assume that in any given case twenty papers are thus collected, each giving two votes for one particular candidate: some of the twenty governors vote for him only, some probably vote for two or three candidates, and some for as many as there are vacancies: at the last election there were six. We will further assume, that on the average three candidates are voted for in each paper. The voting papers so collected are to be given to an active and judicious friend, who will attend on the day of election and seek there friends of other candidates, who, like himself, have proxy papers not wholly filled up; and by mutual agreement the names of the several candidates they represent are added to the different voting papers, and thus to the forty votes which each took with him one hundred and twenty more are added. That I may not be misunderstood, we will take the case of one proxy paper only, with the name of one candidate only, marked with the governor's initials, giving two votes. There are six vacancies: the paper is taken charge of on the day of election by a friend, who finds five other gentlemen, each having a similar voting paper; and they mutually agree to add to the several voting papers the governor's initials to the names of the candidates they severally represent: thus converting the *two votes* originally given into *twelve* for each of the six candidates, to the prejudice, of course, of all candidates who have not a friend there to represent them. The governors whose votes are thus disposed of on the *quid pro quo* principle, have not, in many cases, any knowledge or suspicion of it; and it does not appear that the addition of a governor's initial, after he has filled up,

and signed his paper, is regarded as a forgery, or that votes so given have been questioned. A scrutiny and the striking off of all fictitious votes thus added, would probably give a different result to that which has been arrived at, and if it did not alter the position of those elected, it would, I believe, alter the position, and consequently the prospects of those who have hitherto been unsuccessful and who have yet to commence the struggle, and to some of whom therefore great injustice is done. I am sure that such an abuse needs exposure only to ensure its correction, and I am glad to hear that the council have determined to alter the mode of voting. I am sorry to say that ours is not the only charity to which these remarks apply, unless I am greatly misinformed.

I am, etc., Edward Barber.

Stamford, June 6th, 1857.

PROXY VOTES IN ELECTIONS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

Sir,—Having had some experience of the working of the Medical Benevolent College elections, I beg leave to add my little contribution to those which have recently appeared on this subject in your Journal.

The conclusion of the whole matter is, that under the present system, those candidates who have friends and money will succeed; those who have not, *never will*.

You may order the voting-papers to be returned direct to the Secretary of the College, but it will not diminish the exercise of undue influence; you may even declare canvassing a disqualification without ensuring a fair election; local and personal interests will prevail.

I need only cite one or two cases in the late election to prove the operation of such agencies in guilding the results. Nos. 28 and 29 on the list are, as far as anybody can judge, equally bad cases, yet one polls nearly 2,000 votes more than the other. No. 18 gets only 79 votes in two contests.

I believe the only plan which will give the penniless and the friendless any chance is for the candidates to gain admission *in rotation*, in the order in which they have applied and been placed on the list by the Committee.

I am, etc., Experientia Docet.

June 1857.

PEPTIC TREATMENT OF DIABETES.

Letter from David Nelson, M.D.

Sir,—My attention has been naturally drawn to the recent reports of the Gulstonian Lectures on Diabetes contained in our Journal, and especially to the following passage, which occurs in the number for May 16th, at p. 413. The lecturer there says:—

"Before bringing to a conclusion my observations on the influence of drugs in the treatment of diabetes, I would wish to allude to the action of pepsine—a substance at present occupying the attention of the medical profession, and *extolled as a remedy for diabetes*, amongst numerous other diseases. *I have myself, as yet, had no opportunity of trying its effects*; but my friend, Dr. Parkes, *a few days since*, made trial of it upon a boy affected with the disease, with the following results.

"Daily average of sugar for thirty-three days, under a prescribed diet and a warm bath, 1281 grains.

"Under a similar diet and warm bath, *and pepsine* (P. D. & S.) *given three times a-day*, the average of sugar for six days was 1667 grains.

"So that, in this case, the drug, to say the least, produced no beneficial influence."

I make no commentary upon the above extract, beyond taking the liberty of putting certain words into italics, and introducing a note of interrogation after the word "pepsine." But, at the same time, as these ideas were delivered before a College of Physicians, and have a direct reference to the doctrines enunciated by me for some years, I beg, with all deference, to refer my brethren of the Association to a second paper on the treatment of diabetes, not certainly by *pepsine so-called*, but by *Liquor Pepticus Praparatus*, a preserved gastric liquor, the publication of which paper was commenced in the *Lancet* of June 6th, p. 576, and will be continued. Regretting the necessity for this note,

I remain, etc., David Nelson.

Birmingham, June 1857.

"THE SIMPLEST OPERATION FOR PHIMOSIS."

Letter from F. Jordan, Esq.

Sir,—I am pleased to find the impression becoming every day more prevalent that the old, weighty, unnecessary, and formidable slit of both the integument and lining of the entire prepuce in phimosic contraction is no longer a justifiable proceeding.

Mr. Walker, an American surgeon, has described "a new operation for phimosis" in the Journal for June 6th, which is based upon a principle analogous to the one which led me to communicate a paper, with the above title, to the *Medical Times and Gazette*, Feb. 2nd, 1856. As I cannot but deem that operation (which requires only a pair of pulse-pressed scissors, and no assistant, superior, in all respects, to the one advocated by Mr. Walker), I shall, with your permission, take the present opportunity of describing it with the greatest possible brevity.

Local anæsthesia having being first induced (if deemed advisable) by the application of pounded ice for a minute or two, I introduce one blade of a pair of scissors (blunt-pointed, yet cutting to the end) between the glans and prepuce on one side of the penis, at a point midway between the mesial line anteriorly and the frenum posteriorly. Both layers of the prepuce being divided to the extent of a quarter of an inch, a similar division is made at a similar point on the other side. The prepuce is now retracted to the extent allowed by the incisions. This retraction brings into view another layer of mucous lining, which is divided on both sides to the extent permitted by the lips of the first wounds. The entire prepuce may now be retracted (and kept so) a piece of wet lint wrapped round the penis, and the whole supported by a suspensory bandage. In a few days the wounds heal in a transverse linear manner,—*no sutures having been used*,—leaving no trace of deformity, and a completely efficient prepuce.

I am, etc.,

Birmingham, June 9th, 1857. Frederick Jordan.

OPERATION FOR PHIMOSIS.

Letter from H. Davis, M.D.

Sir,—In the number of your estimable Journal for June 6 (page 497), a description is given of a new mode of operating for phimosis, by Mr. A. G. Walker, an American surgeon. While perusing his description it struck me that I proposed almost the same operation more than two years ago in the *Medical Times and Gazette*. Since then I have performed the operation in a similar manner four times, and still hold the opinion I then stated; viz. 1. That congenital phimosis consists of retraction of the orifice of the prepuce (integument and mucous membrane), and of the mucous lining of the prepuce. 2. That for removal of phimosis, incision of the orifice and subcutaneous incision of the mucous membrane are alone necessary. 3. That this operation requires no modification. In my mode of operation I do not find that any suture or stitching is required, as I believe the small incision of the orifice is necessary to form a good future orifice of the prepuce.

I am, etc., Henry Davis.

30, Wimpole Street, June 10th, 1857.

Parliamentary Intelligence.

PETITIONS.

Petitions in favour of Mr. Headlam's Bill have this week been presented from practitioners in Glasgow, Towcester, Northampton, Droitwich, Skipton, county of Wexford, and Ledbury; from John Thompson, surgeon, and Mayor of Hebburn; and from William Coulson and others, practitioners in London.

Petitions in favour of Lord Elcho's Bill have been presented from the Association of Graduates of the University of Edinburgh, and from J. Traill, of Arbroath.

Petitions against Lord Elcho's Bill have been presented from the Apothecaries' Society of London, from W. Coulson and others, and from Dumfries.

Petitions for Poor-Law Medical Reform have been presented from the medical officers of the following unions:—Tenbury; Bingg; Gainsborough; Cleobury Mortimer; Stratford-upon-

Avon; Chorlton-on-Medlock; Bury; Camelford; Cerne; Romford; King's Lynn; Bridport; Kingston; Henstead; York; Woburn; Chelmsford; Weymouth (3); Ringwood; Taunton; Bedford; Tendring; Market Bosworth; Kidderminster; Sedbergh; Mansfield; Rugeley; Rothwell district of Kettering; Axminster; 4th district of Malmesbury; and from Sunderland.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Birkett. On June 12th, at 48, Russell Square, the wife of Edmund Lloyd Birkett, M.D., of a daughter.

Crisp. On June 16th, at 2, Charlotte Row, Walworth Road, the wife of Frederick A. Crisp, Esq., Surgeon, of a son.

*Gleeson. On June 15th, at Knutsford, Cheshire, the wife of Edward M. Gleeson, Esq., Surgeon, of a son.

Halley. On June 12th, at 7, Harley Street, Cavendish Square, the wife of Alexander Halley, M.D., of a daughter.

Ker. On June 12th, at Cheltenham, the wife of C. B. Ker, M.D., of a son.

Morrieson. On June 3rd, at 11, Manchester Street, the wife of J. S. Morrieson, M.D., Bengal Medical Establishment, of a son.

Ormerod. On June 5th, at Brighton, the wife of Edward L. Ormerod, M.D., of a daughter.

Robinson. On June 2nd, at Kinsale, the wife of Frederick Robinson, M.D., Scots Fusilier Guards, of a son.

Rodgers. On June 9th, at 64, Charlwood Street, Pimlico, the wife of J. E. D. Rodgers, Esq., Surgeon, of a son.

Sillifant. On June 3rd, at Thornhill Square, Islington, the wife of Horatio Sillifant, Esq., Surgeon, of a daughter.

Wyatt. On June 12th, at Oxford, the wife of George Robert Wyatt, Esq., Surgeon, of a daughter.

MARRIAGES.

Allinson—Smith. Allinson, Augustus Ward, Esq., Surgeon, to Fanny Virtue, daughter of Edmund Smith, Esq., of Wood Street, Woolwich, at Lee, on June 6th.

Crooke—Rea. Crooke, E. G., M.D., of Chorley, Lancashire, to Emma Elizabeth, third daughter of the late A. C. Rea, Esq., R.N., of Blackheath Park, Kent, at St. James's Episcopal Chapel, Edinburgh, lately.

Forlong—Houlton. Forlong, Girdon, Esq., to Elizabeth Anna, youngest daughter of Joseph Houlton, M.D., of Blomfield Street, Upper Westbourne Terrace, at Paddington, on June 9th.

Hamilton—Macmillan. Hamilton, Robert, jun., Esq., Surgeon, Edinburgh, to Jane, youngest daughter of Robert Macmillan, Esq., of Holm, Carsphairn, Scotland, at Glenerosh, Dumfriesshire, on June 2nd.

Kearney—Holloway. Kearney, James, Esq., Assistant-Surgeon Bombay Medical Service, to Frances Caroline Elizabeth, eldest daughter of Major Holloway, 42nd Madras Native Infantry, at Bombay, on April 3rd.

Rogers—Woods. Rogers, Henry T., Esq., Lieutenant Madras Engineers, to Catherine Anne, second daughter of the late N. A. Woods, Esq., Surgeon Madras Army, at Tonghee, Burmah, on February 2nd.

Smith—Romer. Smith, Alexander, M.D., Staff-Surgeon Depôt Rifle Battalion, to Julia, youngest daughter of Colonel Romer, Royal Artillery, at Winchester, on June 16th.

Turner—Bowers. Turner, N. Blaker, Esq., Surgeon, of Singleton, Chichester, to Louisa, eldest daughter of John Bowers, Esq., of Shirley, Southampton, at Milbrook Church, Southampton, on June 11th.

Turner—Jelmes. Turner, George Brown, M.D., of Hastings, to Mary Elizabeth, eldest daughter of Henry Jelmes, Esq., of St. Leonard's-on-Sea, at St. Leonard's, on June 3rd.

Washbourne—Sowdon. Washbourne, Buchanan, M.D., of Gloucester, to Frances Ann, youngest daughter of Thomas Sowdon, Esq., of Kingsacre, near Hereford, at Gloucester, on June 11th.

Wilson—Bett. Wilson, Patrick, Esq., banker, Kelso, to Louisa, only daughter of the late James Bett, Esq., Surgeon, 2nd Regiment Life Guards, at St. Peter's Episcopal Church, Peebles, on June 3rd.

Woodfine—Davies. Woodfine, Thomas, Esq., of Hornchurch, Essex, to Julia, youngest daughter of the late Thomas Davies, M.D., of New Broad Street, City, at St. Mark's Myddelton Square, on June 4th.

DEATHS.

Allarton. On June 4th, at Sydenham, Thomas, second son of *George Allarton, Esq., Surgeon.

Browne, Robert Frederick, Esq., Surgeon, at Bathurst, Australia, on March 1st.

Drummond. On June 8th, aged 9, John Alexander, only son of John Drummond, Esq., R.N., Deputy Inspector General of Hospitals.

Scott. On June 15th, at Hertford, Margaret, widow of the late James Robinson Scott, Esq., Surgeon R.N., aged 87.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 12th, 1857:—

Adam, Edward, Dublin
Agar, Walter James, Cork
Catling, George Taylor, Islington
Egan, Charles James, Dublin
Fisher, William Shute, Charleville, co. Cork
Hobson, George William, Aberdeen
Hughes, Roger, Bala, North Wales
Shooter, Charles, Bishop Wilton, Yorkshire

Apothecaries' Hall. Members admitted on Thursday, June 4th, 1857:—

Baker, William Langworthy, Newton Abbot, Devon
Kiernan, Laurence, Baleath Lodge, co. Westmeath, Ireland
Overton, John Greenway, Coventry
Simpson, Thomas Pemberton, Scarborough
Smith, William Josiah
Stewart, William, Cockermouth
Taylor, Adam, Norwich

Thursday, June 11th:—

Barnes, James Hindmarsh, Bath
Bird, William, Stroud, Gloucestershire
Curran, William, Youghal, Ireland
Hethrington, Joseph, Lampleigh Hall, Cumberland
Jeaffreson, George Edwards, Framlingham, Suffolk
Marshall, Alexander Wilson, Birkenhead
Pope, Joseph John, Liverpool
Rees, Hugh, Carnarvon
Vinrace, John, Ashby-de-la-Zouch
Watkins, John Webb

HEALTH OF LONDON:—WEEK ENDING JUNE 13th, 1857.

[From the Registrar-General's Report.]

In the week that ended on Saturday, June 13th, the total number of deaths registered in London was 934, of which 519 were deaths of males, 415 those of females. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 951; but as the deaths returned last week occurred in an increased population, the average, to admit of comparison, should be raised in proportion to the increase, in which case it will become 1046. Hence it will be seen that the present rate of mortality is so far reduced, that the deaths were less by 112 than would have occurred under the average rate of mortality, as calculated on former experience at this period of the year.

Though the total deaths of last week were more than those of the preceding week, the deaths produced by zymotic diseases in the aggregate were rather less; and with the approach of summer the mortality from this class of complaints begins to furnish the chief test of the public health. The fatal cases referred to zymotic diseases were 164, whilst the corrected average of corresponding weeks is 245; and taking six special diseases under this head, small-pox, measles, scarlatina, hooping-cough, diarrhœa, and typhus, the tables show that none of them exceed the average, except hooping-cough, and that small-pox, scarlatina, and typhus are much below it. The lower temperature of last week appears to have checked diarrhœa, which had previously increased; the cases in which it was fatal having fallen from 26 to 20. Only one case of cholera is returned; this occurred to a widow, aged 30 years, in Beaumont Square, Mile End, who died of "diarrhœa

(2 days), cholera (10 hours)." Not a single case of small-pox is returned in any of the districts of London.

The deaths from pulmonary diseases (exclusive of phthisis) are 119; the corrected average being 129. These comprise one from pleurisy, 4 from asthma, 6 from laryngitis, 38 from pneumonia, 64 from bronchitis. The mortality from pneumonia (or inflammation of the lungs) is low. There were 2 deaths from carbuncle; 5 from syphilis (all of infants); 2 from intemperance. Only one person, a woman, 92 years old, is returned as having attained the age of 90.

Last week the births of 824 boys and 778 girls, in all 1602 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1396.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·758 in. The mean reading was above 30 in. on the last two days; the highest reading was 30·18 in., and occurred on Saturday. The mean temperature of the week was 56°, which is less by 1·8° than the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was below the average on every day after Monday. The *highest* temperature was 70·9°, which occurred on Sunday (the 7th). The *lowest* was 38·9° on Saturday. The entire range of the week was 32°. The mean dew-point temperature was 48·9°, and the difference between this and the mean temperature of the air was 7·1°. The mean temperature of the water of the Thames was 63·4. The highest temperature of the river was 65·7° on Tuesday. Rain fell to the amount of 0·71 in., most of which fell on Sunday and Monday. There was rain on every day except the last two.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE. The annual meeting of this Association will take place on Thursday, July 2nd, under the presidency of Dr. Forbes Winslow, D.C.L. The general meeting for the transaction of business will be held at the Great Western Hotel, Paddington, at one o'clock. The dinner will take place at the hotel, at seven o'clock. Every member is entitled to introduce one visitor to the meeting. Notice of communications, and of subjects for discussion at the annual meeting, may be made to the Honorary Secretary. The meeting will be opened by an address from the chair. The president for the ensuing year (Dr. Forbes Winslow) will receive the members of the association at a *conversazione* at 23, Cavendish Square, on Wednesday evening, July 1st. Members of the committee are requested to meet at the hotel, at twelve o'clock precisely, on the day of meeting. The rules of the association can be had on application to the Honorary Secretary, Dr. C. Lockhart Robertson, of 1, Charles Street, Berkeley Square.

ROYAL COLLEGE OF SURGEONS. From an advertisement in the *London Gazette*, it appears most probable that as there is no opposition, Messrs. Coulson and Gulliver will be re-elected to seats in the Council; and as only Mr. Tatum, of St. George's Hospital, has been nominated to fill the vacancy occasioned by the resignation of Mr. Keate, the votes of the Fellows will no doubt be in favour of that gentleman.

TO CORRESPONDENTS.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith.

Communications have been received from:—MR. HOLMES COOTE; DR. B. W. RICHARDSON; DR. E. H. GREENHOW; DR. G. G. ROGERS; DR. KELBURNE KING; DR. LAYCOCK; DR. J. B. PITT; DR. H. DICK; MR. J. V. SOLOMON; MR. GRIFFIN; MR. JOHN FOX; DR. WOODFORDE; DR. W. BUDD; DR. C. L. ROBERTSON; MR. H. WILKINSON; MR. C. MURRAY; MR. P. MARTIN; MR. E. BARBER; EXPERIENTIA DOCET; DR. D. NELSON; MR. F. JORDAN; MR. A. FERNIE; and MR. STONE.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Report on Murrain in Horned Cattle, the Sale of Diseased Animals, and the Effects of the Consumption of their Flesh on Human Health. By *E. H. Greenhow, M.D. Blue Book. London: 1857.
2. The Chemical Atlas, or Tables showing at a Glance the Operations of Qualitative Analysis. By A. Normandy. London: George Knight & Co. 1857.
3. The Dictionaries to the Chemical Atlas: being a Dictionary of Simple Substances, and a Dictionary of Tests and re-Agents. By A. Normandy. London: George Knight & Co. 1857.

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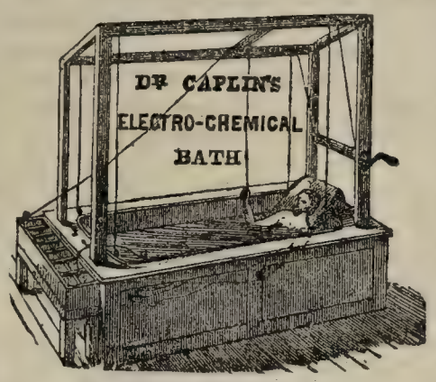
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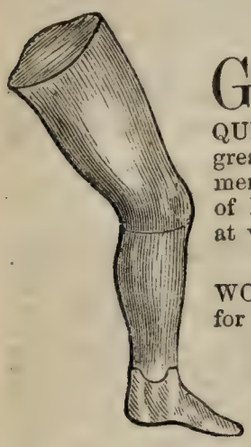
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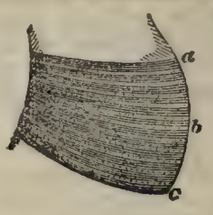
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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SALOP INFIRMARY.

FIVE CASES OF PUNCTURED WOUND OF THE KNEE-JOINT.

By WILLIAM NEWMAN, Esq., M.R.C.S., late House-Surgeon to the Infirmary.

THE publication of the treatment adopted in five cases of punctured wound of the knee-joint, all of which terminated successfully, may possibly not be without some advantage; and though the means adopted, far from being of novel or startling character, are of such every-day kind as hardly to merit special notice, still the result obtained is, I am induced to think, so far satisfactory as to justify the detail of the instances referred to.

The object of this paper is to recommend, in preference to the treatment usually laid down for punctured wounds of joints, of depletion in its various forms, cold applications, etc., the use of irrigation continued without intermission, and that too for so long a time as any symptom of pain or irritation shall remain about the injured part; not counting the propriety of the continuance of the application by the time that may have elapsed since its commencement, but by the state of the articulation. The apparatus is sufficiently simple, and can be applied in the meanest cottage at a moment's notice (no trifling advantage to a country practitioner); it being simply necessary to suspend over the joint a jug of water, from which depends a piece of lint, larger or smaller, according to the current desired. To secure the immobility of the limb, a back splint is applied behind the knee, with a single layer of thin bandage.

CASE I. John Hayes, aged 34, was admitted into the Salop Infirmary, on July 2nd, 1855, under the care of Mr. Stephens. He had met with a severe injury of the right knee-joint by a bill-hook, four hours prior to admission. He was chopping wood, and struck himself with the bill which he was using on the inside of the right knee. On admission, there was a clean cut wound on the inside of the patella, opening the knee-joint obliquely. The articulating surfaces could be seen, and some of the blood from the cut had flowed into the joint. This was removed so far as practicable. The edges of the wound were brought together by two sutures introduced through the skin, plaster, etc.; a splint was applied behind the knee; and the apparatus for irrigation was at once put in action.

12 P.M. The knee was easy and cool.

July 3rd (second day). The knee was slightly swollen. He had had some sleep; and was going on well.

July 4th (third day). The sutures were taken out. The wound looked well. He had no great pain.

July 6th (fifth day). The knee was not swollen; the cut had united. The patient was not in pain; and slept well. The irrigation was discontinued.

July 14th (thirteenth day). The knee was rather stiff. He had no pain in walking. There was no swelling. He was discharged cured.

CASE II. Robert Goring, aged 30, was admitted into the Salop Infirmary on July 13th, 1855, under the care of Mr. Humphreys. A sharp nail had been run into the right knee-joint just above the patella on the preceding evening. On admission, the joint was hot and painful; the synovial membrane was distended with fluid. The patient had no sleep the previous night. Irrigation was resorted to.

July 16th (fourth day). There was little or no swelling remaining. He had no pain; and expressed himself as much better. Irrigation was discontinued; and he was ordered to lie quiet.

July 18th (sixth day). The swelling was quite gone; there was no pain; the knee was rather stiff.

July 21st (ninth day). He could walk; there was no pain nor swelling. The patient was discharged.

CASE III. David Owen, a middle-aged man, was admitted into the Salop Infirmary on July 16th, 1855, under the care of Mr. Wood. The left knee-joint had been wounded on the night of the 14th, by a sharp nail. He had been in much pain ever since; and had had no sleep. On admission, the knee was much swollen and reddened. The synovial membrane was distended with fluid; the edges of the puncture were reddened, and discharged unhealthy pus. Irrigation was resorted to.

July 17th (fourth day). He slept well last night for the first time since the accident. The knee was still very much swollen; but possibly not quite so hot.

July 19th (sixth day). The swelling was not so great; and the pain less.

July 21st (eighth day). He was going on well. The irrigation was ordered to be intermitted for an hour or two at a time.

July 25th (twelfth day). There was no swelling nor pain. The knee was stiff. The irrigation was discontinued.

August 11th. He was retained under observation until this day, but not on account of positive necessity from the state of the knee; and was now discharged cured.

CASE IV. Job Johnstone, aged 26, was admitted into the Salop Infirmary on August 2nd, 1855, under the care of Mr. Humphreys. He had wounded his knee-joint nine days before admission by running a steel pin into the front of the joint one inch below the patella. He had been in bed since, and had had leeches, fomentations, etc., applied to the joint. On admission, the joint was much swollen, hot, and very painful.

August 18th (twenty-fifth day). He had been treated for several days by irrigation; and the joint now presented the ordinary size and appearance. He was discharged cured.

The record of this case is imperfect; but I do not think that more than five or six days were occupied in the process of irrigation.

CASE V. John Pass, aged 14, a labourer's son, residing at Caythorpe, received a punctured wound of the right knee-joint, on January 1st, 1857. He had been struck by a fellow servant with a hay-fork. This had penetrated the knee-joint in front just below the patella. I saw him five hours after the accident: the joint was then full of fluid; the synovial membrane was distended with fluid, and its outline was most distinctly marked; the joint was very painful on pressure, hot, and swollen. Irrigation was resorted to.

January 4th (fourth day). He had been kept constantly quiet, and the water had been always dropping on the knee, which was much less swollen. He had no pain; but complained of stiffness. The irrigation was intermitted.

January 6th (sixth day). He was much better, and had no pain nor swelling. The irrigation was discontinued.

January 8th (eighth day). He was convalescent; he had no swelling nor pain; and could walk well.

There had been no return of pain, nor indication of mischief since. He is now quite well.

REMARKS. These cases are probably all very favourable ones of their class, and a similar successful issue could not always be hoped for from the same means. Still the result was satisfactory, and the time occupied but short. The application is spoken of in high terms by the patients.

In contradistinction to these cases, I saw a case in 1854, where a nail had been run into the knee-joint. Leeches, etc., were repeatedly applied under the direction of an eminent surgeon, as well as lotions of acetate of lead, with rest on a Liston's splint, and bandage; but more than six weeks were occupied in the process of recovery, and the pain suffered was excessive, in marked opposition to the few cases above recorded, as treated on a simpler, and on what appears to be a more satisfactory plan.

ST. MARY'S HOSPITAL.

I. STRICTURE OF THE ŒSOPHAGUS.

Under the care of F. Sibson, M.D., F.R.S.

[*From Notes by* E. A. Hart, Esq., *House-Surgeon.*]

Rachel Vincent, aged 47, a single woman, excessively emaciated, was admitted on May 24th, under Dr. Sibson. Since Christmas she had laboured under increasing dysphagia, with a feeling at first of a lump in the throat corresponding to the thyroid cartilage. It had never shifted its situation, and there was considerable pain of a darting character. At first she could swallow meat cut small; then fluids only; and for three weeks there had been difficulty in getting down even drops of milk. On admission, her face exhibited that variety of emaciation indicative of the rapid absorption of fat rather than of the slow atrophy of disease; all the muscular and bony prominences being strongly designed, whilst the cheeks and temples were much sunken. At the seat of stricture, there appeared much swelling and induration, but no defined tumour. For the first day or two, no instrument could be passed. On the third day, a fine gum elastic catheter entered the stricture, and drops of milk were introduced. She was supported chiefly by injections of brandy and beef-tea, but was evidently rapidly sinking; and, as a great part of the difficulty in swallowing fluids was due to the troublesome cough excited by their regurgitation, the larynx being very irritable, it was thought that some relief might be afforded by the operation of tracheotomy. It was explained to her that no hope of permanent benefit could be entertained from this proceeding; but that, by enabling her to breathe through the lower orifice, the irritability of the larynx would be annulled, and she would be able to persevere in her attempts to allow small quantities of fluid to trickle down the œsophagus with more comfort, and perhaps more success.

The operation was performed on June 1st, by Mr. Lane; and a double tube was introduced. After some hours, she attempted to swallow milk; but there was no marked improvement. On the following day, however, the attempt was repeated with greater success; and for the next few days she seemed to mend. Meanwhile, a fine elastic catheter was passed every morning; but the stricture was so dense that dilatation was impossible. The amount of support she received was quite insufficient for the purposes of life, and within a week she died.

An examination was made fifty hours after death. The œsophagus was discovered to be in a state of fibrous degeneration in a spot corresponding to the fourth dorsal vertebra. The calibre of the tube was extremely narrowed, both from diminution of its diameter, and from fibrous valves stretching across. The thyroid body was very large, and somewhat indurated. The stomach was small and contracted, and, towards the pyloric end, hard and dense in structure; it contained a small quantity of blackish fluid. The other appearances noted were: tubercular infiltration of each lung; commencing granular disease of the kidneys; and universal absorption of fat, the mesentery being represented by a thin gauze-like web. The following were the weights of the several organs:—Right lung, 21 ounces; left lung, 20 ounces; heart, 6 ounces; liver, 2 pounds; spleen, 4½ ounces; right kidney, 6 ounces; left kidney, 5 ounces.

Remarks. Cases such as the above are brought forward in the hope that, by an account of the distressing symptoms of the malady, the attention of surgeons may be called to the matter, and some additional light thrown on the treatment of this formidable affection. It would appear to be an anomaly that, whilst a similar affection of the rectum or the urethra would be speedily and effectually treated according to established rules, the same condition of the most important, and by no means the least accessible, of the mucous canals, is at present pronounced to be incapable of alleviation by surgical skill. Sedillot has thought that, in such cases, the heroic remedy of gastrotomy ought to be resorted to; but, in the words of one of our eminent surgeons, "the probability is that the patient would only be saved from the horror of a lingering death by starvation by a more speedy termination to his existence."

II. AMPUTATION OF THIGH, WITH LIGATURE OF FEMORAL ARTERY ONLY.

Under the care of Alexander Ure, Esq.

[*From Notes by* — Myers, Esq., *Clinical Clerk.*]

J. B., aged 45, a tall, stout, well grown man, was admitted on June 6th, a heavy load of earth having fallen upon him, and fractured his left leg in two places. There was a double comminuted fracture immediately above the ankle-joint; and an inch and a half below the knee was a compound comminuted fracture, with a large portion of the tibia projecting. There was slight hæmorrhage from the upper wound, and from a small punctured wound external to the fracture. The left arm, elbow, and spine, were also much bruised by the accident. When he had recovered from the collapse, amputation by the circular method was at once resorted to. The amount of hæmorrhage was unusually small; and, on a ligature being applied to the femoral artery, and pressure removed from the limb, no bleeding occurred. Sutures were applied, and the wound was dressed with wet lint. No further inconvenience was felt from the stump; but he complained, on June 8th, of great pain in the left arm and right leg. Towards the close of the day, he became restless and delirious; and throughout the night, as well as on the morning of the 9th, he refused to take his food. Short hurried breathing, and frequent rapid pulse, with pinched and anxious countenance, succeeded; and on June 10th he expired.

After death, the manubrium of the sternum was found to be fractured obliquely. The space between the broken ends was filled by coagulum, which also blocked a great part of the anterior mediastinum. The pericardium itself, and the pericardial pleura, were deeply ecchymosed. On the left side, opposite the fifth and sixth ribs, there were a coagulum and a rent in the pleura, but no external bruise corresponding to this situation. The stump and the parts around it appeared perfectly healthy.

UNIVERSITY COLLEGE HOSPITAL.

I. DIFFUSE TRAUMATIC ANEURISM: FRACTURE OF THE CONDYLES OF THE FEMUR (?).

J. T., aged 55, a sawyer, was admitted, on April 23rd, with supposed transverse fracture of the condyles of the left femur, and ecchymosis around the right ankle. A plank, weighing nearly a ton, had fallen from a height of four feet upon the limbs. There was no sensation in the left leg below the knee; and all the parts were cold and the skin dusky. Pulsation was distinctly felt in the anterior and posterior tibial arteries at the time of admission, but ceased in about an hour. The injured limb measured 18 inches round, the sound one 16 inches, above the knee. Two inches below the knee the right limb measured 16¾ inches, the left 14 inches. A large eccentrical pulsating tumour was discovered in the left ham, which was synchronous with the pulse. He was first seen about noon. At 8 P.M., pulsation still could not be detected in the tibial arteries, but continued in the popliteal space. The ecchymosis increased on the following day; but some degree of sensation returned in the leg, and the temperature of the whole limb was the same as on the sound side. Large blebs formed under the right knee-joint. He improved up to April 28th, when he became somewhat more feverish, but this was only temporary. The left leg continued to decrease in size; and, when measured on April 30th, the circumference below the knee was 15¼ inches, and around the knee-joint 16¾ inches. On May 4th, he was able to move the right leg, but had no power over the left.

May 17th. The splint was removed from the limb. No pulsation could be felt in the situation of the tibial arteries. The leg had not decreased at all in size since the last measurement ten days ago.

June 8th. In the evening, after having slowly mended since the last entry, he complained of great pain in the left leg; and the elastic bandages being taken off, distinct fluctuation was perceived in a spot on the outer side of the leg, about an inch and a half below the knee.

June 9th. The fluctuating swelling was opened, and a clot of blood with some serum escaped, followed in about three minutes by another clot and a jet of arterial blood. Owing to the œdema of the thigh, the tourniquet availed scarcely at all; and amputation under chloroform was at once performed by Mr. Erichsen. The patient was nearly sinking whilst upon the operating table, but he rallied temporarily and lived until the afternoon of June 11th.

The left leg and thigh were subsequently carefully examined by Mr. Teevan, the senior house-surgeon, who found a hole of about an inch in diameter on the inner side of the soleus muscle, through which coagula protruded. The tibialis anticus, extensor longus digitorum, and extensor proprius pollicis muscles, which were all pale and friable, were next removed; and the anterior tibial artery was traced from the ankle upwards. After passing between the tibia and fibula, it suddenly diminished in size, gradually tapering to a point, and could not be traced more than half an inch from the posterior surface of the fibula. The artery for about four inches in the upper part of its course was very hard and incompressible, and was filled with a firm fibrinous cord, which diminished in size as the vessel approached the ankle. Both the artery and its sheath were greatly inflamed for about ten inches. The popliteal artery was healthy and patent; the peroneal was slightly inflamed in its entire extent, and quite blocked up for the first two inches with fibrinous clot. The first inch of the posterior tibial artery was partially filled up by fibrine; and against this part of the vessel rested a firm coagulum, nearly as large as a hen's egg. A small part of the posterior surface of the tibia was denuded, and the deep fascia of the leg in this part was entirely destroyed. The head of the fibula was split into two pieces; there was likewise a splintering of the bone for about an inch and a half, the splintered end projecting inwards towards that part of the anterior tibial artery which passes between it and the tibia. Previously to this dissection, Mr. Erichsen made an incision into the limb, which disclosed a large cavity occupying the whole of the outer and upper third of the leg, and extending upwards as a sinus into the posterior flap of the stump. The cavity was filled with large broken down coagula and disintegrated muscle. A perforation, of the size of a crown piece, was found in the outer head of the gastrocnemius, which communicated with the general cavity.

II. FRACTURE OF ACETABULUM: LACERATION OF CAPSULE OF HIP-JOINT: SEVERE LACERATED WOUND.

J. T., aged 26, a carpenter, was struck on the head and face by a piece of timber at the late fall of houses in Tottenham Court Road. He fell down, and then was partially struck by a brick pier. He remained for two hours wedged between the block of timber and the brick pier; the full weight of the latter being supported by a large piece of wood close by. When examined on admission, a large lacerated wound was found below Poupart's ligament, extending from the inner side of the external abdominal ring to midway between the spine of the pubes and the anterior superior spinous process, and downwards for three or four inches. All the muscles in Scarpa's space were lacerated, and the femoral vessels and spermatic cord were fully exposed. A finger could be passed between the symphysis pubis, and the bladder distinctly felt. A catheter was passed, and the urine was drawn off free from blood. Cold water dressing was applied to the wound, the ragged portions of muscle being previously removed. He was in good spirits and perfectly conscious for the two next days, but could get no sleep.

May 12th. A jaundiced tint was observed; the secretions, however, were quite healthy, and the tongue was clean and moist.

May 14th. There was much tenderness in the flanks, and hourly increasing tympanitis. He was low and depressed, very restless, and delirious towards evening, and at 4 A.M. on the following day he sank.

At the *post mortem* examination, the parietal layer of peritoneum in the hypogastric and iliac regions was found greatly inflamed. The intestinal layer appeared healthy. The capsule of the hip-joint was torn open to the extent of about an inch, and the ligamentum teres partially ruptured. About a teaspoonful of pus was found in the joint, and a fracture was discovered running *through* the acetabulum. Much plastic matter was effused around the femoral vessels where the sheath had been opened. The artery itself was quite healthy.

ST. GEORGE'S HOSPITAL.

I. PNEUMONIA: GANGRENE OF LUNG: CANCER OF ŒSOPHAGUS.

J. H., aged 58, a tide-waiter at Sheerness, who was addicted to hard drinking and necessarily much exposed to cold and wet, had suffered for six or seven months from pain at the epigastrium, which was always worse at night. However, he went on working until October 17th, 1856, when he had severe rigors. After leaving him for a week they returned with increased severity, and aching in all his limbs. About ten days later he came to the Hospital with a flushed face, hot skin, and full bounding pulse. He expectorated some thin mucus, and had slight cough, but nothing was heard amiss with the respiration. In the early part of November he had frequent aguish attacks. Some pneumonia was then detected at the back of the right lung; and this was followed by a pleuritic friction sound at the lower part of the same lung in front. The expectoration was thick and yellowish until December 1st. It then became sanious, and the breath was very offensive. This latter symptom was aggravated each day, until at length it was scarcely possible to sit near his bedside. He wasted rapidly, and took scarcely any nourishment. Death occurred on the 12th January, 1857. A *post mortem* examination was made thirteen hours afterwards. Old pleuritic adhesions were found on the right side; and corresponding to the right nipple was a circumscribed space full of thick creamy pus. In the apex of the right lung was a large irregular cavity, about the size of a hen's egg, communicating by a small orifice with the œsophagus. The œsophagus itself was much ulcerated, thickened, and covered with epithelial cancerous deposit. The apex of the lungs and all the parts in the immediate neighbourhood were much thickened and condensed. No tubercles were found in either lung. Both kidneys were granular, and somewhat deficient in cortical structure. The other organs were comparatively healthy.

REMARKS. This patient, notwithstanding the diseased state of his œsophagus, manifested no reluctance to take food, and experienced no dysphagia until a week before his death; but the tube must have been for a very long period in anything but a healthy condition. The urine was examined once or twice for albumen, but none was found. At the upper part of the lung, where the sloughing cavity was situated, bronchial breathing had been heard for weeks; but the first signs of pneumonia were never observed in this spot, but only over the lower and posterior part, as before remarked.

II. CASES OF EPILEPSY.

CASE I. J. B., a carpenter, was quite well until a fortnight before his admission, when he was seized with a fit whilst at work. He struggled violently, and lost his consciousness. The attack lasted an hour and a half. A week later another seizure occurred of a precisely similar kind to the first, but only of half its duration. When first seen he complained of headache; his face was flushed, tongue coated in the centre, bowels costive, urine clear and free from albumen; pulse 68, and somewhat irritable. The pupils acted naturally, and there was no loss of sensation anywhere. He was purged with calomel and senna, and in a few days was free from all unpleasant symptoms. The rhythm of the heart was rather irregular, and the pulse unequal. The constipated state of the bowels returned a week later, and with it the old pain in the head, but he had no fit. After another course of purgatives, he left the Hospital in his usual good health.

CASE II. C. J., aged 30, in service at the Carlton Club, became subject to fits seven years ago. She could assign no cause for their first appearance. Every seizure came on without premonitory symptoms. She struggled violently, bit her tongue, and lost her consciousness. The last came on five days before admission, and was very severe. The catamenia had always been regular, but she had profuse leucorrhœa and pain in the loins. She also complained of pain at the epigastrium after food. Her pulse was small but quite regular, tongue furred, bowels open, urine not quite cleared by heat and nitric acid. Two days after admission she had a fit in the afternoon. The struggling was not prolonged, her lips were very blue, and she remained unconscious six minutes. After recovering herself, convulsive twitchings of the hands were observed at intervals during the evening. She was given occasional doses of calomel, and took the ammonio-citrate of iron three times a day. She had no other fit, but for a time was in an extremely nervous state, owing to a patient in the adjoining bed expiring in great agony. Frequently she seemed on the point of a seizure, but gradually her health improved, and within a month she was discharged in tolerable health.

CASE III. E. P., a foreman in a large perfumery business, had been much harassed by the responsibilities of his position. For fourteen months he had had repeated attacks of epilepsy. Three days before coming to the Hospital, the most severe one came on; and, after it had passed away, he was quite delirious.

He was not violent, but during the first night he was kept in bed with great difficulty. His bowels were freely open; the urine was loaded with lithates, but otherwise healthy. He had bitten his tongue most severely, so that it was one large sore. Salines were given, with nitric ether; and a third of a grain of morphia was ordered on the next day with each draught. Two days after admission, he was extremely refractory, and struck several of the nurses, and refused to let any one change his linen. The morphia was now increased to a grain three times a day. These violent symptoms gradually declined, and, within twelve days of his first being seen, he was quite altered in appearance. He complained of some pain in the head, and did not sleep very well for a time; but he was ultimately discharged cured, having been free from fits during the whole period of his residence in the Hospital.

Remarks. These cases are brought forward as instances of epilepsy unconnected with organic lesion, and depending wholly upon eccentric causes. They serve to illustrate the remarks of Dr. J. W. Ogle, upon this subject, in the *Medical Times and Gazette* of last year. In the first patient, there must have been some connexion between the overloaded bowels and the cerebral symptoms. In the young woman whose case is next noticed, the uterine discharge was probably associated with the epileptic convulsions; and, as the abnormal secretion was checked, and a more healthy tone given to all the tissues, by the steel remedies, the tendency to the recurrence of fits was certainly checked, although it could not be considered as a case of cure. The probability is, that, if she had been under medical care seven years ago, a proper attention to the menstrual functions would have fortified the constitution against a continuance of the seizure. But she had gone on overworking herself, and paying no attention to diet and regimen, until she presented herself at St. George's.

The case of the foreman is remarkable, as showing the rapid subsidence of all undue excitement of the nervous centres when he was totally removed from the anxieties of business, and compelled to keep his bed. Like the preceding patient, he had laboured until his symptoms alarmed not only himself, but his employers, and led them to apply for his reception into the Hospital.

Original Communications.

CASES OF MORAL INSANITY.

By H. Landor, Esq., Heigham Retreat, Norwich.

[*Read before the East Anglian Branch, June* 12, 1857.]

My object in reading these cases of moral insanity is the hope of making general practitioners acquainted with the evils resulting from the want of due recognition of them, and to show at the same time that the good health and good conduct which the patients exhibit while under control are fallacious indications of cure; for true cure cannot result in the short period of time during which it is possible to keep them under treatment. I have purposely omitted details of the particular delusions of each case, in order to bring prominently forward their vicious propensities, and the consequent necessity of long periods of restraint. Nor have I alluded to the question whether drunkenness and vice produce insanity, or are a consequence of it; although I entertain the latter view. I have dwelt upon one feature only of the disorder.

Case I was that of a man, aged 37, admitted in July 1854. He had been a man of hard work and irregular living, often drinking a very considerable quantity of spirits, and eating nothing. He was extremely vain and ill educated; he had no self-control, little information, and much conceit. He had had delirium tremens, and had seen angels and heard devils. In a fortnight after admission, he gained strength, lost his angels and his devils, and slept well: his strength and appearance were much improved.

In the middle of August, the remark I made in the journal was, that it was difficult to know what to do with him; for, if he returned to his business, he would also return to his bad habits. His wife and his brother were both afraid of him. I recommended them to make him a lunatic by statute, and save his property for his family by making it secure in chancery; but they were both afraid of him unless he could be kept in an asylum for life. My conviction was, that he ought to be confined for life, but it would be impossible to convince commissioners, visitors, or relatives, of his fitness for an asylum, or rather, of his unfitness for life out of one. If an ungovernable temper, great vanity, no self-control, inability to resist stimulants, and an utter want of sound judgment, constitute insanity, this man was insane. There is no doubt that these characteristics insured the loss of his property and the misery of his family, by making it certain that he would return to his former habits, and wear away his life in reckless debauchery. But he exhibited no delusions, and succeeded in persuading his relatives to ask his discharge, without having taken any precautions with respect to his property.

He died, from excessive drinking, in the spring of this year (1857), having dissipated £2,000 since his discharge, and lost one of the best businesses in the county by neglect, incivility, and evil habits.

Case II, aged 38, had been living an irregular life for years, drinking, smoking, dancing; boasting of his own abilities, his intrigues, and his other manifest perfections; laying down to his pot-companions the law upon politics, farming, and every other subject, with positiveness and conceit; threatening to thrash those who differed from him, and applying offensive terms to them; unable to endure opposition or even difference of opinion. In appearance, he was extremely ugly, one eyed, mean looking, weak, and contemptible—a most miserable frame for such a blustering soul. Ill tempered and vindictive, he was fortunately a coward. Abstinence from stimulants, and the necessity of leading a quiet regular life, worked their usual effects, and he left the house seemingly well, but with none of his tastes eradicated. His father was afraid of him. He had delusions and diseased feelings of various kinds during the early part of his stay in the asylum.

After an absence of some years, his father applied for his readmission, stating that he had fallen into his former habits, but was too cunning to allow two surgeons to visit him, in order to sign the necessary papers. I strongly advised his father to have two surgeons to see him by stratagem while he was at home, and not to send him to the Retreat on one certificate; for I knew there would be a great difficulty in obtaining the other certificate, as he would not display any insanity unless he were under the influence of his usual excitement. His father was, however, so afraid of him, that he sent him abruptly, on one certificate; and, as I feared, no other surgeon could find any delusions in him when he was visited in the asylum. He was therefore sent home again, much to his own detriment, and to his father's terror.

I may here make a remark on the deficiency in the form of certificate which the Act demands from surgeons. They are required to certify to facts observed by themselves, and therefore insane conduct often escapes them, because they cannot have the opportunity of seeing it, especially in those cases where circumstances have compelled admission on one certificate.

Case III was a surgeon, in large practice in a southern county, but habitually addicted to drink and evil living, which caused him to lose his practice. His symptoms were much the same as in the other two cases; but, as his intemperance had lasted longer, his mind was more broken and feeble. After a residence of some months (during which he improved in body and mind, although he retained a certain amount of low cunning and want of truth), he was discharged, and he ultimately was appointed to an emigrant ship. There his drinking propensities broke loose again: he lost his pay, which was stopped by the emigration commissioners; and he brought disgrace on those who recommended him for the appointment, as well as upon those who gave it to him. He had false ideas relating to his wife and family.

Case IV was a lady, with the same tendency to drink, and to untruth and cunning. Whilst she was confined in the asylum, she was well, but immediately relapsed into her evil habits on her release from it. This lady was placed in a private family during a period of absence from the asylum; and the following is an extract from a letter written to me by the gentleman with whom she was:—

"No one, who has not had the lengthened experience I have of her, could help being deceived by her cunning and falsehood. When she first came, she conformed to the habits of the family, and gave us no trouble, and led us to hope we should be comfortable with her. When she became acquainted with our servants, she got them to bring her beer unknown to us. She obtained the keys, and got the servants to bring her wine and spirits; and desired them not to mention it. This they told us; and, moreover, that, while she was getting improper

things to eat and drink, she was abusing me and my family. In short, her temper and her wilful misconstruction of everything said and done became so intolerable that, finding it impossible to control her sensual appetites, I determined to send her back to you; and I pray you do not be a party to placing her with any one else. If her relatives wish to try her, let them take her. The difficulty, in a private family, of keeping her from stimulants, must be insuperable; for the strictest directions may be given to servants, but they, for their own peace and quiet, will always be found willing to supply her cravings."

This patient was ultimately discharged, more to escape from the importunities of the Commissioners in Lunacy than from any other cause. She went to her relatives: they could not live with her, and sent her to London to another relation. She there, after a month's residence, clandestinely married a worthless foreigner, who sought her for her annuity, which he speedily managed to extort from her family. What has since become of her, I cannot tell; but, in all probability, he has placed her in some French asylum for a trifling sum, whilst he is fattening upon her income. She had many insane ideas concerning herself, her position in life, and her family, which gradually disappeared.

Many more cases might be added to these, but these suffice to mark a class the most difficult to deal with, because they are always sane in asylums, and always relapse when they get out. They invariably succeed in obtaining their discharge by working upon the fears or feelings of their relatives, and the sympathies of commissioners or visitors, who think them sane because, being under control, they cannot exhibit their propensities; and who tell proprietors of asylums that patients so improved cannot be detained. The real answer is, that they are not improved: they appear sane, because they have not the power or opportunity to be otherwise. Give them that power, and they are lost; as in these cases. They cannot keep up the good habits they learned in control, and they become worse in their second state than in their first. They are much to be pitied, for their friends and acquaintances think them wicked and vicious when they are only mad; and their misconduct is never looked upon as disease, partly because the general practitioners of the kingdom are not sufficiently acquainted with this class of disorders to be able to point out to their relatives the necessity of placing them in control, and to prove to them that disease, not vice, is the true solution of their misconduct. I have read these cases in the hope that practitioners will recognise similar cases as insane, and take the earliest steps to control them, and save them from the consequences of indulgence in their propensities. I cannot say that they are curable cases, as a general rule; they undoubtedly are so occasionally; but at large they rapidly become worse, lose all sense of decency and propriety, and end their lives either by suicide or by the consequences of their conduct in the production of fatal disease. There is no hope for them except in control, and that not for the limited periods we are now able to detain them, but until better habits have become so customary as to take the place of their evil habits. Nothing short of this will suffice; and the difficulty of doing this lies in the fact that this form of disorder is rarely recognised by any except those engaged in this branch of medicine. But we require (we might say much more truly that these unfortunate people require) the assistance of general practitioners, to enable us to press strongly upon the friends of such patients the absolute necessity of long continued seclusion.

Few men, engaged in this department of medicine, like to hold strong language to relations, as it is most difficult to convince them that the chief object is the benefit of the patient, not the self-interest of the proprietor; yet it is truly the difference between comfort and misery, and often between life and death, to the patient. If general practitioners could only be brought to see these cases in the same light, how much easier would be the task of convincing the friends, and how much the advantage of the patient's relatives! Take Case I. Two thousand pounds would have been saved to his children, as well as a good business which his widow might have easily managed, or sold for a large amount of money. In Case III, the evil of suffering the patient to be loose on society was not confined to himself, but produced all kinds of vice and immorality on board of the ship, amongst the emigrants, to such an extent as to attract the notice and censure of both Houses of Parliament. In Case IV, shortly after her discharge, the patient is found making a disgraceful runaway match with a needy, money-hunting, soap-abhorring French fiddler, doubtless laying up for herself misery for a lifetime. Can any one say that a life of confinement in a modern asylum, in comfort and decency, is not a life of happiness, compared with the wretchedness produced by indulgence in such diseased and depraved tastes; and that it is not a duty to detain them in control, and save them from themselves?

I am sure that, if these cases were better recognised by the public, they would be soon remedied. They are by no means rare—quite the contrary, they are common; and are at all times most difficult to deal with, but surely they ought not to be; and if the same patient investigation and shrewd discrimination were exhibited by general practitioners in these disorders, which they employ in their common cases, these unhappy people would always be more fitly treated, and their relatives more alive to the true requirements of their condition.

THE WATERY DISCHARGES OF PREGNANT WOMEN.

By I. HARRINSON, Esq., F.R.C.S.

[*Read before the Reading Pathological Society.*]

UNDER the term "*hydrorrhœa uteri gravidarum*", "the dribbling of the waters", etc., a somewhat rare affection has been described, to which pregnant females are subject. The amount discharged, it is said, varies from ounces to pints a day; and the discharge is described to be uniform and colourless. The source has been considered to be the vagina, the space between the membranes; and, as I understand Dr. Rigby, the membrane which lines the cavity of the uterus. Dr. Davis says it is in most cases "a dangerous, and often a fatal affection". Dr. Churchill says, "This opinion is at variance with other authorities, who do not generally consider this disease as of so serious a character."

I have met with two cases of watery discharge during pregnancy.

CASE I occurred in a healthy woman, aged 38, in her ninth pregnancy. From the end of the first month she had a constant discharge, beginning with a coloured, and followed by a profuse watery one, saturating three or four or more napkins daily. These alternated, at intervals of a few days, to the full period. There was no diminution of size apparently induced. Labour was ushered in by a bloody discharge, more profuse than usual: as it advanced, a small portion of the placenta was found presenting. Labour was completed rapidly, naturally, and favourably. The child was alive. Unfortunately, no description of the placenta is given in my notes.

CASE II. A feeble woman, in ill health, aged 38, in her tenth pregnancy, had slight discharge at the end of the second month; more at the end of the third month; and from this time to the end of the sixth month she had it more or less coloured or watery. For the first two weeks of the seventh month, she was under treatment, by which the discharge was arrested. During this time I carefully examined her, but found nothing abnormal. When under supervision, the discharge was entirely watery. After treatment was discontinued, the discharge returned, and labour was ushered in at the end of the seventh month by a sudden coloured discharge, to the amount of a pint. On examination, a thin edge of the placenta was found occupying one-fourth of the circumference of the os uteri, now open to the size of a florin. By the means used, the os uteri rapidly became dilated; and the child, breech presenting, was easily born: it had been dead some days. The placenta was quickly removed, without any unusual hæmorrhage. On examining the placenta, there was seen attached to one edge a considerable quantity of fibrine, showing undoubtedly the separated portion. The cord was only eight and a half inches long.

I maintain that, in these two cases, the placenta was attached in the immediate neighbourhood of the os uteri; that, at an early period of pregnancy, a portion of the placenta became detached; and that from the opposed and separated surfaces the coloured and watery discharges issued. I do not mean positively to assert that these cases are similar to those given on authority in the first part of my paper, though I strongly suspect that they are. It is somewhat singular that, in the recorded cases, no mention is made of any coloured discharge, nor any remark as to the state of the placenta. If the classes are similar, the cases related afford a new version of the source of the discharge; if dissimilar, they supply an important deficiency in the history of watery discharges in pregnant females. Whether similar or dissimilar, they show that both

Dr. Davis and the more numerous dissentient authorities may both be right; that the cases may terminate favourably; and also that they may be beset with peril.

ON GENERAL BLEEDING.

By H. Wilkinson, Esq., Rotherham.

[*Read before the Yorkshire Branch, June 4th*, 1857.]

In bringing the subject of general blood-letting before the notice of this meeting, I am aware that I am treading on very delicate ground. But, as Lord Bacon has said, "Human experience, which is constantly contradicting theory, is the great test of truth"; and, as I do not intend to introduce anything but facts, letting alone theory, I shall not expose myself to severe criticism from those who may think differently.

The propriety of blood-letting, particularly venesection, has undergone considerable modification in the minds of practitioners in late years. What has occasioned this change of opinion, I am at a loss to know; for my own part, I am more and more convinced of the value of the remedy, and am often reminded of the remark I once heard from the late Dr. Younge, of Sheffield: "That he had often had to regret not having taken sufficient blood, but seldom, very seldom, that he had taken too much."

Many gentlemen are of opinion that the aspect or type of disease has changed, and that we have no longer that acute form of disease we used to see. These altered views may account in some measure for the disuse of the lancet in those who entertain them. Another reason may be, that the patient may have been bled *once* during the attack, with relief to the symptoms, but, reaction having returned requiring a second venesection, and that not being carried out, the patient has died, and the lancet has been blamed for the want of decision on the part of the practitioner. Whatever others may think, however, in reference to the altered aspect of disease, I confess that I am so dull or so blind that I cannot see it; on the contrary, I am more and more satisfied of the truth of Dr. Younge's remark, and every day's experience induces me to believe that the remedy admits of much more extensive application than it has ever yet met with, unless we are to believe Gil Blas, when he tells us that Dr. Sangrado bled all his patients till they died, and then declared that they had not lost enough blood. I fear, however, judging from the spirit of the medical journals, and from those whom I frequently meet, that blood-letting has undeservedly fallen into disrepute; and for that reason, I will do the best I can to save it from perdition; convinced, as I am, that where depletion is really indicated, there is no substitute for the lancet; and the patient, when suffering from an acute inflammatory disease, must die, unless depletion be freely carried out.

But, as I have already said, the spirit of the profession is opposed to this practice. As an instance of this, I was particularly astonished, about a year and a half ago, in reading in the *Lancet*, of a paper being read at one of the medical societies, wherein the author came to the strange conclusion, that pneumonia was an adynamic disease; and what surprised me still more was the circumstance, that in so learned a society, no one should venture to criticise such singular views. If the gentleman believes that all diseases are adynamic, I can go with him to a certain extent; but if he means to classify pneumonia with syncope, hypochondriasis, and the like, according to Cullen, then I should say that these are certainly most dissimilar. Indeed, there is scarcely one inflammatory disease, when acute, which admits of a greater amount of depletion than pneumonia; and although I am aware that some members in the profession maintain that it can be cured without bleeding, I am ready to prove that it can be cured much more speedily and with much less risk with it.

Having introduced the subject of my paper, I will bring before the meeting a living illustration of the value of blood-letting, in a patient of a most unlikely appearance to bear or require such a remedy.

Case I. S. G., aged 46, a weak spare man, had suffered from asthma for a long time, when he consulted me for a violent paroxysm of the disease, attended with bronchitis. To all appearance, he could not have lived many hours with such violent dyspnœa; when I proposed bleeding in the arm as a last resource, which he bore freely, without fainting, and which gave him instant relief. He has been bled from the arm twenty-eight times within the last ten years, always with the same amount of relief; and although he still suffers from the asthma, he considers himself in better health than he has been for several years past. I bring this case forward in proof of the wide field of disease in which blood-letting is applicable, both inflammatory and congestive.

I will next give an outline of what I will designate as three extraordinary cases, treated in an extraordinary manner.

Case II. On November 26th, 1855, I was sent for to a little girl, aged 8 years, who was suffering from anasarca as a sequel of scarlatina. She was frequently sick and vomiting, but complained of no other uneasiness. After diuretics had been administered for four days without relief, she began to complain of dull pain in the head; and as I considered the vomiting to arise from the state of the brain likewise, I gave the alarm to her parents (highly respectable and intelligent people), and advised that the head should be shaven, and a blister applied to each temple. On the night of the same day, about ten o'clock, I was hastily summoned to this child, in consequence of convulsions having suddenly supervened. After the fit had continued unabated for two hours without intermission, I thought it high time to do something decisive if I intended to save my patient; with this view, I requested her mother to bring a fillet and basin, and took from her arm, in the semi-erect position, no less than twenty-six and a half ounces of blood. I would here observe, that in such acute cases, I always bleed with my finger on the pulse until the heart's action falters, or I should exhaust my patient to little effect. This bleeding had the effect of removing the sickness at once; the convulsions gradually ceased, and in a few days were entirely gone. I may say, that in this case, we found great benefit, after the bleeding, in the use of croton oil, which was given for several days as a purgative until the dropsy was removed. She thoroughly recovered within nine days after the bleeding, and has remained well ever since.

Case III. A brother of this young lady, aged 9 years, was taken with sickness on the day I was first sent for to her. He had a mild attack of scarlatina, with very slight rash; anasarca followed, and on December 23rd, twenty-seven days from the first, violent convulsions having set in, I bled him from the arm to seventeen ounces; the convulsions ceased, and never returned; he continued to take aperients and diuretics for about six days after, and then quite recovered, and remained well.

Case IV. Another little sister of the above, aged 5 years, had so slight an attack of the disease that fever and anasarca were scarcely perceptible till December 29th, when convulsions came on after complaining for a few hours of pain in her head. I took from this child's arm thirteen and a half ounces of blood; the convulsions ceased; and she appeared well, till January 3rd, five days afterwards, when the convulsions having returned, I bled her a second time, to the amount of about eight ounces more, which again removed the fits; consciousness returned after the first sleep; she got quite well in a few days, and has continued so up to the present time.

I ought to observe, that in every case the head was shaven, and cold applied.

I leave to my hearers the privilege of forming their own opinions as to the propriety of the treatment pursued.

CASE OF MONSTROSITY.

By Charles Murray, Esq., Oldham.

On Thursday, June 4th, 1857, A. C. was safely delivered of a full grown healthy child. It is perfectly formed; the limbs are all complete and well developed. But from between the sternum and umbilicus projects the body of another and smaller child. It is all complete, except the upper extremities, which are merely rudimentary, and the head, which is wanting. The parasitical child is a male, like the larger one. It is endowed with penis and scrotum; but the urethra, if there be any, is closed; and the anus is imperforate.

The infant has thriven from the time of its birth; and nothing has prevented the due performance of the natural functions of the body. It is disturbed, and cries, when the body of the other is handled.

Dr. Ramsbotham, in the appendix to his work on midwifery, gives some similar examples of monstrosity. The first is one of a Chinese, named A-Ke, 16 years old; a second, mentioned by Ambrose Paré; a third by Palfyn; and a fourth by Winslow. Some of these children lived many years.

As far as appearances enable one to judge, the child I have described promises to do well.

Reviews and Notices.

A Treatise on Cancer, and its Treatment. By J. Weldon Fell, M.D., of the University of New York, etc. London: J. Churchill. 1857.

The name of Dr. Fell is familiar to our readers. We have had occasion to refer to him more than once, as the reputed author of a novel and ingenious method of treating cancer, by the application of a secret remedy. The *method* of applying the remedy, Dr. Fell has already exhibited to his professional brethren; but the *nature* of the remedy, he has hitherto carefully guarded for his own peculiar benefit. Now, it happened, as we informed our readers, that certain authorities, who witnessed Dr. Fell's mode of operating, thought it worthy of serious consideration; and, in consequence, the doctor was permitted to practise his invention in the cancer-wards of the Middlesex Hospital, under the conditions—that he should previously, all in honour, divulge the nature of his remedy to the surgeons of that hospital; and that, after a given time, the results of his practice there, and the nature of the remedy itself, should be divulged to an anxiously expectant public.

Here, then, comes the fulfilment of these conditions in the shape of a treatise by Dr. Fell. But our readers need not torture their literary digestion in ruminating over a light or a heavy treatise; for they will find, we can assure them, that the whole pith of the matter, as far as they care for it, is contained in a very few pages, viz.: in the "Report of the Surgeons of the Hospital", and in the "Author's Plan".

Let us first turn to our Author's Plan, and see how Dr. Fell arrived at a knowledge of this speciality in surgical practice. It is interesting to follow out the workings of an ingenious mind in the pursuit of high things. Dr. Fell had contemplated with dismay the miserable weakness of surgery in its contests with cancer, its unavailing cuttings, and its feebler cauterisings; he had examined all the methods which men made use of before his advent on the surgical arena; and he found "that they almost all fail, and that most of them are not only useless, but absolutely injurious." Surgeons, he thought to himself, have failed because they lose sight of the true character of the disease. They endeavour "to remove it, forgetting the strong predisposition existing in many (*sic*) cases for its reproduction." Dr. Fell therefore cast about for some "active agent which should exert a specific effect upon cancerous matter, and which would exert the same influence by absorption, destroying the tendency existing in many cases in the constitution for the reproduction of cancerous cells, and which, taken at the same time internally, would destroy the cancerous diathesis." Many remedies he tried to this end; but all his efforts to cure the disease were vain, until certain traders made him hear of a root used with success by North American Indians in cancerous affections. *Puccoon*, these "stoics of the woods", it seems, denominate the herb; and learned botanists call it *Sanguinaria Canadensis*. Its blood-like juice and showy snow-white flowers had naturally attracted the savage eye; "and, no doubt, some poor squaw, suffering from this dreadful disease, was the first who in despair applied the bruised bloody pulp of the white flowering *puccoon*."

Such was the lesson learnt by science from savagery. In the first periods of his discovery, Dr. Fell applied the "sacred medicine" pure to ulcerative surfaces; but it was only after months of treatment that he cured the patient. He, therefore, "to hasten its action, conjoined various substances, but none appeared to do as well as the chloride of zinc, for with this compound large ulcerated tumours were removed in a few weeks with comparatively little, and in many cases no pain; at the same time, obtaining by absorption and by internal use all the good effects of the *puccoon*."

Next, he operated on non-ulcerated tumours, first destroying the cutis by nitric acid, and then applying the paste of puccoon and chloride of zinc. But he found in the case of large tumours "that the work was slow, and the eschars thin; he, therefore, made incisions about half an inch apart through the eschar, avoiding the living tissues, and the paste spread upon strips of cotton was inserted into them daily; this plan succeeded admirably, and is *believed to be entirely original*." The action of the puccoon, be it observed, was hastened by the chloride of zinc; but "it (the action) was slow enough to allow its (the puccoon's) complete absorption, thereby enabling it to exert its peculiar constitutional effects, and at the same time removing the diseased mass in a few weeks."

Such, in short, was Dr. Fell's discovery; such is his treatment; and such his theory of the puccoon's action. Let us follow our author on in this history of puccoon, and see how he proceeded to deal with the novelty.

Dr. Fell was wise in his generation. He had made a notable discovery, a palpable hit; and he determined to "turn it to commodity", and not permit the reputation and the profit which might accrue therefrom, the one to light on foreign shoulders, or the other to find its way into the wrong pockets. He kept his own counsel, and he tells us why he did so. A stranger, he says, would have been unheard; the remedy might, in other hands, have been ill applied; and, besides, it often happens that a discovery proposed by one unknown to fame is disposed of and "appropriated by some leading man". Dr. Fell was not inclined, in an honourable and conscientious obscurity, to pass his time piping the pastoral symphony, "*Sic vos non vobis*," etc. Such is his excuse, and on this score we must not judge him harshly. The transaction, it is true, was more according to Cocker than Jenner; but then, alas! we live in a remarkably commercial age. So, on this head, we will only add, that Dr. Fell is an American, and that the thing was smartly done.

And now *ad rem*. The case is before us, and let us judge it candidly. Dr. Fell has high pretensions. If his practice equal his professions, he will one day be mounted on a pedestal by the side of the great demigods of humanity. Yes, indeed, under the proviso of that *if*, Dr. Fell shall take his stand, unblushingly, among the best of them. Dr. Fell can *cure* cancer, not merely remove the local disease; others, he admits, have done that before him, but he can eradicate the cancerous taint from the constitution. Cancer is a general disease, and he can cure it as *such*. He can scotch in its bud one of the cruellest and most bitter diseases which afflict our fallen human nature. Medical science has hitherto confessed that, for all she can do, the disease is irremediable; but Dr. Fell has a secret which shall confound the wisdom of generations!

We some weeks since warned the enthusiastic that this pretence of Dr. Fell's could, from the very condition of things, receive no solution from the exhibition of his practice at the Middlesex Hospital; and our warning is fully justified by the Report of the Surgeons: they there say, "that they have not as yet had time to ascertain the average duration of the benefit conferred by the treatment; nor have they any means of knowing whether, in the event of a return of the disease, there be any difference observable from what is known to take place after excision."

As the matter now rests, indeed, there is not one smallest item of proof that this high pretence of Dr. Fell has any foundation whatever to rest upon, excepting his own assertion, which different persons will value differently, but which, we freely confess, has very little weight with us in matters of this kind. Dr. Fell's boast of eradicating cancer from the system is completely contradicted by all previous experience, is opposed by all we know of the pathology and therapeutics of the disease, and is not confirmed by any recent observations. His method no

more tends (for anything proven to the contrary) towards the eradication of cancer from the constitution, than the methods of treatment hitherto employed by surgeons. He himself, indeed, admits that the disease returns in 30 per cent. even of those who have been lucky enough to be puccooned by him. The statistics, however, upon which he founds this favourable statement, are wanting. Two main conditions in it remain unsatisfied; viz., the periods which had elapsed when the observation of the non-return of the cancer was made, after the date of the impenetration of the system with puccoon; and the truly cancerous nature of the tumours operated upon.

All this pretty history, therefore, touching the puccoon, must be regarded for the present as a charming fable from the backwoods of America. The Report of the Middlesex Surgeons says nothing of the "simple"; and, altogether, we may very fairly opine that a handful of ligneous particles from the nearest sawpit would, mixed with potential chloride of zinc, work on cancer as efficaciously as Dr. Fell's paste. Indeed, we have a sort of proof of this in the circumstance that a surgeon, who made himself master of Dr. Fell's method of operating, has, simply by the aid of chloride of zinc, eradicated cancer-masses as effectually as Dr. Fell himself can do with his paste of chloride of zinc *plus* puccoon. The puccoon may charm the eye of the public, but it must not bewilder the critical vision of the profession. Puccoon *outside*, or puccoon in half-grain doses three times a day *inside*, is still upon its trial; the evidence, at present, being unfavourable to its pretended virtues; and Dr. Fell's boast, therefore, of curing cancer as a constitutional disease falls to the ground.

In thus disposing of Dr. Fell's first and greatest pretence, we have spoken of him and of his cancer-cure in a light language; and we feel bound to say that, in our judgment, in his manner of coming before the public, he has laid himself open to the severe and merited censure of a high minded profession, which has ever in this country been foremost in the promulgating and spreading of good tidings to suffering humanity. He has, by his proceedings, in part allied himself to a class of practitioners with whom the profession has no sort of sympathy. Nevertheless, we cannot refuse him the praise which we think fairly belongs to him in this business, though we would gladly have paid it in a more graceful manner.

The Report of the Surgeons above referred to satisfies us that there is a soul of good in Dr. Fell's method. Let us, therefore, endeavour to discover wherein it lies, and so apportion him his just share of credit; reducing the fact and the merit to their simplest terms, and stripping from the Doctor the false glare with which he has surrounded his proceedings.

Puccoon is, as we have shown, in vulgar phrase, a humbugging pretence. Chloride of zinc, therefore, must be the operating virtue in Dr. Fell's paste. Now, chloride of zinc has been for twenty years, at least, an established article in the armamentarium of surgery. *Vixerunt fortes*, etc. Bold doctors have applied it to cancer two decades before the era of Dr. Fell. Our author, consequently, has discovered no new caustic; nor is he the first who applied this chloride for the destruction of cancer-masses. Wherein, then, lie the merit and the novelty of "the Author's Plan"? They appear to us clearly to be connected with his mode of applying the paste; viz., cutting through the eschar formed by the caustic, and inserting the paste into the incisions, as before described. This is the novelty which Dr. Fell has introduced into practice.

Now, if the surgical report be confirmed by a more extended experience, it is certain that Dr. Fell has given to caustics a position and a value, in the treatment of cancer-growths, which they have never yet obtained in legitimate surgery. Caustics, as we have said, have been often, and long ago, used for this end, but they had fallen into disuse, and were hardly recognised instruments of daily service in the hands of the surgeon; the results obtained from their use had not been found satisfactory. In this conjuncture, Dr. Fell appears; and what he does is, to propose *a novel mode of using an old caustic*; so that *this*, stripped of all blazoning and varnishing, is what Dr. Fell has really done; neither more nor less than this.

The report speaks well of his method. The treatment is orthodox, safe, and easy of application. It may be used in all cases; and in many cases where the knife is out of the question. The patient is not confined to bed during the operation. Erysipelas and pyæmia rarely result. A healthy granulating and cicatrising surface succeeds the enucleation of the tumour. The pain of the caustic varies much; it may be slight, and it may be very severe.

With regard to this Report we must observe, that it was made on the 18th of March, Dr. Fell having commenced operations in the Hospital on the 22nd of January preceding. So that the tumours could have been, as Hamlet might say, "but two months dead—nay, not so much, not two," when this Report was written. The experience, consequently, of the surgeons in this treatment must have been somewhat limited at that time; and their report could not have been founded on that large observation of facts, which alone proves the truth or the fallacy of doctrines medical. They had not, indeed, an opportunity of witnessing the whole process from the commencement of the treatment to the complete cicatrisation of the ulcer in the Hospital. Under the circumstances we can understand why such a report became necessary; but we are certainly only speaking a general desire, when we add, that we sincerely hope those gentlemen will, at the expiration of the six months, give a further and fuller and more specific account of what they witnessed in the Hospital; that they will detail fully the cases operated upon there by Dr. Fell.

Considering the facts as they are before us, we observe, that we do not for one moment suppose that this method will supersede the knife in ordinary cases, but that the use of caustics, thus applied, appears to give present relief, and to prolong life, when used in cases of deep cancerous ulcerations, and when the disease has attacked parts where the knife can neither follow it nor embrace the whole of the cancer-growth. The report tells us little satisfactory as to the degree of *pain* suffered under the caustic. We know that it has been in many instances atrocious; and it is useless to tell us that little pain attends the destruction of a large cutaneous surface by nitric acid. Unless it can be shown that the caustic has a specific influence over the constitutional spread of cancer, it is manifest that in the very large majority of *non-ulcerated* cancers, where an operation is justifiable, a few rapid cuts of the knife, with the aid of chloroform, must be a vastly preferable proceeding to the repeated and lingering sufferings involved in the application of caustic. The report on this, as in many other points, is not sufficiently clear. But the subject requires, and will now obtain, further elucidation.

We must not conclude without referring to the conduct of the surgeons of the Middlesex Hospital. These gentlemen have been, in our opinion, most unjustly reflected upon in connection with this affair. Their names alone should have shielded them from all imputation of wrong. There are not to be found in the profession men more honourable and high-minded than they, or men in whose hands the dignity of the profession would be more jealously guarded. We are thoroughly satisfied that whatever they have done, has been done conscientiously, and as duty dictated; "*fais ton devoir, advienne que pourra*" has been their device. The subject demanded their cognisance, and they investigated it. There were *proofs* that Dr. Fell had eradicated tumours in a novel way; that he had operated with an unexpected degree of success in cases which Hospital surgeons had refused to touch. The Middlesex Hospital had wards specially appropriated to cancer; and their Founder particularly desired that investigations of this nature should take place there. The

surgeons permitted the use of no secret remedy in their Hospital; before the remedy was applied its justifiable use was ascertained. They are altogether blameless. Whatever of the unworthy may be said by a high sense of professional honour to creep out in the history of the business, belongs solely and entirely to Dr. Fell. He placed himself in a false position in his manner of coming before the profession, and he must be contented to reap the results in golden honoraria, it may be, but not in a dignified professional status.

Animal Physics: or the Body and its Functions familiarly explained. By Dionysius Lardner, D.C.L., formerly Professor of Natural Philosophy and Astronomy in University College, London. With 520 illustrations. pp. 705. London: Walton and Maberly. 1857.

There are few men, if any, who have by their writings done more to popularise scientific knowledge than Dr. Lardner; and none who have better succeeded in combining accuracy of information with plainness of description. This remark is applicable without limitation to the work which he has lately written on *Animal Physics*.

The book is divided into eighteen chapters; of the contents of which we shall give an outline, as this will best show how far the author has gone towards meeting the requirements of a popular treatise on the structure and functions of the animal, and especially the human body.

Chapter i contains a General View of the Animal Organisation. Here are given sketches of the structure and functions of the skeleton, joints, muscles, blood, lymph, and chyle, of the nervous system, and of the phenomena of circulation, respiration, and digestion. This, in fact, is a preparatory chapter for what is to follow.

Chapter ii contains a description of the Osseous Tissue and of the various Bones and Ligaments.

Chapter iii contains a description of the Muscles, including the general anatomy of muscular tissue and the physiology of muscular action. In both these chapters, the physiological reasons for the several arrangements are so prominently brought out, as to render subjects, which *primâ facie* would appear dry, attractive and interesting.

Chapter iv is devoted to an exposition of the Structure of the Lower Animals, from quadrumana down to zoophytes. This chapter is an outline treatise on zoology, both recent and fossil. It is especially enriched with illustrative woodcuts, of which it contains one hundred and sixty-two.

Chapter v treats of the Nervous System. Here are described the cerebro-spinal axis and nerves, the ganglionic system, and the nervous systems of inferior animals; then follows an exposition of the functions of the nervous system. Dr. Lardner here shows an intimate acquaintance with the researches of Flourens, Müller, Haller, Zinn, Magendie, etc.

Chapter vi is on the Circulation; and includes an excellent description of the blood and of the circulating apparatus, with the physiology of the function of circulation.

Chapter vii contains an account of the Lymphatics, their structure, arrangement, and physiological uses.

Chapter viii is on Respiration. Here the author gives a description of the nature and mechanism of respiration, showing how the chest and lungs act in effecting the process; he then describes the physiological effects of respiration, and gives the various theories which have been held as to the nature of the phenomena which occur. The source of animal heat, and various influences affecting respiration, are next described; and the chapter concludes with a description of the manner in which the function is performed in the lower animals. We may say at once, that a sketch of comparative physiology is the general ending of each chapter of Dr. Lardner's work.

Chapter ix describes, in a full and clear manner, the phenomena of Digestion, and the structure and action of the organs by which these are effected. Here the author has availed himself of the researches of Mialhe, Bernard, Blondlot, Beaumont, and other well known chemists and physiologists of the present day.

Chapter x treats of Assimilation, Secretion, the Skin, and Animal Heat.

Chapter xi contains a description of the Senses in general, including some highly instructive remarks on the common principle of all, and on the protective arrangements and provisions for efficacy in the several organs.

Chapters xii, xiii, xiv, xv, and xvi, treat severally of the Touch, Smell, Taste, Vision, and Hearing; and chapter xvii, of the Voice.

Chapter xviii contains an account of Development, with some observations on Maturity, Decline, and Death. In this chapter, which is very full and instructive, the author has introduced, with illustrative drawings, the researches recently made by MM. Baudrimont and Martin St. Ange on the growth of the chick *in ovo*.

In his preface, Dr. Lardner acknowledges that he has received assistance from several physiologists in the revision of his work, and that he has availed himself of many suggestions which have been made by them to him. And, on a careful perusal of the book, we find abundant evidence that the author has had access to, and has made use of, the best sources of information, and that he has succeeded admirably in putting together the leading facts of animal physiology in a form at once complete in scientific details and intelligible to the popular mind. We doubt whether a more successful attempt could have been made to write a work on physiology, which should thoroughly fulfil the requirements of a treatise at once scientific and popular. The work is one, the positive merits of which entitle it to an extensive circulation; and, as a negative recommendation of no small moment, it contains nothing which can render it unfit to be placed in the hands of persons of either sex, and of any age capable of comprehending the truths of natural science.

The English Bread-Book for Domestic Use, adapted to Families of Every Grade; containing the Plainest and most Minute Instructions to the Learner; Practical Receipts for Many Varieties of Bread; with Notices of the Present System of Adulteration and its Consequences; and of the Improved Baking Processes and Institutions established Abroad. By Eliza Acton, pp. 204. London: Longman and Co., 1857.

The copious title-page of the *English Bread-Book*, which we have copied, renders any further analysis unnecessary. The authoress gives excellent instructions on the best means of preparing the staff of life in a pure and wholesome state; and therefore we recommend the book to the use of our Associates and their families.

The Chemical Atlas, or Tables: shewing at a glance the Operations of Qualitative Analysis, with Practical Observations, and copious Indices of Tests and Reactions: accompanied by a Dictionary of Simple and of Compound Substances, indicating the Tests by which they may be identified; and a Dictionary of Reagents, indicating their Preparation for the Laboratory, the Means of Testing their Purity, and their Behaviour with Substances. By A. Normandy. London: George Knight and Co. 1857.

The *Chemical Atlas* and its accompanying *Dictionaries* appear likely to be of the greatest use to the practical chemist. Instead of having to turn hither and thither to find the information he requires, he will be able to lay open the *Atlas* at the table which best suits the operation in hand, and there he will see at a glance what he has to do, and what results he may expect. Opposite each table, also, are observations on the various ambiguities which may present themselves in the course of the process, and on other matters necessary to be

borne in mind. The *Dictionaries* are convenient works of reference, in which the information is conveyed distinctly and in few words.

British Medical Journal.

SATURDAY, JUNE 27th, 1857.

THE UNIVERSITY OF ST. ANDREW'S: ITS EXAMINATIONS FOR MEDICAL DEGREES.

The graduates of the University of St. Andrew's are naturally one and all annoyed with the improper slight passed on their *Alma Mater* by Government officials, who ought to know more than they do regarding the educational system of their country. As truth will always have its way in the end, the graduates need fear nothing from such aspersions as have been made. Whenever a man attacks the University of St. Andrew's and its examination for the M.D. degree, the inference fairly is, that such man knows nothing of the subject of which he speaks.

In reviewing the progress of medical science for the past eight years, there is no history more curious in connexion with it than that of St. Andrew's University. Whatever some superficials may say and think, it is clear, to all who have a broad view of the advancement of intelligence and scientific improvement in physic, that the St. Andrew's degree is a test of our advancement. Had this university, in throwing open its examination to all qualified members of the profession, been lax in its examinations, and had it conducted its affairs on the hole and corner principle, the effect would have been to degrade the profession wholesale. The liberal part of the argument would have been lost in the laxity of its application. In lieu of this, the university authorities, feeling that true liberality in competition for honours consists in making the competition worthy of the name and in opening it to all, instituted that admirable system of examination which, as a test of qualification, is now surpassed only by the examination of the London University. As each examination time has arrived, and the printed questions have appeared, the increasing severity of the trial has been more manifested. Each successive set of examination papers surpasses its predecessor; and the last are model specimens of what an examination for the Doctor's title ought to be. Gross routine is here thrown boldly aside; the grinder is quietly dethroned; the questions are vastly beyond him and his narrow circle; and the crammed Strasburgian anserines, failing in courage, depart undoctored when the first view of a general philosophical question meets their astonished eyes. They were not prepared for this; it was out of the circle.

But the result which is so cheering in this question is the fact that, just in proportion as the examination becomes more stringent, so is the degree more sought after and more popular. To the majority who take the title, the honour is not practically necessary; but the spirit of emulation stimulates all, and the labour follows as a matter of honour rather than of necessity. Men overwhelmed with practical duties find additional hours for renewing their acquaintance with their academic pursuits, and in acquiring a knowledge of present science. They go up to their examination thus prepared, adding to their student's lore their practitioner's experience; they pass a creditable examination; they obtain their university status; and feel all the better for the effort. Now, so long as the University of St. Andrew's encourages this educational principle, so long will it deserve and daily receive the increasing thanks of the public. No legislation will hinder it thus advancing; and if every practitioner were enlisted to its cause on the terms of graduates, so much the better for the profession at large. At the present moment, or at any other moment, the graduates have only to speak out to make their full claims heard.

We cannot conclude this notice without rendering our thanks to Dr. Day, for his exertions as Chandos Professor and Chief Examiner in the University. Possessing a consummate knowledge of modern medical science; foreseeing the requirements of the time; philosophical and keen as an examiner,—he has done more than any modern man to elevate the position of his university, and of all who worthily belong to it. With the next examination, a competitive trial for honours will, we hear, be commenced—a new and important movement, all in the right direction.

THE VALUE OF PHYSICAL TRAINING.

We firmly believe that Englishmen have become the civilisers of the world, and have maintained their position as the most practical people on the face of the globe, mainly in consequence of the manner in which they have kept a due equilibrium between mental and physical education. To make up the truly able man, muscle as well as grey brain-matter should be thoroughly exercised. Your pale student is only half a man, and will never produce those robust movements which form epochs in the world's history; your mere athlete, on the other hand, will not advance beyond the excitement of the ring; they, on the contrary, who alternate football and cricket, riding and shooting, with a steady mental training, are the sort of stuff out which we carve new empires. The colony of New Zealand, the most prosperous perhaps of our Pacific possessions, was mainly founded by young fellows, who scarcely a score of years ago were crack bowlers at Eton, leading oarsmen on the Isis, or sturdy football players at Rugby when Arnold was their king. The taste for athletic games, so long cherished at our public schools, has been of immense importance in forming the English character. The fashions of the great seminaries have descended to the middle class schools: they and their doings in this important branch of education are therefore of no small importance to all those who wish to see the native vigour of the race maintained in all its ancient glory. There can be little doubt that the public matches of the picked men of the Universities and the Public Schools are greatly conducive to the spread of physical education. The annual rowing-matches on the Thames, in which Oxford and Cambridge struggle for the much coveted cup; the cricket matches, in which Eton, Harrow, Rugby, and Winchester contend with each other under the public eye, are admirable means of diffusing the taste for public sports, and of keeping our national blood at that high pitch necessary to carry it through the energetic work it has to do in all parts of the globe.

It is, then, with unfeigned regret that we have seen the first blow struck at Eton at this physical training, in the abandon-

ment of the public cricket matches played of old by the Etonians. Dr. Hawtrey has set his face, it appears, against these matches, on the plea that they produce licentiousness in the youths and lead to excessive expenditure. These objections do not seem to us forcible enough to warrant the suppression of a salutary custom, and one which, as we have before said, has no slight influence upon our national character and health. There is nothing in the game itself which leads to dissipation; and the slightest surveillance on the part of the authorities would prevent the recurrence of any improprieties, even when public matches take place in the metropolis.

It does seem a little singular, that whilst those at home are discountenancing those national sports which make the Englishman what he is, the Americans are deploring the want of athletic sports in their own country and pointing to England as their happy home. The *New York Times* in an able leader says:—"The unbalanced despotism of the intellect is the sorest social curse under which we labour in the United States. Sports of all kinds, and especially the hearty athletic sports which develope the body with the brain, and bring forward the sharp, quick, active qualities of what may be termed the 'physical' mind in an equal degree with the subtler faculties of ratiocination, have never been encouraged among us as they should have been. Our muscular nature rarely gets a fair chance in our life. We exist by and for the nerves; and it is no fanciful theory which attributes the sudden excesses and equally sudden relapses of political feeling, the partisan intolerance, and the coquetish impatience of our public life in no small degree to the want of national games and pastimes, mainly joyous and earnest." The effect of this want of public games is "that the average citizen of the American metropolis, with more ample means of subsistence at his command, enjoys less of the priceless boon of health than the average citizen of the British capital." And this very increased longevity our transatlantic cotemporary expressly ascribes to the example set to the country by our great public schools, where "the young Englishman begins his education in self-reliance and fair play through the trying ordeal of foot ball at Eton and Rugby, and graduates on the back of a sixteen hand thorough-bred, or on the deck of a clipping schooner." It is very often the case that those at a distance can see the game clearer than those who are close at hand; and we cannot help thinking that the writer in the New York paper, a portion of whose article we quote, sees clearer than Dr. Hawtrey the necessity for maturing, in their full integrity, those robust habits of our upper class youth which act as a key note to those below them in the social scale.

THE WEEK.

The Medical Reform Bills of Mr. Headlam and Lord Elcho are expected to come on for the second reading on Wednesday next. Even though either or both of them should pass safely through this ordeal, there is little or no hope that Medical Reform will be settled this Session, now that it is so far advanced.

The Poor-Law Medical Reform Agitation is going on with vigour. Petitions from the medical officers of unions in all parts of the kingdom are daily being poured into the House of Commons; and not only from medical men, but even in some cases from the clergy, gentry, and ratepayers. We should like to see some more petitions from persons of the latter class: they would help to convince the legislature that what the profession ask is not their own aggrandisement, but simply the means of doing their duty to the poor and to the state without injuring themselves. The question is a public one, not one merely affecting the interests of a class. We therefore hope that the medical officers of unions will go on petitioning, and that they will influence their friends in the laity to join them in their prayer.

In our news pages to-day are copies of two documents which will no doubt surprise many. We allude to the petitions in favour of the Poor-law medical officers sent by the Council of the Royal College of Surgeons and by the Master and Wardens of the Society of Apothecaries. The support of these bodies is most gratifying, especially as precedent had not given much room for hoping for it. We trust that the prayer of the corporate bodies will have due weight in the House; and that this act of theirs, in coming forward in behalf of the Poor-law surgeons, will be recognised as an earnest of future goodwill on the part of those who have been hitherto regarded as devoid of sympathy for the masses of the profession.

In the Committee of supply of the House of Commons, on Friday week, the allocation of the learned societies in Burlington House underwent some criticism; but mostly of a kind creditable to the good understanding of the Government and of honourable members. One gentleman, however (Mr. Drummond), distinguished himself by remarks so characteristic, that they ought to be chronicled to his honour by all men of science, in every place where science is known:—

"The honourable member for Maidstone (Mr. Hope), had declared the general feeling to be that these learned societies ought to be fostered and encouraged by the Government. If that were the feeling of gentlemen on both sides of the House, and if that were the feeling of the country, for goodness' sake let there be no more nonsense heard about administrative reform, or declamations upon hustings about retrenchment and economy. One set of gentlemen who were travellers called themselves the Geographical Society. Another set of gentlemen who caught butterflies called themselves the Linnæan Society. Those were the learned bodies which should be fostered and encouraged. Then there was a Geological Society. But what on earth was the use of a Geological Society? Why should the House go on, year after year, providing out of the public taxes for all these clubs, which they choose to dignify with the name of scientific societies? He protested against this as not only a useless expenditure, but as being no part of the proper business of the State."

Such utter nonsense as this would be unworthy of notice, were it not for the encouraging response which it elicited from Lord Palmerston. His lordship observed that,

"The doctrine of his honourable friend was founded on views of the duties of a Government which were exceedingly narrow and quite unworthy of a great nation. Parliament and the country had for years deemed it right to contribute largely from the public revenues for the promotion of art, not simply on account of the credit which a country derived from its successful cultivation, but from a feeling that the development of art added to the creative power of a nation's industry. Yet we had altogether neglected the promotion of science, while other States had devoted great means to its encouragement. Would any man say that science was of less importance to a country than art? The progress of science obviously contributed more directly to the prosperity and power of a country than any ornamental pursuits, however estimable in themselves."

On Saturday last, the authorities of King's College Hospital held a field-day in the great hall of Lincoln's Inn, for the pur-

pose of raising a sum of £40,000 for the completion of the Hospital! A very large gathering of the clergy were present on the occasion, and the Duke of Cambridge presided. His Royal Highness, in recounting the peculiar merits of this hospital, especially referred to the nursing system there pursued. We do not personally know whether all the praise bestowed by his Royal Highness on the working of the system here is deserved, but we can thoroughly agree with his sentiments on one little matter, which carries with it more than meets the eye. "Even so apparently trifling a thing as that of flowers decorating the window sill, and placed about the rooms, was not to be passed unnoticed. They of themselves gave an air of cheerfulness and comfort to the chambers of the sick, while by such minute attentions the sufferings of the patients could not fail to be alleviated, in thus finding themselves treated as if they were comfortably at home in their own beds."

The Duke spoke truly. Hospitals are but too often utterly without any of those objects of interest to be found in the meanest cottage. The bare walls, without an item of ornament, but too forcibly remind the poor patient of the workhouse. There is no comfort in the look of the place. Such trifles as fresh flowers are medicine to the sick more potent than the hard man of the world can well conceive. King's College will have done a good thing, if it only sets an example to other hospitals of pleasing the simple tastes of its poor inmates with such inexpensive trifles. The large sum of £15,000 was announced as already collected towards the fund, and we trust ere long to see this important structure fully completed.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
West Somerset. [Annual Meeting.]	Castle Hotel, Taunton.	Wed., July 1, 2 P.M.
Birmingham and Midland Counties. [Annual Meeting.]	Hen & Chickens Hotel, New Street, Birmingham.	Thursday, July 2nd, 3 P.M.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 7, 12 noon.
Reading. [Annual Meeting.]	George Hotel, Reading.	Wed., July 8, 4 P.M.
Bath and Bristol. [Annual Meeting.]	Bristol Institution, Bristol.	Thurs., July 9, 3 P.M.
Metrop. Counties. [Annual Meeting.]	37, Soho Square, London.	Tues., July 14, 3 P.M.
Shropshire. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Tuesday, July 14, 2 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

MEETING OF COMMITTEE OF COUNCIL.

Held in Birmingham on June 16th.

Present:—Sir C. Hastings (in the Chair); Dr. Risdon Bennett; Mr. Pemberton; Mr. Soden; Mr. Wickenden; and Dr. Williams.

The proposed Report of the Council (to be presented at the Annual Meeting) was read, and directed to be printed and circulated among the members of the Council.

A letter from Mr. Husband was read, recommending the subject of Army Medical Reform to the consideration of the Committee. Various documents were laid before the meeting. Attention will be drawn to this question in the Report of Council.

The following resolution was adopted:—

That Sir Charles Hastings be requested to ascertain whether it will be practicable to hold the next Annual Meeting of the Association in Edinburgh.

Charles Hastings,
Philip H. Williams.

Worcester, June 1857.

MEMBERS WHO HAVE PAID THEIR SUBSCRIPTIONS FOR 1857: ADDITIONAL LIST.

[Dear Sir,—I have been requested by several members, whose payment of subscriptions for the current year was not announced to me in time for publication in the former list, to send their names to the Journal without delay. I shall therefore feel obliged if you will insert them.

Yours faithfully, Philip H. Williams.]

To the Editor of the Journal.

CORNWALL.
Kerswill, R., Esq., St. Germains

DEVONSHIRE.
Black, G., M.D., Torquay
Croker, J. G., M.D., Bovey Tracey
Forman, G. E., Esq., Teignmouth
James, J. H., Esq., Exeter
Kempe, A., Esq., Exeter
Kerswill, S., Esq, Devonport
Lake, W. C., Esq., Teignmouth
Mackenzie, F., Esq., Tiverton
Price, R. C., Esq., Lympstone
Pridham, E. P., Esq., Exeter
Reed, W. H., Esq., Tiverton
Rendell, E. M. R., Esq., Plymouth
Square, W. J., Esq., Plymouth
Waters, A., Esq., Exmouth

LANCASHIRE.
Hancock, J., Esq., Manchester

STAFFORDSHIRE.
Hancox, H., M.D., Wolverhampton

WARWICKSHIRE.
Chavasse, P., Esq., Birmingham
Clarke, J., Esq., Kenilworth
Davis, H., Esq., Birmingham.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857

MIDLAND BRANCH: ANNUAL MEETING.

The Annual Meeting of the Midland Branch was held at the Town Hall, Leicester, on Thursday, June 18th, at 2 P.M.; G. Shaw, M.D., President, in the chair. There were also present: C. Bowmar, Esq. (Leicester); B. W. Brown, Esq. (Wymeswold); W. Cantrell, Esq. (Worksworth); A. Fry, Esq. (Wigston); T. Hewitt, M.D. (Grantham); H. Lankester, Esq. (Leicester); T. Macaulay, Esq. (Leicester); J. Marriott, Esq. (Kibworth); W. H. May, Esq. (Leicester); E. Morris, M.D. (Spalding); J. Nuttall, M.D. (Syston); Thos. Paget, Esq. (Leicester); T. Robertson, M.D. (Nottingham); J. Sloane, M.D. (Leicester); J. H. Spencer, Esq. (Hallaton); H. Taylor, Esq. (Nottingham); R. H. Thomas, Esq. (Ibstock); J. White, Esq. (Nottingham). J. Buck, Esq., C. R. Crossley, Esq., Wm. Dalley, Esq., and P. Downey, Esq., were also present as visitors.

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Mr. Bowmar moved, and Mr. T. Macaulay seconded, a vote of thanks to the retiring President, B. Eddison, Esq., accompanied by an expression of regret that his absence should have been occasioned by ill health.

PRESIDENT'S ADDRESS.

After a few introductory remarks, the President alluded briefly to the subject of General and Poor-law Medical Reform, expressing some doubts as to the benefits to be derived from the Bills now before Parliament, and contending that reform ought rather to come from within than from without. He then made some observations on the spirit of inquiry of the present day, as contrasted with preceding epochs, more particularly in regard to the caution now exercised towards the adoption of any theory unless supported by long experimental research; and, passing a high tribute of praise to the sagacity of Dr. Marshall Hall in reference to the Ready Method, he took a special review of the investigations of M. Claude Bernard, Brown-Séquard, Dr. Owen Rees, Dr. Pavy, etc.

Mr. Marriott proposed, and Dr. Morris seconded, a vote of thanks to the President, for his very able and comprehensive address.

REPORT OF THE COUNCIL.

Mr. White (Nottingham) read the Report of the Council for the past year, congratulating the members on the prosperity of the Branch, and passing a warm eulogium upon the memory of the late Dr. Williams.

Dr. Morris moved, and Mr. W. Cantrell seconded, the adoption of the Report.

PLACE OF MEETING NEXT YEAR: ELECTION OF OFFICERS.

Mr. T. Paget moved, Mr. W. Cantrell seconded, and it was unanimously carried—

"That the next annual meeting be held at Spalding; and that Edwin Morris, M.D., be the President-elect."

Dr. Goode (Derby), Mr. J. White (Nottingham), and Mr. H. Lankester (Leicester), were re-elected Local Secretaries. Mr. G. Mitchinson (Lincoln) was appointed Local Secretary, in the room of Mr. T. Sympson, who had tendered his resignation, and to whom a vote of thanks for his past services was accorded unanimously.

NEW MEMBERS OF THE BRANCH.

The following gentlemen, having been proposed and seconded, were elected members of the Branch:—W. Joberns, Esq. (Nottingham); W. Newman, Esq. (Fulbeck); C. Kemp, Esq. (Leicester).

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following gentlemen were unanimously nominated to represent the Branch in the General Council for the ensuing year: J. Heygate, M.D. (Derby); J. Hitchman, M.D. (Derby); E. Morris, M.D. (Spalding); J. Snow, Esq. (Lincoln); B. Eddison, Esq. (Nottingham); G. Shaw, M.D. (Leicester); T. Paget, Esq. (Leicester).

CASES AND COMMUNICATIONS.

Mr. White read a paper on the Action of Chloroform.

Dr. Sloane read a paper on the Type of Fever prevalent in Leicester.

[We have received both these papers for publication in the Journal.]

Dr. Nuttall read a case of strangulated obturator hernia, occurring in a patient 75 years of age. An operation for its relief was performed by Mr. Paget; and the result was so far successful that all the symptoms of strangulation at once subsided. The patient, however, gradually sank, and died thirteen days after the operation.

Mr. Paget observed that, though the diagnosis in such a case was scarcely possible, yet an exploratory procedure, such as was adopted in this instance, was by no means difficult, since the deeper intermuscular structures were easily reached by the point of the finger or the handle of a scalpel.

VOTES OF THANKS.

Votes of thanks were unanimously passed to the authors of the papers; and a similar vote to the Mayor, for the use of the Town Hall, having been accorded by acclamation, the meeting broke up.

The members subsequently dined at the Three Crowns Hotel, the chair being filled by the President, supported by the Mayor, Sir H. Halford, Bart., Rev. E. Shaw, J. Taylor, Esq., S. Stone, Esq., etc.

Reports of Societies.

NORWICH PATHOLOGICAL SOCIETY.

Donald Dalrymple, Esq., President, in the Chair.

APOPLEXY: DISEASE OF THE CEREBRAL ARTERIES.

BY D. DALRYMPLE, ESQ.

Mr. G., aged 46, was in his usual health on September 23rd 1856, rose early, and took his bath and breakfast. While reading prayers, he was observed to mumble a little, but after this he wrote some cheques, and played on the floor with his infant boy. At a quarter before ten, while sitting on a sofa, he slipped slowly off it on to the floor, and, when raised, was unable to speak, was unconscious, and paralysed on the right side. He was taken to bed, and medical aid summoned. Mr. Dalrymple found him breathing stertorously; the pupils were closely contracted; the right side was paralysed; the left in strong convulsions; the lips were blueish; the face congested; the head not very hot; pulse very quick, but not hard or bounding. He had been bled to a small amount, which had acted on the circulation. Calomel was given, and sinapisms applied to the feet and legs. After a short time, the pulse rising again, eight leeches were put on the temples, which soon reduced the pulse, and they were taken off. At one o'clock, he became more tranquil, the convulsions ceased, and the breathing became less laborious; at this time, he was sick, and vomited unconsciously to a small extent. About 3 P.M., his breathing again became more laborious, and his face more dusky; the pulse was more rapid and feeble; the pupils began to dilate; and the mucus to collect in the trachea. He would have died then, had he not been raised into the erect posture, in which position he was maintained until he died, at 6 P.M., asphyxiated, a little more than eight hours after he was seized.

At the age of about 20, this gentleman had suffered from fever, which was followed by psoas abscess. For four or five years it continued to discharge, occasionally closing; and as often as it did so, symptoms of pressure on the cerebro-spinal system shewed themselves, which were always relieved when the abscesses reopened. At length, the abscess closed; and from that time till he married, he had only one attack of head symptoms, but that was severe and almost maniacal in character. From this time till the fatal seizure, a period of fifteen years, though eccentric in manner, and at times dull and apathetic, he yet had no cerebral attack. He was a man of great acquirements and retentive memory.

Post Mortem Examination. The head only was examined. The scalp was vascular; the cranial bones were hard but not thickened; the dura mater was closely adherent along the centre of the calvarium. A large quantity of fluid blood was found between the hemispheres lying on the corpus callosum. In the midst of the left hemisphere, the structure of which was torn up and rifled, as if by a ball, lay a recent clot of about two ounces in weight. The left lateral ventricle was full of blood; and the cerebral tissue around the extravasation was disorganised. The brain generally was very soft, but not highly vascular. The arteries were diseased throughout; and in one of the branches of the basilar was found an opening of the size of a slit hemp-seed. Beneath the right anterior lobe there was an aneurismal dilatation of an arterial branch, of about the size of a horse-bean, and resembling an old apoplectic clot.

FIBROID TUMOUR. BY W. CADGE, ESQ.

A labourer, aged 45, was admitted into the Norfolk and Norwich Hospital, having a large tumour on the front of the abdomen. It commenced to grow eighteen or twenty years ago. About ten years since it was removed; about four years after the operation it returned in the cicatrix; and in two years it reached a large size, and was again removed. The tumour reappeared a third time, about a year and a half after the last operation; and at the date of his admission it had the appearance of a cluster of fibrous tumours occupying a large portion of the front of the abdomen. The man's health was not much impaired, and the disease was a third time removed by operation. The mass weighed between two and three pounds; and, on examination, seemed to be non-malignant as to its microscopic character, and to belong to the class of tumours described as "recurring fibroid" by Mr. Paget.

The patient made a good recovery.

MALIGNANT TUMOUR OF TESTES. BY R. B. KIDD, ESQ.

The specimen was taken from a man, aged 30, who died of phthisis. The disease, which was supposed by the patient to be a rupture, was first noticed about four months before death, and steadily increased, till at the time of his death it was of the size and shape of a cocoa-nut, firm, and in parts elastic to the touch; the scrotum was unadherent, but tense, and covered with large and tortuous vessels; it was painful, but not severely so. The tumour, when a section was made, was observed to be enclosed in a distinct capsule, and to have the ordinary appearance of medullary sarcoma; under the microscope, a number of compound nucleated cells and free nuclei were perceived.

APOPLEXY WITH CONVULSIONS. BY H. DOVE, M.D.

R. F., aged 34, a short somewhat stout man, of intemperate habits and sallow complexion, had at times been subject to giddiness, heaviness in the head, and partial loss of power of the lower limbs. On November 1st, he complained of headache and sickness. On the next day, while undressing, he fell apparently exhausted; and soon became comatose. The pupils were contracted; the breathing easy and quiet. In about half an hour he was seized with tetanic convulsions; the jaw was locked, and the back was arched; there were grinding of the teeth and foaming at the mouth; the muscles never fully relaxed, but there were paroxysms of tetanic spasms every few minutes. He died in about three hours.

Post Mortem Examination. The cranium was thin, except a portion of the frontal bone, which was of unusual thickness; the dura mater was free from adhesions and dry; the arachnoid was transparent throughout; the pia mater was much injected. A thin layer of black fluid blood was found extended over the anterior lobe and base of the brain to the medulla oblongata and cervical spinal cord, completely surrounding the latter, and giving it the appearance of having been painted black. There was a small clot and some black fluid blood in the lateral ventricles. The substance of the brain was hard and hypertrophied. The cerebellum was soft. There was no extravasation in the tissue of either brain or cerebellum.

POISONOUS EFFECTS OF EATING PRIVET-BERRIES AND ACORNS. BY J. S. GARTHON, ESQ.

Thirty-seven children belonging to a "Girls' Home" were allowed to wander in a wood, where they ate an immoderate quantity of acorns and privet-berries. Soon afterwards they were seized with the following symptoms. The hands and face were shrivelled, and of a blueish appearance. They were all attacked with opisthotonos, intense thirst, and sickness; but without the power of vomiting. An emetic was administered, and in about half an hour they discharged an enormous quantity of half-masticated acorns and dark-coloured pips of the privet. The fluid was almost black, and of an offensive odour. The tetanic symptoms gradually subsided. The children still complained of intense pain over the stomach; the emetic was repeated, and more offending matter was vomited. On the following day, a full dose of castor oil was administered; the motions produced by it were nearly black and most offensive. The urine was high-coloured and scanty; and it was nearly a fortnight before the children acquired their usual health. Six of the children, whose average age was scarcely thirteen years, menstruated for the first time on the fourth day after the occurrence; and fourteen others, who had menstruated within a fortnight previously, had a recurrence of the discharge.

MEDICAL SOCIETY OF LONDON.

Saturday, May 9th, 1857.

Francis Hird, Esq., President, in the Chair.

ON THE THROAT IN CHRONIC PHTHISIS AND CHRONIC BRONCHITIS: ILLUSTRATED BY PATIENTS. BY EDWARD SMITH, M.D., LL.B.

Dr. Smith first showed that there are peculiar powers and sympathies possessed by the pharynx, in the parts bounded above by the nares, below by the root of the epiglottis, and anteriorly by the posterior arches, but chiefly at the posterior walls; and that these are necessarily associated with all respiratory acts. This he proved by the following considerations:—1. Manipulation of the throat does not cause reflex action, except when implicating the parts indicated. 2. Irritating solutions cause severe choking when applied to those parts only. 3. Irritating vapours inhaled, or such irritating liquids as chloroform swallowed, excite sensation chiefly or entirely there. 4. When a large volume of cold air is inhaled quickly and repeatedly by the mouth, or even by the nose alone, the sensation of irritation and dryness is found only there. 5. When a tube is introduced within the upper orifice of the larynx, it no longer excites reflex action, unless it interfere with the passage of air, or touch the pharyngeal surface of the larynx, or set up reaction allied to inflammation. In addition to these, he mentioned his discovery of the closure of the larynx at its upper orifice, with simultaneous closure of the œsophagus; but did not describe it, as he has a paper on that subject awaiting the consideration of another society. The author thus proved how much care Nature had taken to guard the entrance of the two great vital cavities of the body. Hence all forcible respiratory and expiratory efforts, including some forms of dyspnœa and all instances of coughing, retching, and vomiting, have their essential action in the pharynx; but, in addition, they have a consentaneous one with the respiratory muscles of the chest; since, in the first part of all the latter efforts, the larynx and œsophagus are necessarily closed.

The author then showed that the cause of cough may be in the throat alone, where its seat necessarily is also, or in distant parts, and may have its influence carried to the pharynx by reflexion. In all cases it was matter worthy of inquiry if the cough could be arrested most quickly by attention to the essential seat alone, or to the distant cause alone; the former was oftentimes accessible to treatment when the latter could not be discovered or removed. Dr. Smith also stated that, whilst the cough was commonly the result of a distant sensation, it also caused a distant sensation; so that the patient referred the effects to the lower part of the trachea, whilst the disease or the remedy applied was in the pharynx. Hæmoptysis, without destruction of lung, was believed by him to proceed far more commonly from this part of the mucous tract than from the bronchi or œsophagus; and in general he considered that, whilst the mucous membrane of the larynx may be affected in some cases, the chief local throat-disease in all, and the whole local throat-disease in the great majority of cases, is confined to the pharynx; and that such reflex actions as cough and vomiting may commonly be relieved more rapidly by conjoining the local with the general treatment.

He then proceeded to consider the state of the throat in cases in which there is much cough and irritability of the throat, without any disease of the lungs; and also in phthisis and bronchitis. The former he believed to be frequent, and to comprehend many cases carelessly included in the term bronchitis. He arranged the various conditions under three heads; viz., the anæmic, the congestive, and the desquamative; and showed that a tonicity with exalted sensibility were the common characteristics of these affections, and that true inflammation was exceptional. He distinguished the state of the throat commonly found in phthisis from that commonly present in chronic bronchitis, by the following characters: good movement of the arches and their roots in phthisis, lessened movement in bronchitis, small anterior and large posterior arches in phthisis, and the reverse in bronchitis; attenuation and absorption of fat, with large tonsillar spaces, in phthisis; and rather a state of suffusion in bronchitis, whilst the cavity of the throat laterally is much larger in bronchitis than in phthisis. He did not regard these as diagnostic features of these diseases; and, whilst he could not altogether account for them, it was manifest that they must be associated with different degrees of respiratory action of those parts, and that those actions must differ in the two great classes of diseases.

In reference to treatment, he believed that the ordinary popular stimulants have their principal action on the mucous

membrane of the pharynx as they pass over it; and that, in administering cough medicines, this local action should be borne in mind. Hence he recommended that they should be rendered viscid, as in emulsions of oils and alkalis, of gum, sugar, egg, almonds, etc.; and that they should be given frequently, and swallowed slowly. He particularly commended the use of strong suet and milk, and raw eggs, in small quantity. Of the various medicaments employed, he preferred the strong solution of nitrate of silver, and of equal parts of chloroform and oil, in the anæmic and congestive varieties; and of the former with potass and oil in the desquamative forms; but he particularly insisted upon the fact that such application, to be of service in preventing cough, must be applied to the posterior and lateral walls of the pharynx, by means of a large brush carried dripping as high up and as low down in that cavity as is practicable. He also showed the importance of preventing local irritation from food, and from direct access of cold air into the mouth.

The main object of the paper was to show that the act of coughing, wherever may be its origin, must have its seat in the pharynx; and that it was often as practicable to arrest it by lowering the sensibility of the reflected site, as to remove the distant cause.

In reply to observations made by various speakers, the author stated that the amount of choking induced by the application of the solution depended upon the *strength of the solution*, which should be thirty to forty grains to the ounce; *upon the parts to which it is applied*, so that it is the greatest when applied to the pharynx as low down as near to the epiglottis; and on the *degree of sensibility of the parts*, and this could not be predicated in any of the varieties described. It did not depend upon the introduction of the solution within the larynx, for an irritating substance on the pharyngeal surface of the larynx caused infinitely more suffering than one within the larynx. It was possible that the closure of the larynx might be so continued after the application of the caustic as to produce alarming choking; but, although he had applied the remedy fifty times a day, he had never seen cause for fear. He had no doubt as to the possibility of introducing a tube or sponge through the superior aperture of the larynx, but he believed it to be seldom necessary to do so. He admitted that the disease was often purely local, but in his practice he always conjoined general treatment.

Editor's Letter Box.

REASONS WHY MR. HEADLAM'S BILL WILL NEVER PASS THE HOUSE OF COMMONS.

Letter from Thomas Laycock, M.D.

Sir,—As a member of the British Medical Association, I desire to communicate with my fellow members (many of them my old friends) on the ever-vexed question of medical reform. About twenty-five years ago, being in London, I was entrusted with a commission by a friend in the country, who wished to bring up her only son to the medical profession. It was to make inquiry whether there was any truth in the statements then current, that Parliament would certainly come to a conclusion as to medical reform in that session. A short time ago, I stumbled upon a memorandum of what I did at that time, and I find that I made careful inquiry of some influential men in the medical reform world, and wrote back that it was really expected in well informed quarters that the question so long agitated would at last be speedily settled. The mother (a widow) delayed taking the necessary steps to educate her son. Let loose in the world, he enlisted into a hussar regiment (a magnificent soldier he made), and his bones have been for many years bleaching somewhere on the plains of the Indus.

On looking back, I find that year after year we have had the same story that misled this poor widow. Confident expectations at the beginning of the session: at the close, utter failure. How much mere pecuniary loss the medical reform agitation has cost the profession, it is difficult to say—not less, perhaps, than £1,000 per annum for the last thirty years. This is, however, its least infliction. The loss of time and labour; the unpleasant discussions; the uncertainties; the weariness of hope deferred, are much greater: so that the question is at last become an unbearable nuisance.

Partly in consequence of this feeling, no Bill has had so much support *within* the profession, although *not of* the profession, as that of Mr. Headlam. It has united the medical corporations in a common action. Yet with this apparently powerful support, it has in the opinion of many no chance whatever of passing the House of Commons, either now or at any future time. The reasons why, are certainly worthy the consideration of the Association. I will therefore mention some of them.

Let the would-be medical legislator first examine the composition of the House of Commons; and, having well considered that it is a lay assembly, with few professional sympathies, with a considerable amount of professional antipathies, and with principles and traditions of legislation by which its course as to any particular measure is guided, let him see whether his proposed measure is in accordance with those principles and traditions, or at least that it arouses none of the antipathies, and secures the sympathies of the House. I think we may fairly assume that the principles of social freedom and of "free trade" have not ceased to influence it; and that the power of irresponsible taxation will not now-a-days be deliberately conceded to corporate bodies. If, then, a Medical Bill both ignores these principles and confers such powers, is it reasonable to hope that it will have the approval of the House of Commons? Such a Bill is Mr. Headlam's.

That Bill concerns two classes of practitioners: the existing and the future.

1. It requires all existing practitioners to be "registered" after passing of the Bill, under penalty of deprivation of civil rights; for by Clause xxxi, no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance, or for any medicine prescribed, administered, or supplied by him to his own patients, unless he shall prove upon the trial that he is registered under this Act. If an existing practitioner who, from any cause, neglects to register and "take or use any name, title, admission, or description, *implying* that he is registered" (that is, any of the titles which he can and does now legally use), he may be summarily convicted before any two justices of the peace, "on the oath of one witness", and ordered to pay a sum not exceeding twenty pounds nor less than five pounds. If not able or willing to pay, the said justices may commit the offender to a gaol or house of correction for a term of six calendar months. A quack doctor may call himself what he is—"herbalist", "bone setter", and the like—without fear of penalty, and practise freely without registration; but a qualified practitioner may not. If a physician venture to designate himself "physician", or a surgeon "surgeon", without previous registration, he may be fined, and in default of payment, imprisoned for six months in a house of correction.

2. Every practitioner failing to register is disqualified for any office or employment.

3. Every existing practitioner being registered, cannot remove from that part of the United Kingdom in which he is registered to another, in order to practise, without being registered afresh; but before he can be so registered, he must have first become a member or licentiate of the corresponding college or faculty.

4. When duly registered, all practitioners must look sharply about them, for Clause viii provides that a registrar may write a letter to any registered "person," addressed to him according to his address on the register, to inquire whether he has ceased to practise, or has changed his residence, and "*if no answer shall be returned to such letter within the period of a week* from such sending of the letter," the name of the "registered person" may be erased from the register. Thus a practitioner, residing where he always has resided, not getting such letter so addressed in time, may, from no fault of his own, suddenly find himself liable to all the pains, penalties, and disqualifications of the act. To understand better the trouble and expense to which a practitioner may thus be put, it must be borne in mind that by Clause xvii, a *printed* register is to be published annually, which is to be evidence in all courts and before all justices, and *the absence of the name* of any person from the printed copy *is evidence* (it is specially provided) that the "person" is *not* registered. So that even a mistake of the registrar, or of an office clerk, or of the printer, as well as of a letter carrier or servant, may utterly disqualify a practitioner; while the bill expressly throws the *onus* of proving the mistake on the sufferer. On the other hand, the registrar can only be punished when "wilful falsification" can be proved, and even for so serious an offence, the punishment is no greater than that provided for the hapless practitioner who, not being registered, has not the means to pay the penalty and costs inflicted by any two justices. Conceive it proposed that any other trade

or profession should be subjected to these harassing restrictions and penalties—a rector, or a dean, or a barrister, made the victim of penalties on the oath of one witness before "any two justices," in common with rogues and vagabonds, for not having his name and address properly inserted in a directory. I am not far wrong in supposing that they would look upon such a proposition as simply an unintelligible insult. But the "medical men"? These were ever a patient race!

As to physicians, those who now have the legal right to practise as such by law, have also secured to them by special enactment the right to practise surgery (32 H. VIII. cap. 40). They are also exempt from the operation of the Apothecaries' Act of 1815; but by this bill they are disfranchised, and all those who in the exercise of their unquestioned legal privileges continue to practise surgery, or to dispense their own medicines, are denied the title, and cannot register as "physicians". Thus to dispense medicines, is, according to the bill, to exercise the "art and mystery of an apothecary", as if an English apothecary were a mere trader, and not a member of a liberal profession. If a physician, when registered under the Act, remove from one part of the United Kingdom to another, and he be not already a licentiate or fellow of a college of physicians, then before he can register as a physician in that part of the United Kingdom to which he removes, he must be *examined* and enrolled by and in the college of that part. If he fail to do this, he will "be struck off the register altogether, and shall not be restored until he shall have been so enrolled and paid" penalties for each calendar month of such default of not more than five pounds. Further, by Clause xxx, it is expressly enacted that he shall not be entitled to recover reasonable charges, etc., in a court of law. Common justice is thus denied him by positive legislation, although it was never known that a physician, as such, had brought an action for fees.

The would-be practitioner must go through the following stages. 1. He must have a degree in arts, or passed examinations equivalent thereto. 2. He must undergo three separate examinations by a joint-board in medicine, surgery and midwifery, and their "collateral sciences". 3. Having successfully passed these three examinations, is he entitled to be registered? No. He is only qualified to undergo another examination by the respective colleges of surgeons. 4. But having successfully passed this second examination, he may surely now be registered? Not yet. He must first be "enrolled" a member of the college which examined him and none other, and pay fees. 5. Having done all this, he may now be registered, and be subject to all the restrictions just mentioned.

But let us take a possible, if not probable, case. For various considerations of a financial or domestic character, the medical school the student has had selected for him is in his native town or where relatives reside, as *e.g.* Aberdeen. Having completed his studies there, and having passed his three examinations before the conjoint board of Scotland, sitting at Edinburgh, and having next passed his examination at the Edinburgh College of Surgeons and been "enrolled", and so at last qualified to be registered, his friends now look about for an opening for him, and find that he can settle at Belfast with fair prospects of success. Before he can do this, however, he must proceed to Dublin, and be "enrolled" a member of the Irish College of Surgeons; otherwise he cannot obtain the indispensable preliminary to practise, namely, registration. Further, he finds that he can "remove" for the summer months to a watering place in England (say Harrogate) with professional advantage as well as with personal benefit, but he must now be "enrolled" in the English College of Surgeons, and pay his fees and be registered; for by Clause xxiii, "every physician and surgeon who shall not within three months after such removal cause himself to be enrolled, shall be struck off the register" (that is, *forfeit all legal right*), "and shall not be restored until he shall have been enrolled, and shall have paid to the treasurer of the branch council such penalty as the branch council shall think fit, not exceeding five pounds for each calendar month during which he shall have been so in default." It follows, therefore, that such a practitioner cannot "remove" at pleasure from one part of the United Kingdom to another for longer than three months at once, and at the same time have the privilege of calling himself "surgeon" and accepting a fee, unless he be actually "enrolled" in the three colleges and be on the three registers of each division. Whether even this could be done under the bill as it stands is doubtful, for when he "removes", he is or ought to be "struck off" the register of that part of the United Kingdom from which he removes. I think I have fairly stated the possible and probable working of the bill, in so far as I have gone.

Well, then, what would an intelligent member of the House of Commons say to all this? Obviously, at first glance, that it is virtually the continental passport system fixed upon the medical profession for some great and comprehensive purpose; and he would naturally inquire why they should be subjected to all these complicated processes, and pains, and penalties, and examinations, and enrolments, and registrations, and fees. Why (*e.g.* he would ask) could they not go from one part of the kingdom to another and practise their art freely and without hindrance from Colleges? Oh! say the promoters of the Bill, the clergy and the bar cannot do that; and should the medical profession? But then, says the inquiring member, why assimilate the medical profession to the church or the bar? They are bound to no creed or sect—they practise in no special courts. They belong to all mankind; are free men in every sense, and should be left free to use their knowledge and skill when and how they will, so long as they do it honestly.

True, says another advocate of the measure, but the Bill really aims to put down quackery, and thereby protect the public and benefit the profession, which gladly surrenders its freedom (as you see) for so great and good an object. I agree with you as to the importance of the object, says the legislator, but in this Bill there are no pains and penalties for ignorant quacks; these are only for the duly qualified practitioner. You tell me that the quack cannot recover his fees under the Bill—what of that? He is a business man, and always takes his fee before he gives his advice; and if he cannot be legally appointed surgeon to a union or hospital, a regiment or ship—may I ask has the ignorant mischievous quack ever applied for those offices? You say he will incur penalties if he does anything to imply that he is registered under the act. Then he will glory in his superior freedom, and have a large brass-plate on his door deeply lettered "John Snooks, Herbal Doctor and Water Caster—NOT REGISTERED." By what logic do you reach the conclusion that, when you have fined, say Sir B. C. Brodie, before the city alderman for not being registered (if he chance to be in that predicament), and send him to Newgate for obstinately refusing to pay, you have hit John Snooks a heavy blow, and given his practice great discouragement? Will he not, with some show of reason, argue that he is the safer man of the two, or the law would have looked as sharply after him as after Sir Benjamin? Upon the whole, says the M.P. rather quizzically, having studied political economy as a science, you may trust the public to protect itself.

The inquirer, passing from the political questions raised in the Bill, comes to the educational. He is told it is intended to raise the tone and *status* of the profession, and to advance the science of medicine. I see, he says, you have a series of examinations; may I ask why, when the candidate has passed three such in the departments of medicine, surgery, and midwifery, at a conjoint board, he cannot be registered at once and be entitled to practise? Can they, or can they not, be made sufficient to ascertain the fitness of the candidate? Undoubtedly they can, the advocate replies (himself an examiner in *esse* or *posse*, and with faith in examinations); but if we were to take the power of examination wholly from the Colleges, they would lose their incomes, for these are derived from the fees for examination. But then, says the M.P., what about the fees paid for "enrolment" as a "member"? Oh! replies the advocate, those are also for the funds of the Colleges to support their museums and libraries, and to advance medical science. Thus, then, the legislator sees that it it is a scheme for taxing all professional admissions and removals to secure funds for the medical corporations, and thinks it needlessly complex. But then next the question arises whether a taxation of the profession is necessary for such purposes; and he asks, "Did John Hunter, who founded that noble museum which bears his name, or his brother William, a like-minded worker, seek to tax the profession? Was it the hope of the Fellowship of the College of Physicians (which he refused on the terms it was offered to him) that urged Jenner, the country surgeon, to his researches? Has chemical science, in any of its departments, needed for its advancement Colleges and a tax on all who pursued it? Has the Royal Society, the representative of all science, asked for a Bill to compel all cultivators of science to enter it—to tax its Fellows when they removed from one part of the United Kingdom to another—to fix a standard of education for them—and to force them to cram for examinations unnecessarily multiplied? Would science be the better for such measures?" Emphatically no! Then why medical science? Nay, let me ask, as a question of fact, have the medical "corporations" really done as much for medical science as the medical "societies"?

This is a practical problem, worthy careful solution. Upon the whole, the legislator would add (feeling liberally disposed), if you can spend money usefully on medical science, *show us how*, and apply for a grant at once out of the Consolidated Fund. We cannot grant you powers of taxation hidden under an impracticable passport system. No good could come of that to the public, to the profession, to yourselves, to medical science. Perhaps the M.P. will not say all this; he will only think it; but he will never advance a step beyond taking the matter into "consideration". If a member of Government, he will listen blandly and resignedly to an "imposing" deputation; express his gratification at hearing that, "*at last*, the profession *is* unanimous," etc.; but a member of Government would not, for the sake of his credit, endorse such a Bill. He is a professional man in his way, and has a reputation for success in his profession to win and to lose. How, then, could he support a measure that ignores the established principles of sound political economy, and of civil freedom; that taxes, for indefinite objects, in the most cumbrous and harassing manner, thereby stimulating to evasion; and that would manifestly fail in the removal of any of the evils which it is proposed to remedy?

Curiously enough, the final clauses of the Bill are exactly on the model of the 14th and 15th Henry VIII. The College of Physicians of London have at this moment full power to fine, and commit to Newgate in default, persons practising physic in the metropolis without their license. Nay, the fine is of the same amount in the two measures—£5 per month. The tone and spirit of the new measure is identical with that of the old. How is this? Do we live in the nineteenth century? or is it that we *have* lived, and are gone back to the sixteenth? If so, history is indeed an old almanack, and we have learnt nothing from the experience of those who have gone before us.

I am, etc., T. LAYCOCK.

Rutland Street, Edinburgh, June 16th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Tuesday, June 23rd.

FINSBURY PARK.

AT the time of private business, a long and animated debate arose upon the order for the second reading of the Finsbury Park (No. 2) Bill, with especial reference to an alleged agreement on the part of the Government to contribute £50,000 towards the expenses of the Park.

Lord PALMERSTON frankly acknowledged that the Government had agreed, if the Bill were brought in, to propose to Parliament to grant £50,000 towards this object, and he defended the arrangement or understanding, which was, of course, he added, subject to the decision of the House, and was no objection to the second reading of the Bill.

A division was taken upon the question that the debate be adjourned, which was carried by 214 to 123. This decision was understood to be adverse to the principle of granting public money towards such objects.

The debate was adjourned until Thursday.

SMOKE NUISANCE (SCOTLAND) AMENDMENT BILL.

This Bill was read a third time and passed.

PETITIONS.

Petitions in favour of Poor-law Medical Reform have been presented during the past week from the medical officers of the following Unions:—Leeds, Clapham, No. 5 District of Wellington, Buntingford, Lymington, Bridgewater, Okehampton, Sculcoates, Andover, Kidderminster, Martley, Dunmow, Keynsham, Seisdon, Shoreditch, Leyburn, Amersham, Lynton District of Barnstaple, Builth, Brecknock, Guildford, Pewsey, Halifax, Manchester (5), Taunton, Macclesfield, Burton-on-Trent, Tamworth, Potterspury, Frome, Bury, Clitheroe, Hereford, Oldham, Clifton, Prescot, Berkhampstead, Glossop, Burton-on-Trent, Maldon, Wakefield, Bromsgrove; also from Dulverton, from R. Chapman, M.D., from the ratepayers of King's Lynn, from Newton Abbot, from medical men in Greenwich, from the clergy, gentry, medical men, and ratepayers of the borough of Clitheroe, and from the medical officers of the parish of Birmingham. Petitions from the medical officers of thirty-five Unions have also been presented by Sir John Trollope, and from those of twenty-seven Unions by Mr. R. J. R. Campbell.

Petitions in favour of Mr. Headlam's Bill have been presented from practitioners in Hyde, Finsbury, Staleybridge, Ashton-under-Lyne, Wolverhampton, Appledore, Lambeth, Clapham Road, Stockwell, Maldon, Stockport, and Abergavenny; from the medical officers of St. Ann's Dispensary and the Eye and Ear Institution, Liverpool; and from the Medico-Ethical Association of Manchester.

A petition in favour of Lord Elcho's Bill has been presented from medical practitioners in Alton.

Petitions against Lord Elcho's Bill have been presented from practitioners in Finsbury, and in Lambeth, Clapham Road, Stockwell; and a petition for a Bill to prevent the indiscriminate Sale of Poisons has been presented from the Manchester Medico-Ethical Association.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

CHRISTIE. On June 22nd, at Woburn Place, Hackney, the wife of T. B. Christie, M.D., of a daughter.

KNAGGS. On June 18th, the wife of Samuel Knaggs, Esq., Surgeon, of Huddersfield, of a son.

LAWRENCE. On June 20th, at Bath, the wife of Joseph Lawrence, Esq., Surgeon, of a son.

*THURNAM. On June 23rd, at the Wilts County Asylum, Devizes, the wife of John Thurnam, M.D., of a son.

MARRIAGES.

ARMITAGE—LEES. ARMITAGE, S. H., M.D., of Oldham, to Alice, only surviving daughter of the late Edward Leeds, Esq., of Ashton-under-Lyne, at Ashton-under-Lyne, on June 18th.

CHRISTY—PURNELL. CHRISTY, William B. C., Esq., Surgeon R.N., to Elizabeth Marshall, youngest daughter of the late Thomas Purnell, Esq., of Scarborough, at Scarborough, on June 16th.

CROZIER—CHAMBERS. CROZIER, the Rev. J. A., chaplain to the Forces, to Frances Elizabeth, younger daughter of the late W. F. Chambers, M.D., K.C.H., at Gibraltar, on June 15th.

DOUGLAS—DICKENSON. DOUGLAS, Thomas S., Esq., Surgeon, of Workington, to Mary, eldest daughter of William Dickenson, Esq., of North Mosses, Whitehaven, at Arlecdon, Cumberland, on June 17th.

KUP—MORTON. KUP, Antoine W. P., to Jane Mary, eldest daughter of John Morton, Esq., of Clifton, Bristol, late Superintending Surgeon H.E.I.C.S., at Hongkong, on April 9th.

MAY—PELTSMEYER. MAY, Edward Hooper, Esq., Surgeon, of Tottenham, to Sophie, youngest daughter of Ernst Peltsmeyer, Esq., of Minden, Prussia, at the Friends' Meeting House, Minden, on June 6th.

TAYLOR—ADAMS. TAYLOR, Arthur Henry, Esq., Assistant Surgeon, Royal Horse Artillery, Knight of the Legion of Honour, to Georgianna Elizabeth, eldest daughter of Commissary-General George Adams, C.B., at Dublin, on June 17th.

DEATHS.

ABUD. On June 15th, in Westbourne Park Terrace, aged 26, Arthur, youngest surviving son of Richard Abud, Esq., Surgeon, of 46, Conduit Street.

BERRYMAN, Thomas, M.D., of Alverton, Penzance, at St. Austell, aged 35, on June 17th.

DAVY. On June 21st, at Lesketh How, Ambleside, aged 24, Elizabeth Mary, youngest daughter of John Davy, M.D.

EYRE, Sir James, M.D., at Lauriston, Clapham, suddenly, on June 19th.

WHIDBORNE. On June 18th, suddenly, of croup, aged 3 years, Elizabeth Mary, youngest daughter of G. F. Whidborne, Esq., Surgeon, of 61, Guildford Street, Russell Square.

PASS LISTS.

University of Oxford. At a Congregation held on June 18th, the following degrees were conferred:—

Med. Doc.

Ogle, John William, Trinity College

Med. Bac., with License to Practise.

Blandford, George Fielding, Wadham
Child, Gilbert William, Exeter
Fox, Edward Lane, Balliol

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 19th, 1857:—

Bazire, Victor, Mauritius
Bigland, Thomas, Bramham, Yorkshire
Clifton, Robert Walter, H.E.I.C.S.
Hartley, Doctor, Blackburne, Lancashire
Hatchell, Charles, Bengal
La Fargue, George Frederick Heriot, Husband's Bosworth, Leicestershire
Lawrance, Frederick, Bleadon, Somerset
Mackarsie, William John, Clay Cross, Derbyshire
McCarthy, James Joseph, Royal Navy
Rolfe, Alfred George, Virginia, U.S.
West, Henry Roger, Harpenden, St. Alban's
Williams, John David, Criccieth, North Wales

Apothecaries' Hall. Members admitted on Thursday, June 18th, 1857:—

James, John David, Bedwellty, Monmouthshire
Meenes, Edward Evans, London
Metcalfe, Robert, New Zealand
Pyle, Thomas Thompson, Earsdon, Northumberland
Sprakeling, Robert John, Canterbury
Sutton, William, Smethwick, near Birmingham
Trollope, Thomas, Braintree, Essex
Wilson, John, Whitby

HEALTH OF LONDON:—WEEK ENDING JUNE 20TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which in the previous week were 934, in the week that ended on Saturday (June 20th) were 987. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 966. But as the deaths of last week occurred in an increased population, the average, for the purpose of comparison, should be raised in proportion to the increase, in which case it will become 1063. Hence it appears that the deaths now returned were less by 76 than would have occurred if the average rate of mortality had prevailed.

The births registered last week exhibit an excess of 540 over the deaths returned in the same period.

The deaths referred to the zymotic class of diseases were in the previous week 164; last week they were 197. The increase arises chiefly from diarrhœa, which in the last four weeks was fatal in 17, 26, 20, and 35 cases. Two-thirds of the 35 cases occurred to infants. No death is recorded in the week as caused by "English cholera", or any other description of the disease. Two children, aged six and seven months, died of chicken-pox in Islington. Two cases of small-pox were fatal; one in Poplar and one in Marylebone. Both measles and diarrhœa numbered more deaths in the east districts than in the other parts of the metropolis; the former complaint appearing to be chiefly in the Shoreditch district, in Bethnal Green, and Limehouse. Hooping-cough is now slightly on the decline; 41 children (a smaller number than has been obtained for a long period) died of it last week. The illness of a child who died of measles and typhoid fever was supposed by its father to have been caused by eating some pork in an unsound state. Four children died of syphilitic disease; one person of ischuria; one of diabetes; one of elephantiasis; three persons were the victims of intemperance; besides four whose deaths are assigned to delirium tremens. Five nonagenarians died in the week, all, with one exception, women and widows. One was 92 years of age, one 94, one 95, and two had attained the age of 96.

Last week the births of 764 boys and 763 girls, in all 1527 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1465.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·882 in. The mean reading of Thursday was 30·015 in. The highest reading was 30·09 in. at the beginning of the week. The mean temperature of the week was 60·3°, which is 1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The highest reading of the thermometer in the shade was 84°, on Saturday; and the mean temperature of the same day was 69·1°, which is 9·3° above the average. The lowest reading was 38·8°, on Sunday (the 14th); and the range of the week was 45·2°. The highest reading of a thermometer in the sun was obtained on Friday, and was 106°. The mean dew-point temperature was 51·2°, and the difference between this and the mean air temperature was 9·1°. The mean temperature of the water of the Thames was 62·7°. The temperature of the river rose to 64·4°, on Saturday. The wind, which was in the south-east and east on Sunday and Monday, changed to north-east, and continued in that direction till Friday at noon, after which it blew from the east. The amount of rain in the week was 0·85 in., all of which fell on Saturday. A violent thunder-storm occurred at 40 minutes past 12 on the morning of that day; and rain fell to the amount of five-tenths of an inch within ten minutes.

POOR-LAW MEDICAL REFORM.

Mr. Griffin has addressed the following letter to the Poor-Law Board:

"12, Royal Terrace, Weymouth, 20th June, 1857.

"My Lords and Gentlemen,—I have the honour to forward you copies of the petitions sent to Parliament by the Council of the Royal College of Surgeons, and by the Master and Wardens of the Society of Apothecaries of the City of London. These documents furnish such important evidence in support of the claims of the Poor-Law medical officers for redress, that I should be failing in my duty to your honourable Board if I did not lay before you the opinions of these two eminent and influential bodies.

"The Select Committee of the House of Commons on medical relief, which sat in 1854, recommended 'that the Poor-Law Board should direct their attention to the salaries of the medical officers, which in some cases appear to be inadequate to the duties they are required to perform.' With such statements before you, I trust, my lords and gentlemen, you will no longer permit your medical officers to be unjustly treated; a grave responsibility rests with you. The nation supplies funds for the relief of the poor, and these funds should be administered on a principle of justice and impartiality, and not capriciously, as is the case in many Unions; instance the Weymouth, where the salaries are so unequal that one officer has 1*s.* 4½*d.* per case, a second 2*s.* 6½*d.*, and a third under nearly similar circumstances receives 16*s.* 3½*d.* In other Unions the salaries give an average payment of from 3*d.* to upwards of 20*s.* per case. The average payment to your medical officers throughout the kingdom is only 2*s.* 9½*d.* per case; a sum so small, considering the duration of illness, which averages 28 days 1 hour, that it is impossible for them to do their duty to the poor without great personal sacrifice; so great, indeed, that 539 of your medical officers have quitted your service within the last two years, which would not have been the case with the majority of them, had you afforded them sufficient means to do their duty conscientiously to the poor. Mr. Drummond, in the House of Commons, on the 12th inst. said, 'The same principle regulated the allowance made to the doctors, which were reduced to so low a sum, that it was utterly impossible for the gentlemen to attend properly to the duties of their position upon such terms," etc., etc. That the above assertion is literally true, no one will attempt to deny: can it then be a matter of surprise that your medical officers seek from Parliament that aid which, I regret to say, your honourable Board and the Boards of Guardians have not accorded to them. Within the last few days, 222 petitions have been presented to the House of Commons, and others are daily forwarded from all classes of the medical profession, and even from clergymen and ratepayers, praying for a redress of the grievances of your medical officers, in order that they may be enabled to do their duty to the poor.

"In certain diseases, professional knowledge suggests that cod-liver oil, quinine, and other expensive medicines and leeches are required; but as your honourable Board, and the Board of Guardians conjointly, allow me only 1*s.* 4½*d.* for each case of sickness, though it has an average duration of 28 days 1 hour, how is it possible for me to find these articles out of such a sum? What then must be the case with those officers who receive far less?—*three pence per case.*

"Pharaoh told the children of Israel to go and make brick, but gave them no straw.

"'Then the officers of the children of Israel came and cried unto Pharaoh, saying, Wherefore dealest thou thus with thy servants?

"'There is no straw given unto thy servants, and they say to us, Make brick: and behold thy servants *are* beaten; but the fault is in thine own people.'

"My lords and gentlemen, I would fain stop here, but you have lately issued an order to the Boards of Guardians, accompanied by an instructional letter, which contains this remarkable paragraph: 'The Board trusts that this provision will be acceptable to the medical profession.' The duty I owe to my medical brethren compels me to speak, and not allow it to go forth to the world that you have lately done something 'acceptable to the profession,' and therefore that nothing further is required. It is with regret I declare that the paragraph is not borne out by the order. In the first place that order is prospective, and only applies to appointments to be made after the 24th of June inst.; it therefore does not benefit your present officers, but the reverse, as Art. 1 clearly implies that the present medical officers of workhouses, about 600 in number, are not permanently appointed, and that the order of February 15th, 1855, Art. 1, implying permanency of office, is not legally correct, or why issue a fresh order on the subject? if a doubt existed, a clause ought to have been inserted to make the present officers permanent.

"Art. 3 cannot possibly be 'acceptable to the profession,' as it still continues to sanction the employment by guardians of gentlemen 'not fully qualified.' Surely in the present day such an order need not have been issued by your honourable Board, when plenty of men, with a double qualification, can be found for the exigencies of the service, were but a fair remuneration offered. I would not, on any account, disturb the present officers; but let it not go forth to the world that men 'not fully qualified for their duties' are good enough for the poor, or that their lives are of less value than those of the rich. The Council of the Royal College of Surgeons, composed of men of the highest eminence in the profession, say, in their petition to Parliament, 'Your petitioners respectfully submit that the employment of practitioners possessing only the single qualification, a measure enforced upon the guardians, by their inability to obtain the services of gentlemen possessing the complete qualification, by reason of the low scale of remuneration, is equally injurious to the poor and to the profession, and in their judgment condemnatory of the existing regulations.

"Art. 3 permits a medical man, 'not fully qualified,' to be appointed; and adds, 'upon his completion of his qualification the guardians may pass a resolution empowering such medical officer to hold his office for the time specified in Art. 2; and if they transmit a copy of such resolution to the Poor-law Board, and if that Board consent, he shall be entitled to hold such office accordingly.' In this Article there is nothing to make it especially 'acceptable to the profession,' and worthy of a paragraph on the subject; the article ought rather to have declared that when a medical man, with only a single qualification, becomes doubly qualified, he should, from that instant, be a permanent officer, without giving him the trouble to canvass the guardians to pass a resolution in his favour, failing which, it would never be done.

"I am greatly surprised that the new order enforces residence in the district as a claim for permanency of office, after so much has been written on the subject, pointing out the absurdity of the regulation. I am living out of my district, and am not permanently appointed, and yet my farthest patient is not a mile off. Compare this with one of my colleagues, who is permanently appointed, simply because he resides in his district, and yet has patients nine miles from his residence. Out of five hundred medical officers who have made returns to me, one hundred and forty-six are situated as I am; one living only one yard out of his district, three others on the opposite side of the street, and several very near. The right to permanency of office should rest on distance from the centre of the most populous part of the district. View the order as it exists, where is the great boon conferred, and where the necessity of votes of the guardians, and consent of your honourable Board? Surely it would have been sufficient to declare that upon a medical officer becoming a resident in his district, and so long as he continued so, he should be permanently appointed.

"My lords and gentlemen, it is with sorrow I make these remarks, as your orders are well intentioned; but, from non-acquaintance with the medical profession, they are not applicable to our requirements. I trust you will pardon an officer for thus freely addressing you, as his duty to your honourable Board, his regard for his professional brethren, and his sense of the necessities of the poor, compel him to risk your displeasure.

"I have the honour to be, my lords and gentlemen,

"Your obedient servant,

"RICHARD GRIFFIN."

The following petitions have been presented to Parliament by the Council of the Royal College of Surgeons, and by the Master and Wardens of the Society of Apothecaries.

"*To the Honourable the Commons of the United Kingdom, in Parliament assembled.*

"The humble petition of the undersigned members of the Council of the Royal College of Surgeons of England, sheweth,—

"That, in discharge of the duty of maintaining the character of the medical profession, and of promoting the respectability of the members of this College, we cordially support the petition of the Poor-law medical officers.

"That, in our opinion, the scale of remuneration which, as set forth in their petition, is adopted by the Guardians of Poor-law Unions, and sanctioned by the Poor-law Board, is wholly inadequate to recompense the responsible, skilled, and onerous services of gentlemen whose education for the medical profession is at once laborious, lengthened, and expensive. And that we believe the Poor-law medical officers are now induced to give their professional aid, little more than gratuitously, partly in consequence of their habitual sympathy with the poor, and partly in consequence of the hard necessity of preserving their professional connexions from intrusive rivalry.

"And your petitioners respectfully submit that the employment of practitioners possessing only the single qualification—a measure enforced upon the guardians by their inability to obtain the services of gentlemen possessing the complete qualification, by reason of the low scale of remuneration—is equally injurious to the poor and to the profession, and in their judgment condemnatory of the existing regulations.

"Your petitioners therefore humbly pray your Honourable House to take into favourable consideration the petition of the Poor-law medical officers now before your Honourable House, and to afford them the relief they ask.

"And your petitioners will ever pray, etc.

"(Signed)—Benjamin Travers, *President;* Edward Stanley, Joseph Henry Green, *Vice-Presidents;* Wm Lawrence, B. C. Brodie, Joseph Swan, J. M. Arnott, John F. South, Cæsar H. Hawkins, James Luke, F. C. Skey, J. Hodgson, Thos. Wormald, John Bishop, Gilbert Mackmurdo, F. Kiernan, Wm. Coulson, Richard Partridge, John Hilton, Richard Quain, Edward Cock, Samuel Solly."

"*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.*

"The humble petition of John Francis De Grave, the Master of the Society of the Art and Mystery of Apothecaries, of the City of London; and Jeronimo Simoens and James Saner, the Wardens of the same Society, humbly sheweth,—

"That the Poor-law medical officers complain of numerous and severe grievances, for the relief of which they are now soliciting the interference of your Honourable House.

"That the Poor-law medical officers are, or ought to be, Licentiates of the Society of Apothecaries.

"That the Society believes that the complaints of the Poor-law medical officers are just, and well deserve the serious attention of the legislature. The amount of money paid to the Poor-law medical officers is, in a large proportion of cases, so small that it would be absurd to speak of it as a remuneration for services; indeed, it is doubtful whether the payment can equal the cost of the medicine supplied.

"Your petitioners consider that they are not advocating the interests of the Poor-law medical officers only, but also the best interests of millions of their poorer fellow-subjects. Your petitioners rely with confidence on the wisdom and benevolence of Parliament,

"And humbly pray that your Honourable House will be pleased to grant the relief sought by the Poor-law medical officers.

"(Signed)—J. F. De Grave, J. Simoens, James Saner."

TESTIMONIAL TO A PARISH MEDICAL OFFICER FROM HIS PATIENTS.

At the annual meeting of the members of the Benefit Club of Stoke Saint Gregory, Somerset, a pleasing instance of the gratitude of the poor towards their medical advisers was evinced. It was on the occasion of the resignation of Robert Marchant, Esq., of North Curry, who had held the office of medical superintendent of this and four neighbouring parishes for upwards of thirty years. The testimonial, which was purchased with pence contributed by the poor from their scanty earnings, consisted of a handsome bread platter, bearing, on a silver plate in the centre, this inscription:—"To Robert Marchant, Esq., from the poor of Stoke St. Gregory"; and a bread-knife, the handle carved with wheat-ears. These were presented, in the names of the poor, by the Rev. J. Coleman, curate of the parish. At the same time the following letter, bearing the marks of sixty-eight poor people, most of whom could neither read nor write, was read:

"Stoke Saint Gregory, June 16th, 1857.

"Sir,—We, who have signed our names below, were indeed very sorry to hear that you had relinquished the duties of the medical superintendent of our parish, which you have held for so many years. We have at all times found you most kind and attentive to us in seasons of sickness; and we desire now to express our grateful thanks for the many acts of real kindness which you have shown us. We hope you will accept such a trifling acknowledgment of your past services to us and our families, as our small means have enabled us to procure. We wish you many years of health and happiness, and all the blessings which Almighty God sees fit to send you; and we remain, sir, your grateful and obedient servants, etc., etc., etc."

In reply, Mr. Marchant begged to thank his poorer brethren most sincerely, who had thus shown their appreciation of his endeavours for their benefit. He would at all times feel pleased to be of assistance to them still when they might wish to consult him, and he would gladly help to relieve their distress by any means which were in his power to use.

Trial of a Surgeon for Manslaughter.—At the Central Criminal Court, on Wednesday, June 17th, Mr. Moses Morgan, a surgeon, surrendered to take his trial upon the coroner's inquisition for the manslaughter of Mary Bingham. The deceased was about thirty-three years of age, and the wife of an assistant warder in the Milbank Prison. Early on the morning of April 30th, being taken in labour with her seventh child, she sent for a midwife named Fisher, who assisted her in her delivery until nearly twelve o'clock, when the infant appeared to have been partially born. At this time there appeared to be no doubt that the child was dead, and Mrs. Fisher, finding herself incompetent to deal with the case, sent to Mr. Morgan who immediately attended; and it appeared that he expressed an opinion that nothing more could be done, and that nature would complete the operation. Mr. Morgan saw her several times, and appeared to do all that he could for her relief. At a late hour of the night another medical gentleman was called in, who succeeded in removing the infant by the aid of instruments, and it was found that the difficulty of the birth had been occasioned by malformation of the infant. The woman died in three days. On a *post-mortem* examination it was discovered that the womb was in a state of mortification. It was suggested on the part of the prosecution that there had been neglect on the part of the prisoner in not resorting to the use of instruments earlier, and also that he had resorted to improper violence. Mrs. Fisher, however, stated positively that she saw no violence made use of by Mr. Morgan, and that he acted with great kindness and attention to the deceased. Mr. Robert Neggs, who performed the operation of removing the child, said that the case was a difficult one undoubtedly, owing to the malformation; but he was of opinion that the use of instruments ought to have been resorted to earlier. Mr. Baron Channell did not see how the jury could find a verdict of manslaughter upon this evidence. It was not sufficient to make out that there had been an error of judgment, but there must be evidence of gross negligence and want of skill to justify the jury in returning a verdict of manslaughter against a medical man under such circumstances. The jury returned a verdict of *Not Guilty*.

The Hunterian Museum. The Council of the Royal College of Surgeons, in a report just published, in relation to the Medical Bills now before Parliament, state that the erection of suitable buildings for the reception and display of the collection formed by John Hunter, and the contributions to its preservation and augmentation, exclusive of parliamentary grants amounting in the aggregate to £42,500, have cost the College a sum not much less than £200,000. This is not to be wondered at, when the cost of single specimens is considered: for instance, for the bones of a Proteosaurus, £100 was given; for a single specimen of the Glyptodon, £300; and for the collection of the late Sir Astley Cooper, the sum of £1,500. The annual expenditure on this storehouse of anatomical and physiological knowledge, indispensable as it is to the cultivation of medical science, is stated to amount to £5,000 per annum. In addition to these large sums expended on the museum, we learn that the library, which now contains nearly 50,000 volumes on medicine and the collateral sciences, has been collected at an expense of upwards of 25,000.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Subscriptions for Mr. J. H. Tucker. We have much pleasure in announcing the following subscriptions for Mr. J. H. Tucker, whose claims to the sympathy of his brethren we pointed out in the last number of the Journal.

Sir B. C. Brodie, Bart.	£5	5	0	Mrs. W. B.	£2	0	0
Dr. Babington	5	5	0	Miss H.	2	0	0
Dr. Addison	5	5	0	Dr. McWilliam	1	1	0
Dr. Waller Lewis	5	5	0	Dr. Camps	1	1	0
Sir C. M. Clarke	5	5	0	Dr. Seaton	1	1	0
N. Montefiore, Esq.	5	0	0	Dr. Cross	1	1	0
D. Fullerton, Esq.	5	0	0	C. L. Bradley, Esq.	1	1	0
Dr. James Bird	2	2	0	C. F. J. Lord, Esq.	1	1	0
Dr. Andrew Smith	2	2	0	T. Hunt, Esq.	1	1	0
Miss F.	2	2	0	Dr. Munk	1	1	0
Lt.-Colonel Hough	2	2	0	J. F. Marion, Esq.	1	1	0
Thomas Hough, Esq.	2	2	0	Dr. Barlow	1	1	0
Dr. Sibson	2	2	0	Dr. Aldis	1	1	0
W. S. Jones, Esq.	2	2	0	A. Bleeck, Esq.	1	1	0
John Propert, Esq.	2	2	0	Mrs. W. M.	1	1	0

Communications have been received from:—Mr. J. D. Swallow; Mr. Kitching; Mr. W. R. H. Barker; Mr. G. May, Jun.; Chirurgus (Bristol); M.D.; Mr. H. Wilkinson; Mr. R. Marchant; Mr. Hunt; Mr. Stone; Dr. Vernon; Dr. Bucknill; Mr. H. Lankester; Mr. Nunn; Mr. Richard Griffin; Dr. P. H. Williams; Mr. C. H. Roper; Mr. Joseph White; Mr. C. Leonard; Mr. D. Kent Jones; Mr. J. R. Humphreys; Dr. G. G. Rogers; Mr. Charles Murray; Dr. Markham; Dr. J. Sloane; Mr. William Newman; Mr. H. Landor; Mr. W. I. Cox; Mr. I. Harrinson; Dr. Laycock.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Principles of Moral Insanity, familiarly explained in a Lecture. By *John Kitching. Reprinted from the British Medical Journal. York: W. Simpson. London: W. & F. G. Cash. 1857.
2. Introductory Lecture on Climate. By A. W. P. Pinkerton, M.D. Edinburgh: Sutherland & Knox. 1857.
3. Lives of British Physicians. London: William Tegg & Co. 1857.

ADVERTISEMENTS.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

DISEASE OF EYEBALL.

Under the care of W. BOWMAN, Esq., F.R.S.

[*From Notes supplied by* C. HEATH, ESQ., *House-Surgeon.*]

A. G., aged 55, a dyer, living in London, was admitted on January 24th last with a tumour of the eyeball. He stated that twenty years ago he had inflammation of the right eye, which came on without any known cause. After this had continued some weeks, his vision was left in a very imperfect state, and the eyeball gradually shrank. Since this attack he had had repeated inflammations of the part. Two months ago, he noticed increased vascularity of the conjunctiva, and two spots, "like currants", on the eye, from which a discharge tinged with blood issued. The globe then became more prominent, and the growth from its surface rapidly increased in size. His general health was very good. The tumour projected so much that the eyelids were kept on the stretch, the upper one being also everted. Two irregularly shaped dark masses, moist with bloody exudation and separated by a red furrow, were observed. The patient being placed under the influence of amylene, Mr. Bowman proceeded to extirpate the diseased mass. The eyelids were first divided at their outer angle, and the eyeball detached by scissors from the surrounding structures; the optic nerve being cut through beyond the diseased part. There was but slight hæmorrhage. A suture was passed through the divided eyelids, and the wound dressed with wet lint. No pain was experienced during the operation, and no bad effects followed from the amylene.

The tumour is described as follows by Mr. Hulke:—It consisted of two parts; a larger portion, of a deep black colour, melanotic; and a smaller part, resembling medullary cancer. Although the two portions appeared very different to the naked eye, their minute structure was found nearly identical, consisting of cells with a faint delicate outline, containing one or two nuclei, their average diameter being 1-1430th of an inch. The dark part differed from the light only by the presence of deep brown pigment grains in the cells, and free grains. The tumour filled the interior of the sclerotic, and formed a considerable mass in front, the cornea having given way. It also encroached for some distance upon the outside of the globe. Posteriorly there were some small nodules around the sheath of the optic nerve. The continuity of the sclerotic was interrupted at several points, so that the portion of the tumour outside the globe communicated with the inner mass.

The day following the operation, the eyelids were somewhat œdematous, but the man complained of no pain.

January 26th. The upper eyelid especially was extremely red and swollen. The margins of the lids were agglutinated by purulent matter. Leeches and frequent syringing with warm water gave great relief; but there was considerable discharge from the wound until the 31st. This gradually ceased; and four days later he was put upon the list of out-patients, and soon altogether cured.

ST. GEORGE'S HOSPITAL.

I. HÆMOPTYSIS THE RESULT OF TUBERCULAR DEPOSIT: GREAT TEMPORARY BENEFIT FROM FREQUENT MODERATE DEPLETION AND TANNATE OF ALUMINA.

M. G., aged 27, a married woman, had for two years been subject to spitting of blood in small quantities. It had, however, been very copious for the five days preceding her admission, and she was brought into the ward almost speechless, and very anæmic. The catamenia had always been regular but profuse, and at each menstrual period during the past two years she spat up a little blood. At the apex of the right lung the respiration was cavernous, and the exaggeration of the voice-sounds so great as almost to amount to pectoriloquy. The middle and posterior part of the right lung was dull on percussion. Two days after her admission she brought up more than a pint of blood. The treatment consisted of ice given freely, dilute sulphuric acid draughts every four hours, and afterwards, when this profuse bleeding occurred, Ruspini's styptic. Leeches were also applied over the sternum. On examining the chest again, the heart's sounds were heard most distinctly on the right side, and the apex could be felt beating under the right breast. Coarse crepitations were heard all over the front of the left lung, and tubular breathing with pectoriloquy at the apex of the right. For many days the bleeding was very obstinate. Leeches were from time to time put upon the chest; after their use, the pulse was reduced in frequency, and became more equal; but next to ice the tannate of alumina in twelve grain doses every four hours was most efficacious in restraining the hæmorrhage. She continued under treatment some six weeks. On any increased action of the circulatory system manifesting itself, leeches were at once employed; the tannate of alumina being continued until the sputa lost all trace of blood. She left the Hospital at her own desire, after having been free from hæmoptysis for eight days.

REMARKS. Although from the history, symptoms, and general appearance of this woman, there was no doubt as to the cause of the hæmorrhage; yet it is singular that hæmoptysis of an active kind should persist so long. It seems as though the progress of tubercular deposit is arrested temporarily, and a relief given to the system by this unloading of the vessels; or, to use Dr. Watson's words, "the presence of pyrexia renders it probable that the hæmorrhage is the consequence and the relief of active congestion, provoked by the irritation of tubercles." The case is brought forward as an instance of nicely balanced treatment, gently assisting nature in depleting at first, and then judiciously timing astringent remedies, so that the patient might not be brought into an enfeebled and anæmic condition which would favour the progress of the more serious and primary disorder.

II. EMPYEMA (ENCYSTED): PNEUMONIA.

Under the care of H. B. JONES, M.D., F.R.S.

H. L., aged 22, a hysterical-looking young woman, came under the care of Dr. Bence Jones, in April last. She had been suffering from amenorrhœa for six months, and since Christmas had had cough, shortness of breath, and aphonia. During the first few weeks of January she perspired much at night, and rapidly wasted. There was at no period any acute pain in the chest; but extreme dulness on percussion over the upper two-thirds of the left lung posteriorly. At the inferior third, as well as over the lower lobe of the right lung, was crepitation of a rather fine character, but which was not unfrequently exchanged for a *crumpling* sound, as if two surfaces coated with dry hard lymph were in contact. At the middle part of the right lung the respiration was harsh and tubular. She slowly mended up to May 22nd, when the dyspnœa returned in an aggravated form, with every sign of severe congestion of the lungs, and within two days she sank.

The *post mortem* examination was made thirty-one hours after death. The heart was large, but thin as to its walls. The upper part of each pleural cavity was obliterated by old adhesions; the lower was dilated into a large cyst. Both these cysts were of about the same size; that on the right side contained nearly a pint of purulent fluid; the left one was occupied by a mass of loose false membrane, the interstices of which were filled with gelatinous matter, which could be easily peeled off the surface of the pleura. The thyroid gland was of three times its usual size, but otherwise appeared

healthy. Connected with its upper part were two or three separate rounded masses of similar structure, one of which lay over and concealed the crico-thyroid interval.

Remarks. The most striking features in this case were the hurried respiration, without pain, or any congestion of the face indicative of defective arterialisation of the blood; the comparatively healthy appearance of the patient (for, although she spoke of rapid emaciation in the early part of the winter, her condition was not that of a person enfeebled by some wasting disorder); and the aphonia, which might very well have been supposed to depend upon hysteria, owing to the general aspect of the girl, and the absence of enlargement about the larynx, or signs of tubercular disease in that organ. The lower part of the right lung was discovered, at the *post mortem* examination, to be hepatised, but there was not the slightest trace of pleuritic inflammation at this spot, which is somewhat singular; for, in other cases of encysted pleurisy which we have met with, if any pneumonia existed, there also was pleurisy, quite separate from the encysted portion of the disease.

WESTMINSTER HOSPITAL.

SPONTANEOUS ŒDEMA OF THE PENIS, WITH SLOUGHING.

Under the care of Charles Brooke, Esq., M.A., F.R.S.

[*Reported by* G. Nayler, Esq., *House-Surgeon.*]

J. B., aged 50, a letter-carrier, was admitted June 12th, with œdema of the penis, which was found to be distended to three or four times its natural size. The upper part of the organ was very red; and, about the centre of the dorsal aspect, were three ulcers, the largest of the size of a threepenny-piece, covered with a yellowish slough, the edges being evenly defined. A black spot, as large as a pea, was seen underneath, near the junction with the scrotum. He complained of no pain; and, except having rather a weak pulse, his general health was good. There was no reason for supposing that the complaint had a venereal origin. He stated that, a week prior to his admission, he observed two small black spots, no bigger in the first instance than a pin's head; and that, two or three days afterwards, the above named sores appeared, and continued to increase up to the time of his entering the Hospital. He had been under no medical treatment, and had been often wet through of late whilst carrying about letters.

Mr. Brooke at once made an incision in the median line, on the upper surface, about a quarter of an inch long; and ordered a linseed meal and charcoal poultice; at the same time allowing the patient full diet and wine, and giving bark and ammonia three times a day.

The next morning he was much better; the size of the penis was much less, and the black spot had not increased. Two days later, the penis was about its natural size, and a slough was beginning to separate.

June 17th. A healthy sore was left, which was treated at first with simple water-dressing, and, on June 19th, with a weak solution of nitrate of silver. On the 21st, he was reported convalescent.

Remarks. The above is an example of a rare form of disease, and some differences of opinion have arisen as to its treatment, principally, as we think, from confusing the "diffuse watery tumour of the scrotum (or penis)", mentioned by Pott, with the acute anasarcous tumour or inflammatory œdema of the same parts, of which the foregoing case is an instance. Whether incisions or simple punctures should be resorted to in the former complaint, the recommendation of all the leading men is in favour of the knife for the acute disease. In a report of the Medical Society of London for March 31st, 1854, Mr. Henry Smith, bringing forward a case of this kind, advocates this treatment; and in Mr. Liston's paper on the subject, published in the twenty-second volume of the *Medico-Chirurgical Transactions*, it is stated that, in cases of rapid distension, the destruction of cellular tissue can only be arrested by early and free incisions. The same author urges the importance of tonic treatment similar to that employed for this patient at the Westminster Hospital, and gives notes of cases in which the like good result was obtained.

LONDON HOSPITAL.

I. URETHRAL CALCULUS.

[*Reported by* J. Sharman, Esq., *House-Surgeon.*]

E. L., aged 62, was admitted on the evening of May 29th, in a very exhausted condition, from extravasation of urine in the perinæum and adjacent parts. The catheter could not be introduced until free incisions had been made to relieve the tension. After this was done, an instrument was easily passed into the bladder, and a small amount of urine drawn off. As the catheter passed down, a calculus was felt obstructing the urethra, about three inches from the meatus, as nearly as could be judged. This did not, however, offer much impediment to the passage of the instrument. Cataplasms were applied to the penis and scrotum; an elastic catheter was left in the bladder; wine and beef-tea were given; and it was hoped that, in a few hours, he would sufficiently rally from his depressed state to admit of the removal of the stone. However, he rapidly changed, becoming cold and pulseless; and sank early the next day.

On examining the urethra and other parts after death, the whole genito-urinary mucous tract was found softened; and the canal had given way, both at the membranous portion and about three inches from the meatus, where, as before stated, a phosphatic calculus was found encysted, and of the size of a large bean.

II. GASTROTOMY.

E. H., aged 44, was transferred from the physician's wards, having long suffered from obstinate constipation. After trying inflation *per rectum* ineffectually, Mr. Critchett laid open the abdomen in the mesial line by an incision, extending from an inch below the umbilicus to the pubes. The small intestines were found much distended; one coil was punctured with a grooved needle, and a large amount of fluid fæcal matter drawn off. The seat of obstruction could not readily be found; and the patient being very low, it was not thought advisable to proceed. Death supervened about ten hours later; and at the autopsy a small band of lymph was discovered passing from the fundus of the uterus to the mesentery, strangulating about a foot of the ileum.

III. OPERATION FOR LACERATION OF PERINÆUM DURING DELIVERY.

Under the care of J. Adams, Esq.

J. H., aged 41, was admitted on May 26th, and gave the following history. Five weeks previously she had been confined for the first time of a dead child. The labour was protracted, and the forceps requisite to complete it. The perinæum was torn, the laceration extending to the sphincter ani, some few fibres of which were torn through. Up to the time of the operation, the fæces had passed involuntarily. Her health being somewhat recruited, Mr. Adams proceeded to operate on June 4th. The edges of the lacerated part were freely pared, and the sphincter ani was divided on each side by diagonal incisions. The quilled suture was employed to maintain the surfaces of the perinæal wound in contact, and the parts rapidly healed. Unfortunately and unexpectedly the catamenia appeared six days after the operation; but the union of the parts was not in the least interfered with; and the patient has now left the Hospital perfectly cured.

WORCESTER INFIRMARY.

FRACTURE OF THE CRANIUM.

Under the care of H. Budd, Esq.

[*Reported by* Erlin Clarke, M.B., *House-Surgeon.*]

May 14th, 1857. L. H., an active, healthy man, aged 24, while amusing himself on a recently erected gymnasium, was thrown from a height of thirty feet to the ground, in consequence of a heavy iron collar breaking, a portion of which struck him on the head; he was almost immediately able to rise, and walked to the Infirmary, a distance of nearly half a mile. It was found that, besides some minor wounds of the face and contusions on the body, he had received a compound fracture of the right frontal bone, the fracture extending obliquely downwards and outwards from the frontal eminence nearly to the external angular process; there were also two smaller fissures at right angles to this; there was slight depression of the fragments. He was perfectly sensible and collected, pulse 70, rather feeble, and the pupils acted freely. He was purged with calomel, and a cold lotion was applied to the scalp.

May 15th. Pulse 94; pupils active; scalp cool. The head was shaved, and the patient was bled to ℥xx.

May 16th. Pulse 84, and soft. The bowels were free, and the man was, in all respects, doing well. He was ordered a

saline antimonial mixture to keep the circulation quiet. Everything seemed to go on favourably till the evening of May 18th, when he complained of heat of the scalp; the pulse rose to 94. Ice was applied to the head, after twelve leeches had been used.

May 19th. Pulse 110. The scalp was hot; the pupils were rather dilated and sluggish. The patient did not appear conscious unless spoken to loudly, when he answered rationally. The treatment was continued, with the addition of a few doses of calomel.

May 20th. The coma had increased during the night, and once or twice he had attempted to get out of bed; the pulse varied at short intervals from 90 to 130. It was now evident that, although the depressed bone had not of itself produced any serious symptoms calling for its removal at an earlier period, yet the results of the depression, the inflammation set up in the encephalon by it, rendered an operation necessary to give exit to the inflammatory products. The wound was accordingly enlarged; and a portion of bone being removed by a Hey's saw, gave exit to a small quantity of pus, and allowed the extraction of two pieces of the inner table of the skull which had perforated the dura mater, and were sticking in the substance of the brain; the dura mater was dark and sloughy. Water dressing was applied to the parts. The man never recovered consciousness, though he lingered till the 23rd, when he died. His friends refused to allow a *post mortem* examination.

Original Communications.

THE FEVER OF LEICESTER.

By John Sloane, M.D., House Surgeon to the Leicester Infirmary.

[*Read before the Midland Branch, June 18th.*]

In 1816 Broussais promulgated the doctrine that fever was caused by irritation or inflammation of the gastro-enteric mucous membrane. This doctrine was very generally received on the continent of Europe, but not in the United Kingdom, because in our own country, especially in Ireland and Scotland, those lesions of the intestinal canal were rarely seen after death which were so frequently found in France. The medical profession was divided into two parties on this question; those who held the opinions of Broussais were called non-essentialists, and those who dissented from them essentialists. Dr. Gerhard, of Philadelphia, was, I believe, the first to infer that the opinions held by the respective parties had been arrived at after observations made upon two distinct and separate diseases. M. Montault, M. Valleix, Dr. Henderson, and the late Dr. John Reid, Dr. Stewart, and M. Louis, in their respective articles on fever, successively became converts to this view, but it was not generally accepted till after the appearance of Dr. Jenner's paper in the *Medico-Chirurgical Transactions* for 1849, in which he ably proved that the fever in which ulceration of the intestine occurred was decidedly a different disease from that in which the bowel was not ulcerated. The latter he termed typhus, the former typhoid fever. He also described a febrile affection, which he named relapsing fever, which I believe to be rare; and as I have not seen an example of it in Leicester, I shall not again allude to it.

In the years 1847, 1848 and 1849, at the London Fever Hospital were observed 158 cases of typhus in relatives likely to visit each other, or in residents in the same house; and 25 cases of typhoid in persons under similar circumstances. If these had not been diseases caused by distinct and separate contagious poisons, we should have expected in these 183 cases some patient who had been exposed to the contagion of typhus to have exhibited the phenomena observable in typhoid fever, and the converse; but this occurred in only one instance.

"A man, aged 46, was admitted October 10th with well marked typhus fever, and his son, aged 16, had been received into the Hospital on September 19th with equally well marked typhoid fever. But in this apparent exception to the rule the mother of the boy had visited him in the Hospital, and therefore might have carried the contagion of typhus fever to her husband. The father, moreover, had been little exposed to the contagion emanating from the son, because the latter, a vagabond at variance with the father, was from home when he was taken sick."

In the remaining 182 cases, those who had been exposed to the contagion of typhus were affected with typhus, and those exposed to the contagion of typhoid were affected with typhoid fever. This is what we observe in diseases of a similar type which are admitted to be different maladies, such as small-pox, measles, and scarlatina. If a person exposed to the contagion of one of these diseases became affected with one of the others indiscriminately, we should be justified in concluding that they were merely varieties of the same disease; but we find that an individual exposed to the contagious poison of small-pox, invariably, if he become affected, has small-pox; and the same remark applies equally to the other two. Yet these three diseases were for years confounded under one name; and it was not till after the appearance of Dr. Withering's essay, sixty-four years ago, that the profession was convinced that scarlatina was not a severe form of measles.

The following cases corroborate these observations by Dr. Jenner.

Case. Catharine Gibbons, aged 22, an Irishwoman residing in Britannia Street, was admitted into the Fever House under the care of Dr. Shaw, on March 5th, 1856, suffering from typhus, with the characteristic rash. She attributed her illness to overcrowding at a soup-kitchen some days previously. She was in all probability exposed there to the contagion of typhus. She was discharged cured on March 18th. This woman's husband visited her once; and on the 29th of the same month he was admitted with well marked typhus of six days duration.

Case. Wm. Henson, aged 25, from Sileby, was admitted into the Fever House on Feb. 28th, 1856, under the care of Dr. Crane, with well marked typhoid fever of seven days duration, with the distinctive spots. He had three days before admission attended the funeral of his mother, who died of fever, accompanied by purging. This woman had been under the care of Messrs. Downey and Atherley at her own home, and was daily visited by her son during her illness. Although I never had an opportunity of witnessing this case, I have much reason to believe that it was one of typhoid, not only on account of the purging which was stated to be present, but because there was at the time an epidemic of typhoid raging in the village, from which sixteen patients were admitted into the Fever House during a few months. Henson's mother was a nurse, and attended a woman in her confinement in a house in which there were three or four patients ill of fever, from which she returned to her home affected with fever, of which she died six weeks afterwards.

Typhoid and typhus may be readily distinguished by the rash and symptoms observable in each. Typhoid is by far the most common form of fever in Leicestershire. During the period I have held the office of house-surgeon, the last two years, three times a greater number of cases of typhoid than of typhus have been admitted into the Leicester Fever House. The prevalence of one of these forms of fever in particular districts is interesting. When attached to the Belfast Hospital, and to the Meath Hospital in Dublin, I can remember that all, or almost all, the cases of fever admitted were typhus. When I was a student at Edinburgh during the years 1846, 1847, 1848, and 1849, the same fever was as frequently seen in the wards of the Infirmary there.

I heard Professor Bennett inform his class that, at a time typhus was the only form of fever observed in Edinburgh, across the Frith of Forth, in Fifeshire, in a village where Professor Goodsir resided, typhoid was prevalent; and after death, as usual, he found ulceration of the intestinal follicles. During the years 1854, 1855, and 1856, there were 1087 cases of typhus, and 647 of typhoid fever admitted into the London Fever Hospital; and, judging from the statements of Andral, typhoid must be much the most common in Paris.

The rash of typhoid appears from the seventh to the twelfth day of the disease, sometimes later, and sometimes, but rarely, earlier. The eruption, according to Jenner, is scattered over the anterior and posterior surface of the trunk. In eleven cases in which I carefully noted the site of the eruption, it was present on the thighs in two; in two others it was observed on the face; and in another, in which there was a most copious eruption, there were some well marked spots on the right arm and forearm. In all these it was also observed on the trunk. Usually there is only a small number of spots visible at a time; but in the case last mentioned they were very thickly spread over the abdomen and shoulders. The spots are circular, about two lines in diameter; rose-coloured; elevated above the

surrounding cuticle; can be easily felt by the finger passed over them; they are not hard; they disappear on pressure, but soon reappear.

"The ordinary duration of each spot" Jenner states to be "about two days; but it varies from two to six days." In five separate cases of typhoid, of twelve spots, which I marked with a circle of ink, and most carefully watched, one disappeared on the second day, two on the third, two on the fourth, two on the fifth, two on the sixth, and one on the tenth day; so that, according to my observations, their duration varies from two to ten days.

"Fresh spots," writes Jenner, "appear every day or two from the outset of the eruption till from the twenty-first to the twenty-eighth day of the disease. This successive daily eruption of a few small, very slightly elevated, rose-coloured spots, disappearing on pressure, each spot continuing visible for three or four days only, is, so far as I know, peculiar to, and absolutely diagnostic of, typhoid fever."

All this I believe, except as regards the duration of each spot, and the day of the disease when the eruption disappears. I have already stated that a spot may continue present for ten days; and in one case I observed some typhoid spots on the thirtieth day of the fever.

Is typhoid fever contagious? I believe it is; but this question is still *sub judice*. If it be not, how can we explain such a case as that of Henson, to which I have already directed your attention? His mother, in a village in which there is an epidemic of typhoid, goes to nurse in a house in which there are four persons ill of fever. She returns to her home affected with typhoid, of which she dies. Her son visits her daily during her illness. On the day of her funeral he feels ill, and three days afterwards is admitted in the Leicester Fever House with well marked typhoid fever. If it be not contagious, how can we account for an epidemic such as that which last year occurred at Sileby? If it were caused by noxious effluvia, we should have expected it to be confined to the houses in the immediate neighbourhood in which the injurious miasm was engendered; and that it should not have spread over such a large village, unless the poisonous gases were being generated throughout its whole extent: and the cause of such an improbable occurrence could hardly have escaped the observation of the intelligent surgeon there, or of the inhabitants. I know that Sileby is badly drained, and that its sanitary reputation is low; but it was as well drained and cleansed last year as this or any previous year, and yet fever is not a common disease there. Within the last two years there has been a similar but less severe epidemic at Countesthorpe, and another at Markfield, both villages in this county. I believe that typhoid is contagious, but much less so than typhus; that they both are most likely to appear and to spread in densely inhabited, badly cleansed, and badly ventilated districts. Evidence of the truth of this statement is afforded in Leicester, of which the sanitary condition has, within the last few years, been much improved. In the last report of Mr. Moore, our zealous and efficient officer of health, it is stated that in Leicester in 1853 there were 104 deaths from fever (both forms are included); in 1854, 101; in 1855, 54; and in 1856, only 30. I cannot refrain from digressing a little to allude to the progress of preventive medicine in this town. I extract the following sentences from the last quarterly return of the registrar-general.

"The mortality of Leicester has been much reduced within the last three years. The deaths in the ten years 1841-50 inclusive, were 14,921, of which it was computed in the sixteenth annual report of the Registrar-General, that 5,575 were unnatural deaths, or the results of the insalubrities in which the people of Leicester lived. The borough, under the circumstances, appointed an intelligent health officer. The system of deep sewerage was completed in 1855, and the sewerage was deodorised. The river, which was the receptacle of nearly all the filth of the town, is now comparatively pure. The courts, which were covered with stagnant water, are now clean. The people who reside over the deepened sewers enjoy improved habitations. The annual mortality in the three years 1852-54 inclusive, was at the rate of 29, 27, and 25; while in 1855 and 1856 it fell to 23 and 21 nearly, in 1,000. Small-pox has been completely disarmed by vaccination. The mortality will fluctuate; but by persevering in her career Leicester will reap large rewards of health and fame."

In fourteen cases of typhoid, in which I noted the supposed cause, four were attributed to contagion; in eight the cause was unknown; one patient believed that a foul smelling privy in the vicinity of her residence was the cause of her illness; and one young woman, a servant in a public-house, thought that her fever was occasioned by the gases from decomposing fish in an adjoining fishmonger's premises.

The premonitory symptoms of both fevers are much alike, and are those, so well known to you all, which are described in works on the practice of medicine. I noted the complications in fifteen cases of typhoid; in eight there was no complication; in three there was bronchitis; in two abscesses; in one bronchitis and abscesses; and in one bronchitis, gangrene, and bedsores. The abscesses had the following sites: One woman had one in each axilla; a man had an abscess in his cheek; and another man one near the anus. The gangrene occurred in a young woman aged 16, of strumous appearance and feeble habit. On the twenty-first day of the fever I noted that there were several patches of ecchymosis, one on the inside of left arm, which extended over a space about as large as could be covered with two fingers; it was completely covered with a vesicle which contained serum. This one was the largest; but at many parts where there had been pressure these discoloured patches existed of variable size; they were hard as compared to the adjoining uninfiltrated tissue. On the following day, the left hand and forearm were slightly swollen; this extremity seemed to be paralysed, but she was able to move the left lower extremity. The paralysis gradually disappeared as the sore on the inside of the arm healed. The sloughs separated, and the wounds gradually cicatrised, with the exception of one over each trochanter, and these were steadily healing when she was sent into the country.

The *post mortem* appearances I have observed are of some interest.

Rokitansky states that "the small intestine is the seat of the ulcerative process in fever."

I have in three cases seen the glands of the large intestine more or less affected. At the autopsy of George Morson, aged 19, who died on the twenty-fourth day of the fever, I found Peyer's glands ulcerated on the lower foot-and-half of the small intestine; the ileo-cæcal valve blackish, and covered rather thickly with a number of small white spots. The mucous membrane covering the cæcum and ascending colon was dark red, and covered thickly with small white patches, generally about the size of a pin's head. They felt elevated when the finger was passed over them, and hard when pressed against the plate upon which the bowel was lying. In the immediate vicinity of some of these patches the mucous membrane assumed a bright red colour. Several ulcers, of about the size of a split pea, were scattered over the surface of the cæcum and ascending colon; one ulcer was situated at about the middle of the appendix vermiformis. The transverse and the descending colon and the rectum were slightly congested, and throughout their whole extent there were at intervals ulcers about the size of a pin's head, and small white patches similar to those previously described; these had not the hardness of those in the ascending colon, with the exception of a few, which possessed this character only to a slight extent.

The next case was that of Mary A. Hubbard, aged 8, who died on the thirty-seventh day of the fever. She had so far recovered as to be able to sit up and to run about the ward, when she was suddenly seized with severe abdominal pain and tenderness on pressure. This sudden and unexpected complication was believed to be caused by perforation, for which I prescribed opium in large doses, according to the plan introduced by my former teacher, Dr. Stokes, of Dublin. She gradually became worse, and died sixteen days after the supervention of these untoward symptoms. At the *post mortem* examination I found the mesenteric glands enlarged throughout whole extent of mesentery, but especially towards its lower part; the mesentery itself congested, and the whole large intestine thickly studded with black round spots, rather more than a line in diameter, which could not be felt by the finger passed over them. The ileo-cæcal valve was bluish black. In the lower part of the ileum were three or four cicatrices of ulcers, rather darker in colour than the surrounding bowel, not depressed. When the finger was passed over them a roughness was felt; on looking at them, it appeared as if there were little spots of lymph filling up the cavity which was covered by mucous membrane.

In Mary Sarson, aged 27, whom I lately examined *post mortem*, I found, besides the usual ulceration of the small intestine, ulceration of the whole of the large intestine.

In Jones and Sieveking's *Pathological Anatomy*, Dr. Handfield Jones alludes to this lesion as having been observed by him, but in such terms as to lead one to suppose that it is very rare. Andral mentions it as by no means an unusual *post mortem* appearance. Dr. Peacock also describes it; and Dr.

Wilks, in *Guy's Hospital Reports*, lately states that in five cases, besides the ulceration of the ileum, he found more or less ulceration of the cæcum, and of the ascending colon in one case.

Rokitansky states that, in fever, the ulcers, of an oval shape, always have their long axis parallel to that of the intestine. In the case of Elizabeth Ellis, aged 16, who died on the twelfth day of the fever, I observed the following appearances. The mesenteric glands were reddened and enlarged; one, in the mesentery, at the lower part of the small intestine, was about the size of a large bean. Ulcers were seen in the lower three feet of the ileum, of different sizes and shapes, generally oval or round; those of an irregular form appeared to be owing to the so called typhoid deposit not having wholly separated. The ulcers usually were about the size of a split pea; many, however, were smaller. In this case, I observed some of the oval ulcers to have their long axis in a direction across the bowel, and not in a direction parallel to it, as stated by Rokitansky. I shall not occupy your time further with the pathology of the disease, which is so well and fully described by Rokitansky and Andral.

The rash of typhus appears from the fourth to the seventh day of the disease. It is liable to occupy the trunk, the extremities, and sometimes the face. The spots are variable in size, but are usually larger than those of typhoid fever; they are not elevated, except slightly so, for a short period after their first appearance; they cannot be felt by the finger passed over them. Their shape is irregular; their number is variable; usually they are very numerous; their colour at first is a pink red, and at this stage they fade on pressure; afterwards they assume a purple colour, and are unaffected by pressure. Their duration is generally from their appearance till the disease terminates.

That typhus fever is contagious, is now almost universally admitted.

The complications most frequently observed in Leicester are bronchitis and delirium.

I have nothing to communicate regarding the *post mortem* appearances which is not well known. Is the characteristic eruption always present in these fevers? No; but I have never seen a case of typhus in Leicester without it; nor did Dr. Peacock, in 35 cases at St. Thomas's Hospital, which he closely watched, and which he published in the *Medical Times and Gazette* last year. Dr. Henderson and the late Dr. John Reid, in a report on the typhus of Edinburgh which they published in 1839, state that they found the eruption in 108 out of 130 cases; 6 of the cases, in which there was no eruption, were admitted into the infirmary at late periods of the disease; so that in only 16 cases was no rash observed. In typhoid, the eruption is not so frequent; I have found it absent in about one-fifth of the cases that have fallen under my own observation. This occasional absence of rash is another point of resemblance between these fevers and scarlatina, one of the eruptive contagious fevers to which I have already likened them. *Scarlatina sine exanthemate* is by no means uncommon.

A simple plan of treatment is, in my opinion, the best. Dr. Graves's principle of feeding fever should be acted upon; and I think it very important that the administration of wine and other stimulants should be commenced early. We know that both these fevers are attended with much depression; and those cases have appeared to me to progress most favourably in which wine was given as soon as symptoms of depression supervened. While the patient is awake, the wine or brandy should be given every hour or half-hour, in small quantities at a time, so that their stimulant action may be continuously kept up. The patient must be plied well with beef-tea, arrow-root, and such other nutritious easily digested articles of diet as he can be induced to take; and I have seen patients who were unable to swallow restored by the administration of enemata of strong beef-tea and wine. Uncomplicated cases are usually treated at the Fever House, in the early stages, by sesquicarbonate of ammonia in water, or camphor mixture; and, during convalescence, by decoction of cinchona bark with sesquicarbonate of ammonia. The purging of typhoid is best checked, according to my experience, by chalk mixture, combined with tincture of catechu and small doses of laudanum; and I have seen much benefit from small injections of starch, containing forty minims or a drachm of tincture of opium. The bronchitis of fever I usually treat by the administration of mild expectorants, by shifting the posture of the patient from lying on the back to one side and then to the other, by keeping up the strength, and by not applying large blisters, which I have observed frequently to cause much depression. Small blisters applied to the front of the chest may be useful.

An alarming and not unfrequent complication of typhus is violent delirium, which, if not relieved, terminates in coma and death. Dr. Graves has strongly advocated the exhibition of small doses of opium and tartar emetic. I have frequently used this combination, and have never seen it fail to give relief, and that speedily. I fear that its powers are not sufficiently known, as I have never seen nor read of it being prescribed in England except by myself.* To impress upon you the mode of administering and the value of this remedy, I shall briefly relate a few cases in which it was given. It should be prescribed only when the delirium is of a violent and active character, and not in the feeble delirium which occurs in the last stage of fever, where these remedies would only hasten death.

Case. Martha Holland, aged 45, residing in Carley Street, was admitted into the Fever House on September 15th, 1856, under the care of Dr. Crane. A month previously she began to be ailing, with the usual premonitory symptoms of fever, with the addition of a soreness in her mouth and throat. Three weeks before admission, she was confined to bed, and since then had been gradually getting worse. She had been under the care of my friends Messrs. Derington, Gramshaw, and Thompson. She had been purged throughout the illness (probably from medicine, as will be seen afterwards), and since the day before had been very delirious and violent. There had been three cases of fever in the next house. These particulars I learned from the husband. She required to be held in bed, and was constantly shouting; and was under the impression that she had murdered her brother. She was sitting up in bed, with a wild expression of countenance. The pupils were dilated; the lips and teeth covered with sordes; she was thickly covered over the front of the abdomen and thorax with pale red circular spots, about half a line in diameter, which did not disappear on pressure. One large, bright red, round, slightly elevated spot, about a line and a half in diameter, was situated near the umbilicus. She was ordered to have low diet and beef-tea, and to take the following draught every hour until sleep supervened.

℞ Tincturæ opii ♏iv; liquoris antimonii potassio-tartratis ♏xx; liquoris ammoniæ acetatis ʒss; aquæ ʒj. M.

September 16th. The medicine was administered with great difficulty; it required three persons to force her to swallow it. She slept about an hour and a half during the night, and had some sleep in the morning. She is now lying quiet, and answers questions rationally. The pupils are of natural size. She is very hoarse, from shouting yesterday. The tongue is moist, but thickly furred in the centre; she has much thirst; the appetite is bad; the motions are rather loose; pulse 96, feeble. She has some cough; no *râle* is audible over the chest. There is a copious eruption, with the characters described yesterday, over the trunk, and the upper and lower extremities. She was directed to take a dose of the medicine every four hours, and to have four ounces of wine daily.

September 18th. The tongue is moist, furred black in the centre; the appetite is pretty good. *The bowels have not been opened for two days.* Pulse 80. The skin is moist; there are some sudamina in front of the chest and abdomen. The rash is disappearing. She is rather deaf, and speaks hoarsely; but is perfectly rational and quiet.

Omittatur mistura.

Capiat ter die decocti cinchonæ ʒj; ammoniæ sesquicarbonatis gr. v; aquæ ʒss.

Her convalescence was uninterrupted, and she was discharged on October 14th, cured.

Case. Ranald Sharman, aged 36, from Shearsby, was admitted on November 5th, under the care of Dr. Crane. On October 27th, he was taken with severe headache, but continued at his work during that day: since then he had been unable to follow his employment, but had been out of bed during a part of each day. On November 3rd he became delirious; and, as there was only one woman to nurse him, he had been much exposed to cold when he attempted to escape from imaginary dangers, such as the house being on fire, that he was to be murdered, etc., etc. He had been under the care of Mr. Gimson. These facts I learned from his relatives who accompanied him to the Fever House. He was ordered to take the opium and antimony, as prescribed in the previous case.

November 6th. He was very violent in the night, and the nurses were obliged to have recourse to the strait waistcoat to restrain him. The medicine was given regularly, but with

* My friend Dr. Robertson, of Nottingham, stated at the meeting, that he had frequently adopted this plan of treatment with very satisfactory results.

much difficulty. He went to sleep for an hour and a half this morning, and has been much quieter since. He is now lying quietly, with his eyes closed, and seems much inclined to sleep.

November 7th. He is quiet and rational. He was ordered to take a dose of his mixture every four hours.

November 9th. He was ordered to take his medicine three times a day.

November 14th. He complains of a difficulty in passing urine, and of feeling cold when out of bed. He sleeps badly. He was ordered to omit the mixture, and to take three times a day five minims of dilute sulphuric acid in decoction of cinchona bark; and to have full diet, with a pint of beer daily. A small abscess formed near the anus, which was opened. With this exception, he progressed rapidly towards recovery, and was discharged cured on December 2nd.

There are some remaining points in connexion with these fevers to which I might allude; but, as I can throw no additional light upon them, I shall not trespass further upon your attention.

ON THE ACTION OF CHLOROFORM.

By Joseph White, Esq., M.R.C.S.Ed., Resident Surgeon to the General Hospital, near Nottingham.

[*Read before the Midland Branch, June 18th.*]

So much has been said and written during the last few years on the properties and mode of action of chloroform, and so many and various opinions have been entertained as to the manner in which its effects are produced, that I dare not occupy the time of this meeting with even a reference to those statements which have from time to time engaged the attention of the profession.

In the remarks which I am about to read, my object will simply be to bring forward a few facts which the observation of a considerable number of cases would seem to establish, and to introduce for our discussion some few points connected with the physiological action and mode of administration of this agent, which I believe may be of interest to us all.

That chloroform, when inhaled, produces its effect by becoming absorbed into the circulation, I believe admits of no doubt. The observations of numerous experimenters would all seem to prove it, and none perhaps more than those which have been so carefully made by Dr. Snow, and which have appeared in his excellent series of papers in the *Medical Gazette*.

A few years ago, at the time that Dr. Snow published his first observations, I made the following experiments. A small rabbit was poisoned by chloroform, being made to inhale its vapour in a nearly pure state; immediately upon respiration becoming weak, which was two and a half minutes after the first inhalation, about half an ounce of blood was taken from the femoral artery, and subjected to Biert's process for the detection of chloroform. It yielded the most distinct evidence of its presence.

In order to ascertain the quantity of chloroform which could be dissolved in the blood, I placed in a long narrow tube, which was graduated into five hundred equal parts, five measures of chloroform, and filled up the remaining four hundred and ninety-five with serum of blood. The end of the tube was carefully closed and shaken frequently; after twelve hours, there were only rather more than three measures of chloroform remaining at the bottom of the tube. Nearly two measures had been absorbed. At the end of five days, the same quantity remained.

I also placed in a wide mouthed glass jar about four ounces of serum of blood, and fixed over its mouth a portion of very thin bladder. The jar was inverted, and exposed to an atmosphere saturated with chloroform for twelve hours. At the end of that time, both this liquid and that contained in the tube were submitted to the process for the detection of chloroform, and each yielded the same evidence of complete saturation.

These experiments were several times repeated, and always with the same result. I believe that they show tolerably clearly the readiness with which the vapour of chloroform will permeate an animal membrane, especially such as that lining the air-cells of the lungs; and the rapidity with which it must necessarily act when applied to such an extensive and highly absorbent surface.

The recent experiments of Matteucci have proved that the process of endosmosis is most materially influenced by the number of minute vessels in an absorbing surface. These, upon the principle of capillary attraction, act with the greatest force when least in size. I need not say that the pulmonary lining membrane presents in an eminent degree such a condition—a condition favourable to the most rapid action of endosmosis.

The vapour having thus entered the blood, and particularly having done so at so short a distance from the heart, its passage onwards is easy and rapid. Carried by the pulmonary veins immediately to the left side of the heart, it is at once thrown into the great circulating mass, and amongst other channels is conveyed by the coronary arteries to the substance of the heart, by the carotids and vertebrals to the brain, and by the vertebrals to the spinal cord. It is also, of course, impelled through the aorta to every part of the body; and, circulating in the minute capillaries, it permeates their coats, and coming into contact with the nervous filaments of a part, gradually destroys its sensibility by producing local narcotism.

Whilst the distance to which the blood has to circulate, and the minuteness of the vessels through which it has to pass, render the production of this general anæsthesia comparatively tardy, the larger size and the shorter length of the vessels which convey the blood to the brain favour the production of a much more rapid effect upon that organ.

Hence, no sooner does inhalation of the vapour of chloroform commence, than its effect upon the brain is indicated by the state of mental excitement and confusion of ideas which so generally present themselves during the first few moments of its administration.

As inhalation proceeds, more blood charged with the vapour circulates through the cerebral vessels, and permeating their coats produces a further effect upon the brain. Consciousness, which before was perfect, is now impaired; and in place of the perfect sensibility which existed, there is now a still greater degree of mental excitement, a dreamy state almost amounting to delirium. Common sensibility is now considerably impaired. The pain of many nervous affections is in this stage diminished in intensity, and it has generally been found unnecessary to go beyond this stage to relieve the pains of parturition. The chloroformised blood has now had time to be carried by the general circulation to the capillaries, and there coming in contact with the filaments of the nerves, produces by its local action that general insensibility to pain which, though in a slight degree, now begins to be rendered evident. There is now also some affection of the functions of the spinal cord. As in the brain, so in it, the first effect of chloroform is to produce excitement. We have, therefore, at this period of its action the strong involuntary muscular contractions which so often, especially in the young and robust, precede the occurrence of complete insensibility. This excitement is sometimes so great as to require considerable force to restrain the movements of the patient. There is often the most forcible contraction of all the voluntary muscles, including those of respiration, accompanied by violent and prolonged expiratory efforts and considerable congestion of the face and surface of the body. Though this condition appears alarming at the moment, it generally soon subsides under cautious perseverance in the administration of the vapour freely diluted with atmospheric air; and the next stage is generally quickly induced.

Inhalation still proceeding, more and more chloroform is carried by the circulation to the brain, to the spinal cord, and to the body generally. Its action upon the brain increasing, an almost total suspension of the cerebral functions is the result. All voluntary motion ceases; sounds of an articulate kind are no longer uttered; the eye becomes perfectly fixed, and the pupil moderately contracted, though still somewhat sensible to the stimulus of light.

Valentin considers upon anatomical grounds, and from experiments upon the lower animals, that the contraction of the pupil is due to the reflex* function of the brain, through the ciliary filaments of the motor oculi, and that the dilatation of the pupil is due to the reflex function of the spinal cord through the ciliary filaments of the cervico-spinal nerves. If this be correct, the sensorial functions of the brain are suspended, but the reflex functions are still entire.

The action upon the spinal cord increases also; and here, as in the brain, the sedative effect of the chloroform begins to supersede its stimulant action. The muscles continue to be slightly contracted, though far less rigidly than before. The action upon the sentient extremities of the nerves increases also, and the insensibility to pain, which before was partial, is now complete.

* By the reflex function of the brain is meant the excito-motor function of that portion of the true spinal system of Dr. M. Hall, which is seated above the medulla oblongata.

I have thus traced the action of chloroform to the point to which its inhalation is generally carried in an ordinary case of operation. It may, however, with caution be pushed still further, even in the human subject (as in the reduction of dislocations and of herniæ), should *complete* muscular relaxation be required. The mental functions are then entirely lost, and the activity of the spinal cord is then so far arrested as to be excited only by the most powerful stimuli. The muscles generally are completely relaxed, and no ordinary excitant is able to cause contraction. In experiments upon rabbits, galvanism has generally, though not invariably, produced muscular contractions in this stage of narcotism. General anæsthesia, of course, continues perfect; the respiration now becomes stertorous and slow, and the pupils widely dilated. There is, in fact, complete suspension of the cerebral functions, and all but complete suspension of those of the spinal cord.

I may here mention that, in the greater number of experiments which have been made, it has been found that, up to this stage of the action of chloroform, the passage of fluids into the larynx has immediately produced coughing, and vomiting has not unfrequently occurred. The functions of the pneumogastric nerve and medulla oblongata seem to remain unimpaired; and the irritation of anything within the glottis being conveyed along the superior laryngeal branch to the medulla, is thence reflected along the recurrent to the muscles by which the glottis is closed. This condition, however, does not long remain if inhalation be still pursued. The irritability of the larynx and stomach quickly cease, and fluids then pass unfelt into either. Still, for a time, respiration and the heart's action go on, though they also rapidly become more and more feeble, and are soon entirely arrested.

It is a fact worthy of serious consideration, that in those cases of administration of chloroform in the human subject which have proved fatal, respiration and the heart's action have generally ceased simultaneously. In nearly all these cases, insensibility has been produced in less than a minute, and in every case the dangerous symptoms have set in suddenly, indicating that the vapour had been inhaled of great strength. Now, in Dr. Snow's experiments, he found that respiration ceased before the circulation in an inverse ratio to the strength of the chloroform vapour used. He found that 1-22nd part as much vapour as the blood would dissolve, would put a stop to respiration, whilst it required as much as 1-18th part to arrest the action of the heart: a fact which at once proves the great danger which must ever attend the administration of the vapour in a too concentrated form.

Before passing to a summary of what I believe to be the correct mode of administering chloroform, with which I propose to conclude these remarks, I may very briefly refer to the mode in which the *subsidence* of its effects seems to take place.

Allowing, as I think may be pretty clearly established, that chloroform, permeating the coats of the capillary vessels by the ordinary laws of exosmosis, produces its effect by immediate contact, this is not difficult to explain. It has been stated that chloroform is conveyed by the arteries to the part where its effect is produced. If inhalation be now arrested, blood of course still continues to be carried by the vessels as before; but instead of being charged with chloroform, is now entirely free from its presence. It is an established law in endosmosis, as proved long ago by Mr. Graham, that if two fluids be separated by a delicate membrane, and one holds any substance in solution in a greater proportion than the other, that the stronger of the two will gradually permeate the membrane, and combine with the weaker until an equilibrium be established.

Thus, if pure blood circulate through capillaries, in the neighbourhood of which is serum containing chloroform, that chloroform gradually re-enters the vessels, and carried onwards by the veins is exhaled by the skin and lungs. In the mean time, however, the more rapid circulation of the blood in the cerebral vessels has much more speedily removed by the same process the chloroform which had been conveyed to the brain; and hence the explanation of the fact that we have, in the majority of cases, and particularly in young subjects, a complete subsidence of the sopor or coma which has been produced, and not unfrequently a return of consciousness, before the insensibility to pain has passed away.

What, then, are the indications to be observed in the administration of this agent? I will endeavour to illustrate the answer by taking an ordinary case, such as is presented in perhaps ninety per cent. of the cases in which it is used.

In all cases, in which sufficient time elapses, no solid food should be taken for several hours before chloroform is inhaled. This precaution is of the greatest importance. If solids have been taken into the stomach within two or three hours of the exhibition of chloroform, vomiting almost invariably occurs, and that just at the time when the full effect of the vapour is beginning to be produced. The patient is completely roused; the operation, if begun, is obliged to be suspended; and every time the chloroform is renewed vomiting returns, and produces for some hours afterwards a most unfavourable state of depression and persistent nausea.

The next condition is that, whenever practicable, the patient should be placed in the horizontal position. Unless this posture be adopted, faintness frequently comes on as soon as insensibility is produced; and besides being an unfavourable and even dangerous symptom in itself, frequently causes considerable delay in the performance of an operation. I have known several instances in which operations have been obliged to be suspended whilst the patient has been hurriedly laid down, frequently on a bed which was not prepared, and which was consequently soiled by the blood upon the patient's dress, and several minutes perhaps elapse before the patient may be sufficiently recovered for the operation to proceed. This may almost always be avoided by adopting the horizontal posture.

These precautions having been taken, chloroform should be administered slowly, and, at first especially, considerably diluted with atmospheric air.

I have myself always preferred a simple form of inhaler to the handkerchief or napkin, as frequently employed, a preference which experience has taught me more and more to value. The inhaler of Dr. Snow, in all cases in which great delicacy is required, or where danger is apprehended, is, I believe, superior to any other instrument; but the more simple apparatus which was invented several years ago by Dr. Sibson, answers extremely well in all ordinary cases, and is perhaps the most convenient instrument for general use. The advantages of such an instrument over the handkerchief are several and important. The instrument can be accurately fitted to the face, and the part containing the chloroform effectually prevented coming in contact with the skin, and producing vesication, which I have more than once known to result from the application of the handkerchief. The quantity of chloroform used can be more accurately determined, and the proportion of atmospheric air inhaled with the vapour accurately and easily adjusted. The valves when properly balanced act as an efficient index of the number and force of the respiration, and its greatest advantage is that in cases of danger it affords a ready and efficient instrument for performance of artificial respiration.

With such an apparatus as this, there is no difficulty in regulating the accession of the effects of chloroform with the greatest accuracy; and in no case should insensibility begin to be produced under three or four minutes from the commencement of the inhalation. I cannot too strongly insist upon this, as I believe it to be the great safeguard in the administration of chloroform. The opening for the admission of air should be kept patent for at least two minutes from the commencement, when it may be gradually closed, unless coughing be produced, as is not unfrequently the case; and which can only be arrested by perseverance in the use of the vapour in a more diluted form.

We now approach the period when we have occasionally considerable excitement, accompanied by struggling and violent muscular contractions. This condition can only be overcome by cautiously persevering in the exhibition of the chloroform, still freely diluted; and it is generally not long before the excitement subsides. This excitement has generally been most common in young and robust men whose health has not been previously impaired, and especially in those who have been accustomed to the free use of alcoholic drinks. During this stage, the pupils are generally dilated, sometimes only moderately so, but never contracted.

Immediately following the period in which this excitement frequently occurs, is an interval in which the patient generally lies perfectly quiet, and to all appearance in a state fit for the performance of an operation. The state of general muscula contraction is now comparatively slight, and if the arm b raised it will generally fall powerless. The eyelids are closed but they are closed *forcibly*, and if the lid be raised, it dis covers the eye restless, the pupil of about the natural size, and when the finger is removed, the eyelid again becomes closely contracted. If the operation be now commenced, indications of pain are invariably manifested; and there is not unfrequently so much struggling and resistance as to interfere most mate-

rially with its performance. Though this stage is not one in which an operation ought to be commenced, it is that which unerringly indicates the near approach of that condition which is of all others most favourable for its accomplishment. If inhalation be allowed quietly to proceed, a few moments produce a considerable change. The eyelid which had been so forcibly closed, when now raised remains so. The eye, which had been constantly moving, now remains perfectly fixed and motionless; and the pupil, after oscillating for a few seconds between dilatation and contraction, now becomes firmly contracted almost to a point. This is the condition in which any ordinary operation may be performed, and this state may be maintained with care for an almost indefinite time, and that with safety.

If the effect of chloroform is carried beyond this point, we have immediately dilated pupil, stertorous breathing, lividity of countenance, and danger; but as long as, by the occasional application of the inhaler, charged only with a small quantity of chloroform, we maintain the patient in that condition in which his eyelids remain unclosed, his eye steady, his pupil fully contracted, and his breathing tranquil, we may with confidence submit him to an operation, even a tedious operation, wtthout any fear of his suffering pain, and with but little fear of his suffering any ill effects from the administration of chloroform.

CASE OF OBTURATOR HERNIA: WITH OPERATION.

By H. Nuttall, M.D., Syston.

[*Read before the Midland Branch, June 18th*, 1857.]

There are on record three cases of obturator hernia, with operation; one by Mr. Henry Obrè of London, reported in the thirty-fourth volume of the *Medico-Chirurgical Transactions*, and in the *Medical Times and Gazette* for July 19th, 1851; another by Mr. Bransby Cooper, in the *Medical Times and Gazette* for January 29th, 1853; and a third occurred last year, and is reported by Mr. Heath of Newcastle-upon-Tyne, in the *Lancet* for January 31st, 1857. There are, however, several very excellent specimens of obturator hernia in the different museums. I have seen three; one in the museum of St. Bartholomew's Hospital, found after death in a young man who had died of phthisis; one in the museum of the Royal College of Surgeons in London; and one in the museum of Guy's Hospital, sent there by Mr. Hilton, from a patient upon whom he had performed gastrotomy (the hernia not having been discovered before the operation). A full account of this case is given in the thirty-first volume of the *Medico-Chirurgical Transactions;* and probably there are other specimens which I have not seen.

Writers on operative surgery say but little upon this affection—I suppose, because of its rarity. Samuel Cooper, in his *Surgical Dictionary* (edit. 1838), says, "If it were strangulated, and not capable of relief from the usual means, an operation would be requisite, though attended with difficulties." Syme, in his *Principles of Surgery* (edit. 1832), thinks it "unnecessary to say anything about this form of hernia". Liston, in his *Practical Surgery* (edit. 1846), makes the following remark:—"No surgical interference can take place in cases of protrusion through the openings in the diaphragm, through the obturator or ischiatic foramina, or in other rare internal displacements;" and Miller (edit. 1846), following in the wake of his great master, after stating that this form of hernia is rare, goes on to say that "it does not admit of accurate diagnosis in life, and is not amenable to surgical treatment if strangulated." These works were published before Mr. Obrè's or Mr. Cooper's cases occurred. In the more recent work of Mr. Erichsen, published in 1853, after stating that Lawrence seems "to doubt the possibility of the recognition of this complaint during life, in consequence of the small size which the tumour attains, and its being covered in and compressed under the pectineus muscle," merely quotes the cases recorded by Messrs. Obrè and Cooper, without himself expressing any opinion.

Case. On May 24th, 1856, I was requested to see Ann Rodwell, at Barkby, a thin and spare woman, 75 years old, living as nurse and principal attendant upon her husband, who is bedridden. I found her in bed, complaining of most of the symptoms of a strangulated hernia; viz., sickness, pain in the bowels and back, faintness, exhaustion, etc. She stated that, for a week or so, she had had a very bad cough, with expectoration of phlegm, which continued up to Thursday, May 22nd, when the cough nearly left her, and pain was first felt in her bowels. Since that time she had had no evacuation from them. The pain had been considerable, and was still increasing. When the cough came on, it seemed as if it forced something down towards her womb. The sickness had been very troublesome and painful, and the matters vomited consisted of yellow bile, etc. She complained of feeling very faint, and had an anxious nipped appearance of countenance. Urinated tolerably freely.

On examining her body, I found the pulse 100, small and weak; the skin moist and clammy; the tongue somewhat dry in the centre, with a little yellowish fur on it, moist at the edges; legs drawn up towards the abdomen. The pain in the abdomen was considerable, particularly if pressed upon or percussed; on one or two occasions percussion produced vomiting. There was slight tympanitis. The inguinal region was natural; below Poupart's ligament there was in the crural space on the left side, on very firm pressure, pain in one spot, not larger than the end of one finger, and painful only when pretty firmly pressed upon; sudden pressure with the finger in this spot caused the patient to wince and start, and on one occasion to vomit slightly. There was neither swelling nor any perceptible fulness on either side. I determined to try the effects of enemata, and a calomel and colocynth purgative, until the next morning.

In the morning, matters were in much the same state as on the previous day. The bowels had not acted; the sickness continued; the matters vomited were now slightly stercoraceous. I was certain that a mechanical obstruction existed somewhere along the course of the intestine, and the pain in a small circumscribed spot in the crural space led me to infer that that was the seat of strangulation, and to the suspicion of an obturator hernia. In this emergency, Mr. Paget, of Leicester, saw the patient with me; and, after very careful examination, an explorative operation was determined upon. This was commenced as if for crural hernia; the first incision being, however, somewhat longer than is usual in the operation for crural hernia. The skin, fasciæ, etc., were cut through, with a hope that a hernia might still be found through the crural arch; but all the parts there were natural. Pressure still gave pain deep down between the adductor longus and psoas muscles, though no swelling could at present be felt. On insinuating the finger deeply down (guided by the pain) between the adductor longus and psoas muscles and behind the femoral vessels, a small round tumour was discovered, of about the size of a marble, elastic, but hardish, which by a little pressure suddenly gurgled and slipped away, with a sensation similar to that of a crural hernia reduced by the taxis. The patient immediately expressed relief. We saw her placed in bed after binding up the wound in the same way as after an operation for crural hernia, and left her comfortable, neither sick nor suffering much pain. One grain of opium was ordered to be taken immediately, and repeated in four hours.

May 26th. She has dosed a good deal, and has not been sick. The bowels have not been relieved; the abdomen is tender if touched; pulse 100, small and weak; tongue dry in the middle, moist at the edges. She was ordered to take four grains of calomel, and six grains of compound extract of colocynth directly; and if the bowels were not relieved in six hours, an enema to be given. Effervescing medicine was also prescribed.

May 27th. The pills did not act, and a clyster was given, which produced first a small, afterwards a copious motion. The tenderness over the abdomen and pain on pressure continue. She complains of being very weak and faint. She was ordered to have half a grain of opium and one grain of calomel every four hours, and to continue the effervescing medicine; and to have a blister five inches square applied over the abdomen.

May 28th. She is much the same as yesterday. She complains of being so very weak and unable to take food, and feels somewhat sick, but does not vomit. The abdomen is still tender; pulse 106, small, and very weak. The bowels act without clysters or aperient. The pill and medicine were continued; and four ounces of port wine were given daily.

May 29th. She still feels very low and weak. The abdomen is tender; the pulse is 104, small, and feeble. The bowels have been moved. She was directed to continue the wine, and to have half a grain of opium every four hours.

June 7th. Each day the debility and exhaustion increased. The bowels acted very comfortably most days, but the system had not power to rally, and the patient died exhausted thirteen days after the operation.

Post Mortem Examination nine hours after death. On raising the omentum the small intestines presented a dark plum colour, which extended to the large intestine; flakes of lymph occupied some of the interstices. On looking at the ileum, on one of the most superficial folds a blackish spot was readily seen, which, on examination, was found to be an ulcerated portion, at which part, on being gently extended, the ileum was immediately torn through; each end presenting a border almost as distinct and as well defined as if cut with a knife; no feculent matter had escaped; there was no obstruction of any kind in the intestines, and the feculent matter which they contained was similar to what had been voided for two or three days before death. The hole in the obturator foramen was not more patulous than the one on the opposite side. The wound caused by the operation never healed.

British Medical Journal.

SATURDAY, JULY 4th, 1857.

THE MEDICAL BILL.

On Wednesday last, Mr. Headlam's Medical Bill came on for discussion, and, contrary to the general expectation, had a most signal triumph. It is so well known that Government were in favour of Lord Elcho's Bill, that many persons entertained the idea that, this year at least, Mr. Headlam would not be able to carry his Bill to a second reading. The division of Wednesday came therefore as a great surprise; and even Lord Elcho must have been not a little astonished to find his opponent triumph by a majority of one hundred and forty-seven.

As we fully expected, Mr. Headlam supported his measure principally on the ground of the superiority of his Council over the nominee Council of the Board of Health. "If he had nothing to do with the medical profession, he should on constitutional grounds, to the utmost of his ability, oppose the clauses which would thus subject that profession to the control of the Crown. There were many reasons why it was not desirable that this Council should be nominated by the Crown; but the strongest of these was, that it was from this Council alone that the right to practise could be obtained. Such a constitution would place the profession entirely at the mercy of the Crown." We cannot help thinking that the Board of Health party, who have all along attempted to get the entire control of the medical profession into their own hands, on this occasion went a little too far, and displeased the independent members of the House. Mr. Cowper, the future chief, as it is understood, of "the Medical Committee"—or whatever the snug party at the Privy Council intend to call themselves—was evidently talking against time on the night of the debate, and, we cannot help thinking, with the view to prolong the debate to an adjournment—an indefinite adjournment, as he no doubt fondly hoped. The House, however, was in no temper for "hocus pocus" of the kind—as Lord Elcho phrases it—and marked its disapprobation of the manœuvre by reiterated expressions of impatience; and after listening with attention to a speech from Mr. Headlam, gave an overwhelming majority in favour of his Bill.

The success already obtained, we cannot help in a great measure attributing to the number of petitions in favour of Mr. Headlam's measure which have been forwarded to the House, principally by members of this Association. The British Medical Journal appears to have caused Lord Elcho an immense amount of irritation; he is evidently nettled exceedingly that the associates followed our advice and sent up a number of petitions, instead of a number of signatures to a single petition. He reads our recommendation to the House in a half sneering tone, and evidently thinks that we have behaved very naughtily. We have yet to learn, however, that we have no right to make our numbers and weight felt in any legitimate manner; and if five hundred petitions will induce the House of Commons to attend to any public measure better than half a dozen, those who feel interested should get the five hundred sent.

Lord Elcho seems to have employed himself in abusing the steps taken by the supporters of Mr. Headlam's Bill, rather than in criticising the Bill itself. For instance: "He believed he might state that, although among the deputations who waited on Lord Palmerston on this subject, the delegates of the Medical Association of Great Britain were mentioned, the Committee of that Association had not authorised any members of their body to attend." The plain English of this is that, in Lord Elcho's opinion, certain persons ventured to term themselves delegates of the Association in Lord Palmerston's drawing-room, and, by so doing, appeared under false pretences. Our answer to this is an unqualified denial of the fact. The Editor of this Journal was the only gentleman connected with the Association who was asked if his name might be given as representing the Association, and he distinctly stated he had no authority to attend in the capacity of a delegate. We mention this fact for our own justification in the eyes of the Association, as otherwise it is unworthy of notice.

Lord Elcho, finding himself utterly defeated, immediately dropped "No. 3", and rather gratuitously predicted that No. 1 would not pass into law this session. No doubt he or some of his supporters will endeavour to justify this prediction. The Committee is fixed for Wednesday next; and we shall not be surprised if the manœuvre of last year is again attempted. On that occasion, it will be remembered, the matter was referred to a Select Committee. If, unfortunately, the Bill should be again put into that limbo, we trust the disgraceful slight passed last year upon the promoters of the measure will not be repeated. Mr. Headlam must be the Chairman of that Committee, in order to prevent his offspring from being so disfigured that he will not be able to recognise it. A majority of one hundred and forty-seven members of the House have defeated the attempt to make the Council the creatures of the Crown; and all those who watch the Bill with interest must endeavour to prevent a few interested parties from undoing upstairs that which has been done in a tolerably full House.

We have made these last remarks as if it were certain, not only that the attempt to refer the Bill to a Select Committee will be made, but that it will succeed. But even as to this a doubt arises in our mind. Will the House act in so inconsistent a manner as to consign to a hopeless limbo a measure of which it has expressed its decided approval? Will the opponents of the Bill—the advocates of Crown-nominated Councils—again attempt that which, they must see, is most distasteful, while it gains no good end? We trust that, next Wednesday, nothing may be heard of a Select Committee; and that, in any case, Mr. Headlam's supporters will continue steady in their course, so that the Bill may be at once carried through a Committee of the whole House.

THE WEEK.

Mr. Griffin and his friends of the Poor-Law Medical Reform Association have indeed need of pluck. After all that has been said and written—after all the elaborate representations which have been presented to the Poor-Law Board and to the House of Commons—let us hear the President of the Poor-Law Board. Having stated that an order had been recently issued for rendering the appointments of the Poor-Law Medical Officers permanent, he says :—

"In those cases in which the remuneration was extremely low, the Poor-Law Board endeavoured to procure an addition to it; but he was sorry to say that, generally speaking, the Poor-Law Guardians were not disposed to agree with the Poor-Law Board as to the propriety of such addition. *Unless the Poor-Law Board entered into a violent contest with the Boards of Guardians on that subject—which he was not at all prepared to do—it would be difficult indeed to obtain an increase of the salaries.* He ought at the same time to state that, in a great number of unions, the medical officers were sufficiently remunerated..... He could not hold out any hopes to the medical officers that their salaries would be increased by means of an increased vote of the House, because the House was reluctant to grant even the usual vote under the head of Poor-Law medical relief. As occasion permitted, the area within which the medical officers had to discharge their duties would be diminished."

And therefore, because the Poor-Law Board wish to go on quite smoothly and agreeably with the Boards of Guardians; and because in some cases (in a great number, if Mr. Bouverie likes) the salaries are sufficient;—*therefore*, the munificent sums of threepence halfpenny and upwards, are what a great number of hard-working doctors must still be contented with; and thankful must they be too, perhaps, if they are not kicked out for grumbling. The union surgeons must go on steadily, making right use of the proper means, until they have obtained what they require. The medical corporations have shown fight in their favour; and there are men in Parliament who will not suffer their cause to fail, notwithstanding the free and easy style in which presidents of Poor-Law Boards attempt to dispose of it.

On Saturday last, the Harveian Oration was delivered at the College of Physicians by Dr. Copland. Six and twenty of the Fellows of the College afterwards dined together at the "Wellington," in St. James's Street; the President of the College and the chief Censor occupying respectively the head and foot of the table. We are happy to record this fact. It indicates that the present magnates of the College do not intend to clothe themselves in an unapproachable suit of buckram, such as has been hitherto too much the wear of those who have ruled the College in Pall Mall. This reunion is, we understand, only the prelude to many convivialities of a like nature. We are sure that the College will be the gainer by the establishment of such familiar meetings between the senior and junior fellows. *C'est l'union qui fait la force;* and it is just this want of union which has been heretofore a source of weakness in the authority of the College.

The Governors of St. Mary's Hospital have lately granted the gentlemen, who have acted as assistant-physicians and assistant-surgeons of the institution since its opening, permission to designate themselves respectively physicians and surgeons of the hospital, their official duties and relative positions remaining unaltered. The senior officers of the hospital, we are glad to record, behaved most liberally towards their juniors in assisting them to carry out this alteration in their titles. We trust that other hospitals in London will not let the fact be forgotten. It really is not in accordance with the advanced spirit of the age, nor with common sense, that men advanced in age and of standing in their profession, should be obliged to write themselves "assistants", perhaps for the whole period of their lives. Justice requires that the invidious term should be removed when a man has served his hospital a given time, and has proved himself worthy of the title of physician or surgeon. In the present instance, we believe that this little incident, in which the senior officers have played so graceful a part, has excited feelings of extreme cordiality between all the medical officers of St. Mary's Hospital. This hospital was founded in a liberal spirit; it was opened in a liberal spirit; and we are most glad to find that liberality still presides over its councils.

The Society of Arts, in the examinations which they have instituted with the object of encouraging the diffusion of knowledge among the mechanic and artisan classes, have very judiciously included the physical sciences in their programme. At the examination recently held in London, at which eighty candidates presented themselves, five offered themselves for examination on the subject of Hydrostatics and Pneumatics, four on Electricity, five on Heat, fifteen on Chemistry; but *not one* candidate appeared in Physiology. Last year there was, out of fifty-two candidates, *one* who obtained a certificate in Physiology. What has been now said regards London; but the Society have also held an examination in Huddersfield, to which one hundred and forty candidates entered themselves. We have not seen the report of this examination; but we fear, from an observation made by a gentleman at the recent Annual Conference of the Society, that Physiology does not make a better show in the north. The gentleman to whom we refer, Mr. F. Curzon, said :—

"There was no one within fifty miles of Huddersfield qualified to give instruction in physiology. He believed, if a competent person would state what salary would induce him to take up his residence in the north, by an union of the institutions of the large towns like Halifax and Wakefield for that purpose, a qualified lecturer on that science might be fully employed."

Cannot any of our associates help to the attainment of so desirable an object as the diffusion of a popular knowledge of physiology? One earnest man in the profession we are aware of, who would evidently do something if encouraged and aided. Mr. Knaggs, of Huddersfield, writing on the sanitary condition of that town in the *Sanitary Review* for this month, says :—

"Slight reflection assures us how great masses of disease originate directly from ignorance of the most simple and elementary physiological laws of nature; truths which ought to be indelibly impressed upon the mind of every child, but which, in this age of progress, are not thought of sufficient importance to enter into the plan of general education. . . . All classes of society suffer from this incomprehensible and serious neglect of that which should constitute one of the first and leading features of healthy practical education; but in an especial degree is this so with the poorer classes. A vast proportion of the diseases which beset humanity would, I am con-

vinced, be effectually put a stop to if the principles upon which our health depends were well engrafted in the minds of society... Something might be done to encourage a taste for this science, by lectures and popular works on the subject. In the hands of the more advanced student, such text-books as those of Carpenter, Lardner, and others, would furnish ample materials of interest and instruction; but amongst the poorer classes, I would suggest the circulation of popular and sound physiological tracts."

These words of Mr. Knaggs are full of sound sense. Sanitary reformers cannot expect to do good until the *principles* of hygiene are taught to the people. We trust that this fact will become generally recognised; and that in future reports, the Society of Arts, to whom the cause of popular education owes so much, will not have to note down the discouraging words—"Physiology, no candidates."

There is to be met with, here and there, and from time to time, a surgeon who refuses to permit the administration of chloroform during operation in cases in which it would be unhesitatingly administered, under like circumstances, by ninety-nine out of every hundred of his professional brethren. We admit that the refusal is founded on motives most conscientious. But is the conscience which thus guides the operator enlightened? is it in accordance with the dictates of reason and plain common sense? We certainly think not. The man who thus acts puts his small and individual experience in competition with the experience of the whole body of the profession. Now, is it reasonable for one man out of the hundred to believe that he alone is right, and that the ninety-nine are all under a delusion; the ninety-nine being men who are all his equals in surgical experience and skill, and many of them vastly his superiors? We venture, raising a voice in behalf of suffering humanity, to suggest to that one man to consider whether he would not act much more rationally, and so more conscientiously, if he were in such case to distrust his own opinion (which is manifestly founded on the narrow basis of his personal experience), and permit his judgment to be guided in this matter by the recorded observations of the whole surgical world? Whoever refuses his patient the blessings of chloroform, and subjects him to the intense agony of a great operation, in cases as above referred to, accepts, in our opinion, a most grave responsibility. We freely confess that we could not have the courage to witness operations performed under such circumstances.

The clairvoyants are a clever tribe; they don't miss a chance. Our readers will remember, that several months ago a dreadful murder was committed in Dublin; and some perhaps may have heard that a clairvoyant was said to have been employed on the occasion to fish out the malefactor, at the instance of a high clerical dignitary, notorious for his logical acumen and want of common sense. The detectives—thick- and clear-sighted—all failed in the attempt. Last week, however, the murderer appears to have been pitched upon; his wife gave the clue, being desirous of saving her husband's soul by hanging his body. At this juncture, as we see in one of the journals, up jumps some pimp to the morbid appetite of marvel-mongers, and declares, that the clairvoyant long ago named the individual in question as the actual sinner. Doubtless the Mesmerists will be shouting their "Io Pæans" on this occasion; and we may surmise that fresh accessions will be added to their ranks, on account of this brilliant triumph of the black art. We live in an advanced age.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July next.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 7, 12 noon.
Reading. [Annual Meeting.]	George Hotel, Reading.	Wed., July 8, 4 P.M.
Bath and Bristol. [Annual Meeting.]	Bristol Institution, Bristol.	Thurs., July 9, 3 P.M.
Metrop. Counties. [Annual Meeting.]	37, Soho Square, London.	Tues., July 14, 3 P.M.
Shropshire. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Tuesday, July 14, 2 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, May 1857

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

The Annual Meeting of the Lancashire and Cheshire Branch was held in the Council Chamber of the Town Hall, Preston, on Wednesday, June 24th; Lawrence Spencer, Esq., Mayor of Preston, and President, in the Chair. There were also present: R. Allen, Esq. (Preston); H. Ashton, Esq. (Walton-le-Dale); E. Barnes, Esq. (Leyland); E. Batty, Esq. (Liverpool); W. Bradley, Esq. (Preston); W. Chapman, Esq. (Gartstang); G. Dagliesh, Esq. (Wigan); J. Dickinson, M.D. (Liverpool); F. D. Fletcher, Esq. (Liverpool); R. A. Gaskell, Esq. (St. Helen's); J. B. Gilbertson, Esq. (Preston); B. Gilpin, Esq. (Ulverstone); W. Gradwell, Esq. (Kirkham); B. Haldan, Esq. (Preston); J. Hall, Esq. (Preston); E. Houghton, Esq. (Lytham); G. D. Hunt, Esq. (Fleetwood); T. Inman, M.D. (Liverpool); Ellis Jones, Esq. (Liverpool); E. Lyon, M.D. (Manchester); J. Martin, Esq. (Hindley); R. Martland, M.D. (Blackburn); W. Moore, Esq. (Blackpool); D. Noble, M.D. (Manchester), (Retiring President); J. Noble, Esq. (Preston); E. Richardson, Esq. (Preston); G. Southam, Esq. (Manchester); A. Stookes, M.D. (Liverpool); H. Swift, Esq. (Liverpool); J. Vose, M.D. (Liverpool); A. T. H. Waters, Esq. (Liverpool); R. Wilding, Esq. (Blackburn); W. C. Williamson, Esq. (Manchester); G. Wolstenholme, Esq. (Bolton); also R. Altham, M.D.; W. B. Arminson, M.D.; T. Barton, Esq.; H. H. Carter, Esq.; W. Dunderdale, Esq.; J. H. Hammond, Esq.; W. Howitt, Esq.; T. Monk, Esq.; J. Pilkington, Esq.; J. Rigby, Esq.; W. Smith, Esq.; W. H. Spencer, Esq.;—(all of Preston); J. Berry, Esq. (Leyland); Dr. Bone, staff-surgeon (Barracks, Fulwood); E. Eccles, Esq. (Longridge); E. H. Monks, Esq. (Wigan); J. Pilkington, Esq. (Chorley).

Dr. Noble, on taking the chair, congratulated the Branch concerning what might be considered as a very successful meeting. This was of especial consequence, as it had always been somewhat doubtful as to whether a meeting would be likely to succeed in any other town than Liverpool and Manchester within the jurisdiction of the Branch. However, it might be considered that the present meeting was entirely successful. He had great pleasure in calling upon the President-elect to succeed him in this office—a gentleman whom he had known for many years, both as a fellow-apprentice, at least in the same town and locality, a fellow-student in London, and an uninterrupted friend.

Mr. Spencer having taken the chair,

Dr. Noble said that Mr. Hatton, the Secretary, had sent in his resignation; and he was, moreover, unable to attend. He therefore moved that Mr. Southam, of Manchester, be requested to act as Secretary *pro tem.*

Dr. Martland (Blackburn) seconded the proposition, which was agreed to.

PRESIDENT'S ADDRESS.

In taking the chair, permit me to tender to the members of the Lancashire and Cheshire Branch the strong feelings of obligation which I entertain towards them for the honour which they have conferred upon me by electing me to be the President for the ensuing year. I feel deeply sensible of the honour which has been conferred upon me, and of the difficulties I shall have to encounter to discharge the duties of the important office to the satisfaction of the members generally. I feel the difficulties the more, inasmuch as I have to follow one who is so well known, not only on account of his general knowledge, but also by the zeal and energy with which he discharges all public duties which he undertakes. I have great pleasure in welcoming you here; and, in saying so, I am only repeating the good wishes of my fellow-practitioners, who are delighted to have the pleasure of joining you in holding the meeting in Preston; and I assure you they wish through me to tender to you a most cordial welcome. I am satisfied that they will regret—should anything transpire, or should anything be omitted—if the result should be, in the slightest degree, to mar the harmonious proceedings of to-day. There is only one circumstance that tends to discompose myself, and that is the fact of seeing around me at these tables so many persons better fitted, both by their talents and position, to fill the chair which I have now the honour to hold. I regret it, gentlemen, much, because I am satisfied that the person occupying this post must be looked up to, and considered as a worthy representative; and I fear, as the representative of the profession in Preston, you have in me but an indifferent sample. [*No, no.*] At the same time, though I cannot boast of any literary position—at the same time that I have not done much to advance my profession as far as the press is concerned, those who know me best will not hesitate to say that, for the last twenty years, I have worked hard, and done all in my power to ameliorate the sufferings of mankind. [*Applause.*] It is to me a matter of deep regret that we have not amongst us one gentleman whom we may consider the father of the profession in the town. I allude to our old and valued friend Mr. Brown. I am sure it will be painful to many gentlemen around this room to know that he is suffering from affliction—that he is the subject of painful disease; but, although he is so afflicted, I am sure it will be a pleasure to know that his mind is such that he could collect his thoughts; and I assure you that this morning I not only have had a communication from him, but I have his entire permission to submit to you a most interesting case, which, I am sure, will afford the meeting a great amount of pleasure to investigate and observe.

It is usual in meetings of this kind to particularise many of the topics that engross the attention of the medical public; but I rejoice to say that, on the present occasion, there are few subjects that are disturbing the profession. In respect to our Medical Bill, that I think may be considered as settled. There may be some doubt as to whether it will become law during the present session of Parliament; but as to its facts, as to its principles, I think the medical public generally are agreed. I shall not venture to take up your time with any observations in reference to other matters at present before Parliament; but I would venture to remark that there is one subject, to which if I did not draw attention, I should be ill wanting; I allude to the British Medical Association, which has been in existence now upwards of twenty-four years. The Association, when in its infancy, was but small in numbers, but has gradually waxed and grown into great magnitude, enrolling amongst its members above two thousand of the most respectable and painstaking medical men, not only in England, but in other parts of Great Britain. I assure you that it has now become of so much importance that, in my judgment, it is almost a reflection upon any person not to be a member of it. I assure you that these meetings are of all other things the most likely to conduce to an increase in the numbers of that Association; and I can venture to state that those gentlemen who are already members look forward to the Parent meeting, as well as to their Branch meetings, with feelings of great satisfaction. I am satisfied, from what I observed to-day, from the meetings which have already taken place in the early part of the morning, that there have been pleasant recollections of the past; and I hope that the time which has been spent in Preston will not only be spent in conviviality, but in education and medical improvement. There is also one other matter—that is, the subject of the Journal itself. I have pleasure in stating that I have carefully read its pages for the last eight or ten years; and, ever since I began to read them, I have perused them with interest, and have always considered that each week I acquired some fact or other that would be of advantage to me.

The President referred to the advantage which would accrue if the members composing the Association, gentlemen connected with public institutions, and enjoying an extensive practice, would record in the Journal those cases of interest which came under their cognisance. He concluded by calling upon the Secretary to read the report.

REPORT OF COUNCIL.

Mr. Southam read the annexed report.

"The Council of the Lancashire and Cheshire Branch, in presenting their annual report, have little to dwell upon, so far as regards any active operations, nothing having occurred to engage their special attention.

"Since the last annual meeting in Manchester, important changes have, however, been made in the constitution and rules of the parent society. It is now no longer designated a Provincial Association, but has, by the almost unanimous votes of its members, assumed the title of the British Medical Association.

"By the new form of government adopted, every member of the Association, by joining a Branch, has the right of electing to the General Council; and your Council have to regret that the members do not more readily take advantage of this privilege, as there are upwards of one hundred resident in Lancashire and Cheshire who are not enrolled in the Branch. The Council would here particularly draw the attention of members to the construction of the second clause in the fourth rule, as it now stands, recommended by the Committee appointed to revise the rules to remain intact. By its provisions, all gentle-

men who enter the Parent Association through the portals of the Branch are *ipso facto* members of the Branch; but, as many gentlemen have demurred to this compulsory clause, it will be for the consideration of this meeting to decide whether this rule shall or shall not be altered.

"The rules, modified by the Committee in accordance with the changes adopted in the constitution of the Association at Birmingham, in July 1856, will be laid before the present meeting for approval.

"The great question of Medical Reform has not been lost sight of by your Council; and they have appointed a sub-committee, consisting of Dr. Noble, the President, Dr. Lyon, Mr. Southam, and Mr. Hatton, the Honorary Secretary, to watch the progress of Mr. Headlam's Bill, to which the Association is committed; and to point out to him the discrepancies which at present appear to exist in the measure brought in by him.

"The Honorary Secretary has received the form of a petition from Mr. Griffin, in favour of the Poor-law Medical Officers; and, as it has received the sanction of Sir Charles Hastings, your Council earnestly hope that every member present will unhesitatingly sign it, considering that the object is on behalf of the worst paid of their professional brethren.

"Your Council refer with satisfaction to the Bill introduced by Earl Granville, President of Her Majesty's Privy Council, to restrict and regulate the Sale of Poisons; and, although there are many difficulties attendant upon the subject, your Council hope the legislature will pass such a comprehensive measure as will tend to check the indiscriminate sale of poison to ignorant people, and thus to diminish a very grievous evil, so remarkably increased of late years.

"Your Council also allude with pleasure to the appointment of a commission to inquire into the state of the Army Medical Department, and cannot but refer with feelings of congratulation to the steps so early taken by this Branch on behalf of naval assistant-surgeons, whose position is now so much ameliorated.

"Your Council have pride in the recollection that this important Branch was originally established as an independent society, founded in the small village of Newton, with the view of cordially co-operating with the objects of the Provincial Medical and Surgical Association. Now, however, that this latter is characterised by no mere provinciality, but embraces the United Kingdom, they trust that the same cordiality and good feeling which have ever characterised the actions of this Branch may be sustained under the new state of things; and that, now the whole profession are united, without distinction of metropolitan and provincial, all members of the profession will see the advantage of combining in one common brotherhood, to endeavour to enhance its own well-being, and by union of its members as links of one powerful chain."

From the financial statement, it appeared that the balance in hand amounted to £4:8:3.

Dr. Dickinson (Liverpool) moved that the report of the Council be received, adopted, and printed together with the proceedings of the meeting.

Mr. Wolstenholme (Bolton) seconded the proposition, which was agreed to unanimously.

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Mr. Howitt (Preston) moved—

"That the best thanks of this meeting be given to Dr. Noble, the late President, and the other members of the Council, for their services during the past year."

He eulogised Dr. Noble for the energy and perseverance he had displayed in connection with the society. He felt sure that every gentleman present would co-operate with him in giving thanks to Dr. Noble for his services during the past year. The other gentlemen were also entitled to our best thanks for the diligence and activity they had displayed in carrying on the proceedings of the society. He regretted that more members had not joined during the past year, as the society was deserving of the support of every member of the medical profession.

Professor Williamson (Manchester), in seconding the motion, passed a high eulogy upon Dr. Noble, to whom they ought to feel exceedingly grateful for what he had accomplished. Upon the Council had hitherto depended the amount of success that had accrued. Their prosperity depended upon the way in which the crew worked the vessel, and hitherto they had worked it exceedingly well. [*Applause.*]

The motion was agreed to.

PLACE OF MEETING IN 1858: ELECTION OF OFFICERS.

Dr. Inman (Liverpool) proposed that the next anniversary meeting be held in Liverpool; and that Ellis Jones, Esq., of Liverpool, be nominated President-elect; and John Hatton, Esq., of Manchester, and James Vose, M.D., of Liverpool, be Vice-Presidents-elect for the ensuing year. In Liverpool there were forty or forty-five members of the Branch—no inconsiderable portion—and out of that number there was scarcely one who had not been induced to join by Mr. Jones. Mr. Hatton had long discharged the duties of Secretary, and Dr. Vose was one who was looked up to not only by the profession in general, but by the intellectual part of the profession in particular.

Mr. A. T. H. Waters (Liverpool) seconded the motion, which was carried by acclamation.

Dr. Vose (Liverpool) proposed that Mr. Waters, of Liverpool, should be elected Honorary Secretary in the place of Mr. Hatton, resigned.

Mr. Swift (Liverpool) seconded the resolution, stating that Mr. Waters possessed qualities which admirably fitted him to succeed Mr. Hatton.

The motion was carried; and Mr. Waters returned thanks.

VOTE OF THANKS TO MR. HATTON.

Dr. Lyon (Manchester) moved—

"That this meeting having heard with regret that Mr. Hatton has decided upon retiring from the honorary secretaryship, record their grateful sense of his able and valuable exertions for a period of fifteen years in support of the Lancashire and Cheshire Branch of the British Medical Association, and at the same time tender to him their best and most ardent thanks."

Mr. Ellis Jones (Liverpool), in seconding the proposition, bore testimony to the services rendered by Mr. Hatton, and expressed a wish that some substantial token of esteem and respect might be paid to him.

The motion was assented to with applause.

COUNCIL OF THE BRANCH.

On the proposition of Mr. Gilbertson (Preston), seconded by Mr. Noble (Preston), the following gentlemen were appointed to constitute the Council of the Branch, in addition to L. Spencer, Esq., President, and Abraham Wood, Esq. (Rochdale), and E. Waters, M.D. (Chester), Vice-Presidents: E. Batty, Esq, (Liverpool); G. M. Davis, Esq. (Liverpool); J. Dickinson, M.D. (Liverpool); W. H. Duncan, M.D. (Liverpool); A. D. Dunstan, Esq. (Holmes Chapel); H. Halkyard, Esq. (Oldham); John Hatton, Esq. (Manchester); Ellis Jones, Esq. (Liverpool); E. Lyon, M.D. (Manchester); P. Macintyre, M.D. (Liverpool); G. Mallett, Esq. (Bolton); T. Mellor, Esq. (Manchester); D. Noble, M.D. (Manchester); T. Radford, M.D. (Manchester); J. Robinson, Esq. (Bolton); J. Sharp, Esq. (Warrington); G. Southam, Esq. (Manchester); G. Turner, M.D. (Stockport); H. Wilson, Esq. (Runcorn); G. Wolstenholme, Esq. (Bolton).

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following members were elected representatives of the Branch in the General Council: J. Dickinson, M.D. (Liverpool); T. Inman, M.D. (Liverpool); Ellis Jones, Esq. (Liverpool); E. Lyon, M.D. (Manchester); D. Noble, M.D. (Manchester); G. Southam, Esq. (Manchester); L. Spencer, Esq. (Preston); J. Vose, M.D. (Liverpool); E. Waters, M.D. (Chester); A. T. H. Waters, Esq. (Liverpool).

POOR-LAW MEDICAL REFORM.

A petition to Parliament was adopted, praying for relief for Poor-law surgeons.

CASES AND COMMUNICATIONS.

The case submitted by Mr. Brown was brought forward and inspected by the members.

Dr. Noble read a paper on "The Use of Opiates in the Treatment of Insanity."

A discussion followed, in which Dr. Inman, Dr. Vose, Mr. Waters, Professor Williamson, Mr. Ellis Jones, and others, took part.

Professor Williamson then read a paper on "Some practical Points in the Treatment of Diseases of the Ear."

On the proposition of Mr. Southam, seconded by Dr. Vose, a vote of thanks was accorded to Dr. Noble and Professor Williamson, for their papers.

A request that he would allow his essay to appear in the Journal was declined by Dr. Noble, he being under a prior engagement to publish it in another paper.

Mr. Jones remarked that it was exceedingly essential that the members of the Association should support the Editor of their own Journal by all the literary and scientific contributions it was in their power to give.

VOTE OF THANKS TO THE PRESIDENT.

Dr. Noble moved, seconded by Dr. Inman, that a vote of thanks be rendered to the Chairman, not only as President of the present meeting, but also for his exercise of the presidency since he undertook that office.

The motion was carried with acclamation.

The Chairman returned his acknowledgments, and thanked every member for the kindness and courtesy he had received. [*Applause.*]

The proceedings of the meeting terminated at three o'clock in the afternoon.

THE DINNER.

The dinner took place at the Assembly Room, Bull Hotel; about sixty gentlemen were present. His Worship the Mayor presided, supported by the Rev. Canon Parr, Dr. Vose, Mr. Waters, Mr. Southam, etc. Mr. W. Howitt occupied the vice-chair. The cloth having been drawn, and the loyal toasts drunk,

The Chairman proposed "The Bishop and Clergy of the diocese," joining with the toast the health of the Vicar of Preston.

The Rev. Canon Parr returned thanks, and proposed "The Army and Navy." He looked upon those bodies, not to be used for aggression, but for defence. He looked upon the army and navy in any country, efficiently maintained, as the best guarantees for the security of that country in peace and quietness. [*Cheers.*]

The toast was drunk with applause, and was responded to by Mr. Hammond.

Dr. Lyon, in an appropriate speech, proposed "The British Medical Association," which was enthusiastically received.

Professor Williamson gave "The Lancashire and Cheshire Branch of the British Medical Association." It was a proof of the wisdom of their founders that they made the body to which they belonged a union. They clearly understood the fact suggested by some of the political governments of the world that had existed throughout all time, that a federal union was the true idea which ought to pervade the mass of those who would give strength and vigour and perennial youth to any body. The object was to secure that union that could only spring from unity of thought, from sympathy of feeling, from congeniality of nature, and from a number of those elements which could only be found when men were brought frequently together, when they knew one another, when they respected one another, and loved one another; in fact, when they were so united in all that was good and elevating, that at the most insignificant signal they were prepared to act in harmonious co-operation. Alluding to the practical utility of the Association, he said it was recognised, and universally allowed that when Mr. Headlam's Bill became law (and it would become law sooner or later), it was substantially their work. [*Cheers.*]

The Vice-Chairman proposed the health of Dr. Noble, Dr. Inman, and Mr. Dagliesh, in a brief speech, in which he passed a high encomium upon each of those gentlemen.

Dr. Noble was delighted to have this opportunity of meeting so many old friends in the place of his nativity and youth. It was quite plain that if any body of men would accomplish good in any particular era, it must be by corresponding with the spirit of the times; and, if one thing was more clear than another, it was that results affecting the community were to be effected by association, and not by autocracy. Individuals themselves were powerless, but when associated they became potent for achieving great results; and he did contend that the British Medical Association, of which the Lancashire and Cheshire Branch was an integral part, had accomplished good indeed. It was a question sometimes asked by the querulous, and sometimes in scorn, "What have you done? What is the use of your Association? If I join it, what shall I get?" Now, they had nothing to say to such parties. The inspiring motive for a man to become a member must be a feeling of professional chivalry, and a trust that good would come.

Mr. Dagliesh also returned thanks.

Dr. Vose proposed the health of the President, which toast was drunk with great acclamation.

The Chairman returned thanks.

Mr. Southam proposed the healths of the President elect and the Vice-Presidents.

Mr. Jones responded.

Mr. Batty gave "The Council," coupled with the name of Mr. Wolstenholme.

Mr. Jones gave the toast of Mr. Hatton, the late honorary secretary. The toast was heartily responded to.

Dr. Duncan proposed the health of Mr. Waters, the newly appointed secretary.

Mr. Waters briefly responded, and gave "The new members," to which Mr. Hunt replied.

Mr. Swift proposed "The visitors," which was acknowledged by Mr. Hall.

Other toasts followed, and the proceedings terminated about half-past seven o'clock.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—During the last eighteen months Union medical affairs have occupied much space in your valuable columns. Glad should I be, could I say this is the last epistle I shall write on the subject of Poor-law; but alas! we have still to fight the hard battle of right against might. I must therefore crave further indulgence, and a continuance of your able and generous assistance.

On June 25th, the President of the Poor-Law Board, in reply to Sir John Trollope, said, "that an order had recently been issued by the Poor-Law Board, directing that the appointments of medical officers to Poor-law Unions should be made permanent. Their salaries were fixed by the Poor-law Guardians, and the funds from which they were paid were partly the rates levied in their districts, and partly a vote of that House. In those cases in which the remuneration was extremely low, the Poor-law Board endeavoured to procure an addition to it, but he was sorry to say that, generally speaking, the Poor-law guardians were not disposed to agree with the Poor-law Board as to the propriety of such addition. Unless the Poor-law Board entered into a violent contest with the Boards or Guardians on that subject—which he was not all prepared to do—it would be difficult indeed to obtain an increase of the salaries. He ought at the same time to state that, in a great number of Unions, the medical officers were sufficiently remunerated. There could be no doubt that the great body of them discharged their duties with fidelity and diligence. Any one acquainted with the present operation of the Poor-law must admit that a great improvement had been effected in the administration of medical relief to the poor. [*Hear.*] He could not hold out any hopes to the medical officers that their salaries would be increased by means of an increased vote of the House, because the House was reluctant to grant even the usual vote under the head of Poor-law medical relief. As occasion permitted, the area within which the medical officers had to discharge their duties would be diminished."

The first part of Mr. Bouverie's speech is intended to imply that one cause of our complaint is removed, as the "order" recently issued makes us permanent officers. That it is not so I have shown in my letter to the Poor-law Board on the 20th instant. The order is prospective, and does nothing for the present officers, and very little for those to be hereafter appointed, as it is still clogged with residence in the district as a *sine quâ non* for permanency of office. I trust, however, my medical brethren will not be disheartened by the general tenor of Mr. Bouverie's reply, which is not more discouraging than was the opposition to the repeal of the corn laws; yet that measure was ultimately carried, and why should not ours?

The President of the Poor-law Board compliments us on our "fidelity and diligence"—goodly traits in our character, truly; but words alone, however gratifying, will not pay our druggists' bills. We require something more tangible, and must have it, too, before we cease to agitate. My medical brethren must continue to send in their petitions to the House, and to make interest with its members. That considerable progress has been made, is testified by the promises of support which so many of the Union surgeons have already received from their representatives. I, however, fear we shall not do much this session, hurried as it is, and opposed as we are, by Government, as it is clearly evinced by the statement of the President that he is "not prepared to enter into a violent contest with the Boards of Guardians on the subject." He is not, in fact,

prepared to support his officers in their claims for redress. We must, therefore, to quote his own words, prove our "fidelity and diligence", by a firm resolve to obtain the fruits of the verdict already recorded in our favour by the Select Committee of the House of Commons on medical relief, which made its report in 1854.

Our organisation is daily becoming more perfect; we are supported by the Royal College of Surgeons and the Company of Apothecaries; and I may say by nearly the entire profession. About three hundred petitions have already been presented; many of them contain the names of men of high standing; some of the clergy have also signed in our favour; and one petition has the name of the chairman of a board of guardians conjoined with many magistrates and ratepayers.

Let my friends continue to furnish me with the names of the petitioners, and the means to carry on the war, and the fault shall not be mine if victory does not ultimately crown our efforts.

I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, June 27th, 1857.

P.S.—Since writing the above, I have received a communication from a nobleman, well known by name to the profession, and if his lordship display only one-half the energy in support of our cause that he has shown in opposition to Mr. Headlam's Bill, we shall have a staunch advocate. Lord Elcho concludes his letter with the following words:—"I am unable to take any steps in the present session as regards the grievances of the Poor-Law Medical Officers; but I shall be very glad, if you have no more worthy advocate, to turn my attention to the subject next session."

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, June 25th.

METROPOLITAN WORKHOUSES.

Viscount Raynham moved for a Select Committee "to inquire into the condition and administration of metropolitan workhouses, and into the arrangements made by the parochial authorities for relieving the poor." He said that since attention was called to this subject, matters had become worse and worse in most of the metropolitan workhouses. A recent blue-book from the Poor-Law Board contained nothing but accounts of mismanagement in Marylebone and St. Pancras Workhouses. The inspectors described it as "most horrible". Since then, St. Pancras may have been somewhat improved, but that was owing to an inquiry instituted by the Poor-Law Board; and further inquiry might cause similar improvements in other workhouses. One great defect is the want of classification, the dissolute being mingled with the deserving. It is also notorious that the guardians screw down the salaries of officials to the lowest point; and porters are selected for their harshness and skill in driving the poor from the doors, and in preventing casual poor from obtaining relief. They are intrusted with a discretion which they are unfit to assume, and which it is illegal to exercise. Moreover, pauper nurses are employed whose old age and infirmities render them unfit for the duties. The wards are also overcrowded, and the guardians ought to be compelled to remove pauper children to the country. The evil would also be further reduced if the guardians abandoned their too parsimonious principles. The constitution of the Board of Guardians is wholly at variance with the rights of the inmates, as guardians are elected merely on pledges to reduce the expenditure. Last year, a widow—a lunatic—fifty-nine years of age, committed suicide, owing to the neglect of the medical officer at Hampstead; and the coroner's jury severely censured the two relieving officers; and many other cases had occurred where the inhumanity of the officers had caused suffering and death.

Mr. D. Nicol seconded the motion for inquiry.

Mr. Williams said the general administration of Marylebone was marked by humanity and attention to the poor. All the clergy of the district were *ex officio* members. The officers also were fully competent to their duties, and they were amply paid.

Mr. Bouverie said there were twenty-four workhouses in the metropolis; and the proposed inquiry would not be complete this session. He would not say that the administration of the Poor-Law in Marylebone and St. Pancras was perfectly satisfactory, but it had much improved since the Poor-Law Board made their report. The Poor-Law Board has now sufficient powers of revision; and if any particular case of hardship be complained of, he would be ready to investigate it.

Mr. P. W. Martin said the Poor-Law Board's report was made in January 1856; yet in October 1856, Mr. Hall reported that the regulations of the Poor-Law Board were still disobeyed, and the state of the wards was described as "horrible".

Mr. H. Drummond said that Mr. Bouverie's speech had added to his conviction that inquiry was necessary.

Alderman Copeland also supported inquiry.

Sir J. Pakington said that although the metropolitan workhouses were in an unsatisfactory condition, yet as Mr. Bouverie had promised to rectify the evils, the motion ought to be withdrawn.

The House then divided. The numbers were—for Viscount Raynham's motion, 52; against it, 73: majority against it, 11. The motion was therefore lost.

POOR LAW MEDICAL OFFICERS.

In answer to Sir J. Trollope,

Mr. Bouverie said, that an order had recently been issued by the Poor-law Board directing that the appointments of medical officers to Poor-law Unions should be made permanent. Their salaries were fixed by the Poor-law Guardians, and the funds from which they were paid were partly the rates levied in their districts, and partly a vote of that House. In those cases in which the remuneration was extremely low, the Poor-law Board endeavoured to procure an addition to it, but he was sorry to say that, generally speaking, the Poor-law Guardians were not disposed to agree with the Poor-law Board as to the propriety of such addition. Unless the Poor-law Board entered into a violent contest with the Boards of Guardians on that subject—which he was not at all prepared to do—it would be difficult indeed to obtain an increase of the salaries. He ought at the same time to state that, in a great number of Unions, the medical officers were sufficiently remunerated. There could be no doubt that the great body of them discharged their duties with fidelity and diligence. Any one acquainted with the present operation of the Poor-law, must admit that a great improvement had been effected in the administration of medical relief to the poor. [*Hear.*] He could not hold out any hopes to the medical officers that their salaries would be increased by means of an increased vote of the House, because the House was reluctant to grant even the usual vote under the head of Poor-Law Medical Relief. As occasion permitted, the area within which the medical officers had to discharge their duties would be diminished.

Wednesday, July 1st.

MEDICAL PROFESSION (No. 1) BILL.

Mr. Headlam moved that this Bill be read a second time.

Mr. Craufurd moved that the Bill be read a second time on that day six months. In the course of last year, Mr. Headlam introduced a measure, on which considerable labour had been bestowed, and which to a great extent elicited the united support of the medical profession, more especially of the British Medical Association. To secure the unanimity necessary to success, it was framed on the principle of compromise. With the view to carry out that spirit in the fullest sense, and to do justice to certain Universities and other bodies, Lord Elcho brought forward a second Bill. Both the measures were read a second time, and referred to a select committee. The consequence was the framing of a measure considerably modifying the one proposed by Mr. Headlam, and assuming the form now presented to the House by the Medical Profession (No. 3) Bill, introduced by Lord Elcho. In the shape in which that Bill came down from the committee, it almost entirely coincided with the measure proposed by the British Medical Association. Everything was in fair train, but the late period at which the committee concluded their labours rendered it necessary that the matter should stand over. Since then Mr. Headlam introduced a Bill. It was certainly not a little extraordinary that Mr. Headlam should almost wholly disregard the decision of the committee, and should again introduce a Bill nearly identical with that brought in by him in the session of 1856. The Bill completely consulted the interests of the corporations. He (Mr. Craufurd) did not want to upset vested interests; but he was indisposed to continue these corporations in the possession of privileges no longer suited to the spirit of our times. Bill No. 3 dealt tenderly with vested interests; it did not sweep away the medical corporations, which had undoubtedly done much good

in their time, and which might continue to be beneficial to the profession if put on a sound basis; but it did not compel students, before they could be admitted to practise, to pay heavy fees to these bodies. Another distinction between the Bills referred to the medical council. Last session, he (Mr. Craufurd) was much wedded to the representative principle. But the discussion in the committee, and the consideration of the evidence, had induced him to change his opinion. Though in theory a representative council might be best, it would be impossible for such a body to work in a satisfactory manner; from its size it would be unwieldy and unmanageable, and though nominally based on representation, it would not have within itself the element of responsibility. [*Hear, hear.*] On the other hand, a council nominated by the Government would be responsible to the country through Government. He would not, by throwing sop to the corporations, attempt to conciliate bodies which had hitherto stood very much in the way of medical reform; and he therefore moved that the Bill be read a second time that day six months.

Mr. Black seconded the amendment.

Viscount Bury approved of Mr. Headlam's Bill. Though the licensing bodies might have failed, when acting singly, to use their power with good effect, that was no reason why they should fail when they were able to combine with one another for the advancement of the common object. He feared lest the system of Government nomination, as proposed in Lord Elcho's Bill, should be used as a political engine; that when one party was in power the most necessary qualification for members of the council would be that they should be good Whigs, and so with the other side of the House. He would also support Mr. Headlam's Bill, because it provided no exclusion for what were called medical heresies.

Colonel Sykes concurred in the principle of representation as opposed to that of nomination by the Crown. He thought, however, that Mr. Headlam's Bill unnecessarily multiplied examinations and fees, and ignored the University element. He should oppose Mr. Headlam's Bill; and would also vote against Lord Elcho's measure, because it was based on the principle of nomination.

Colonel French thought the amendments of Lord Elcho might be introduced into Mr. Headlam's Bill in committee.

Mr. W. Ewart opposed Mr. Headlam's Bill.

Mr. Hatchell supported Mr. Headlam's Bill.

Mr. Black believed that the best test of a medical man's competency was the opinion of the public, and that, however rigid might be the system of medical examination, men incompetent to practise would succeed in obtaining certificates of competency from examiners. Before a man was allowed to practise he ought to be examined by competent persons; but why should he, after having obtained a certificate of competency, be called upon to enter into a corporation. There ought not to be any class distinctions in the medical profession. He (Mr. Black) had no desire to injure the ancient medical institutions; they had been of great service, but he thought it should be optional with physicians or surgeons to enter them, and not compulsory. The majority of the profession would, no doubt, seek admission into them.

Mr. Grogan said Mr. Black wanted to have free trade in the medical profession as well as in manufactures; but all States had found it necessary to prevent the care of the public health from being intrusted to incompetent men. [*Hear, hear.*] The Government could not dispense with a compulsory system of education as a preliminary to the practice. The medical profession had attained high eminence without Government interference, and he hoped that that House would resist any attempt to place it under the control of a Government nominee.

Mr. Neate deprecated the custom of undervaluing the ancient institutions. Free trade and unrestricted competition were very good in but very bad out of their place. [*Hear.*] It was to monopoly that much of our progress in arts and sciences was due. That remark applied to the medical more than to any other learned profession. Did the House wish to see free trade extended to the legal profession or to the church? He was speaking as if Mr. Headlam's Bill would sanction monopoly. But it would admit everybody to qualify himself for the medical profession; but it would also require, as it ought to do, that it should be ascertained whether he had qualified himself before he was permitted to practise. The College of Physicians was, no doubt, for a time actuated by a spirit of selfishness and exclusiveness, but it was now determined to meet, as far as possible, the requirements of the present state of society. [*Hear.*] It was for the interest of the State at large to maintain, in some shape or other, professional aristocracies.

Mr. Vance supported Mr. Headlam's Bill.

Mr. T. Duncombe objected to both the Bills. The examination of practitioners ought not to be reserved either to self-elected bodies or by nominees of the Crown. Though they had a State Church and State law, the public did not want State physic. The chartered bodies which it was sought to protect had always stood in the way of improvement. This was shown by the incarceration of the inventor of the tourniquet; and the first prescriber of cantharides had been sent to Newgate at the instance of the head of the College of Physicians. He was opposed to the system of registration.

Mr. Blake opposed the Bill No. 1, giving preference to the measure of Lord Elcho.

Mr. Briscoe supported the second reading of the Bill.

Lord Elcho claimed to be actuated by a sense of public duty alone in bringing forward his Bill. It had been said that he desired to obstruct medical reform, and to rival his hon. and learned friend. So far from that being the case, he was most anxious to remove the anomalies of the medical profession, and to effect some measure of reform. As regarded the imputation of rivalry, he (Lord Elcho) had not only no wish to set himself up against Mr. Headlam, but when his hon. and learned friend had given notice of the Bill, he (Lord Elcho) had asked him if it was the same as the amended Bill of last session; because, if so, he would support it. And it was only because it was not the Bill of the Committee, but the same Bill, with the exception of an alteration in the constitution of the council, that had been brought in by Mr. Headlam in the beginning of 1856, that he opposed it. He, however, wished to discuss the question on the broad principle of the Bill, and not to mix up with it any details. He would, however, first read to the House the names of the Committee on the Bill of 1856. They were Mr. Cowper, then President of the Board of Health; Mr. Brady, Sir W. Heathcote, Mr. Napier, Mr. Black, Mr. Bell, Mr. Howard, Mr. Headlam, Mr. Craufurd, Mr. Strutt (now Lord Belper), Mr. A. Hastie, Mr. Percy, Lord R. Grosvenor, Colonel Dunne, and Lord Elcho. This Committee were all but unanimous in recommending the Bill which he (Lord Elcho) had introduced; and, with one exception (that of Colonel Dunne, now not in Parliament), they had promised to support it. The main principle of Mr. Headlam's Bill was to give a monopoly of the medical education of the country to the corporations. The Bill made it compulsory on every member of a university to be examined before one of the corporations before he could be registered; and another clause obliged a practitioner to reside two years in one country before he could be registered. The reason for the latter clause, as far as he (Lord Elcho) could make it out, was a certain degree of jealousy of Scotch doctors, which had always existed in this country. Scotch doctors, however, went through a strict examination, and stood as high in the world of science as gentlemen who had received diplomas from English colleges. Mr. Neate had argued in favour of monopolies; but scientific monopolies had always worked injuriously for the people of this country. The practice of granting medical licenses had long been exercised by the Universities of Oxford, Cambridge, Edinburgh, and Dublin. In 1854, a Bill was passed, putting the London University on the same footing in that respect as the Universities he had named; and Mr. Headlam had supported an amendment to place the University of Durham in a similar position. In France, the power of granting medical licenses rested solely with the University of Paris. In Germany and Italy, the power of granting such licenses was in a government board. The rights of the Scotch Universities to grant medical degrees originated in bulls of the Popes, in which the same privileges were conceded as were held by Paris and Bologna. Some strong grounds ought to be adduced in support of a proposal, not only to perpetuate an old monopoly, but to give the holders of that monopoly powers which they had not hitherto possessed. It had been stated by Mr. Lawrence, before the Committee, that Scotch medical degrees were useless; but from a letter from Dr. Reid, who was medical examiner at St. Andrew's in 1847, it would appear that no degree was granted at that University without a strict examination in accordance with the regulations of 1826. It also appeared that a large number of the candidates rejected were members of the College of Surgeons of England. These medical corporations, like corporations of trades, had their roots in mediæval times. He wished to know whether, in 1857, the House was so satisfied with corporate bodies, that they would give them powers which they never had possessed. He should not object to giving them a fair

share of power, but he was opposed to granting them a complete monopoly. He would now say a few words with reference to his own Bill. The main objection to it was that the council ought to be representative. He believed that the best council would be one nominated by the Crown, with the Secretary for the Home Department, or some other high officer of state, at its head. By that means a proper council would be formed, and security would be obtained that the power of the Crown would not be abused. The question whether the corporations should obtain a monopoly or not was not a question for consideration in committee. The Bill of Mr. Headlam was taken by the Select Committee for a basis, but it was so altered that scarcely any part of the original was left. He would state what medical corporations themselves said of his Bill. The Dublin Apothecaries' Company stated that it was characterised by an equitable adjustment of the rights of all parties, and they prayed that it might pass at once. The Edinburgh College of Physicians last year also expressed a hope that the Bill would pass. The British Medical Association, with reference to the Bill of the Select Committee, said last year that they were desirous of seeing it become law. He had another test by which to judge of the Bill. It had been said that the opinion of foreigners on what passed in this country was the same as the judgment of posterity. He had received a letter from medical men in Jersey, expressing their wish that a clause might be introduced into the Bill to bring them under its operation. Mr. Warburton, a member of the senate of the University of London, had given, on part of that body, the preference to his over that of Mr. Headlam's. The recommendations of the Edinburgh College of Physicians on the constitution of the Council were nearly similar to the provisions of the Bill. Another objection of the corporations to the Bill was the establishment of one Board. Now, he had to remind the House that they were legislating, not for the rich man, who could afford his guinea, but for the public. Ample security was taken that no person's name should be on the registry unless he was qualified. When once a candidate's name was on the registry he was to be considered as a licentiate in medicine and surgery; but the medical corporations and the Universities would be left to compete with each other, so as to induce the licentiate to take a higher step. He would now say a word on the question of this being "a Scotch job." He believed that his proposal would be advantageous to Scotland; but others would be equally gainers. He had, however, held but little communication with the Scotch Universities. It had been also said that the greatest unanimity prevailed in the profession with regard to Mr. Headlam's Bill. He admitted that by some hocus pocus the names of the hon. member for the University of Oxford and of the hon. and learned member for the University of Dublin were now on the back of Mr. Headlam's Bill, and he gave his hon. friend full credit for the diplomatic tact which he had shown in getting his Bill endorsed with the names of those two honourable members. Last year the names of Mr. Craufurd and Mr. Brady appeared upon Mr. Headlam's Bill; and it might naturally have been supposed that when the hon. member for Newcastle-on-Tyne introduced this session another measure of medical reform, he would again have placed their names upon the Bill. Mr. Headlam, however, had not said a word on the subject to one of these gentlemen. This seemed rather sharp practice; and consequently he (Lord Elcho) asked Mr. Craufurd and Mr. Brady to allow their names to be placed upon the Bill which he introduced. They unhesitatingly consented, and he obtained leave to bring in the Medical Profession No. 2 Bill. The next day Mr. Brady requested him, as a personal favour, to take his name off the Bill; stating that, from peculiar circumstances connected with his position in Ireland, he did not wish to meddle any more with medical reform. He (Lord Elcho) acceded to the hon. gentleman's request; but he had to get the order for the Bill discharged, and to obtain leave to introduce the Medical Profession No. 3 Bill. He had been denounced in a document emanating from the College of Physicians, for having interfered with the unanimity of the profession. But the Bill was not so much his as that of the Select Committee. The unanimity of the medical corporations as to the Bill was more apparent than real. In truth, there was no unanimity on the subject. He was enabled to say that the committee of the British Medical Association had never authorised any of their body to go with the deputation to Lord Palmerston. The day after the deputation went to Lord Palmerston a letter appeared, saying that the gentlemen who professed to represent the College of Surgeons had no right to speak in the name of the profession. Attempts had been made to place legislation on this subject upon the ground of unanimity, but he trusted he had shown that that unanimity did not exist. Indeed, the interests of the Universities and of the corporate bodies were so discordant, that it was impossible to establish unanimity. Let the House do what was right, without waiting for the consent of the profession; and they would ultimately find that they had done that which would be for the benefit of both the public at large and the profession. The mission of the physician was a high one; but physicians were but men; and the House had to deal with them in their corporate, and not in their individual capacity; and he therefore trusted that hon. members would not yield so far to that influence which physicians deservedly had upon all classes of society. He hoped the House would reject the monopolising Bill of the corporations, and adopt the measure of the Select Committee. [*Cheers.*]

Mr. Napier supported the Bill of Mr. Headlam. He believed that nothing better fitted men to attain distinction in any profession, and to render benefits to society, than the enlightened liberal education which was obtained in the universities. He considered that the great fault of legal, military, and medical education was the maintenance of systems of narrow and exclusive training, instead of providing a system of general enlightened education in schools and universities open to all, and then having separate establishments for subsequent military, or legal, or medical instruction. His anxiety was that the House, in dealing with a question of this nature, should proceed upon enlightened educational principles. The subject now under consideration had been referred to a select committee; and the chief difficulty experienced by that committee was in bringing into harmony and co-operation the great bodies connected with the medical profession which were at variance. It was most important that an enlightened system of medical education should be established, but that object could only be effected by concessions on both sides. The bodies to which he had referred met in conference; they considered the measure which was presented to them; and after various meetings and discussions, they at length arrived at something like common agreement. That was the reason that his name appeared on the back of this Bill, as representing the University of Dublin. Undoubtedly this Bill and that of Lord Elcho were utterly irreconcileable. Who were the persons who objected to the Bill of Mr. Headlam? He did not wish to say anything disrespectful of Scotland; but although her universities had produced eminent men, the reputation of the Scotch degrees had been greatly depreciated. Irishmen who were unable to pass for degrees in their own country went over to Scotland in order to obtain them. The Scotch Universities did not require degrees in arts before degrees in medicine were conferred. The Bill of Mr. Headlam required that before a man was licensed as a physician he should have taken a degree in arts and medicine in some university. The Bill of Lord Elcho would, on the contrary, reduce all medical men to the common level of the general practitioner, and would only require the *minimum* of education. The noble lord maintained the right of the universities to grant licenses to practise, but he (Mr. Napier) thought the function of the universities should be to afford a sound preliminary and preparatory training, leaving to other bodies the duty of licensing. He contended they ought to take the very highest standard of education, and the question was how was that to be provided. It was often said that, as a body, the members of the medical profession were not equally well educated with the bar and the church. He thought the reason was that the education of the medical practitioner had heretofore been much too exclusive, and did not embrace a preliminary general education. He trusted that the House would not give way to the suggestions made by the opponents of Mr. Headlam's Bill, emanating, as those suggestions did, from quarters where at present no adequate education was given, and where the governing bodies wanted to have power to dispose of an inferior article in the market. He thought the medical profession had not been fairly treated in this country. It ought to rank almost as high as the theological profession, for a man could be the priest of his own family, but he could not be the physician of his own family. It had, however, never been held in anything like equal esteem with the profession either of theology or of the law. He could not understand why that should be, seeing how intimately our moral and physical qualities were blended together, and how delicate and important in the last degree were the functions which medical practitioners were constantly called on to discharge. Believing that the Bill of Mr. Headlam would have the effect of insuring a higher amount of general and professional edu-

cation, and of elevating the profession generally, and knowing that it had the approval of his constituents, he gave it his most cordial support. [*Hear, hear.*]

Mr. Cowper hardly expected that Mr. Napier, who represented a university in that house, would have taken the course he had on this occasion. The Bill of Mr. Headlam took from the universities the power which they possessed by law of giving licenses to medical practitioners; and what was the equivalent they were to receive in return? By the Bill No. 3 they would receive what he (Mr. Cowper) thought was a proper equivalent—namely, that they would have the power of nominating the examiners who were to examine in arts and the sciences connected with medicine, while the medical corporations would nominate the examiners who were to examine with a view to practise. When Mr. Napier found fault with the education given at the universities he must have alluded to places where the education was of an inferior description; but he would ask him to look not merely to those universities, but also to the universities of London, Edinburgh, and Glasgow, which were medical schools; and especially to that of Edinburgh, where the theory of medicine was not merely taught, but also the practice in the most eminent degree. The subject of medical reform occupied a singular position with regard to the question of unanimity. Mr. Headlam stated when he sought to introduce his Bill of last year that it had received the unanimous assent of the general body of the medical profession; but when the House went into committee upon it no less than fifty-one amendments were suggested to the measure; and, indeed, the opposition to the Bill from every quarter of the House was so manifest that Mr. Headlam found it out of the question to attempt to carry the measure further, and he took the very wise course of agreeing to a suggestion to refer it to a select committee. When it was referred to a select committee there was really unanimity; because the only division of importance that arose was on a motion as to the constitution of the council, which was carried by a majority of eight to two. As to the constitution of the council he (Mr. Cowper) would much rather see the representative principle adopted; but he still thought the influence of the Crown ought to be felt in that body; and if the nomination of the Crown was not to be recognized there ought to be a provision by which the decrees and resolutions of that council should not come into effect unless they had the approval of Her Majesty by the advice of the Privy Council. One great defect under the present system was the want of proper qualification among a large number of persons who were yet held to be qualified by law. Several hon. gentlemen had assumed that the present state of the law in respect to qualification was all that could be required; but he, on the contrary, believed it was very imperfect, and that the Bill of Mr. Headlam, instead of providing an adequate remedy, rather aggravated the evil than otherwise. Believing that its effects would be to lower instead of raising the standard of qualification, he should be compelled to vote against the second reading. [The right hon. gentleman was proceeding to point out in detail what he considered the defects of the Bill of Mr. Headlam, but the impatience of the House for a division was such that he was obliged to desist for a time.] He said that the Bill of Mr. Headlam was in his opinion an attempt to maintain the defects of the existing system, and was objectionable in that it did not substitute a better examination for the present imperfect one, and that it did not provide for an improvement in the standard of qualification of the general practitioner. If the House rejected the Bill No. 1, it would not be compelled to accept No. 3. The Government were not in any way bound to support the Bill No. 3; but as the poor in the rural districts must be dependent for their health, and even for their lives, upon the proper qualifications of general practitioners, he had felt it his duty to state to the House his views upon the measure which was now under consideration. [Cries of *Divide! divide!*]

Mr. Headlam would refer to the history of this question a little before last session. In the year 1844, after investigations by committees of the House, Sir J. Graham brought in a Bill which was in all respects identical with that which he (Mr. Headlam) had submitted to the House [*Hear, hear*]; and in the following year another Bill of precisely similar character, and containing the same recognition of the rights and privileges of corporations as he had embodied in his measure, was introduced by the same right hon. baronet. Unfortunately, the medical profession did not give to those Bills the support which they deserved, and they were lost. At last the profession had attained a degree of unanimity in favour of this Bill, which, considering the conflict of privileges, rights, and interests, was something wonderful; and he thought it was not too much to ask that the House should at least read a second time a measure which was so recommended and so sanctioned. Last year he introduced, on behalf of the British Medical Association, not on behalf of these corporate bodies, a Bill in which regard was paid to their rights and privileges. That Bill was read a second time without opposition. When it was proposed to go into committee, the Secretary of State for the Home Department opposed this proceeding, and on a division the matter was referred to a select committee, of which, in the natural course of things, he (Mr. Headlam) should have been chairman. At first, however, he declined to be even a member of the committee. The then President of the Board of Health nominated it, presided over it, and introduced into the Bill which emanated from it those clauses of which he now complained, which would entirely destroy all the organisation which had grown up within the medical profession, and subject that profession to a council, to be nominated by the Crown, and of which the President of the Board of Health would be the head. If he had nothing to do with the medical profession, he should, on constitutional grounds, to the utmost of his ability, oppose the clauses which would thus subject that profession to the control of the Crown. [*Hear, hear.*] There were many reasons why it was not desirable that this council should be nominated by the Crown; but the strongest of these was, that it was from this council alone that the right to practise could be obtained. Such a constitution would place the profession entirely at the mercy of the Crown. [*Hear, hear.*] It was the duty of the House in some measure to consider the rights and feelings of the medical profession; and he would undertake to say that the members of that profession generally objected to the Bill of the noble lord (Lord Elcho), and that the assents which he had obtained were mainly attributable to some trifling objections which were entertained to parts of his (Mr. Headlam's) measure. In the course of the last autumn a compromise had been come to, and endeavours had been made to settle this question by mutual concessions. It was not right that any hon. member should endeavour to revive differences. [*Hear, hear.*] He objected to Lord Elcho's Bill, because the council was to be nominated by the Crown, because it would entirely destroy all the organisation which had grown up within the profession, and because it made the *minimum* of education the sole barrier over which a man must pass before he entered the profession.

Mr. Coningham would vote against both Bills.

The House then divided, when the numbers were—

For the second reading	225
Against	78
Majority	——147

The Bill was therefore read a second time. The committee was fixed for Wednesday next.

MEDICAL BILL (No. 3).

Lord Elcho said that, as he understood that the discussion which had just concluded had been upon both these Bills, and the result of the division was in favour of No. 1, and against No. 3, he should not at present attempt to proceed further with the latter. At the same time, as he ventured to prophesy that the Bill No. 1 would not pass into law this session, he gave notice that, if the Government did not take up the question, he should next year reproduce the Bill No. 3 in its present form. Under these circumstances, he moved that the order of the day for the second reading of the Medical Bill No. 3 should be read and discharged.

The order was accordingly read and discharged.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

*Duncan. On June 24th, at Tunbridge Wells, the wife of Robert Duncan, Esq., Surgeon, of a daughter.

Newington. On June 19th, at Ticehurst, the wife of S. Newington, M.D., of a daughter.

Prance. On June 30th, at Plymouth, the wife of Charles R. Prance, M.D., of a daughter.

MARRIAGES.

Blomfield—Bower. Blomfield, J., M.D., to Ellen, daughter of the late V. Bower, Esq., of Peckham Rye, at St. Giles', Camberwell, on June 27th.

Combs—Philcox. Combs, James W., Esq., Surgeon, Burwash, Sussex, to Louisa, only daughter of James Philcox, Esq., Solicitor, of the same place, on June 23rd.

Pearce—Graham. Pearce, Ravenhill, M.D., of Brighton, to Jane, only daughter of Nathaniel Graham, Esq., of Pinner, Middlesex, at Hove Church, Sussex, on June 27th.

Roden—Gibbons. *Roden, Sargeant S., M.D., of Droitwich, to Clara, only daughter of the late W. Gibbons, Esq., of Richmond, Surrey, at Richmond, on June 25th.

Sopwith—Deane. *Sopwith, Henry L., Esq., Surgeon, of Tunbridge Wells, to Matilda, only surviving daughter of Charles Deane, Esq., late of Blandford Place, Regent's Park, at the Rectory Church, St. Marylebone, on June 25th.

Wollen—Winkles. Wollen, John Lloyd, M.D., to Jessie Kezia Maria, youngest daughter of Henry Winkles, Esq., of Hendon, Middlesex, at the British Embassy in Dresden, on June 24th.

DEATHS.

Carswell, Sir Robert, M.D., Physician in Ordinary to the King of the Belgians, and formerly Professor of Pathological Anatomy in University College, London, at Lacken, near Brussels, aged 64, on June 15th.

Holland. On June 25th, Harriet Anne Edgar, wife of Joseph Holland, Esq., Surgeon, of Prestwich, Lancashire.

PASS LISTS.

Royal College of Physicians. At the usual Quarterly Meeting of the Comitia Majora, held on Thursday, June 25th, the following gentlemen having passed the necessary examinations for the diploma, were admitted members of the College:—

Dr. Stallard, Leicester
Dr. Harris, Great Ormond Street
Dr. Meyer, London
Dr. Cecil Hastings, Albemarle Street
Dr. Moon, Brighton

Also, as Extra Licentiates:—

Dr. Alcock, Evesham
Dr. Lancaster, Clifton

At the same Comitia, the following gentlemen were elected Censors for the ensuing year:—

Dr. Jeaffreson, Finsbury Square
Dr. Pitman, Montague Place
Dr. Bence Jones, Brook Street
Dr. Risdon Bennett, Finsbury Square

The following gentlemen were also chosen Fellows of the College.—

Dr. Lister, Madeira
Dr. Chowne, Connaught Place West
Dr. Cape, Curzon Street
Dr. Roxburgh, Gloucester Place
Dr. Child, Devonshire Terrace, Hyde Park
Dr. Oldham, Finsbury Square
Dr. Burslem, Bournemouth
Dr. Stuart Babington, Hertford Street, May Fair
Dr. Symonds, Clifton
Dr. Evans, Birmingham

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 26th, 1857:—

Barrett, John Topping, Oldham, Lancashire
Booth, Brabazon Shiels, Darver Castle, co. Louth
Hayden, Robert Owen, Caernarvon
Hicks, Robert, Lewisham
Kershaw, Joseph, Manchester
Lowe, Edwin, George Street, Hanover Square
McClement, Richard Carr, Larne, co. Antrim
Ruffe, Richard Edwin, Tamworth, Staffordshire
Tait, Greville Ewing, Heytesbury, Wiltshire

Apothecaries' Hall. Members admitted on Thursday, June 25th, 1857:—

Ayling, George Frederick, Great Portland Street (as an assistant)
Brooks, Arthur D'Oyley, Henley-on-Thames, Oxon
Hayes, Richard Henry, Langton, Staffordshire
Pilcher, Edward William Humphrey, Arundel Terrace, Islington
Tait, Robert, Coldstream, N.B.

HEALTH OF LONDON:—WEEK ENDING JUNE 27th, 1857.

[From the Registrar-General's Report.]

The number of deaths registered in London in the week that ended on Saturday (27th June) was 1005. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1090; but as the deaths of last week occurred in an increased population, the average should be raised, with a view to comparison, proportionally to the increase, in which case it will become 1199. The deaths now returned were therefore less by 194 than would have occurred if the average rate of mortality towards the end of June had prevailed.

The deaths produced by the zymotic or epidemic class of diseases were last week 195; the corrected average of corresponding weeks is 264. The mortality of this class is considerably less than usual; and on reference to particular heads, it will be seen that the reduction is in typhus (including common fever), scarlatina, and small-pox. Four cases of small-pox and one of varicella (chicken-pox) were fatal in the week. Although the heat was excessive, and the mean temperature of last week higher by 8° than that of the previous three weeks, the mortality from diarrhœa has not yet shown any important increase; the weekly deaths from this complaint during June having been 26, 20, 35, and 33. Besides the 33 of last week, three deaths of children were registered as caused by "English cholera", and "cholera infantum". Hooping-cough, which carried off 46 children, and, in the next place, measles, which carried off 36, are at present the most fatal diseases of the zymotic description. Three deaths from measles are returned from each of the following sub-districts:—West Hackney, St. Clement Danes, and Mile End Old Town Lower. Five children died of hooping-cough in the sub-district of St. Leonard, Shoreditch. Three persons are recorded as having died of intemperance, besides six cases in which the cause of death is stated to be delirium tremens. A death which occurred in May, and on which an inquest was held, was caused by starvation. The two eldest persons in the returns are women, aged respectively 91 and 95 years.

Last week the births of 867 boys and 805 girls, in all 1672 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1568.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·058 in. The mean daily reading was above 30 in., on five days; the highest reading attained was 30·25 in., on Thursday. The mean temperature of the week was 67·3°, which is 6·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). On four days the mean temperature was from 8° to 10° above the average. The highest temperature in the shade occurred on Saturday, and was 88·5°; the highest in the sun occurred on the same day, and was 116°. The lowest temperature was 50·7°, on Thursday; and the range of the week was 37·8°. The mean dew-point temperature was 58·2°, and the difference between this and the mean temperature of the air was 9·1°. The mean temperature of the water of the Thames was 65·8°. On Saturday, the thermometer in the river rose to 71·7°. The air was frequently calm. Rain fell on Sunday to the amount of 0·21 in.; none fell during the rest of the week.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. J. G. Davey; Dr. Collet; Mr. W. I. Cox; Mr. A. T. H. Waters; Mr. E. Clarke; Dr. R. U. West; Mr. Griffin; The Royal College of Physicians; Dr. B. W. Richardson; Rev. J. McBean; Mr. P. Martin; Mr. Joseph White; Dr. Vinen; Dr. P. H. Williams; Dr. J. Struthers; Dr. McIntyre; Mr. Stone; Dr. J. Sloane; Dr. Nuttall; and Dr. G. G. Rogers.

ADVERTISEMENTS.

Price 3s. Annual Subscription, 10s. No. X, for JULY 1857.

The Sanitary Review. Edited by Dr. RICHARDSON. This Number contains the following Articles:—Sweating Sickness in England. By F. C. Webb, M.D.—Diseased Food and Disease.—Epitome of Sanitary Literature.—Hygiene of the Turkish Army. By J. N. Radcliffe, Esq.—Sanitary Legislation the First Duty of a Government. By B. Daniel, Esq.—Nursery Government in its Sanitary Aspects. By T. H. Barker, M.D.—Sanitary State of Huddersfield. By S. Knaggs, Esq.—Progress of Epidemics in England, communicated by Forty Observers.—Sanitary Legislation.—Transactions of the Epidemiological Society.

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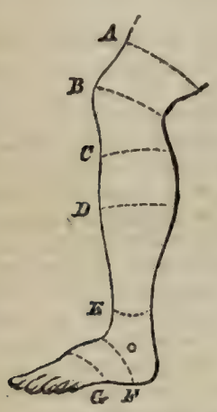
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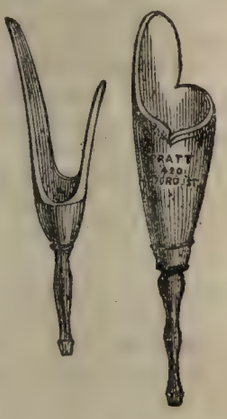


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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Diseases OF SPECIAL OCCUPATIONS.

No. III.

DISEASES OF COLLIERS IN SOUTH LANCASHIRE.

By WILLIAM I. COX, Esq., M.R.C.S., etc., Corresponding Member of the Epidemiological Society.

[*Concluded from page* 492.]

CLASS *e. Renal diseases*, especially that of which the chief characteristic is albuminous urine, are not uncommon. Sometimes this malady seems to date its origin from the receipt of mechanical violence to the back and loins, to which colliers and miners are necessarily very liable; and yet more frequently, perhaps, it is in great measure induced by long persistence in the unnatural and irksome postures which these operatives are compelled, under often occurring circumstances, to assume during their time of labour; crouching down, doubled up, as it were, in a low-roofed "stall" or chamber; sometimes twisted to one side, with the spinal muscles and column painfully stretched for a considerable period of time; yet obliged to exert considerable muscular force in these positions. It is not surprising to the physiologist that the kidneys should ultimately suffer from this. Very commonly, however, the renal mischief is associated with hypertrophied heart; and might doubtless be too often traced to a common cause—habitual intemperance. We must bear in mind that all these causes, predisposing and exciting, are frequently in operation conjointly.

Class *f. Cutaneous affections*, particularly such as arise for the most part from want of cleanliness, are often met with among colliers, and are very intractable. This peculiarity is, no doubt, attributable partly to the prolonged continuance of the exciting cause; and partly to the deleterious influence of the privation of pure air and sun-light over the functions of the skin.

On the whole (and in accordance with statistical tables carefully kept by myself and others), it appears that *pulmonary* and *cardiac* diseases number the most victims among the colliery operatives. There is certainly a larger number of persons suffering from asthma, bronchitis, etc., in the coal districts of South Lancashire, in proportion to the population, than in any other locality with which I am acquainted. And that this is owing to the evils specially attendant on the lives of the colliery operatives—the nature of their work, their personal habits, and physical and moral characteristics—and not to any supposed influence of meteorological phenomena in this district, is demonstrable from two facts:—1. The factory operatives resident in the same locality, and of course subjected to the same atmospheric influences, are not attacked by the maladies in question in anything like the same ratio; 2. We have it on reliable testimony that the colliers of Durham, Newcastle, and Glasgow, are sufferers to a nearly equal extent from the same diseases.

III. PREVENTION OF COLLIERS' DISEASES.

The prevention of disease is fully as reliable a testimony of professional skill and scientific knowledge as its treatment; whilst it is generally considered to constitute a surer evidence of the possession of that disinterested and noble philanthropy which should ever characterise the disciples of physic. No medical practitioner whom Providence has caused to reside and exercise his art for any length of time in the midst of a mining district can, I should suppose, fail to observe and deeply to deplore the great existing amount of evil in the lives of the operatives; and the sad proportion of bodily disease and moral corruption springing from remediable (or, at all events, mitigable) causes, associated with their daily life, labour, and habits. By the dispensations of the All-Wise, the laws of our *physical* being, and those by the operation of which our *moral* nature is regulated, are so nicely balanced, so admirably linked together, that any infringement of the one is speedily productive of a baneful effect in the proper observance of the other; and, the equilibrium once being destroyed, the reaction of evil from each to each goes on, multiplying mischief, until the body and the mind are alike tainted and corrupt. Hence we always find associated corporeal and spiritual uncleanness. Hence it is that a human being, living constantly amongst dirt and filth knows no self-respect; or, at all events, he speedily gets rid of so inestimable a possession. Hence it is that such an one shuns the society of his cleanlier and more decent fellowmen, and feels cowed when in their company. Hence it is notorious that the vices of drunkenness and sexual incontinence, and shameless depravity, the faults of a quarrelsome, violent, peevish disposition, and a general recklessness of mind, are the usual characteristics of persons inhabiting dirty ill ventilated houses; whilst it is equally as patent a fact, that clean, airy, well drained habitations, are favourable to the maintenance of health, and the development of moral habits. The almost certain effect of the foul air alone in so many of the dwellings of our artisans—dwellings offensive to every sense, and full to repletion of every uncleanness and horror—is to cause a general debility of the system—a condition of body in which the slightest exertion induces unnatural fatigue; and this latter a querulousness of mind, and a morbid craving for strong drinks. Thus vicious habits of one especially fatal class are engrafted, and too often last for life; laying the foundation of wide spread vice and woe.

I will now proceed very briefly to suggest a few measures towards the amelioration of the bodily and moral condition of the colliery operatives. For a more lengthened detail of these, I must refer the reader to my papers in the *Sanitary Review*.

1. The establishment of baths and wash-houses in the immediate vicinity of the coal-pits.
2. The erection of improved dwellings for the habitation of the operatives.
3. A good water supply to the said dwellings.
4. The entire abolition of female labour.
5. Schools for children: to be compulsory, if found to be necessary.
6. Classes and lectures for adults of both sexes.
7. The establishment of savings' banks and mechanics' institutes.

All these things are loudly called for; and, to be successful, must be thoroughly and efficiently worked out. I believe that the erection and constant use of baths in the neighbourhood of the pits would go far to obviate many of the evils to which I have alluded. That perfect contempt for cleanliness of body, and aversion to the use of water for the purposes of ablution, which is so extraordinary and peculiar to colliery operatives, would then gradually disappear. Their moral influence would also, I am convinced, be very great. The scandalous licentiousness and scornful indifference towards the maintenance of sexual modesty, which, I grieve to say, is strikingly characteristic both of men and women in these coal districts, is no doubt in part attributable to the odious and common practice of the young persons of both sexes stripping on their return home, and performing their apologies for ablution in a state almost of nudity, in the same "house-place", and in open view, not only of parents, but of unmarried brothers and sisters, and of adult lodgers. I have frequently been a disgusted witness to these revolting spectacles. What must be the effect on the mind of the untaught girl of this familiarity of exposure? All such abominations would be at once swept away by the establishment of baths and wash-houses at the collieries.

A vast improvement in the social habits, and consequently

in the health of the operatives, would certainly be effected by their being provided with wholesome, well ventilated, well drained dwellings, and a cheap thorough water supply, where that great desideratum is deficient. In the coal fields of South Wales and Monmouthshire, the colliers are generally resident in commodious cottages, built by the masters in the neighbourhood of the works. It is to be regretted that this system is not generally adopted in Lancashire. But if the home of the workman be not an object of care to the master, it will be idle to attempt bettering his condition, with any prospect of permanent benefit resultant from such endeavour. We can never hope (consistently at least with the teachings of physical and psychical science, the results of experience, and the revelations of religious truth) to plant successfully in the habitations of wretchedness, redolent of the atmosphere of an earthly hell, the virtues of heavenly origin. Self-denial, temperance, chastity, forbearance, good-will towards men, universal charity, these have nought in common, nor can exist in association with the squalid court, the reeking sewer, the polluting air, stagnant in homes of physical and moral corruption.

Surely, also, it is time that our legislature should abolish for ever the abomination of female *employées* at the "brow" of the shafts. The evil effects of this revolting usage are not confined to the demoralisation and destruction of the sense of female shame, which it directly produces; nor to the persons of the female operatives. It tends indirectly to lower the moral status and bodily welfare of the men with whom they live in marriage or concubinage. And, this sad state of mind and morals reacting on their physical condition, their unhappy offspring necessarily suffer from the degeneracy of their parents. Moreover, they leave their children daily to the care of strangers, who drug them with narcotics to avoid the trouble of their supervision; and the mortality and bodily and mental poisoning thus induced among the offspring of the female workers in collieries, is nearly as great as that so notoriously existent among the neglected children of factory operatives. Until an Act of Parliament shall put a stop to the evil by removing one of its principal causes, a powerful check might still be given to the maintenance of the system by the masters refusing the employment of women; and, in other ways, showing their entire disapprobation of so odious a custom. Moral suasion in this, as in so many other matters, would do much if steadily put in force.

My experience in the peculiarities of temper and character in colliers, has quite convinced me that it is nearly hopeless to leave the training of the rising generation in the hands of their natural protectors. The parents, not having been themselves the recipients of education, are prejudiced against it, and have no faith in its advantages. We have been long waiting (and probably shall yet have to wait) the advent of a government plan of education—rendering the school tuition of the children of colliery operatives compulsory at a certain age—which we may reasonably confide in to disperse the darkness of ignorance and depravity, which still broods over the coal fields of the north. In 1844, the Rev. Mr. Clay, of Preston, found that forty per cent. of the persons admitted into the House of Correction were ignorant of the Atonement, and of the meaning of the words "virtue" and "vice". In Mr. Tremenhere's report for the same year, we find that in South Lancashire fifty-nine in one hundred persons were unable to read or write. Have matters improved since then? No. From statistics which I collected in 1855, and also from other trustworthy sources, I found that among the colliers in the district about Wigan one only in four was able to read. Can we then feel surprise that dirt, sensuality, waste, improvidence, wickedness, should be rife in such a locality? Is it foreign to the immutable relations of things, that a large amount of disease should also be coexistent with the above—naturally resulting from them indeed—and therefore in a great measure removable? Entire ignorance of physieal laws leads of course to their daily infringement; as in like manner, a blunted and imperfect perception of the moral laws is associated necessarily with the constant violation of these. Disease is the inevitable result of both.

But our efforts at amelioration should not be confined to the rising generation. Adults should likewise be instructed by appropriate teachers—evening classes, lectures, meetings for mutual recreation and improvement. Especially females should be taught, not frivolous accomplishments—not music, or crochet, or embroidery—but cooking, the making of children's clothes, in short, the whole art of domestic economy on a humble scale. I would suggest, with regard to the lectures, that these should be delivered by the clergy and medical men of the district; that they should consist of simple discourses on popular science, and on the ordinary phenomena of the domestic and work-day life of the hearers; the style to be familiar, devoid of all technicality, and adapted to the listeners' comprehension.

The establishment of savings' banks and provident associations would also have a very beneficial effect in teaching habits of saving, and consequent self-denial; in inculcating a feeling of self-respect, and creating a sense of property. Much there is in the power of the masters to effect for the bodily and moral welfare of their men. It is for them to antidote the beer-shop, to offer something pleasing, intellectual, or at all events harmless, in lieu of the incitements of a degraded sensualism. Mechanics' institutes and reading-rooms will prove useful agents in so doing.

IV. TREATMENT OF DISEASES.

Very little is needful, or indeed excusable, on this head. The application of general principles will be found successful. I may remark, however, that the abstraction of blood, even in cases which among almost all classes call for its adoption, is rarely necessary with colliers. Indeed, they bear it very badly. I have as yet not had recourse to it in any case of pleurisy or pneumonia occurring among them. With reference to the "black lung", I have generally found it the most judicious plan to do but little, watching carefully for inflammatory symptoms; but avoiding all medicinal treatment, excepting complications arise; or the consequences of the morbid deposit have become apparent. For the chronic asthma, which I have described as being so very frequently met with among the colliers, and which is often associated with extensive emphysema (vesicular), and with the "black lung", I have found the employment of chloric ether and conium, or ammonia and opium, the most efficacious treatment. In the management of the numerous cases of rheumatism, which have fallen under my notice among the colliery operatives, I have found, after considerable experience of many much vaunted remedies, that the fibrous variety of the disease is best combated (in the absence of heart complications) by the exhibition of the bicarbonate of potash in large doses, with an opiate at night; that the best treatment of the synovial kind is, in recent cases, the administration of acetate or nitrate of potash, or phosphate of ammonia with opium; in chronic cases, quina or iodide of potassium with acetic extract of colchicum. The renal diseases call for no particular treatment. The skin affections will yield more certainly and rapidly to the arsenical plan of treatment introduced by my friend Mr. Hunt (and now well known to the profession) than to any other.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

I. ABSCESS OF TIBIA WITHOUT PAIN: TREPHINING: RECOVERY.

Under the care of Alexander Ure, Esq.

[*From Notes supplied by* Ernest Hart, Esq., *House-Surgeon.*]

W. R., aged 13, a fair, healthy-looking lad, well nourished, came under the care of Mr. Ure for disease of the right tibia. During four months there had been considerable swelling and induration over the right shin, just above the ankle, consequent upon a blow. He had never complained of pain or startings in his sleep, but walked lamely. An abscess formed, and at the bottom of the resulting sinus bone could be felt, but it was not denuded. There was marked tenderness on pressure at one small spot a little below the opening. It was resolved to expose the bone by exploratory incision, and to examine and remove any diseased portion which might be found. A small opening was discovered, through which the probe was passed, breaking down a thin osseous shell, and entering the cavity of what proved to be an abscess of the size of a walnut within the substance of the tibia. This was freely laid open, and the diseased surfaces removed by a gouge. The wound has healed up well—granulating from the bottom, and the boy is now about to leave the Hospital.

Remarks. Abscess of the bone is a disease in which English surgeons may feel an especial interest, seeing that the greatest improvement in its treatment is due to the skill of one of the most eminent of their body. This case is remarkable for the total absence of pain during the suppurative stage. The symptoms were rather those of necrosis than of abscess, the only characteristic feature being the localised tenderness above alluded to. This may be worthy of observation in future similar cases.

II. COMMINUTED FRACTURE OF STERNUM: DISLOCATION OF MANUBRIUM BACKWARDS: RECOVERY.

Under the care of Alexander Ure, Esq.

J. B., aged 64, a "navvie," strongly built, and of heavy frame, had fallen from a height of forty feet, and struck his chest violently against the edge of a rafter lying on the ground. He immediately became insensible, and was brought to the Hospital in a state of collapse. He was breathing heavily; and at every inspiration loud crepitus could be heard across the room, proceeding from the edges of the fractured sternum. The manubrium was dislocated backwards, having a comminuted depressed fracture of its anterior table. The second piece was also fractured opposite the third rib.

An effective retentive apparatus was improvised with the aid of hard rollers, kept in place over the sternum by a tightly applied bandage, and he was then put to bed. Ether and ammonia were called for on account of his extreme depression. He was liberally fed with milk and beef tea; and strong green tea was administered from time to time. His pulse rose, and he complained loudly of acute pain at the seat of fracture. On the second day he was bled from the arm to six ounces, and a pill of stramonium, antimony, and camphor was ordered three times a-day. The cough continued troublesome, but gradually abated. At the end of a week he showed symptoms of excessive weakness, and was allowed brandy and wine. After this he continued to do well, and in a month's time left the Hospital cured.

Remarks. This case is worthy of note on account of its favourable termination; and it forcibly shows the importance and advantage of treating symptoms as they arise; using moderate depletion as inflammation threatens, bearing always in mind the necessity for supporting the system by a nourishing diet, and warding off extreme depression by nervine tonics. The use of green tea was attended with admirable results, and probably conduced, in a great measure, to the recovery of the patient.

ST. GEORGE'S HOSPITAL.

I. COMPOUND FRACTURE OF LEG.

Under the care of H. C. Johnson, Esq.

Giles P., aged 38, messenger at the Junior United Service Club, was brought to the Hospital on June 9th with compound fracture of the right leg. It seems, from his account, that he was riding a pony in a narrow street, and going rather fast, came into contact with a cab, also moving quickly, so that his leg got crushed between the wheel and the saddle. He was able to get off the pony, and was conveyed up to the Hospital; no care, however, having been taken to place the limb in a horizontal position. On examining him, it was found that he had sustained fracture of both tibia and fibula obliquely about the lower end of the middle third. Communicating with the broken bones was a wound of about one inch and a half in length, nearly on the anterior surface of the leg, slightly towards its inner border. Great displacement of the bones had taken place; and as the hæmorrhage was considerable, and compression had to be applied for some time, the fracture-box could not immediately be adapted. A few hours afterwards, the bleeding having stopped, Assalini's box was applied. The patient went on very well till June 13th, when some sloughing was noticed round the wound, and there was no free or healthy suppuration. (The wound, he said, was caused at the time of the accident; and from the torn state of the clothes, and the bleeding, this seems to have probably been the case.)

June 14th. He complained of headache. Pulse 108; tongue white; skin hot. He had very little pain, but there was a kind of forced cheerfulness about him.

June 15th. There was great drowsiness; he muttered occasionally, but was rational when conversed with. There was general feverishness. The wound looked unhealthy, with sero-sanguineous discharge from it. Pulse 132, and tremulous; tongue brown; face sallow. He was ordered to take a saline ammonia draught, with mxv of tincture of opium every four hours.

June 16. He complained of great thirst. There was frequent subsultus, and increased delirium, but he could be roused into coherency. It was found necessary, from the swollen state of the limb, and the appearance of cellular infiltration, to make several incisions in the leg; but very little discharge came away, and he was quite unconscious of the knife. Wine and chlorate of potass were now given. Towards evening his delirium increased, with some convulsive twitchings of the muscles of the face and hands; and he gradually sank, expiring about midnight.

II. REMOVAL OF LARGE (MALIGNANT?) TUMOUR OF THIGH.

Under the care of T. Tatum, Esq.

Sarah W., aged 40, a married healthy looking woman, from the country, was admitted under the care of Mr. Tatum. Six years ago, she first noticed a swelling in the posterior part of the thigh, of about the size of an orange, which she could not attribute to any cause. Since that time it had continued to increase rapidly, but was unaccompanied with any pain, the only inconvenience being the tension caused by the weight of the tumour, and her inability to sit down comfortably. The tumour was of the size of a large pumpkin, and situated at the posterior surface of the upper part of the left thigh, immediately below the nates. It was smooth, hard, and pendulous; the attachment to the thigh apparently not occupying any very great surface. Her health was very good. Accordingly, on June 4th, she was put under the influence of chloroform, and a longitudinal incision, to the extent of seven or eight inches, made over the tumour, corresponding as nearly as possible to the surface of the posterior part of the thigh. The tumour was immediately exposed, and no adhesions to the skin at the upper part appeared to exist: it was easily dissected out, the deep attachments being loose. The great sciatic nerve remained covered over by a layer of dense cellular tissue. The hæmorrhage was inconsiderable, and easily controlled: a few sutures brought the edges together, and wet dressing was applied. On examination, the tumour was found to be contained in a large cyst, that again being covered by an extraneous membrane. On cutting into the mass, a portion of it was found to be of a fibro-cystic character; another portion presented a kind of fleshy appearance, semi-transparent, interspersed with patches of a red colour, giving the idea of degenerated muscular tissue. Under the microscope, cancer-cells and exudation-corpuscles were seen in both these portions of the tumour; but no distinct traces of muscular fibre could be discovered. The main bulk of the softened fleshy part was infiltrated with fat and oil-corpuscles.

No inconvenience attended the use of chloroform in this case; and, on June 20th, Mr. Wintle, the Surgical Registrar, reports the patient as convalescent.

III. MALIGNANT DISEASE OF THYROID BODY: DEATH FROM APNŒA.

Under the care of H. Pitman, M.D.

C. S., aged 41, came under the care of Dr. Pitman on June 1st. She stated that she had been quite healthy until three weeks previously, when she began to suffer from pain in the throat and dyspnœa. The bowels were costive; the catamenia regular; bronchitic râles were heard all over the chest; and she expectorated some blood-tinged mucus. The thyroid gland was noticed to be large and very hard. She said that it began to increase in size two years ago, but not at all rapidly. During the last three weeks, its growth had been accelerated. There was dysphagia and inability to sleep, but no pain, except when pressure was made on the throat. She was ordered blue pill and antimony every four hours; a blister was put upon the chest, and the bowels opened by senna. But no improvement in the power of deglutition took place; and she began to feel excessively exhausted from want of nourishment. Great prominence and dilatation of the right external jugular were noticed. The sputa continued tinged with blood. The dyspnœa was increased on the least exertion; and, on bending her head forward, great pain was felt in the tumour. Compound tincture of iodine and leeches were successively applied to the swelling, and the free bleeding from the latter gave some temporary relief. From June 9th to 13th, her breathing, power of swallowing, and expectoration, all improved; then more severe pain set in, and she spat up a great deal of bloody mucus. Leeches and sinapisms were applied to the throat and chest, but her

uneasiness increased. She could not swallow anything, and wasted rapidly. Paroxysms of dyspnœa came on from time to time; and in one of these, on June 21st, she expired.

The autopsy took place seventeen hours afterwards. A hard gristly tumour, of the size of a hen's egg, was found to occupy the place of the thyroid body. On the left side, at its upper part, this tumour was softer; and a cyst in it was filled with reddish glairy fluid. The morbid growth extended under the sternum for two inches, and surrounded the trachea, except at its median and posterior part. On slitting open the windpipe, one or two commencing points of ulceration were seen, and those corresponded with the softened parts of the tumour. In the lower lobe of the left lung, and in the inferior part of the right, patches of deposit similar to that in the throat were discovered. Cancer-cells were found in specimens from both these situations. No cancerous deposits existed elsewhere. The capsule of the left kidney was very adherent. In other respects, the abdominal viscera were healthy.

Remarks. This case may be advantageously compared with an accompanying report in to-day's Journal from University College Hospital, and with two former cases reported within the last fortnight, one from St. George's, the other from St. Mary's Hospital; and the same remarks, as to the inutility of operative proceedings, will apply in every instance.

IV. RENAL DROPSY: PTYALISM.

M. S., aged 41, had been suffering six weeks from swelling of the abdomen and lower extremities; and, from the commencement of this state of things, she noticed a decrease in the quantity of her urine. For most of the time she had been under the care of a medical gentleman, and was far less dropsical on admission into the Hospital than previously. She had been taking a small quantity of mercury, and was profusely salivated. There was pain across the loins, an anæmic pasty complexion, weak pulse, and dry coated tongue. The urine was loaded with albumen, and contained pus-globules and numerous vibriones. Borax and honey, in infusion of cloves, were used as a gargle; vapour baths were ordered; saline draughts were taken three times a day, and compound jalap powder on alternate mornings. She left in a month, very much relieved in all her symptoms, but with the mouth still tender.

Remarks. It was impossible to ascertain whether mercury had been given in this case to answer any particular end, as, for instance, to promote interstitial absorption in the diseased kidneys; or whether it was administered without due care, no attention having been paid to the urinary organs. At all events, it affords another instance of the intractable kind of salivation which follows the use of the drug in Bright's disease, and shews the wisdom of combating inflammatory symptoms in such cases by other than mercurial agents.

UNIVERSITY COLLEGE HOSPITAL.

I. ENCEPHALOID DISEASE OF ŒSOPHAGUS.

Under the care of J. E. Erichsen, Esq.

[*Reported by* W. F. Teevan, Esq., *House-Surgeon.*]

G. B., aged 47, a paper-hanger, was admitted on May 4th, in a very emaciated condition. His general health had been good; he had always lived in London; and had never suffered from privation. There was a visible difference in the colour of the two sides of the face. The ground tint of both was of a dirty white colour; whilst on the right cheek the capillaries were considerably injected. Both eyeballs protruded more than natural; the right eye, as compared with the left, appeared partially closed; and the pupil was somewhat contracted; the contraction being permanent.

His voice was a compound of a nasal twang and a stridulous whisper. On attempting to converse for a few minutes, he was always interrupted by laryngeal spasm. There was great fœtor of the breath; the tongue was very coated; the pulse feeble, but regular, and averaging 84 per minute; the bowels were very costive. He complained of constant languor, and of perspiration after the least exertion. His hands were cold and clammy, and the perspiratory odour was almost as offensive as the breath. There was great fulness of the right side of the neck, occupying the entire posterior inferior triangle, and extending into the lower part of the anterior triangle. A mass uniformly hard and undulating, having two small projections of the size of a hazel-nut, and fixed in the neck, except just at its upper part, formed this swelling, which encroached on the trachea, and forced the right carotid considerably out of its course.

The patient stated that about nine months ago he first noticed a small hard nodule in his neck, which had gone on slowly increasing in bulk. It caused him no inconvenience until three months later, when he frequently woke in the night with sharp cutting pain in the tumour, and began to experience difficulty in swallowing. About three months after this date, he could only take bread finely crumbled. He also began to have a peculiar sensation in his right arm, which sometimes extended from the fingers to the neck, whilst at other times mere numbness of the fingers was felt.

On May 6th, Mr. Erichsen endeavoured to pass a tolerably sized bougie down the œsophagus, but could not succeed. A small one, of the diameter of a goose-quill, passed readily; and over this was slipped a bougie of the size of one's little finger. An obstruction was felt in the œsophagus, but whether dependent upon malignant disease of the tube, or upon the enlarged mass external to it, could not be determined.

The tumour was dressed with iodide of lead ointment; and the man was ordered full diet, with porter, cod-liver oil, and opiates at night, if needful.

After the withdrawal of the bougie, some blood was thrown up. On examining it with the microscope, no cancer-cells were found. An instrument was passed for the last time with some difficulty and pain to the patient two days later. Up to the 20th, he seemed rather better, and the power of deglutition improved, although the mass in the neck was larger and more elastic. His cachectic appearance became more marked, and there was rapid emaciation. On the evening of May 30th, laryngeal spasm came on, with intense pain and orthopnœa. He was much weakened by this attack, and only kept up by frequent small doses of brandy.

A drop of atropine was put into the right eye, in order to try if the pupil was susceptible of dilatation. On visiting the man an hour afterwards, the right pupil was found extremely dilated, and the left one also, but to a less extent. This dilatation lasted for two days.

On June 10th, excessive pain came on in the neck. There was complete aphonia, and almost incessant dyspnœa.

At 4 A.M. on the 12th, he died, rather from asthenia than suffocation.

The œsophagus and lungs only were examined thirty-six hours after death. The larynx and trachea were slightly inflamed. The œsophagus was found extremely diseased: cancerous degeneration commencing at a point opposite the cricoid cartilage, and extending downwards for at least two inches. The mass in the neck consisted of the cervical glands secondarily involved in the disease, although not broken down, as were the œsophageal structures. The right common carotid, for the first inch of its course, and the corresponding portion of the subclavian artery, were firmly adherent to the cancerous mass, and exhibited great inflammation both of their sheaths and tunics. The pneumogastric and sympathetic nerves were entirely incorporated with the tumour at this point, and could not be further traced. Three nodules, each about the size of a small split-pea, were found in the lungs; and these, together with the tumour, were examined microscopically by Dr. Jenner, who found the disease to be of the encephaloid variety.

II. SEPARATION OF PUBIC AND SACRO-ILIAC ARTICULATIONS.

G. B., aged 44, a labourer on the London and North Western Railway, was knocked down by a train at the Harrow Station, on June 17th. The buffer of the engine struck him in the middle of the back, and threw him to the side of the line. He reached University College about 4 P.M., two hours after the accident. The pelvic bones were widely separated at the symphysis, and the right thigh had sustained a compound fracture in its upper third. There was no laceration of the urethra; the pulse was 120, and very feeble; and after recovery from the collapse, traumatic delirium continued.

He passed urine freely at 8 P.M., although previously the catheter could not be introduced. The pulse had then improved, and was only 85 per minute.

He was very restless during the night, and the pulse again rose, and was occasionally intermittent. The evacuations were passed involuntarily. Both pupils were dilated. He grew rapidly worse, and sank in the forenoon of the 18th.

At the *post mortem* examination twenty-four hours later, the pubic bones were found separated to the extent of four inches, and on the right side was a complete separation at the sacro-iliac synchondrosis. There was also a fracture of the right transverse process of the last lumbar vertebra.

Original Communications.

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

By H. Hannotte Vernon, M.D., Physician to the Blenheim Dispensary; formerly Resident-Accoucheur to St. Mary's Hospital.

Part I.—Physiology.

A more perfect control over the motor functions of the uterus has appeared to me for some time past to be one of the leading necessities of obstetric medicine. This fact is undeniable; viz., that, in ninety-nine cases out of a hundred, the first and last clinical resource of the accoucheur is ergot of rye. And yet, as a matter of theoretical discourse, the great majority of those well versed in the practice of obstetrics, will refer now to one variety of inertia of the uterus, and now to another; and will, at the same time, admit the utility of various agents over and above the everlasting ergot. The true explanation of this curious anomaly has its origin possibly in the following circumstances:

1. In the want of a complete physiological analysis of labour.
2. In the want of any scientific analysis at all of the complicated pathological conditions which are grouped together under the idea of *inertia uteri*.
3. In the defect of an application of such physiological analysis as exists to the limited pathological teaching on this head; and the want of harmony between these two and a code of therapeutics; and
4. In a deficiency of research of late years in the direction of oxytocics.

Without pretending to do more than advance a very short way towards a more advantageous position for the practitioner of obstetricy, I would submit that the following remarks contain something additional to our present stock of ideas in three several directions; viz.

First. In a more complete analysis of the motor actions of the uterus than exists in any text-book extant.

Secondly. In an attempt to reduce the multitudinous varieties of *inertia uteri* into something like scientific order; and in an endeavour to expound the pathological states which underlie them.

Thirdly. In the addition to our obstetric armamentarium of at least two valuable oxytocics, and in an attempt to draw the connection which really exists between physiology, pathology, and therapeutics, somewhat closer as regards an important branch of the medical art.

A dry and laborious physiological inquiry into the nature of the motor endowments of the uterus is so uninviting, except as a key to aberrant forms of uterine action and their appropriate remedies, that I will endeavour to compress this portion of the subject into as small a space as possible. It is, however, absolutely necessary to follow the physiological analysis closely, because it will be made use of in the sequel. And, as general incitement to such a disquisition, it may be observed that it will be hardly possible to retain a firm grasp of so complex a subject without reducing our ideas to the categorical form given by a scientific arrangement.

The elements of uterine nervi-motor action are

I. An arrangement of nervous fibres whose peripheral extremities are endowed with sensibility or irritability.

II. An arrangement of nervous fibres capable of conveying, to certain nervous centres, the excitor stimuli applied to their extremities.

III. Various nervous centres; either endowed with a power of *originating motor impulses*, or of *reflecting* impressions conveyed to them *in the form of motor impulses*.

IV. An arrangement of nervous fibres, capable of transmitting the motor impulses, generated in the nervous centres, to an organ endowed with power of motion.

V. A muscular apparatus, responding to various impulses, either generated in or reflected from various nervous centres; itself possessed, like all other muscular tissues, of an *irritability* of its own, and of a given *tonicity* and *cohesion*.

I. In speaking of an arrangement of nervous fibres, whose peripheral extremities are endowed with sensibility or irritability, as one of the elements of uterine nervi-motor action, and as an element distinct from the conducting apparatus, although these peripheral parts are only the extremities of the fibres which constitute the conducting apparatus, some explanation is necessary. The reason why what at first sight may appear a trivial distinction is made, is this: that there are morbid states, either of the tissues in which the terminations of the incident fibres lie, or even of the terminations of the fibres themselves, which are quite separate and distinct from any morbid condition of the nerve fibres themselves. Thus, there may be an inflammatory condition of some portions of the uterine tissue, or of the membranes lining the uterus, or of the placenta; and then there is excessive irritability of the extremities of the incident nerve fibres, either of some of them or of all. In cases where the uterus is affected with a low grade of inflammation, whether circumscribed or not, irregular, painful, spasmodic, and almost incessant contraction of the uterus frequently occurs. Women who become pregnant while labouring under imperfectly resolved inflammations of the cervix uteri, whether attended by abrasion or ulceration or not, are generally the subjects of acute suffering during parturition. Such suffering depends upon excentric hyperæsthesia, and is quite distinct from exalted sensibility produced by irritations applied to the trunks of nerves, and still more widely different from that centric hyperæsthesia which depends upon morbid or too mobile conditions of the cerebro-spinal axis, or ganglionic centres. Again; it sometimes happens that the irritability of the peripheral terminations of the incident nerve fibres is *diminished;* and this is most conspicuous in cases where a dead fœtus is retained in utero, up to or even beyond the natural term of gestation.*

II. In like manner the second element of uterine nervi-motor action is a certain arrangement of conductors, or incident nerve fibres pertaining also to two different systems—the cerebro-spinal and the sympathetic. If exception is made of the mechanical influence of tumours, there appear to be very few causes which can interfere with the due performance of the functions of the excitor or incident nerves. At any rate, if any such causes exist they would seem to consist of molecular conditions, beyond our present means of investigation. Or it may be assumed, without any great violence being done to reason, that the nerves themselves, both excitor and motor, may partake of the general hyperæsthesia which affects certain subjects; or they may have a special exalted irritability of their own, by virtue of which impressions made upon or produced at their terminations and origins are multiplied or exalted. But for all practical purposes it may be pretty safely assumed, in the vast majority of cases, that the functions of the excitor and motor nerves, as mere conductors of impressions and impulses, are entire.

III. The third element of uterine nervi-motor action is a certain arrangement of nervous centres endowed with the property of *originating* motor impulses, or with a power of *reflecting* impressions *in the form of motor impulses* also. These nervous centres may be arranged under six heads.

1. The minute ganglia described by Dr. Robert Lee as spread with their branches like a web over the surface of the uterus. Whether such ganglia have any real existence, has, until lately, been matter of dispute; but all physiologists of repute are now agreed as to the correctness of Dr. Lee's observations. These ganglia belong to the sympathetic system, and are the analogues of the ganglia described by Remak as existing on the surface of the heart in connection with branches of the cardiac plexus of nerves.
2. The ganglia of the hypogastric plexus; and, by communication, the whole sympathetic system.
3. The spinal cord.
4. The great ganglia of the brain proper.
5. The hemispheres of the brain.
6. The cerebellum.

It will be endeavoured to indicate how each of these centres act in originating, conducting, or reflecting motor impulses, presently. In the mean time it must be premised that, in order to have a normal action of the uterus, these different nervous centres must have a certain degree of polarity or excitability. If their polarity is defective, there will be irregular contraction of the uterus, or inertia uteri; if it is excessive, there will be either irregular, or clonic, or excessive contraction of the uterus.

IV. The fourth element of uterine nervi-motor action is an arrangement of motor fibres, or conductors of motor impulses, issuing from nervous centres of two kinds; viz., either sym-

* The peripheral arrangements of nerve pertain to either the cerebro-spinal or sympathetic systems.

pathetic or cerebro-spinal. The observations made as to the general integrity of the functions of the impression conducting nerves, apply also to those which conduct motor impulses.

V. The fifth element is a muscular organ containing the body to be expelled, acting "sponte sua," or consensually, or in a reflex manner; and various other muscles acting either in a reflex manner or consensually, or by direct volition. And the containing organ or uterus must be of a given quality as regards its muscular structure; that is to say, it must be of a certain tonicity and firmness, and capable of responding to the stimuli conveyed to it by the nerves. Thus particular forms of debility (anæmia, albuminuria) are attended by feeble action of the uterus, in consequence of deterioration of its muscular structure; and women who have borne many children, especially if breeding be prolonged beyond the usual period of life, have generally flabby uteri.

Having analysed the parturient apparatus, and resolved it into its elementary parts, it will be desirable now to show in what manner these different elements act, either separately or in combination. It has been thought sufficient hitherto to reduce the nervous phenomena under two categories: 1st. Centric, or direct, action; and, 2ndly, Eccentric, or reflex, action. But this method of dealing with the subject, although perfectly correct, is hardly analytical enough. It makes each category contain such a multiplicity of different actions, that the mind does not readily appreciate nor easily recollect them. It is preferable rather to take each nervous centre by itself, and to inquire into its mode of action in originating motor impulses, and in conducting them; and into the way in which it reflects, transfers, or diffuses impressions conducted to it by the excitor nerves. I spoke of six different nervous centres or systems of centres concerned in the act of parturition; and I shall now refer to them more in detail, but still as briefly as possible.

1. The ganglia which are described by Dr. Lee as covering the uterus immediately underneath its peritoneal investment, seem to me to be worthy of separate consideration from the ganglia of the hypogastric plexus, and the sympathetic system of nerves generally. In the first place, they are transitory structures developed at a particular period, and for a special purpose, and destined to disappear when that period has passed away, and that purpose has been fulfilled.* It is almost unnecessary to adduce *à priori* arguments to fortify Dr. Robert Lee's dissections; but if it were so, it might be asked why should the nervous elements of the uterine tissue be the only ones not undergoing evolution during pregnancy. From nuclei and spindle-shaped nucleated cells the muscular structure of the uterus is evolved; within the few short months which suffice for this enormous histological change, small twigs of artery are metamorphosed into trunks of considerable calibre, inconspicuous veins become huge reservoirs of blood, and the mucous membrane is converted into an organ of no small complexity. The second reason why I wish to fix attention more particularly on those sympathetic ganglia which lie in and upon the textures of the uterus, is the parallelism which obtains between them and the ganglia in and upon the heart, and the parallelism which obtains between some of the nervi-motor functions of the heart and uterus.

The experiments of Dr. Lee, Remak, Volkmann, and others, seem to have pretty clearly established that the ganglia contained in the substance of the heart are the nervous centres which originate and co-ordinate the motor impulses exciting it to contraction. It is unnecessary to go into the details of these experiments, further than to assist in showing that there are grounds for assigning to the uterine ganglia an analogous relation to the motor actions of the uterus. Thus—

a. The anatomical arrangement of the cardiac and uterine ganglia is very similar.

b. The heart and the uterus both act rhythmically, though in different degrees.

c. The contractions of the uterus, like those of the heart, travel over the organ in a definite manner, that part ceasing to contract first which first contracted.

d. The contractions of the uterus, like those of the heart, follow the application of a stimulus (applied directly to the organ) less rapidly than in the case of muscles supplied with nerves from the cerebro-spinal axis.

e. The heart and the uterus are not under the direct influence of the will; but they act consensually with other muscles which are under the control of the will: and this is true of all muscles supplied by the sympathetic.

f. The contractions of the heart and uterus are not necessarily suspended by the destruction of that portion of the cerebro-spinal axis from which they derive cerebro-spinal nerve-fibres; and

g. The same is true if the nervous communication is cut off, the centre being left intact.

h. Neither is abortion a necessary consequence of destruction of that portion of the spinal column which is in directest relation to the uterus.

i. Parturition can be excited in cases of paraplegia.

j. The uterus, in pregnant animals, will contract rhythmically hours after death.

k. The development of the rhythmical action of the uterus is cotemporaneous with the development of the ganglia spoken of. Although the uterus is capable of a certain amount of contraction in the non-pregnant state, such contraction is not rhythmical in its character, and, so far as is known, travels over the organ in no definite manner.

These arguments are not arranged in a very logical manner, but they will suffice to give a strong probability to the position claimed for the ganglia of the uterus. Hitherto the importance of these nervous centres (which might be called the brain of the uterus, in the same way as the solar plexus has been aptly called the brain of the stomach) has been very much overlooked. That prominence has not been given to those ganglia which are actually situated in and upon the textures of the uterus, and which are the product of the genetic evolution, which I think they possess. The irritability of muscular fibre in the human subject, apart from nervous connexions, is very small. It is true that portions of muscular fibre, separated from nerve and carefully cleaned, will contract upon the application of cold; but this contractility is an endowment common to other tissues, such as the yellow elastic, etc.; and hardly deserves to be called irritability. Again, the well known experiment of Valentin (who stimulated a muscle to contract by galvanic shocks conveyed through its nerves until it ceased to respond to the stimulus, and then produced fresh contractions by applying the stimulus directly to the muscle) is not worth very much; it only proves that, on the direct application of a powerful stimulus, a muscle will contract. It does not show that muscular fibre in the living subject habitually contracts, upon the application of a stimulus, by virtue of its own irritability. Physiological stimuli of sufficient intensity to provoke such action do not, in fact, exist; and, indeed, we have little or no knowledge of muscular action in the human subject, apart from nervous action also.

The following modes of action of the uterine ganglia are submitted:—

a. They act directly or centrically, originating a large share of the motor impulses which incite the uterus to contract; and more especially they preside over and determine the rhythmical nature of such contractions.

b. They reflect impressions conveyed to them, in the form of motor impulses.

c. They conduct impressions conveyed to them to the sympathetic ganglia generally; and

d. Such impressions are also conducted as far as the spinal cord, whence they are reflected, in the form of motor impulses, through the afferent spinal nerves; and the more intense the impression is, the greater will be the range of ganglionic centres to which it is conducted, and the more extensive will be the tract of spinal cord excited.

e. Or impulses originating in the encephalon, emotional, not connected with the will, are conducted through the spinal cord, and reach these ganglia; or such impulses may travel, as it were, by another route, viz., through the sympathetic, beginning in the cervical region, or through the splanchnic nerves.

f. Or centric action of the spinal cord may possibly evolve motor impulses, which are conducted to the uterine ganglia.

2. The ganglia of the hypogastric plexus, and the sympathetic generally, do not appear to bear such an important relation to the process of labour as the ganglia of the uterus proper. The communication is not very abundant, and the hypogastric plexus itself is not very large; and, moreover, it is only its inferior portion which is in direct communication with the uterus. But the functions performed are exactly similar in kind, only differing in degree.

a. They originate or act centrically.

b. They conduct *to* other centres.

c. They conduct *from* other centres.

* It is, of course, not meant that these ganglia are evolved *de novo* during pregnancy; but that from dormant and extremely minute elements they rise into structures of first-rate importance in the uterine economy. In like manner it is not meant that they absolutely disappear after delivery, but that they undergo the same process of involution which the other tissues of the uterus affect.

d. They reflect impressions in the form of motor impulses.

3. The exact share which the spinal cord takes in the nervi-motor functions of the uterus, it is not possible, nor indeed necessary, to determine. Whether it or the ganglia proper of the uterus exercise the preponderating influence, *i. e.*, originate or reflect the greater share of motor impulses conveyed to the uterus, does not concern us very much. What we are interested in knowing is the manner of action of the centres in question.

The following modes of action of the spinal column are submitted.

a. It acts centrically, originating motor impulses which are conveyed to the uterus either by its own afferent nerves, or through the ganglia of the sympathetic.

b. It reflects impressions made upon the excitor nerves, in the form of motor impulses; and this, whether the impressions are made upon the excitor nerves of the uterus itself, or of some other organ or part of the body. The sudden application of heat or cold to the general surface of the body is productive of reflex contraction of the uterus; but such reflex actions are more easily set up by irritating the mammary nerves, or the nerves of organs lying in the vicinity of the uterus.

c. The spinal cord conducts motor impulses generated in the great ganglia of the brain, themselves the product of emotion, to the uterus; or conveys to the uterus, from the same sources, influences which suspend its contraction.

d. The spinal column conducts to the voluntary muscles those motor impulses which are the product of the will, and which we believe to be generated in the cerebral hemispheres (speaking in a strictly physiological sense); or possibly it transforms the cerebral act into motor impulses. And the uterus acts consensually with the voluntary muscles so set in action, in the same way as the heart acts consensually with voluntary muscles, or the iris with some of the muscles of the orbit, or the bladder with the diaphragm and abdominal muscles, or the muscles of the intestine with the same muscles, or indeed with the voluntary system of muscles generally.

e. The spinal column receives those influences of co-ordination of voluntary movements which we believe to be generated in the cerebellum.

4. The great ganglia at the base of the brain were spoken of as the fourth system of nervous centres concerned in the parturient act. They must be considered as generating motor impulses, subsequently to the act of *perception* performed by the hemispheres of the brain; or the act of perception by the hemispheres (I speak in a strictly physiological sense again) is followed by the issuing of influences from the great ganglia which exalt, depress, or suspend the contractions of the uterus.

5. The cerebral hemispheres would appear to be the percipients of impressions which are transformed into motor impulses in the great ganglia, and conducted from thence through the crura cerebri and the spinal column to the uterus; or by another route, viz., through the par vagum and the sympathetic. And, again, it would appear that the cerebral hemispheres are the instruments of the will, and, by the intervention of the spinal cord, set in motion those muscles with which the uterus acts consensually. It will be seen that the brain acts entirely in a centric manner. I have not referred to the medulla oblongata, nor to the sensory cerebral nerves, because the latter really belong to the medulla; and the medulla itself acts in a manner no way different from the spinal column as regards the act of labour.

6. The cerebellum acts only as a co-ordinator of those voluntary muscles with which the uterus acts consensually. As far as is known, its action is purely centric.

In some particulars, the account just given of the nervi-motor actions of the uterus is different from any other with which I am acquainted. In most obstetric systems of the present day, there is a casual reference to the reflex nature of uterine contraction, as well as to the influence of the emotions on the uterus during labour. In Dr. Tyler Smith's recent course of lectures, the subject is more fully investigated than in any prior writings; but, admirable as his account is, an undue share of importance is (I would submit, with the greatest deference to such an authority) accorded to the spinal column, which is, in my opinion, only an accessory to the act of labour, though chief accessory.

Intimately connected with the foregoing physiological particulars are some points in the pathology of uterine nervi-motor action.

14, Harewood Square.

SUCCESSFUL SYSTEM OF DRAINAGE AT WORTHING.

By Henry Collet, M.D.

[*Abridgement of a paper read before the South Eastern Branch, June 24th*, 1857.]

As a branch of hygienic or preventive medicine, the subject of this paper cannot fail to interest general practitioners. The narrative may also prove an encouragement to other towns similarly situated to follow an example effecting so much good in the prevention of disease, in the increase in value of life and property, in domestic happiness, especially among the poorer classes, and, it may be hoped, an improvement in the moral and religious tone of society.

There are some now living in Worthing who remember it a small fishing village. It became a popular place of resort, and consequently increasing and prosperous, from the advantages of its position on the coast, its wide spread sands, and the varied beauty of the surrounding neighbourhood. As the population increased, however, the drainage, which was from the beginning without arrangement, and based upon the old polluting system of cesspools, proved defective. These poured their fluid contents by several trunks on the shore, a short distance from the beautiful esplanade, which at times, therefrom, especially during the ebb of the tide, could no longer be resorted to.

Who, then, can be surprised that the town became injured in reputation as a watering place? But this was not all. The wells in many places became contaminated by soakage from the cesspools with which they were in close proximity, so that the water became thereby unfit for use. The requirements to remove these evils were a new system of drainage carried *from* the shore, and a general and sufficient supply of pure water. How it has been supplied, the following description of the works will show.

Drainage. The cesspools in the town (and there was one to almost every house) have been filled up, and water-closets have been substituted. The pernicious system of discharging the sewerage into the sea, in front of the town, has been abandoned. The drainage has been wholly remodelled; a main brick sewer or culvert, of an egg shape, measuring 3 feet 2 inches by 2 feet 3 inches, has been carried through the principal streets, at a depth, in some parts, of 23 feet; and is connected with the other streets, and with every house by branch drains of stone ware, varying in diameter from 15 inches to 6 inches. The main sewer terminates in a sumpt 6 feet 2 inches by 2 feet 10 inches; and a sewerage-well 30 feet deep and 10 feet in diameter at the top, reduced to 6 feet at the bottom. This well is situated considerably to the north-east of the town, and an artificial fall is obtained into it from every direction. In it is placed a sewerage-pump, consisting of three fifteen-inch barrels, worked by steam power, and connected with the engine in the water tower (shortly to be mentioned) by an iron shafting and driving gear, by which it is pumped through an outfall sewer emptying itself into the sea, at a place two miles eastward of the town, called Sea-Mills Bridge. There the sewerage mixes with a stream of pure water from the hills, and with the general drainage of the district. It is worthy of remark, that the abundant supply of pure water, mixed as it now is with the sewerage, so completely, by its antiseptic properties, counteracts the putrefactive fermentation, that neither at the works, nor in the immediate neighbourhood of the outfall, is there any disagreeable smell. Thus the beach and sands are wholly freed from the sewerage which formerly damaged both them and the esplanade; the sands are rapidly improving, and will, it is expected, before long, recover their former firm and dry condition.

Water Supply. The water tower at the north-east of the town, with the engine-house and chimney shaft adjoining, have been erected under the direction of W. Rawlinson, C.E. It has a total elevation of about 110 feet, and measures 40 feet square on the plan. There is a central pier of brick, and a spiral staircase of cast iron. The foundation is of concrete. Within the adjoining engine-house, a well has been sunk in the chalk, to a depth of 70 feet, which is lined with iron cylinders, to exclude the surface water. Below this depth, a bore has been driven into the chalk 295 feet further, making a total depth of 365 feet; from it gushes an abundant supply of the purest water, 15 degrees of hardness, which is lifted by the engine into a water-tank at the top of the Tower, and thence distributed into all the houses in the town. The tank is of cast iron, 40 feet square, and 13 feet deep, and will contain 110,000 gallons. Its bottom is 70

feet from the ground. The thickest plates are half an inch, and the thinnest three-eighths of an inch, in substance. The engine—which, as I have mentioned, also works the sewerage-pump in the sewerage-well, situated at a little distance—is a high pressure one, and was made by Messrs. Headley and Manning, of Cambridge. The engine commenced work at the end of last year (1856). The public sewers are all completed. The whole of that part of the town in which visitors reside is effectively drained and supplied with water, and the remaining works in the smaller streets are rapidly approaching completion. The poorest cottager has now, or shortly will have, with respect to water-supply, all the advantages of his richer neighbours.

It is well known to visitors who have frequented the town, that a quantity of sea-weed is apt to be thrown upon the beach in the autumn. Except in combination with other substances which create chemical decomposition, it cannot be considered unhealthy, but remedial. The late Dr. Golding Bird was wont to remark that, but for the sewerage mixing with the sea-weed thrown on the shore, it would be an additional inducement to send patients to Worthing. The whole drainage having been removed, no deleterious action can again occur from this source.

With all the adverse circumstances which have been mentioned, the Registrar's report has not shown any unusual mortality in Worthing. The annual number of deaths has averaged from 15 to 17 per 1000 on the population for seven years, including many visitors. Of 417 deaths in the last three years, 39 only resulted from epidemic diseases. Cholera is wholly unknown. The daily range of the thermometer in three successive years, reported by the Registrar-General, from observations taken by Mr. W. G. Barker, of Worthing, was coequal with that for Ventnor, Torquay, Guernsey, Liverpool, etc.—*the least* in the kingdom. It was thus proved—1. That the town of Worthing, in all its natural relations, cannot be considered otherwise than a healthy locality, and a desirable place of resort for invalids. 2. That the objections hitherto existing arose entirely from its defective drainage, and are now completely removed by the new system just described.

I hope that, as the town has seriously suffered by the previous condemnation of my medical friends, they will now, as an act of justice to the inhabitants, and for the benefit of society, make known its present altered and improved condition.

FRACTURE OF THE CRANIUM.

By Henry Hancox, M.D., Wolverhampton.

John Smith, aged 35 years, a strong, well built man, by occupation a miner, when returning home from market, rather the worse for liquor, was attacked by a man, who threw a brick at him, which struck him on the left side of the head, a little above the orbital ridge of the frontal bone, producing a wound about two inches in length, with fracture of the bone. He fell and remained insensible for a few minutes, when he rose and walked home, a distance of about two hundred yards. An unqualified man attended him, and dressed the wound, and continued to visit him for three weeks, the patient, during the whole of this time, being semiconscious. The fracture was not detected by the worthy attendant, who applied six blisters to the legs and other parts of the body. Occasional delirium on the part of the patient induced the quack to believe the man "mad," and to recommend his removal to the asylum. The friends, not willing to comply with the wishes of the attendant, summoned my brother, Mr. W. M. Hancox, to attend him. He found the patient in a semi-conscious state. The man answered questions when loudly spoken to; the pupils acted freely; he referred all his sufferings to the head, pointing to the injured part as the seat of pain. On examining the head, a fracture was distinctly detected, with depression of a fragment; on pressure being applied, the patient was thrown into convulsions, which led to the belief that a portion of bone was pressing on the brain. The operation of trephining was performed by my brother, in the usual way, in the presence of Mr. Cooper and myself, when a small spiculum of bone, about an inch in length, was found penetrating through the dura mater into the substance of the brain; it was removed, the wound was brought together by plaster, and water dressing was applied to the parts.

The following day the patient was quite conscious, was able to speak and recognise those around him, and expressed himself thankful for the relief he had obtained. He continued to improve daily, and at the end of a month was able to go about, and gave evidence before the magistrates against the man who committed the assault.

From the above time he began to drink, and was attacked with inflammation of the brain, for which he was bled, and calomel, etc., was administered. He lingered for ten days, and died.

A *post mortem* examination was made forty-eight hours after death. The dura mater was quite healthy; on cutting through that membrane, lymph, in quantity about five or six ounces, was found to be pressing upon the brain, the left hemisphere of which was in a state of suppuration; the right hemisphere and cerebellum were slightly congested.

Remarks. This case presents a few points of interest. The circumstance of the man walking home after receiving so severe an injury, and shortly after reaching home becoming partially comatose, and remaining in that state for three weeks; the complete success of the operation so long after the injury; and the restoration of consciousness to enable him to be questioned and cross-questioned by the magistrates, show the necessity of having recourse to every means in our power likely to prolong life or arrest disease. It may be stated, without fear of contradiction, that had it not been for his own imprudence in having recourse to stimulating drinks, his system at the time doubtless being debilitated and not sufficiently able to withstand the stimulating effects of alcoholic liquors, he might have been now living.

I am induced to send the above particulars on reading a similar case reported in the Journal of last week, by Dr. Clarke, of the Worcester Infirmary.

British Medical Journal.

SATURDAY, JULY 11th, 1857.

DEATH OF JOSEPH WICKENDEN, Esq.,

We regret to have to announce this day the death of Joseph Wickenden, Esq., of Birmingham, one of the founders of the Association, and to the last one of its most active members of Council. The death of this estimable man took place suddenly, from apoplexy, on Sunday last, at his residence in the vicinity of Birmingham. A biographical sketch of Mr. Wickenden will be found in a succeeding column.

THE TRIAL FOR POISONING AT GLASGOW.

The electric telegraph has this afternoon (Thursday) brought tidings that the jury, empanelled to try whether or not Madeline Smith treacherously and foully murdered her lover, Emile L'Angelier, have returned a verdict of "Not proven". Now that this interesting trial is concluded, we shall give in our next number a summary of the case in its medical bearings.

In the meantime, there are some remarks of practical interest, which may be offered at once. When Mr. Kesteven in this Journal undertook to supply the antidote to the "poisoning information," afforded to the public, with no evil intent of course, but still with evil effect, by *Chambers's Journal* and

Blackwood's Magazine, that it was a common practice of the Styrian peasantry to eat arsenic in order to improve their wind and complexions, he little thought that before a couple of years were passed this practice would be referred to as an excuse for the possession of this deadly drug by a young lady, and that the opinions of two medical men, of a diametrically opposite nature, would be given in an open court of law as to the effect of an arsenical solution on the human skin. The public must, we fear, be sadly puzzled to find that two scientific men cannot agree as to the effect of one of the best understood poisons upon the epidermis —to hear Dr. Laurie state that he has washed his hands in a solution of arsenic without unpleasant results, and to hear a professor of chemistry, Mr. Penny, give it as his opinion that "the external use of arsenic is very dangerous"! It will strike plain men that these questions ought to have been long since decided—that, when prisoners at the bar are trembling between life and death, science should not be found guessing upon matters which may send them to the scaffold.

The histories of all the famous poisoning cases tried of late years are sufficient to prove, that medical men have not noted with sufficient accuracy the effect of arsenic and other poisons upon the human body, either inwardly or outwardly. In the trial of Wooler for poisoning his wife, the nature of the case was not suspected for many weeks by the highly respected physician who attended her; indeed, he thought she was "consumptive and had ulceration of the bowels". In like manner, whilst Mrs. Palmer was sinking under the effect of repeated doses of tartarised antimony, Dr. Knight, her physician, thought, "as far as he could judge, that she was suffering from a severe form of cholera—English cholera." L'Angelier is the last victim of poison, whose case has become notorious. Eighty-eight grains of arsenic were found in his stomach, and, in all probability, double that quantity had been originally taken; nevertheless his medical attendant, Dr. Hugh Thomson, "took his complaint to be a bilious derangement," and he acknowledges that he "never suspected irritant poison."

Thus, in three celebrated cases, the poison was left to do its work unnoticed, until too late, by the professional men in attendance. Let it not for one moment be supposed that we wish to impute blame to either of these gentlemen for the non-discovery of the truth in time to save life. That the symptoms of poisoning by antimony and arsenic do simulate the effects of choleraic poison in the body, there can be little doubt; that arsenic may cause symptoms similar to those witnessed in a bilious attack, may also be granted; that medical men in the present state of our knowledge should mistake the effects of these poisons for those of natural disease, is not for one moment to be wondered at, or mentioned to their prejudice; but the fact still remains, that they do mistake them, and that murder may be perpetrated with impunity. It will be urged, we know, that, in the cases we have mentioned, the instrument of death was discovered by medical science; but, we may ask, in how many poisoning cases have the victims of jealousy and all other evil passions slept their last sleep, whilst the register of death, in place of noting "the deep damnation of their taking off", speaks only of ordinary disease? We cannot think of the many evil deeds that may be buried in the silent grave, without a shudder; and we ask our professional brethren whether it is not time that the effects of different poisons upon the human body should be much more accurately noted than they have been hitherto? We know that but too often the fearful truth of the presence of arsenic in the body of the prostrate patient is not diagnosed until it is too late to remedy the evil; we know that retrospective knowledge is liable to be tinctured with error; still, the knowledge that we alone have the opportunity of taking up, in the majority of cases, the first clue of many a hideous maze of crime, should make us careful so to prepare ourselves that we may not be found wanting at the critical moment. We know full well how difficult a part the medical man has to take in any case where foul play is suspected. One false step may bring upon him ruin; and, in any case, the discovery of the truth cannot but be painful and full of trouble to him. Nevertheless, we must accept the consequences of our mission, whatever they may be; and we should so prepare ourselves as to be ready at any moment to answer, without fear, the question that may suggest itself—"Am I only playing the part of a blind, whilst crime is leading my patient the dusky road to death?"

THE WEEK.

In the list of pensions granted during the year ending June 20th, 1857, and charged upon the civil list, we find the following names:—

Dr. William Pulteney Alison, £100, November 10th, 1856 (late Professor of the Practice of Physic in the University of Edinburgh), in consideration of his scientific attainments.

Mrs. Margaret Gavin, £50, November 15th, 1856, in consideration of the distressed circumstances in which she has been left on the death of her husband, Dr. Hector Gavin, who was accidentally killed in the Crimea, while employed in the public service.

Mrs. Lydia Falconer Miller, £70, June 19th, 1857, in consideration of the eminent services rendered to literature and science by the works of her late husband, Mr. Hugh Miller, and the straitened circumstances in which she is placed by his decease.

THE LATE JOSEPH WICKENDEN, ESQ.

It has often been remarked as one of the characteristics of Birmingham society, that however much it may be wanting in that intellectual element which predominates in communities less exclusively devoted to business, it has been signally favoured in being chosen as the residence of some of the most eminent members of the profession. One of those men who have a reputation beyond the immediate circle of their practice has just passed from us. Mr. Wickenden, who has occupied a leading position in Birmingham for the last quarter of a century, has died. On the evening of Saturday, he retired to bed in his usual health, and was soon after suddenly attacked with a fit of apoplexy, which terminated his useful life on Sunday morning, July 5th.

Mr. Wickenden was born on the borders of the New Forest, in 1795. His early life was distinguished by industry and activity; and, having at a somewhat early age decided upon entering the medical profession, he was articled to Messrs. Dansey, Muston, and Basket, surgeons, of Blandford. Mr. Wickenden pursued his studies in London at Guy's and St. Thomas's Hospitals, and on their completion he settled in Birmingham, in 1818. He came here almost a total stranger; but his devo-

tion to his profession, his intelligence, and his kindness of manner, soon gathered around him a circle of friends, which continued to expand year by year until his death. His career was one of continuous industry, and his benevolence formed a portion of his daily duties rather than an occasional display of that quality, in which the medical profession above all others abounds. Mr. Wickenden was one of the few surviving representatives of the Medical Society of that day, which numbered so many eminent men in its ranks, and he was associated with them in the formation of the Medical Benevolent Society, in which he ever manifested a deep interest, and the objects of of which harmonised so entirely with his disposition. He was one of its early directors, and considered it his bounden duty to attend its quarterly meetings, and dispense the benefits of the institution with a wise discretion.

Soon after settling in Birmingham, Mr. Wickenden became connected with the Philosophical Institution, and was its secretary for about eighteen years. He read one or two papers to the society, and took a deep interest in its progress. His devotion to general science was the only relaxation from the labours of his profession he allowed himself to indulge in. He was a Fellow of the Geological Society, and attended the meetings of the British Association, whenever he found it practicable to do so. His connection with the Philosophical Institution afforded him an opportunity of cultivating the friendship of many eminent men. At the final closing of the Institution he transferred his share in the property to the Midland Institute, and was a frequent and attentive attendant upon many of the scientific lectures delivered in connection with the new society.

In 1826 Mr. Wickenden was a candidate for the honorary appointment of surgeon to the Birmingham General Dispensary, but was disappointed in the object of his ambition, and never afterwards was a candidate for any public office.

In 1832, in conjunction with Sir Charles, then Dr. Hastings, and others, he assisted in the formation of the Provincial Medical and Surgical Association. Mr. Wickenden was for many years a member of the General Council; and was elected, under the revised laws, as one of the representatives of the Birmingham and Midland Counties Branch, and as a member of the Committee of Council, in the proceedings of which he took an active part. At the annual meeting of the Association, held in Birmingham last year, he was active in promoting its success.

He was a member of the local Medical Society, and held the office of president for the last eighteen months. The last meeting of the society was held at his house, on which occasion he embodied his long experience in the profession in a very useful paper, on the difficulties and responsibilities which attach themselves to the duties of a medical man.

As a medical practitioner his judgment was sound and practical, and was held in high estimation by his professional brethren, who were glad at all times to avail themselves of his counsel: and many of the younger members of the profession will ever remember the willingness and kindness with which he rendered them assistance in the time of difficulty. In the midst of his arduous duties his health began to suffer; and about twelve years ago it was thought desirable for him to remove from the town to the Hagley Road, and limit his professional duties, which were making too great a demand on his health. By his numerous patients his loss will be severely felt, for they not only lose in him their skilful medical adviser, but also their genial friend and their kind and discreet counsellor. Always courteous, cheerful, and considerate, and influenced as he was by deep and earnest religious convictions, he brought comfort and consolation to many a troubled bed and to many a sorrowing household. He has his reward in the universal regret which the intelligence of his sudden, but happily painless, death has caused, and in the love and respect with which the recollection of his blameless and useful life will long be cherished.

[The above sketch is taken, with a few verbal alterations, from the *Birmingham Journal.*]

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July instant.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Annual Meeting.]	37, Soho Square, London.	Tues., July 14, 3 P.M.
Shropshire. [Annual Meeting.]	Queen's Head Hotel, Oswestry.	Tuesday, July 14, 2 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, July 1857

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

SOUTH EASTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of the South Eastern Branch was held at the Town Hall, Reigate, on Wednesday, June 24th; Charles M. Thompson, Esq. (Westerham), President, in the Chair. There were also present: J. H. Baller, M.D. (Penshurst); G. Bottomley, Esq. (Croydon); J. C. Burrows, M.D. (Brighton); R. Bushell, Esq. (Horley); A. Carpenter, M.B. (Croydon); C. Wm. Chaldecott, Esq. (Dorking); H. Colebrook, M.D. (Southborough); H. Collet, M.D. (Worthing); G. N. Edwards, M.B. (London); W. A. Greenhill, M.D. (Hastings); H. Harris, Esq. (Reigate); G. F. Hodgson, Esq. (Brighton); C. Holman, M.D. (Reigate); H. M. Holman, M.D. (Hurstpierpoint); T. K. Hornidge, Esq. (London); T. Hunt, Esq. (London); Peter Martin, Esq. (Reigate); P. J. Martin, Esq. (Pulborough); George Moore, M.D. (Brighton); Lewis Newnham, M.D. (Camberwell); W. Newnham, Esq. (Tunbridge Wells); R. M. Rathill, Esq. (Westerham); E. Ray, Esq. (Dulwich); J. Reid, Esq. (Canterbury); W. Sankey. Esq. (Dover); A. Sisson, Esq. (Reigate); S. G. Sloman, Esq. (Farnham); T. Smith, Esq. (Crawley); T. H. Smith, Esq. (St. Mary Cray); J. Stedman, Esq. (Guildford); J. S. Steele, Esq. (Reigate); W. Street, Esq. (Reigate); C. R. Thompson, Esq. (Westerham); C. Trustram, Esq. (Tunbridge Wells); R. Turner, Esq. (Tunbridge Wells); W. Wallis, Esq. (Hartfield); T. B. Winter, Esq. (Brighton); also W. Batley, Esq. (Brighton); S. R. Crabtree, Esq. (Reigate); W. Harvey, Esq. (London); R. Martin, M.B. (London); W. Martin, Esq. (Bengal Medical Service); F. M. Smith, Esq. (London); W. Soper, Esq. (Reigate); and R. H. Stone, Esq. (Redhill.)

PRESIDENT'S ADDRESS.

I desire to thank you for the honour you have done me in placing me in this chair. I am fully sensible that my elevation to this position has been rather a matter of accident than from any merit on my part. If, indeed, I had any claim to this distinction, it could only arise from the fact of my being a very old member of this Branch of our Association. It is customary on these occasions for your president to address you, gentlemen, upon some scientific subject; but this you must not expect from me. When I look round and see many gentlemen so far my superiors both in position and in attainments, I should consider it the height of presumption on my part to address them upon scientific matters; and in truth, had I the ability to do so I should lack the inclination. The time of our meeting extends over so few hours, that I believe the majority of our members would rather look upon it in a social than a scientific point of view. Escaped from the trammels of business for a few hours, they are disposed to pass them in social intercourse, in making new friendships, and renewing old ones, and in seeing such objects of interest as our place of meeting may enable them to witness. You will remember that at our last anniversary at Chatham, the meeting was adjourned after the usual routine business had been disposed of, and that two or three hours were most agreeably spent in the museums and hospitals of the place. I am sorry to say we cannot offer you any such interesting object in this town. Had our meeting taken place at Redhill (and I may here mention that a want of accommodation alone prevented our holding it there), we should have proposed visiting the Asylum for Idiots on Earlswood Common, and also the Philanthropic Schools at Redhill, both of which are well worthy of attention, but are now, I fear, too far removed from us. We are now assembled at Reigate, and with your permission I shall give you a short topographical account of it, for which I am indebted to my friend, Mr. Peter Martin.

Reigate is an old town, with little or no history. It possessed a castle which, like those of Tunbridge and Guildford, opened its gates to Louis the Dauphin, or rather to the barons associated with Louis, to oppose King John. Of this castle some earthwork remains, and from the centre of the keep you may descend into a remarkable cave excavated to a considerable distance in the sand rock. This is no doubt a very ancient work. About the year 1780, Miss Burney, on one of her periodical visits to Brighton with Mrs. Thrale, stopped to refresh at Reigate, and described it in her diary as an "old decayed borough." Since that period it has passed from "decay" to a certain amount of prosperity, which has been mainly owing to its situation on the high road to Brighton, and latterly to the formation of the junction station at Redhill. The town of Reigate is situated on the lower green range of sand which extends from the western parts of Surrey to Hythe, in Kent. This sand range rarely exceeds a mile in width. It is bounded on the north by a narrow clay belt, beyond which rises the chalk, in a parallel range, to about five hundred feet above the sea. On the south of the central sand ridge begins the great clay district of the Wealden. The climate is mild and dry, but does not differ materially from that of other parts of the south of England. On the southern slope of the green sand, however, which is always steep and sometimes precipitous, there are many sheltered spots where the average temperature is two or three degrees above that of the south-eastern district. On the first publication of the Registrar-General's returns it appeared that the Union of Reigate enjoyed a high degree of salubrity as evinced by a low rate of mortality. It is curious, as being rather opposed to popular notions, that whereas this small rate of mortality is based on the register of the Reigate Union, a comparatively small portion of this union exhibits sandy strata. About one-third of the union consists of the weald clay district, and another third extends into the chalk range, cold and damp on the surface and sloping northwards. The sandy range of Reigate is no doubt much more agreeable to dwell on, but it does not appear that either the chalk downs of Chipstead and Walton, or the clay flats of Horley and Charlwood, add inordinately to the rate of mortality of the whole union. The supply of water in the town and its immediate neighbourhood is at present insufficient and uncertain, and this circumstance, besides its own inconvenience, brings with it that of incomplete and inefficient drainage. At the census of 1851 the population of the parish was 4,909; it must now be 6,000. You will perceive, gentlemen, there is nothing much attractive in this town; but should time permit, I should recommend a visit to the Castle grounds, and also the Cave, in which, it is said, the barons used to meet and discuss the provisions of Magna Charta.

But to us, gentlemen, this town has a peculiar claim upon our interests, as being (not the birthplace) but the residence for many years of one of the greatest friends and ornaments of this Branch of our Association, of a gentleman who has devoted a long life to the advocacy of medical reform, and the improvement of the status of our profession; who founded this Branch; who twenty-five years ago originated the idea of the Medical Benevolent College; and who, had he been supported by the public and the profession as he ought to have been, would have carried out that noble plan, and would have won those laurels which now grace the brow of a more fortunate and not less worthy man. You may perhaps recognise in this brief sketch our friend Thomas Martin, who through a long life has upheld the honour and dignity of our profession, and has left a bright example of what may be achieved by talent, integrity, and perseverence. Retired now from the arduous duties of his profession, he still devotes his energies to the welfare and improvement of his fellow-townsmen. Schools, institutes, churches have risen under his auspices; and in future years, when the inquirer asks after Thomas Martin, he will be told as of one of yore, *Si monumentum quæris, circumspice.*

And now, having spoken of a living ornament of our profession, permit me to say a few words of one who is no more. You must all regret with me the loss we have sustained since our last anniversary, in the death of Isaac Hargreaves. He was a talented surgeon and a perfect gentleman. Upon two occasions he filled the chair which I now unworthily occupy; and all well remember how admirably he discharged his duties. His liberality to his patients knew no bounds; indeed, he was liberal to a fault; for, permit me to say, I think a medical man may be too liberal. However indifferent to emolument himself, he should remember that by exercising liberality to those who do not need it, he places in an invidious position those of his medical brethren who cannot afford to exercise the same amount of liberality. I have argued the point with him, and am quite convinced that he acted from the purest, though I think, mistaken motives. But his liberality extended also to his professional brethren. He was always kind and courteous to his juniors, and I believe no one ever called him into consultation who had cause to regret having done so. Liberal during his life, he was so likewise in his death. I can say with truth he has made the widow's heart rejoice. He has bequeathed a handsome legacy to the dispensary at Tunbridge Wells, with which he was connected, and has made the munificent bequest of £500 to the Medical Benevolent College, to which he had been a handsome donor while living. Few of our profession have the power of acting as Isaac Hargreaves has done: let those who have the power follow his example. *Requiescat in pace!*

REPORT OF COUNCIL.

Mr. Peter Martin (Secretary), read the following report:—

"The Council, in meeting the Branch on the present occasion, have to congratulate their constituents on a continued state of welldoing. The number of members is somewhat on the increase, the losses by death and resignation since the last anniversary having been eight, and the number of new members twelve. At the same time, the Council feel that there is a large number of gentlemen practising in the three counties, whom they could gladly see associated with them in the British Medical Association. The isolated position so often occupied by a general practitioner in the country, leads him to be naturally self-dependent; but if he rightly considers his duty to his profession, he surely ought to join in association with others to devise and to carry out what improvements may be wanted for the common good; and if the hitherto unorganised condition of the medical profession has prevented this Association from as yet fully attaining the object at which it has aimed, we are fully persuaded that, in the incidents of these meetings, and in the pleasurable connexions and friendship which arise from them, sufficient inducement should exist to bring all practitioners in the district into union with us.

"The Committee feel sure that one of the first thoughts which will occur to the mind of every member here to day, will be the loss which we have sustained in the death of Mr. Hargreaves, and which has been already noticed by the President. The late Mr. Hargreaves was one of the first promoters of the establishment of this Branch, and continued to his death one of its warmest supporters. He twice filled the office of President to the great satisfaction of the members, and was seldom absent from our meetings, where his hearty greeting will long be missed.

"The Committee have not to report any application for a contribution from the fund to the sustenance of local meetings, according to Rule viii of the Branch; but they consider the provisions of this rule so valuable, that it will not long remain without application.

"The Medical Reform question appears at length to have arrived at a point from which we may look forward to its resolution. The opinion of the profession, and we may say public opinion, so far as the very limited public is concerned, which either understands or cares for this question, appears to be generally in favour of Mr. Headlam's Bill, and it will be proposed to this meeting to present a petition in favour of the Bill.

"The agitation against the mal-administration of the Poor-Law in medical matters, which after some years abeyance has been re-commenced, must effectually lead to a successful result, because the struggle is based on principles of truth and common sense; these will have to combat a vast amount of ignorance and prejudice, and it must be confessed that their advancement is impeded by the conduct of many members of the profession. The generous conduct, however, of the younger members of the profession, the practitioners of ten years hence, will, we trust, much modify this latter condition. And to the internal behaviour of the profession, we must principally look for the change, which is to modify the conduct of the governing powers towards us.

"The Council have to report that they have received a requisition from the members residing at Brighton, inviting the Branch to meet at that town in 1858; and they have great pleasure in recommending the meeting to accept their invitation.

"The balance in the hands of the Treasurer at the last meeting was £21 : 14 : 4. The Branch subscriptions have amounted to £14 : 14. The expense of the year to £8 : 1 : 5. The balance in the hands of the Treasurer at present is £28 : 6 : 11."

On the motion of Mr. H. Smith, seconded by Mr. G. Stedman, the report was unanimously adopted.

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following gentlemen were returned as members of the General Council:—G. Bottomley, Esq. (Croydon); W. A. Greenhill, M.D. (Hastings); J. Reid, Esq. (Canterbury); James Stedman, Esq. (Guildford); C. M. Thompson, Esq. (Westerham); E. Westall, Esq. (Croydon).

COUNCIL OF THE BRANCH.

The following gentlemen were elected the Council of the Branch:—J. C. Burrows, Esq. (Brighton); E. J. Furner, Esq. (Brighton); W. A. Greenhill, M.D. (Hastings); J. Reid, Esq. (Canterbury); F. H. Sankey, Esq. (Wingham); W. Sankey, Esq. (Dover); James Stedman, Esq. (Guildford); G. Stilwell, Esq. (Epsom); W. Street, Esq. (Reigate); C. Trustram, Esq. (Tunbridge Wells); E. Westall, Esq. (Croydon).

PLACE OF MEETING IN 1858: ELECTION OF OFFICERS.

It was proposed by C. Trustram, Esq., seconded by Thomas H. Smith, Esq., and resolved—

"That the place of meeting in 1858 be Brighton; and that John Cordy Burrows, Esq., be requested to act as President; Dr. Branfoot and Mr. Lowdell as Vice-Presidents; and that Dr. King, Dr. Dill, Mr. Dixon, Mr. Taaffe, Mr. Hodgson, be the Local Members of the Branch Council."

It was proposed by J. H. Baller, Esq., seconded by C. Trustram, Esq., and resolved—

"That Peter Martin, Esq., be requested to act as Secretary and Treasurer for the ensuing year."

VOTE OF THANKS.

It was proposed by T. B. Winter, Esq., seconded by Wm. Newnham, Esq., and resolved—

"That the best thanks of the South-Eastern Branch be offered to Adam Martin, M.D., President, to J. Dulvey, Esq., and F. J. Brown, M.D., Vice-Presidents, and to the Branch Council, for their kind attention to the business of the Branch during the past year."

MEDICAL REFORM.

It was proposed by C. Trustram, Esq., seconded by James Reid, Esq., and resolved—

"That a petition be presented by the South-Eastern Branch to the House of Commons, in favour of the Medical Reform Bill introduced by Mr. Headlam."

POOR-LAW MEDICAL REFORM.

Edward Ray, Esq., proposed, R. Turner, Esq., seconded, and it was resolved—

"That this meeting warmly sympathises with the Poor-Law Medical Officers in their long continued struggle for more just treatment both to themselves and to the sick poor; and that the following petition be signed by the Chairman on behalf of the Branch, and presented to the House of Commons."

PARASITIC VEGETATION: THE SPHÆNIA ROBERTSII. BY J. REID, ESQ.

Mr. Reid (Canterbury) exhibited specimens of *Sphænia Robertsii*, a parasitic vegetation growing on caterpillars in New Zealand, and used in China as a medicinal article of diet.

SACCULATED URINARY CALCULUS. BY J. REID, ESQ.

Mr. Reid also read a Case of Sacculated Urinary Calculus, which he had removed by the recto-vesical section, and in which the patient had recovered from the operation.

DRAINAGE OF WORTHING. BY H. COLLET, M.D.

[This paper is published in the present number of the Journal.]

CALIPERS FOR MEASURING THE MOVEMENTS OF THE CHEST IN INSPIRATION. BY G. N. EDWARDS, M.B.

This instrument differs from the ordinary caliper compasses in having the two legs continued beyond the joint in two flat pieces of metal, which move parallel to each other, as the compass is opened or shut. One of these flat pieces is cut into the segment of a circle, whose centre is that of the compass-joint, its outer circular edge being grooved for the reception of a small catgut cord, working, as the instrument is opened or shut, on a small pinion wheel, whose axis is perpendicular to the flat piece of metal terminating the other leg, and turning a small index-needle parallel to the plate in which the index of the pinion works. By this arrangement, when the extremities of the feet of the calipers are kept applied to any two points whose distances from each other vary, this variation, and the proportionate one described by the circular arc, is indicated by the motion of the index-needle over the dial-plate. Such dimensions are chosen that a difference of two inches between the extremities of the feet of the calipers causes a complete revolution of the index-needle. Variations of less than the twentieth part of an inch are thus rendered apparent, and easily measured. For greater variations than two inches, a piece removed from the dial-plate, with an index in its upper part, exposes a graduated scale on the surface of the circular arc. A spring of vulcanised India-rubber, attached to each foot of the instrument, at equal distances from the compass-joint, assists in keeping the extremities of the feet in contact with the points whose variation in distance is to be measured. The lower half of each leg of the calipers slides into the other, for convenience of portability; and a small spring prevents the lower half of each leg from sliding back into the upper when the instrument

is in use. These calipers, as then constructed, were described and figured in the *Medical Times and Gazette* of Dec. 27th, 1856. They have, however, been considerably altered since that time.

PREVALENT TYPES OF DISEASE.

Mr. Smith (St. Mary Cray) called attention to the frequency of carbuncle and boil, thecal abscess, and suppurations generally, as well as to the great frequency of intermittent complaints. He dated a diminution of diseases of sthenic character from the first cholera and influenza. Wine, quinine, and stimulating remedies, were required earlier in disease, and in a much larger proportion of cases than formerly. Ague was much more frequent, and occurred in places where formerly it was scarcely known.

Mr. Trustram (Tunbridge Wells) considered that exudations had of late been much more frequent from the mucous than from serous surfaces. He mentioned the frequent occurrence of diphtherite; and stated that, in a Sussex parish, there had been, within twelve months, 100 deaths in a population of 2,000; a great number of these arising from a very fatal affection of the throat, which he believed to be what was formerly known as cynanche pharyngea, and was characterised by very copious fibrinous exudation.

Mr. Wallis (Hartfield) considered that this malignant sore throat was connected with the poison of scarlatina.

Mr. Reid mentioned that, according to his observation, the nervous element had of late years predominated in disease to a much greater extent than formerly: hence greater debility and earlier exhaustion, and the necessity for a more stimulating treatment.

Dr. Carpenter (Croydon) stated that, of late, the remarkably feeble type of disease which had so long prevailed was passing away, and disease in his neighbourhood partook more of a sthenic character. He considered that bad water and insufficient drainage were to a great extent causes of the very low form of disease which had so long prevailed.

Mr. Turner (Tunbridge Wells) and Mr. Hunt (London) moved the thanks of the meeting to the gentlemen who had brought forward communications.

After a vote of thanks to the Chairman, the meeting adjourned, and reassembled to partake of an excellent dinner, which was provided at the White Hart Hotel. The Chairman was supported by the Rev. James Cecil Wynter, Rector of Gatton and Rural Dean; the Rev. F. Owston, Incumbent of Pirbright; and other non-professional friends; and a most agreeable evening was passed.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 26th, 1857.

Sir C. Locock, Bart., President, in the Chair.

THE INFLUENCE OF THE LABOUR OF THE TREADWHEEL OVER RESPIRATION AND PULSATION; AND ITS RELATION TO THE WASTE OF THE SYSTEM, AND THE DIETARY OF THE PRISONERS. BY EDWARD SMITH, M.D., LL.B.

This investigation was part of a series of inquiries which the author had prosecuted, and which had been presented to the Royal Society. The aim was to show how great is the wear of system caused by this mode of punishment, the inequality of the punishment, and the serious defect in the quantity of respiratory food supplied to the prisoners. The inquiries were made by the author on his own person in October, 1856, at the Coldbath-fields prison, by the courtesy of Mr. Pownall and other Middlesex magistrates. He worked the wheel during periods of a quarter of an hour each, with intervening periods of rest of a quarter of an hour, in the manner prescribed for the prisoners, and made seven series of observations. The average quantity of air breathed during the labour was 2500 cubic inches per minute, at a rate of respiration of 25¼ per minute, and a depth of respiration varying from 91½ cubic inches to 107½ cubic inches. The rate of pulsation varied from 150 to 172 per minute. During the intervals of rest he sat quietly, and after 13 minutes rest the rate of respiration varied from 15 to 18¼ per minute, the quantity of air respired from 725 cubic inches to 980 cubic inches, the depth from 48 cubic inches to 53 cubic inches, and the rate of pulsation from 97 to 120 per minute. Before he entered upon the inquiry, he breathed in the standing posture about 600 cubic inches per minute, at a rate of 14 per minute, and a depth of 43 cubic inches, and the rate of pulsation was 75 per minute. Thus, during the exertion the quantity of air inspired was increased more that fourfold, the rate of respiration was increased two thirds, the depth of inspiration 2¼ times, and the rate of pulsation 2½ times. The returns during the period of rest show that the effects of the labour had not passed away in a quarter of an hour. Compared with the results in the quiet sitting posture, the author stated that the effect on the respiration was 5¼ times, and on pulsation 2½ times as great; and taking together the 3¾ hours of hard labour with a similar period of rest, he proved that the effect upon the system of the 8 hours labour was equal to that of 24 hours of those not condemned to hard labour; and that if the whole 24 hours were taken together, the effect would probably be two-thirds greater than that of occupations not laborious. He then contrasted those results with others which he had obtained for the purposes of comparison. Thus, fast walking, at upwards of four miles per hour, caused a respiration of 30 per minute, a depth of 80 cubic inches, and a total quantity per minute of 2400 cubic inches. The rate of pulsation was 130 per minute. Ascending steps at the rate of speed of the treadwheel—viz., 640 yards per hour, caused the rate of respiration to be 22 per minute, the depth 90 cubic inches, and total quantity per minute 1986 cubic inches, and a rate of pulsation of 114 per minute. Carrying 118 pounds at the rate of three miles per hour induced a rate of respiration of 24¾ times per minute, a depth of 90 cubic inches, and a total quantity of 2141 cubic inches per minute, with a rate of pulsation of 189 per minute. Thus the labour of the treadwheel produces greater effect upon the respiration than any of those modes of exertion, while the effect upon pulsation was greater in the last severe labour only. The total quantity of air breathed per hour upon the treadwheel (if the labour were continuous) would be 150,000 cubic inches as opposed to 27,000 cubic inches in the quiet sitting posture; and the wear of the system would, upon the known principles of science, be in a somewhat similar proportion. He then proceeded to consider the effect of this exertion upon the system, and showed that the excessive exercise of the lungs and heart must ultimately lead to phthisis, asthma, emphysema, congestion of various organs, and disease of the heart; and that in persons with diminished vital capacity of the lungs, and weak hearts, the effect must sooner be very serious. In reference to food, he was of opinion that the reparative (nitrogenous) food, as flesh and bread, was ample, and required revision only in the better distribution of it—as, for example, the removal of 2 oz. or 3 oz. of the 6 oz. of cooked meat, allowed at the dinner four times per week, to the breakfast, which consists only of bread and cocoa. He also pointed out the importance (and especially to those who masticate imperfectly) of rendering the meat tender, and of allowing more time between the meal and the return to the hard labour. The great and most serious defect which he pointed out was in the respiratory food, since neither fat nor sugar is allowed except in combination, as in the ox-heads, or in the briskets of beef, and in the milk and cocoa. No sugar, lard, suet, bacon, or butter are allowed, and of course beer and alcoholic liquors are excluded; these, with starch, are almost the sole articles of respiratory food. He dwelt upon the imperative necessity for an increase of fat, both in relation to the wants of respiration, and to the due digestion of starchy food; and showed that, under the present system, much food must be wasted from non-digestion, and the system must, and often does, decrease in weight. He then explained the mode of working the wheel, and showed that the labour is not only in moving the body as the wheel descends, but in maintaining it erect in opposition to gravity, since the centre of gravity is probably external to and in front of the body. He proved that it is an uneven punishment, the inequality not being that of guilt, but of physical conformation and health; and, moreover, that the resistance offered by the wheel is not uniform in various prisons, and has been lessened at the Coldbath-fields prison; and hence, that the lives of the prisoners are at the mercy of uneducated engineers. He showed that the old, the tall, the feeble, those having unsound teeth, and diseased lungs and heart, those not accustomed to climbing or slow walking, and those with small bones and muscles of the back and upper extremities, must suffer the most; and hence that the punishment falls with different degrees of severity upon different classes of the community. He also pointed out the fact that weak hearts and lessened vital capacity of the lungs may

exist with a fair amount of health, and hence would not be necessarily known to the prisoner, nor, indeed, to the surgeon, except on a minute examination. He was of opinion that it was a punishment unfit for the age (as the discontinuance of it in many prisons also implied), and certain, if long continued, to induce disease and a premature death; and not only rendered the prisoner a greater cost to the community whilst in prison, by reason of the increased quantity of food which the labour demands, but subsequently from a premature old age; and since the labour is not employed to meet the cost of maintenance of those who furnish the power, it is so much of human flesh and life wasted. In a postscript he referred to the Government dietary for prisoners condemned for short periods, and showed that a system which affords only bread and water, or bread and gruel, for the whole diet, must be calculated to injure the health of the prisoners, a system far more repulsive than the private whippings which have been proposed and opposed.

Dr. Webster dissented from the conclusions of the author respecting the effect of the treadmill on the health of the prisoners. Persons of weak health, he said, were often benefited by the prison discipline, and the mortality in most of the London prisons was exceedingly low. The total deaths in all the London gaols during last year amounted to 81, which was a small mortality, considering there were always upwards of 6000 inmates within these receptables, of whom a large proportion were males: while, as frequent changes of prisoners also occurred, the aggregate numbers have been much augmented. The diet, too, of the prisoners was often much better than they were accustomed to when out of prison, with the exception of those who were imprisoned for seven days, and whose fare was only bread and water. Some of the injurious results attendant upon prison life were merely the moral effects of confinement; while others were attributable to the improper method of heating the prisons with warm air.

Dr. Snow said the author ought not to take for granted that the quantity of oxygen consumed always bore a definite proportion to the quantity inspired. Under the circumstances mentioned by Dr. Smith there would doubtless be some increased consumption; but under other circumstances (as after the use of narcotics), the reverse might be the case. Nor was it certain that an increase in the respiratory elements of food was required by the prisoners so much as an increase in that which would furnish muscular tissue, such as mutton and beef, especially the latter, which was consumed in large quantities by navigators.

Dr. Markham thought it would have been better if the practical results, as shown by the reports of the medical officers, had been laid before the members, rather than the theoretical conclusions of the author.

Mr. Spencer Wells referred to a statement made by Captain Chesterton, in his *Revelations of Prison Life*, that the health of the prisoners, when the treadmill was first brought into use by Mr. Cubitt, suffered from the period of labour being too protracted, but that since the period of toil had been shortened the work proved beneficial to the system; and this was the general opinion of those who had opportunities of judging. The punishment, in military prisons, of lifting shot was also found to benefit the men, if not carried to excess.

Dr. Webster said the prisoners often worked in a close atmosphere, which was, of course, prejudical to health.

Dr. Stewart said there could be no doubt that after a short training the labour at the treadmill, like all others, would become less severe; so that the effects produced on the author, who was not accustomed to the exercise, could not be regarded as applicable to all persons.

Dr. O'Connor said he was informed by the governor of one of the Dublin prisons, that the work was beneficial to the prisoners, their health generally improving under the exercise when of short duration. He agreed with Dr. Webster, that moral causes, rather than the actual prison dicipline, would act as promoters of disease.

Dr. Smith, in reply, referred to the reprobation of the treadmill by Mr. Mayhew, in his *Great World of London*, and by Mr. Reade in *It is Never too Late to Mend*. The discontinuance of its use in prisons was a tacit condemnation. Dr. Webster had mixed up prisoners condemned and not condemned to hard labour. As the increased respiration was from natural causes, there would be a corresponding increase in the chemical changes. He described the "shot drill," and showed that it was less laborious than the treadwheel, although it was quite as irksome. The after effects of the treadwheel could seldom be traced, from the short duration of the punishment; but new inquiries in that direction are needed. The results which he (Dr. Smith) had mentioned were subject to some deduction for want of training, though he was strong and healthy, accustomed to long walking, and experienced in the use of the spirometer, and many persons would be less capable of bearing the fatigue than himself.

HARVEIAN SOCIETY.

Thursday, June 18th, 1857.

A. Ure, Esq., President, in the Chair.

CASE OF SUDDEN DEATH FROM PLEURITIC AND PERICARDIAL DROPSICAL EFFUSION (SCARLATINA?): RELATION OF DROPSY TO SCARLATINA. BY GRAILY HEWITT, M.D.

The case was that of a girl, aged 4, previously healthy, residing in rooms over a stable, who was seized on May 20th with feverishness, heat of skin, etc. The mother administered jalap, which acted freely. In the evening, the symptoms were relieved. In the night of May 20th, the child was feverish; and frequent micturition was noticed. There was no sore throat nor difficulty of swallowing, and no rash was seen on the skin. On the morning of the second day, the fever had lessened, and the breathing was found to be a little quick; but the patient was well enough to go out and play, and ate her food well. Frequency of micturition continued. The night of the second day, she was worse, very restless, and thirsty. Towards the morning of the third day, the breathing became much oppressed; between 5 and 8 o'clock, A.M., she was sick twice, the dyspnœa progressively increasing. At 9 o'clock, she was "gasping for breath", but was quite conscious. She was taken to a hospital for relief, and expired on the road home, at half-past 9, the third day of her illness. She was seen by Dr. Hewitt, for the first time, a few minutes after she had ceased to breathe.

Post Mortem Examination. There was no anasarca. The pia mater was a little congested; the amount of serum in the lateral ventricles was slight. The thymus gland was larger than usual; its reservoir was distended. The heart was empty, pale, and flaccid. The pericardium contained half an ounce of serosity. The pleural cavities each contained about four ounces of a similar fluid. The lungs were for the most part healthy; the bronchial tubes were congested. The liver was congested. The kidneys were also congested; the cortical substance was pale. No urine was found in the bladder. The other organs were quite healthy.

The author was of opinion that the cause of death was the effusion into the thoracic cavities; and that this effusion had probably been poured out only a few hours before the fatal event took place. He next proceeded to discuss the question as to the cause of the dropsy in this case. He considered this to be an example of acute consecutive dropsy, following on a state of the blood induced by the reception of the poison of scarlatina; this being one of those exceptional cases in which the dropsy occurs soon after the commencement of the fever, instead of at a later period. The child had had measles, but not scarlatina; and, although it was not proved that the latter disease was present in the immediate neighbourhood, yet the neighbourhood was one frequently infected by it and diseases of an allied character. Cases recorded by Dr. Miller, and the opinions of Drs. Copland and Willshire, were cited as favouring the supposition that the dropsy of scarlet fever may be a part of the disease itself—a result of the action of the poison on the blood. He considered that recorded facts were only to be reconciled on this theory, although in many cases, undoubtedly, the dropsy did appear to depend on a state of the kidneys analogous to that which occurs in Bright's disease. The difference between a case of scarlatina with dropsy and no actual disease of the kidney, and one of Bright's disease with dropsy, was the following: in the one case, the blood was not in a condition to allow of the necessary separation of the urea from it; in the other, the kidneys themselves were at fault. These two conditions doubtless react on and increase each other in many cases. The dropsy was vicarious to a certain extent of the rash.

Sudden effusion into the great thoracic cavities, and leading to a fatal result, is in children a somewhat rare occurrence; and it is still more rare that dropsy of this character sets in at so early a period of the disease (supposing this to have been a case of scarlatina) as in the instance above mentioned.

ELECTION OF TREASURER.

Henry W. Fuller, M.D., was appointed Treasurer to the Society, in the room of Joseph Ridge, M.D., resigned. Dr. Ridge was at the same time elected an honorary member.

EPIDEMIOLOGICAL SOCIETY.

Monday, June 1st, 1857.

B. G. Babington, M.D., F.R.S., President, in the Chair.

THE MORTALITY FROM ERUPTIVE FEVERS AT DIFFERENT PERIODS OF THE YEAR. BY J. W. TRIPE, M.D.

This communication was stated by the author to be merely a basis upon which he purposed to institute a general inquiry into the history of epidemic diseases.

The main results of the paper were as follow. 1. *Small-pox* presented two periods of depressed and two of elevated mortality. The first period of elevation occurred in January, and the second at the end of May and early in June: the former being the highest. The first period of depression was at the end of March or early in April, and the second in September: the latter being the lowest. Therefore, small-pox was most fatal in winter, next in summer, and least fatal in spring. 2. A series of cold springs was attended with comparatively a large mortality: the period of highest mortality coincided with a temperature of less than 40° F., and the lowest with one of above 46° F. 3. The average highest mortality in the seventeen corresponding weeks of 1840-56 was more than double the average lowest mortality. 4. *Measles* had only one period of highest and one of lowest mortality: the former occurring in December, and the latter varying in different years; but the rate of death in spring was much smaller than in any other quarter. 5. The rate of death was greater in the series of spring and winter quarters, which were below the average temperature, than in those which were above it. 6. As in small-pox, the average highest mortality during seventeen corresponding weeks in 1840-56 was double the average lowest mortality. 7. *Scarlet fever* presented one period of highest and one of lowest rate of death, and this more markedly than either small-pox or measles: the greatest number of deaths occurring at the end of October or beginning of November, the lowest at the middle or end of March or beginning of April. 8. The average mortality was higher in warm springs than in cold. 9. The mean of the greatest number of deaths in seventeen corresponding weeks of 1840-56 was about twice and four-fifths as large as the mean of the lowest number of deaths in seventeen corresponding weeks of these years. 10. Although *fever* was more rife from the thirty-sixth to the fifty-first week, yet there was not any particular short period at which it could be said to reach its culminating point. 11. The greatest rate of death occurred in autumn and the smallest in spring; the difference between them being less than in the other eruptive fever. 12. The average maximum number of deaths in seventeen corresponding weeks of the years 1840-56, was not much more than one and a half that of the minimum. 13. The period of greatest mortality from *diarrhœa* was very definitely marked, occupying a period of about seven weeks (from the thirty-first to the thirty-seventh), during which more than two-fifths of the annual mortality takes place; the greatest rate of death extending from the last weeks of July to the first weeks in September. 14. This period corresponded with a mean weekly temperature of 60°.5 or above.

Editor's Letter Box.

HYDROCELE: EFFUSION OF SERUM INTO THE CELLULAR TISSUE.

Letter from J. G. Davey, M.D.

Sir,—The perusal, in our Journal of June 20th, of the case related by Mr. Walter, of "Hydrocele of the Tunica Vaginalis, with Effusion of Serum into the Cellular Tissue of the Scrotum and Penis" (the latter a consequence of a blow on the distended scrotum), brought to my mind a very interesting example of hydrocele, of an enormous size, which came under my care at Colombo (Ceylon), about eight years since. The patient, a Cingalese, called one morning at the Colombo General Dispensary, when I happened to be present. He exhibited to view a hydrocele hardly smaller than the body of a robust child. It reached far below the knees, its diameter being so great as to interfere very materially with progression. I introduced a trocar and canula, and allowed about a wash-hand basinful of serous fluid to escape. My intention was to remove the whole of the contents of the sac by instalments. I saw the man again after a few days, and repeated the operation. On the next occasion of my being at the Dispensary, I was asked to call on this patient with the hydrocele, as he was unable to leave his room. I found him suffering from a violent inflammation of the scrotum, and of the parts contiguous. The scrotum was greatly swollen; in fact, it had resumed a size hardly if at all less than that it presented on my first seeing the case, *i. e.*, *before* the first introduction of the trocar and canula. It was hot, excessively painful, and every where "hard and indurated". My first impression was, that I had wounded some vessel, and had so converted what had been a simple hydrocele into an affection vastly more formidable, viz., hæmatocele. This proved a mere surmise on my part. Like Mr. Walter, I concluded that, in my case, the serum which had been contained in the cavity of the tunica vaginalis had, from some cause, become infiltrated into the cellular tissue beneath the skin of the scrotum, etc.; and that this infiltration had resulted in a violent inflammatory condition of the parts concerned.

The treatment adopted was not "a free and long incision"; the enormous length and breadth of the diseased mass (scrotum) seemed not to justify this. I preferred to make many and deep punctures, not with a common scalpel, but with a large double edged knife, into the scrotum; and these I repeated on succeeding visits, for some days, or until the very acute character of the local disorder declined. Warm poppy fomentations were used freely, and with much relief to the pain and tension. The febrile symptoms ran high, and were met by appropriate internal remedies, as castor oil, effervescing mixture, and nitrate of potash; to the latter quinine was afterwards added. The good effect of the several means employed became apparent in the gradual decline of the inflammation, as well as in the subsidence of the constitutional (sympathetic) disorder. Subsequently, for the removal of the interstitial deposition, thickening of structure, etc., which were left behind, the tincture of iodine, nitrate of silver, etc., were employed locally, with very satisfactory results; even the hydrocele was cured.

I am disposed to believe that, without the many and deep punctures, not only would the scrotum, in great part, have sloughed away, but that my patient's life would have been greatly endangered.

I have known but of two other cases like the one recorded by Mr. Walter (see British Medical Journal, p. 524), and the preceding, occurring in my own practice; and, unless I am greatly mistaken, both of these terminated in a general sloughing of the scrotum. One patient died.

Like Mr. Walter's case, my own will, I take it, be considered of much interest, not only on account of its complicated nature, but also on account of the speedy and permanent relief which a simple operation afforded.

I should perhaps add, that, when under treatment for the hydrocele and effusion of serum, etc., my patient was attacked with a severe dysentery, which of itself was very nearly proving fatal; it yielded, however, to the free administration of opium with ipecacuanha, to which nitrate of silver was subsequently added.

I am, etc., J. G. Davey.

Northwoods, near Bristol, June 24th, 1857.

THE UNIVERSITY OF ST. ANDREW'S AND ITS MEDICAL DEGREES.

Sir,—May I offer a few comments on a letter from "M.D., St. Andrew's," in your Journal of June 20th?

I agree with him as to the "difference between St. Andrew's now and St. Andrew's fifty years ago", and as to the respectability of its "published examinations"; but it does not necessarily follow that these attest "the respectability and practical value of its degrees." There is, notwithstanding, a something wanting to assure the profession on these points. St. Andrew's seems to differ from the other Scotch Universities, chiefly in making no distinction between Universities and other medical schools. To this we cannot offer much objection, so long as the example of the English and Irish Universities can be pointed to. Indeed, Oxford is now setting to all Universities the bright example of offering a degree in Arts to all who can pass the examination, without regard to the place or the mode of education, not even requiring the candidate to come to Oxford. Here the principle, not merely of a University education, but even of a curriculum, is abandoned; and, so long as the examination is thorough, there is no reason why it should not be so with regard to those departments of knowledge in which

the student requires the help of books only. Were it not that medicine can be studied only in and about hospitals and dissecting rooms, a curriculum might be abandoned here too, leaving the examination as the only and true test. Indeed, it is now so; for compliance with the curriculum does not imply more than payment of the lecturer's fee, and bodily presence at a certain number of his good, bad, or indifferent lectures. The examination being the true test, how are we to know whether it has been thoroughly applied; how, in short, is the profession to have confidence in the degree of this or that University? The publication of the examination *questions*, merely, goes for nothing. It is easy to put grand questions, and as easy to take bad answers. Why do they not publish the *answers* as well as the questions? It is not enough that the famous University of St. Andrew's has awarded the degree. We want to know *who* St. Andrew's is,—with whom the responsibility of awarding the degree rests,—why the names of the examiners are not made public as well as the names of the graduates. No wonder that, as your correspondent says, "it was found necessary for Mr. Ellice to ask Mr. Cowper whether he had asserted that degrees were granted at St. Andrew's without examination." We know that in the other Scotch Universities the professors are always the examiners too; but St. Andrew's has only one medical professor, with whose name the profession is familiar. Why not make known the names of the examiners in the other departments? For the examination papers profess to include anatomy, physiology, materia medica, midwifery, etc., as well as medicine. I saw lately the announcement of the addition of Dr. Gairdner, of Edinburgh, to the Board. If the other members of the examining Board are men of mark, like him, why not publish their names to the profession? It would afford double security in the degree; for the examiners would be held responsible for the character of the degree, and their reputation bound up with it. It would not then be necessary to make a show by the publication of the questions.

I have no wish to cast discredit on the St. Andrew's graduates. On the contrary, they will agree with me that their *Alma mater* does not do them justice in this matter in the eye of the profession. Nor am I one of those who think more or less of a man according to the degree he is decked with, any more than the hat he wears. Yet there are certain shops where one is sure to get a good hat, and others where we are in doubt. No simile, Mr. Editor, will bear to be pushed too far; for a man cannot well do without a hat, but may do very well without a degree! I am, etc., M.R.C.S.

June 29th, 1857.

THE UNIVERSITY OF ST. ANDREW'S AND ITS MEDICAL DEGREES.

Letter from William Webb, M.D.

Sir,—Your very truthful remarks upon the Medical Examinations at St. Andrew's, in the Journal of June 27, were very gratifying to me, as they would be to hundreds of the graduates of that ancient University; and I am sure you will receive, at the hands of those gentlemen, and eventually at the hands of the entire profession of medicine, the most cordial thanks for the zealous and yet impartial manner in which you have advocated the claims of this much-abused University to professional and public confidence. One would have thought, sir, that the well-known and undoubted probity of such men as Day, Anderson, etc., and the very practical manner in which the examinations for the degree of M.D. at St. Andrew's are conducted (as seen by the papers published periodically in the Medical Journals), would have been sufficient to dispel, at least from within our ranks, any notions or opinions (which those persons acquainted with the working of St. Andrew's of old might, with much justice, have formed) as to imperfection and laxity in the test for the degree of Doctor of Medicine. But how frequently do we hear it said by medical men, when speaking of their brethren the St. Andrew's graduates, "Oh! he has a Scotch degree, obtained without examination or without any trial of merit;" meaning to imply, that it is a degree bought with money, and not by the diligent and careful study of disease. But, sir, you have spoken out upon this point from your own personal experience, and hundreds are ready to endorse your testimony, that no man, who is not well and practically informed in his profession, can come forth from the portals of St. Andrew's as a Doctor of Medicine.

You have mentioned that at the next examination a system of competition for honours will be introduced. This is a most desirable addition, and one which the graduates will heartily welcome. But it appears to me, in thus approximating more nearly to the University of London, that the mode of arrangement into two divisions, adopted by this University, of the candidates who have passed (those placed in the first of which only to be allowed to compete for honours), would save the examiners much unnecessary trouble. But all these matters, and any others which have for their object the elevation of our *Alma mater* as a Medical University, may safely be left to the esteemed Chandos Professor of Medicine.

I am, etc. William Webb.

Wirksworth, Derbyshire, July 2nd, 1857.

THE LONDON PHARMACOPŒIA.

Sir,—A young lady lately requested of me a prescription for a troublesome tickling cough. The following is given to her.

℞ Troch. morph. et ipecac. ℥ij. Sumantur viij usque ad xij quotidie, urgente tussi.

To my astonishment, it is returned, the druggist in plea urging that it is not in the *Pharmacopœia*. Thus, while brandy caudle, *aliàs* mistura vini gallici, is directed by the compilers of the London *Pharmacopœia*—a thing which may very well be left to the nurses—the above invaluable troches are excluded. Why? And what am I to do, not knowing of any substitute for them? I am, etc., A Member.

Barnsley, June 29th, 1857.

CLASSIFICATION OF MENTAL DISEASES: CLAIM OF PRIORITY.

Letter from Daniel Noble, M.D.

Dr. Noble presents his compliments to the Editor of the British Medical Journal, and will feel obliged by his publication of the subjoined correspondence.

Manchester, July 4th, 1857.

I. *Letter from Dr. Noble to Dr. C. Lockhart Robertson.*

"Manchester, July 2nd, 1857.

"Dear Sir,—In looking over your Review of the Progress of Psychological Medicine, in the volume just issued of Ranking's *Half-yearly Abstract*, I have noticed that you refer to a classification of cases of insanity in the categories emotional, notional, and intelligential, as one that is offered by Dr. Monro; and that you do not so much as mention myself, its real author. I am the more surprised at this proceeding on your part, as Dr. Monro himself, in the very papers you cite, does me more than justice, not only *adopting* the classification as from myself, but giving to it a measure of commendation which I should not have ventured to claim.

"My division of cases of insanity was instituted to facilitate instructional exposition, and it arose logically out of certain views of cerebral physiology which I had worked out for myself—views which pervade the whole of my *Elements of Psychological Medicine*, an acquaintance with which you evince by having placed it first on the list of works with which your article is headed.

"I cannot doubt that you have acted in this matter simply from want of thought; and I feel confident that, when the error is pointed out, you will be anxious to repair it. Under such circumstances, I must request permission to use whatever answer you make to this communication in any way that I may deem just to myself.

"I am, dear sir, yours very truly,

"Daniel Noble.

"C. Lockhart Robertson, Esq., M.B.Cantab., 1, Charles Street, Berkeley Square, London."

II. *Letter from Dr. C. Lockhart Robertson to Dr. Noble.*

"1, Charles Street, Berkeley Square, July 3rd.

"Dear Sir,—I much regret the apparent omission of your name in my notice of Dr. Monro's paper, of which you complain. Dr. Monro had so fully admitted your claim, that, being engaged simply in a notice of his papers, it did not strike me to state that you were the author of the division of insanity into emotional, notional, and intelligential, as I should otherwise most fully have done.

"I write hastily, amid a press of letters, the day after our annual meeting; but am anxious not to lose a post in assuring you how far it was from my intention to give to Dr. Monro any honour due to you. "I am, dear sir, yours sincerely,

"C. Lockhart Robertson.

"D. Noble, Esq., M.D., Manchester.

III. *Letter from Dr. Noble to Dr. C. Lockhart Robertson.*

"Manchester, July 4th, 1857.

"My dear Sir,—I should have deemed reclamation, probably, to be unnecessary, had your Retrospect been published in the *Asylum Journal*, the periodical in which Dr. Monro's papers appeared. But, you know, it has but a moderate circulation, and this, too, limited very much to a special class of practitioners; whilst Ranking's *Abstract*, as you are aware, is very generally read by the profession at large. And how many persons, in their compilations, will be guided by statements contained in the latter publication, in which you distinctly affirm that the classification in question has been '*offered* by Dr. Monro'?

"I refer to these things simply as showing that the statement was one which I could not, in justice to myself, have done otherwise than notice. But I am bound to thank you for the full, courteous, and gentlemanly acknowledgment which you have made; and am, my dear sir, yours sincerely,

"Daniel Noble.

"C. Lockhart Robertson, Esq., M.B.Cantab."

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, July 3rd.

BOARD OF HEALTH.

Mr. Palk asked the Secretary of State for the Home Department whether it was the intention of the Government to bring in any Bill to remedy the defects proved before a select committee of the present Board of Health? The Bill under which the Board of Health was established was passed in 1848. That measure had been condemned over and over again. It had been submitted to the consideration of committees, and various members of the present Administration had attempted to make such modifications and alterations in its provisions as might lead to its adoption as a permanent measure. Those attempts had failed; and, in the session before last, the House, by a large majority, refused to give the right hon. member for Hertford (Mr. Cowper) permission to introduce a permanent measure which he then proposed. The right hon. gentleman succeeded, however, in obtaining the consent of the House to the continuance of the Act then in force, on the specific pledge that, early this session, a Bill should be brought forward to remedy the defects which were admitted to exist in that Act. They had now arrived at a period of the session when it was very doubtful whether such a measure could be introduced with the slightest chance of its being carried this year. The present state of affairs was fraught with great injustice to the towns and districts now under the Board of Health, because they had spent all the money they were authorised to raise without having completed the necessary works for drainage and other purposes. Another aggrieved class were those who had been waiting, year after year, for the promised measure, in order that they might be enabled to adopt those means for the cleansing of particular towns which were rendered necessary by the increase of the population. The only Bill that had been introduced on this subject was one which the right hon. Home Secretary had been so successful in carrying through a second reading, that he had totally forgotten to explain its nature. That Bill, however, simply rendered permanent all those defects in the existing Act which had been so repeatedly condemned. He wished to ask if the right hon. gentleman would state to the House whether the Government was prepared to carry out the pledge under which they obtained a renewal of this Bill for one year, or whether that pledge was made merely to gain time?

Sir G. Grey said he thought it desirable not to make any statement in anticipation of the discussion which would probably take place at a later period of the evening, when the House went into committee on the General Board of Health Bill; but he might state in reply to the question put to him by the hon. gentleman, that a Bill had been prepared for materially amending the Act of 1848, although he could not admit with the hon. member that that Act was condemned by the select committee.

PETITIONS.

Petitions in favour of Poor-law Medical Reform have been presented from the medical officers of the following unions:—Tynemouth, Havant, Sherborne, Thornbury, Bridge, Oldham, Midhurst, Abingdon, Chippenham, Honiton, Shepton Mallett and Langport, Bolton, Boston, East and West Flagg, Luton, Halstead, Bridgnorth, Croydon, Ticehurst, St. Alban's, Westbury and Whorwelsdown, Uxbridge, Axminster, Atcham, Manchester, Barrow-upon-Soar, Bourne, Towcester, Banbury, Coventry, Williton, Langport, Eastbourne, Swansea, Lutterworth, Wisbech, Daventry, Watford, Great Yarmouth, Liskeard, Totnes, New Alresford, Plomesgate, Barnstaple, Crediton; also from twenty-eight other unions; from the President, Vice-Presidents, and Council of the Royal College of Surgeons of England; the Master and Wardens of the Society of Apothecaries in London; and from the medical students in Leeds; the South-Eastern Branch; the Yorkshire Branch; ratepayers of Walkem Parish; medical officers in Alton; and the medical students of St. George's Hospital.

Petitions for the abolition of the Compulsory Vaccination Act have been presented from Sunderland, Northampton, Cork, Derby, and from Dr. Reed, practitioner of homœopathic medicine; also from Darton, Birthwaite, Dunstable, Liverpool, and Jersey.

A petition has been presented from Dr. Bayard, a French physician, "who, having learned that it is the intention of Parliament to institute an inquiry into the efficacy of vaccination, states that he has had great experience, distrusts and condemns its use, and places his experience at the service of the Committee."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Bletchly. On July 2nd, at 7, Commercial Place, Finsbury Square, the wife of Edward Bletchly, Esq., Surgeon, of a son.

Brown. On July 5th, at 7, Hans Place, Sloane Street, the wife of Charles Gage Brown, M.D., of a daughter.

Pickstock. On July 1st, at Paignton, near Torquay, the wife of G. N. Pickstock, M.D., of a son.

MARRIAGES.

Begley—Malyn. *Begley, W. C., M.D., of Hanwell, to Jane, widow of the late John Malyn, Esq., of James Street, Buckingham Gate, at Wandsworth, on July 4th.

Bengough—Cox. Bengough, the Rev. S. E., B.A., to Julia Mary, youngest daughter of the late J. C. Cox, M.D., of Fishponds, near Bristol, at Bishop's Hull, near Taunton, on July 2nd.

Body—May. Body, Bernard Richard, Esq., of Reading, to Emily, eldest daughter of *George May, Esq., Surgeon, of the same place, on July 7th.

Cumming—Spurgin. Cumming, Henry, Esq., of Exeter, to Sarah Olivia, daughter of John Spurgin, M.D., of Great Cumberland Street, Hyde Park, at St. Mary's, Bryanstone Square, on July 2nd.

Elphick—Wardell. Elphick, William, Esq., Surgeon, to Mary Adamson, youngest daughter of the late Thomas Wardell, Esq., of Poplar, at Poplar, on July 1st.

Foulis—Stevenson. Foulis, Robert, M.D., to Mary, fourth daughter of James Stevenson, Esq., at Edinburgh, on June 30th.

Hanson—Harman. Hanson, the Rev. Stephen, M.A., Senior Fellow of Caius and Gonville College, Cambridge, and rector of Weeting, to Catherine, eldest daughter of E. Beversham Harman, M.D., of Pembridge Place, Bayswater, at St. John's, Notting Hill, on July 1st.

Henly—Finucane. Henly, George A., Esq., of Portsmouth, Purveyor to the Forces, to Lizzie, only daughter of the late Joseph Finucane, M.D., of Kingstown, Dublin, at Monkstown, near Dublin, on July 1st.

Tatham—Dixon. Tatham, Robert G., eldest son of Christopher Tatham, Esq., Surgeon, of Newby Place, to Emma Louisa, second surviving daughter of James Dixon, Esq., of East India Road, at All Saints, Poplar, on July 2nd.

DEATHS.

Bealey, William, M.D., at Bath, aged 76, on June 29th.

Ballingall. On July 3rd, at Bath, aged 63, Lady Ballingall, widow of the late Sir George Ballingall, Professor of Military Surgery in the University of Ediburgh.

Gillies. On June 25th, at Coldstream, Berwickshire, Rebecca Seton, eldest daughter of George Gillies, Esq., Surgeon.

Roper. On July 4th, at Goswell Road, Islington, Elizabeth, wife of Giles Symonds Roper, Esq., Surgeon.

Waudby, Samuel, Esq., Surgeon in the Peninsular and Oriental Company's Service, and late House-Surgeon to the Hereford Infirmary, on board the *Alma*, of intermittent fever, aged 37, on June 15th.

West, George, Esq., Surgeon, of Northampton Place, Hackney Road, at Hastings, aged 55, on June 26th.

*Wickenden, Joseph, Esq., Surgeon, of Birmingham, aged 62, sudden, of apoplexy, on July 5th.

APPOINTMENTS.

Coulson, William, Esq., re-elected a member of the Council of the Royal College of Surgeons of England. The numbers polled were—*Ayes* 37, *Noes* 9.

*Daly, Owen, M.D., Lecturer on the Practice of Medicine in the Hull and East Riding School of Anatomy, appointed Physician to the Hull General Infirmary, on June 26th, in room of *F. R. Horner, M.D., resigned.

Gulliver, George, Esq., re-elected a member of the Council of the Royal College of Surgeons of England. The numbers polled were—*Ayes* 40, *Noes* 6.

Tatum, Thomas, Esq., elected a member of the Council of the Royal College of Surgeons of England, in the room of Robert Keate, Esq. The numbers polled were—*Ayes* 38, *Noes* 8.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 3rd, 1857:—

Beach, Henry John, Cheltenham
Blasson, William, Billingborough
Bury, George, Mitchelstown, co. Cork
Cooper, Thomas James, Canterbury
Evans, Maurice Bibby, Glasgoed, near Oswestry
Lawrence, Arthur Garnous, Carmarthen
Pickford, William Henry, Brighton
Thompson, John, Hull
Watson, William Spencer, Southampton Street, Bloomsbury
Wilkes, George, Stepney Green
Yarde, William, Lamb's Conduit Street

Apothecaries' Hall. Members admitted on Thursday, July 2nd, 1857:—

Craddock, Samuel, Shepton Mallett
Day, William Henry, Stratton, near Swindon, Wilts
Druce, William, Melbourne, Victoria
Fricker, Louis Hugh, Southampton
Jones, Richard, Aber Corris, North Wales
Smith, William John, North Shields

HEALTH OF LONDON:—WEEK ENDING JULY 4TH, 1857.

[*From the Registrar-General's Report.*]

In the week that ended on Saturday (July 4th), the total number of deaths registered in London was 1029. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 980. But as the deaths, now returned, occurred in an increased population, it is necessary, with a view to comparison, to raise the average proportionally to the increase, in which case it will become 1078. The deaths registered last week were therefore less by 49 than the average rate of mortality at the beginning of July would have produced.

The deaths arising from zymotic diseases exhibit an increase, chiefly in consequence of increased prevalence of diarrhœa. The deaths from this complaint rose from 33 in the previous week to 65 last week. Of these 65, there were 56 amongst young children, a very large proportion of the cases being amongst children less than a year old. About a third part of the whole number of deaths from diarrhœa occurred in the east districts, though the population of that division is to that of London only in the proportion of about one to five. It is also to be remarked that more deaths from each of the five zymotic diseases—measles, scarlatina, hooping-cough, diarrhœa, and typhus—were returned last week in the east districts, than in any other of the five groups of districts into which London is divided. The number of deaths caused by summer cholera in all the metropolitan districts was five, of which four occurred to infants. The remaining case was that of a coachman, who was attacked on the night of Saturday, after exposure to the great heat of that day, and died after four days illness.

Last week the births of 826 boys and 778 girls, in all 1604 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1422.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·678 in. The mean temperature of the week was 62·4°, which is 1° higher than the average of the same week in 43 years. On Sunday (the 28th ult.), the mean temperature was 73·7°, which is 12·4° above the average; and the highest temperature of that day in the shade was 92·7°, and in the sun 119°. The lowest temperature in the week was 52°, on Friday; and the range of the week was therefore 40·7°. After Sunday, the temperature declined constantly till Friday; and on the last four days the mean daily temperature was below the average. The mean temperature of the water of the Thames was 68·5°. The highest temperature of the river was 72·4°, on Sunday. The wind blew generally from the south-west. The temperature in the shade on Sunday rose to a point higher than any since the 6th July, 1846.

In the last Quarter (which ended 27th June), the deaths in London were 13,252. The rate of mortality was remarkably low; for in the corresponding quarters of the four years 1853-56, when the population was less, the deaths ranged from 14,069 to 15,055. The decrease is most considerable in the deaths from diseases of the zymotic class, which in the spring quarter of 1854 were fatal in 3,686 cases, and in the same months of this year in 2,413 cases, though hooping-cough has lately been extensively fatal to children, and deaths from measles have also been rather numerous. A very striking decrease is perceived in small-pox, which averaged only two deaths a week; also in scarlatina and typhus. Fewer persons than usual died from apoplexy and paralysis, and fewer children from "convulsions". Pneumonia declined; and phthisis, which destroys more lives than any other disease in the catalogue, appears to have reduced its operations within narrower limits. There is also a decrease under rheumatism. Thirty-one persons died from intemperance, which is considerably more than in any of the four corresponding quarters.

Testimonial to Professor Sands Cox. A short time since a numerous meeting of ladies, by permission, was held in the Committee-room of the Queen's Hospital, for the purpose of expressing their sense of Mr. Sands Cox's private worth and public services. Mrs. T. B. Upfill was called to the Chair. It was proposed by Mrs. Colonel Edwards, and seconded by Mrs. W. Norton, "That a subscription be opened to present Mr. Sands Cox with a token of their personal regard, their sense of his private worth, and their estimation of his public services." Mrs. Morris Banks kindly undertook the office of Honorary Secretary, and the list was headed by the Lady Charlotte Law, the Lady Mayoress, and other influential ladies. A handsome sum has been subscribed, and the Committee of Management have purchased an approprite testimonial—viz., an elegant escritoire, of beautiful walnut wood, with chaste silver fittings, and a costly achromatic microscope. A plate at the foot of the instrument bears the following inscription:—

"*Ladies Testimonial.* Presented to William Sands Cox, Esq., F.R.S., the founder of the Queen's College and the Queen's Hospital, at Birmingham, in token of their regard for his private worth, and public services. July 1st, 1857."

This truly graceful tribute of respect is accompanied with an address written on vellum, and inscribed with the names of the subscribers. The subscription to the general testimonial now exceeds £1200 in amount. (*Birmingham Paper.*)

Royal Humane Society. At the half-yearly meeting of this Society, held on Wednesday last, one of the honorary silver medals was awarded to Mr. Erasmus Wilson, for saving the life of a woman aged 60, who attempted to drown herself in the Regent's Canal on April 22nd last.

POOR-LAW MEDICAL RELIEF.

Mr. Griffin has addressed the following letter to the Poor-Law Board:—

"12, Royal Terrace, Weymouth, June 29th, 1857.

"MY LORDS AND GENTLEMEN,—As one of your medical officers, I shall feel obliged by your informing me if '*the lame, impotent, old, blind, and such other among them being poor and not able to work,*' are the only persons I am, by virtue of my office, bound to attend; and what course I am to pursue when the relieving officer sends me orders to attend persons not coming under the class above named. I need scarcely remind your honourable Board that your reply is one of vital importance, not only to your medical officers, but to about four millions of the labouring classes, who for a long time past have been attended by orders from the relieving officers.

"The majority of the Union patients I now attend are the wives and children of men in employment, and even men themselves who are in the receipt of wages up to the hour of sickness, and one at this very time actually has ten shillings a week from a club during his illness.

"In the *Justice of the Peace* for June 27th is a leading article on 'Medical Relief to the Poor, and the Poor-law Medical Officers'. In one part of the article is the following:—

"'Perhaps much of the grievances of which the medical officers complain is caused by the too great facility which is afforded to the labouring classes generally to obtain medical aid at the cost of the poor-rates when they, or any members of their families, are sick. Generally speaking, this species of parochial relief is not looked upon by the poor in the same light as direct eleemosynary relief; and, on the other hand, the guardians and their officers, as it is to cost nothing to the parish beyond the salary of the medical officer, too readily grant medical orders. It may be urged that they do so to prevent the whole family becoming paupers by the death of the head of the family; but we think that this is a very short-sighted view of the question. In no case can the poor-rates be lawfully applied by the guardians to prevent a person becoming destitute. It is only when he is actually destitute—that is, destitute of the means of obtaining from his own resources that which he applies to the guardians to be supplied with at the cost of the ratepayers—that he can be relieved; and the principle is the same, whether the application be for medical or any other kind of relief. In either case, the sole question for the consideration of the guardians is the fact of the then destitution of the applicant, and not the likelihood of his becoming destitute if that for which he applies be withheld. Unless the poor—and by that term we mean, not those only who are usually reckoned paupers, but the labourers generally—are made to rely upon their own resources in sickness as well as in health, it is in vain to look for a continuance of the diminished pauperism of the country.

"'In the petition of the Poor-law medical officers, the fifth resolution is, 'That the class of persons entitled to medical relief be defined, and not left to the discretion or caprice of relieving officers.' This, however, we have already disposed of, by showing what class of persons only are entitled to medical relief, namely, the *really destitute poor;* and we do not understand in what way they could be more clearly defined. Perhaps the legislature will be asked to define more particularly than it has already done the class of persons entitled to ordinary relief from the poor-rates—'*the lame, impotent, old, blind, and such other amongst them being poor and not able to work,*' appears to us to be a tolerably clear definition; *and none other are entitled to medical relief at the cost of the poor-rates.*"

"The foregoing quotation, coming as it does from a periodical edited by three barristers-at-law (one of them, W. C. Glen, Esq., well known in connexion with Poor-law), is entitled to grave consideration. That it will have due weight with your honourable Board in giving your decision, I have little doubt. Your medical officers cannot go on attending the labouring classes indiscriminately, as they have hitherto done, unless they are legally bound to do so, or their salaries are increased in the same ratio as their labour.

"I have the honour to be, my lords and gentlemen,

"Your obedient servant, "RICHARD GRIFFIN.

"The Poor-law Board."

KING'S COLLEGE HOSPITAL. A meeting was held on Friday, July 3, in the board-room of the hospital, attended by Earl Howe, Sir Thomas Phillips, and several of the leading members of the council, for the purpose of presenting a testimonial to Mr. J. W. Cunningham, the secretary of the college, who has rendered most important honorary services in the foundation and building of that part of the hospital which at present exists. The testimonial, consisting of Mr. Cunningham's portrait by Richmond, and two handsome silver salvers, was presented by Sir Thomas Phillips, and appropriately acknowledged.

TESTIMONIAL TO A. EMSON, ESQ. At the recent festival of the Dorchester Tradesmen's Benefit Society, a piece of plate was presented to Alfred Emson, Esq., the surgeon of the club, in acknowledgment of the kindness and attention the members had experienced at his hands during the many years he had been their medical adviser. The testimonial consisted of a chaste silver inkstand, including two beautifully cut bottles with silver tops, and bore the following inscription:—"Presented to A. Emson, Esq., by the Members of the Dorchester Tradesmen's Benefit Society, as a mark of respect for his attention as their Surgeon. June 29, 1857." Mr. Emson made a feeling response to the kindness which had thus been shown to him; and the remainder of the evening was spent in a most convivial and pleasant manner.

TESTIMONIAL TO FERGUSON BRANSON, M.D. A handsome silver inkstand was on Thursday, July 2nd, presented to Dr. Branson, of Baslow, on his retirement from practice in Sheffield, by some of his medical brethren in that town, to testify their high estimation of his character, and sincere regret at his departure from amongst them.

TO CORRESPONDENTS.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

A POOR-LAW MEDICAL OFFICER. Your letter on the Single Qualification has been received, but you have not communicated to the Editor your name and address.

MR. A. KEMPE is referred to the JOURNAL for June 27.

Communications have been received from:—DR. G. G. ROGERS; MR. W. I. COX; DR. H. H. VERNON; DR. H. COLLET; DR. H. HANCOX; DR. M. DAVIS; DR. COCKLE; M.R.C.S.; DR. J. G. DAVEY; THE EDITOR OF THE QUARTERLY JOURNAL OF DENTAL SCIENCE; DR. J. M. COLEY; A MEMBER; DR. D. NOBLE; MR. J. A. LOCKING; MR. RICHARD GRIFFIN; MR. H. TERRY, JUN.; DR. W. WEBB; MR. GEORGE MAY, JUN.; DR. KINGSLEY; MR. SOLOMON; MR. A. KEMPE; MR. W. F. FAVELL; MR. S. BERRY; J. R.; and MR. O. PEMBERTON.

ADVERTISEMENTS.

Metropolitan Counties Branch of THE BRITISH MEDICAL ASSOCIATION.—The Fifth Annual General Meeting of this Branch will be held at 37, Soho Square, on Tuesday, July 14th, at 3 P.M.

The Members and their Friends will dine together at the Freemasons' Tavern, Great Queen Street, at Six o'Clock. Tickets for the Dinner, including Dessert and Tea and Coffee, 10s. 6d.

June 25, 1857. T. OGIER WARD, M.D., Hon. Sec.

Plates, cloth, 8vo, 10s.

Stricture of the Urethra, its Pathology AND TREATMENT. By HENRY THOMPSON, F.R.C.S., M.B., Surgeon to the Marylebone Infirmary, etc.

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"Dr. Williams has here given a very pleasantly written and interesting book. He makes out a good case for Aspley Guise as a residence for invalids, and shows that England has in herself the advantages which sick tourists seek abroad."—*Journal of Public Health.*

London: THOMAS RICHARDS, 37, Great Queen Street.

Price 3s. Annual Subscription, 10s. No. X, for JULY 1857.

The Sanitary Review. Edited by

Dr. RICHARDSON. This Number contains the following Articles:—Sweating Sickness in England. By F. C. Webb, M.D.—Diseased Food and Disease.—Epitome of Sanitary Literature.—Hygiene of the Turkish Army. By J. N. Radcliffe, Esq.—Sanitary Legislation the First Duty of a Government. By B. Daniel, Esq.—Nursery Government in its Sanitary Aspects. By T. H. Barker, M.D.—Sanitary State of Huddersfield. By S. Knaggs, Esq.—Progress of Epidemics in England, communicated by Forty Observers.—Sanitary Legislation.—Transactions of the Epidemiological Society.

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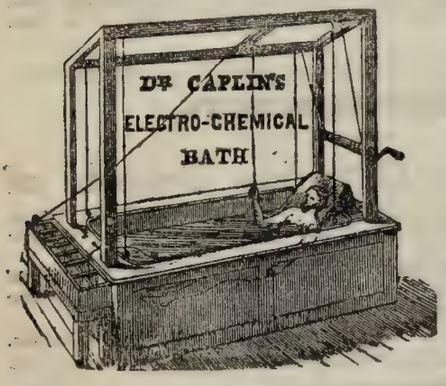
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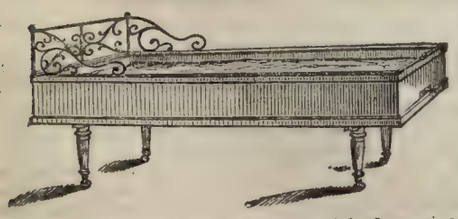
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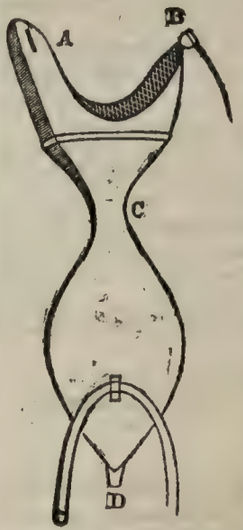
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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WESTMINSTER HOSPITAL.

TWO CASES OF EXCISION OF THE KNEE-JOINT.

Under the care of B. HOLT, Esq.

[*Reported by* G. NAYLER, Esq., *House-Surgeon.*]

CASE I. M. K., aged 23, a strumous looking young woman, and very anæmic, was admitted under Mr. Holt on March 17th, with the following symptoms. The left knee was inclined at almost a right angle; great effusion had taken place into and around the joint; and fluctuation could be detected in every part. The limb was inclined somewhat inwards; extension or flexion could only be performed in a very slight degree; the skin was not at all discoloured; but there was great tenderness on pressure. In other respects, her health was pretty good. The disease had commenced thirteen weeks prior to her admission; and, according to her statement, had originated from a fall. Three days before she came into the Hospital, she walked two or three miles; and this exercise was followed by so great an increase of the swelling and pain in the knee, that she could scarcely put her foot to the ground. By the aid of fomentations and perfect rest the swelling was subdued. After this, recourse was had to blisters and cupping; and these in their turn yielded to Scott's bandage, but with no appreciable benefit. As constant pain was felt in the joint, and the symptoms did not yield to treatment, and moreover, as the patient was gradually losing flesh, Mr. Holt decided upon excising the joint, which was done as follows on June 23rd.

Chloroform being inhaled, the thigh was transfixed about two inches above the condyles of the femur, and a flap incision made by carrying the knife downwards, and then below the patella about an inch and a half beyond the lower border of this bone. On raising the flap upwards, and exposing the joint, the synovial membrane, especially where it surrounded the patella, was found to be of a dark red colour, pulpy, and thickened; and the cartilages had undergone slight ulceration. Some pus escaped when the joint was opened, and this was afterwards found to proceed from a small abscess at the back of the internal condyle of the femur. In consequence of the contracted state of the knee, two or three thin slices had to be removed from the bones before the limb could be brought into the straight position. The lower or transverse part of the flaps retaining the patella was then brought together by sutures, leaving the lateral portions free. To support the joint, a ham-splint was applied, and secured above and below the knee by a bandage. A piece of wet lint was all that was then applied to the wound, and the patient was sent back to the ward.

Shortly after her removal to bed, chloroform was again given, and the limb placed in a splint similar to that employed in operations of this kind by Mr. Fergusson of King's College. It consists of a wide concave iron plate for the thigh, and one also for the leg: the two are united by an intervening portion adapted to the back of the knee, which is exceedingly narrow, scarcely exceeding half an inch in width. There is a long outside splint interrupted at the knee, the deficiency being supplied by a connecting iron bar, and this can be hooked on to the main apparatus. The other appendages are a perineal bandage, pads corresponding to the splint, and a foot-piece. The foot being firmly bandaged, perfect coaptation of the bones was readily accomplished by introducing two fingers into the lateral parts of the wound, which had been purposely left open for this object; and to prevent any tendency of the femur to rise, a splint was applied on its anterior surface. Extension was then kept up by the outside splint and the ordinary perinæal band.

Pain was relieved by opiates; and as she was very low and had a frequent weak pulse, brandy was given freely. During the two following days, the pulse was 140, and very weak. She was also troubled with constant vomiting, which was allayed by small doses of hydrocyanic acid, with an alkali.

June 26th. She was much better, the bowels had acted freely, and she complained of no pain.

June 27th. Suppuration had commenced at the sides of the wound; the transverse part having in a great measure united by the first intention.

June 29th. She was ordered a mutton chop, eggs, and a pint of porter. From this date, she steadily improved. Every fourth day the splint was removed for a few minutes, to alter it and apply clean pads.

July 10th. The limb was in an excellent position, and the same treatment was then being continued—the patient appearing to be satisfactorily recovering.

CASE II. The next case is that of a little boy, 3 years of age, who came into the Hospital on April 8th, with disease of the knee-joint, which was bent beyond a right angle, and much swollen. There were several abscesses in the neighbourhood, which discharged pus freely. The slightest pressure or attempt at motion caused great pain. He was kept quiet in bed, the limb being retained in a splint, with poultices or warm water dressing to the abscesses. Cod-liver oil and steel wine, with nourishing diet and port wine, were given, the bowels being kept in healthy action by occasional doses of grey powder. It was hoped that the disease would yield to this treatment; but, after more than two months trial, as the pain increased in the joint, and he began to show signs of great debility, it was decided, after careful examination (which revealed the existence of diseased bone at the bottom of one or more of the abscesses), that the knee should be resected.

The same operation was performed as in the previous case, and a similar apparatus afterwards employed. A large cradle was placed over the lad's lower extremities, and from it the limb was slung.

July 1st. He was restless, and complained of much pain in the limb, and was unwilling to take his food. The wound looked healthy on the 2nd; and, a day or two later, the dressings were removed for the first time, when the parts all appeared healing favourably.

REMARKS. The details of the after-treatment have been thus dwelt upon by Mr. Nayler, because, as he very properly remarks, "they play a most important part in the subsequent progress of the case. The disease had resisted all methods of treatment; and the question remained, whether amputation or resection should be had recourse to. Although the resection of joints is a comparatively new operation, and attended with considerable danger, yet, when it is considered that the mortality from amputation is not less than one in four, whilst from excision it scarcely exceeds one in seven, the latter is surely entitled to a preference. In the above mentioned cases, the patients' ages and the comparatively healthy condition of the limbs, offered a favourable prospect of success. The shock to the system is unquestionably milder, and the loss of blood far less than in amputation; added to which, the danger of pyæmia is more remote; and it will probably be admitted that a limb, although anchylosed, is far more useful than any that art can supply."

UNIVERSITY COLLEGE HOSPITAL:

DISEASE OF ELBOW-JOINT: EXCISION.

Under the care of J. E. ERICHSEN, Esq.

R. Y., aged 39, a cotton-spinner, was admitted, under Mr. Erichsen, on June 25th. For the last two years he had lived in London, and previously in Manchester, where his general health had been very good.

About three years ago, whilst at work, he knocked his elbow violently against a "frame". Two days later, he went to a surgeon, who satisfied himself that there was no fracture, and prescribed a liniment, after using which the patient got better, and felt no inconvenience for a twelvemonth, except occasional weakness of the joint. After this date, the loss of power became more constant; but there was no swelling, and all the movements of the elbow were performed with ease, except that he could not thoroughly extend the arm. Four months before his admission, he noticed a swelling at the posterior and outer side of the joint, which was red and painful; and, as it rapidly increased, a surgeon was called in, who lanced it, and let out a considerable quantity of pus; and ordered poultices to be afterwards applied. At this time the man was working in a brewery, and continued to do so after the operation. The discharge gradually decreased, and he discontinued his attendance at the Bloomsbury Dispensary, of which he had become a patient. About six weeks later, the swelling around the elbow reappeared, and he applied again at the Dispensary, where he was advised to endeavour to obtain admission at University College Hospital.

On the first examination of the limb, the difference in size between it and the sound one was seven inches: the diseased joint measured thirteen inches round, the opposite elbow only six. All the inequalities about the joint were obliterated: on the outer side was the incision made by the lancet, but no discharge from it. A probe being passed down, denuded bone could be felt. All the movements of the joint were perfect, except extension, which was only partially performed.

The arm was placed in a sling; a leathern splint was applied along the inner side; and a poultice laid over the elbow-joint. Quinine and acid mixture was given three times a day.

July 2nd. He felt much better, relished his food, and slept well. A slight attack of diarrhœa set in, which was speedily checked.

July 4th. There was more pain in the joint, but it appeared less red, and measured three-quarters of an inch less than on admission. Indistinct fluctuation could be felt over the external condyle, which became, however, quite apparent two days later, when Mr. Erichsen incised the swelling. Here, also, dead bone was detected. Although two explorations with the probe had discovered this state of things, there was no positive evidence that the joint was affected, no grating or preternatural mobility. Mr. Erichsen therefore thought it advisable to endeavour, by an exploratory operation, to remove the dead portions of bone without excising the joint. The patient was accordingly placed under the influence of chloroform on the 8th, and a T-shaped incision made in the usual manner. It was then found that the joint was involved to such an extent as to render excision necessary. Accordingly, the lower end of the humerus, the head of the radius, and the whole of the articular surface of the ulna, were removed. The articular surface of the humerus was partially deprived of cartilage, cicatrised tissue taking its place. The outer condyle was also carious, and covered with fungoid granulations. The articular surface of the ulna, especially the olecranon, was extensively denuded of cartilage, and very vascular. The head of the radius was not deprived of its cartilaginous covering, but there was a carious spot on its side. The patient, after an opiate, passed a tolerably good night. The arm was placed on a straight splint, which was kept on until the evening of the 9th. When it was removed, the wound was found to be discharging healthy pus; and the man has, up to the present date, progressed satisfactorily.

ST. GEORGE'S HOSPITAL.

I. DISEASE OF KNEE-JOINT: AMPUTATION: DEATH: HYDATID CYSTS IN LIVER.

Under the care of Cæsar Hawkins, Esq.

[*From Notes supplied by* Edgcumbe Venning, Esq., *Clinical Clerk.*]

W. P., aged 38, was admitted on April 20th with great pain and swelling of the right knee. The pain was first experienced fourteen months ago, and came on quite independently of any injury or over exertion. It was continuous, and accompanied by very gradually increasing size of the joint. The man was in a provincial Hospital for nearly three months, but obtained no benefit; and the pain becoming more severe, and symptoms of hectic presenting themselves, he applied for admission at St. George's. Within a few days of his coming under treatment there were signs of the rapid formation of pus in the joint, and a prominent swelling was observed below the patella. This was opened on May 25th, and blood, with a small quantity of pus and synovial fluid, escaped. Great relief was afforded by the incision, and up to June 1st he was comparatively easy. The discharge from the wound was very scanty, and the swelling around the patella did not subside. He had all along complained of slight cough, with thin colourless expectoration, and once spat up a little blood. During the afternoon of the 15th the pain in the knee became worse than he had ever felt it before, and the thigh swelled to some extent. This increase of pain prevented him from procuring any sleep, and his appearance was indicative of great exhaustion. The thigh was amputated on the 25th, about six inches above the knee. During the operation a quantity of thin fluid escaped from the abscess, some communication extending from the joint to this distance up the thigh. The articulating surfaces were found denuded, and the cartilages were ulcerated, and in some places disorganised. In the afternoon he complained of great pain in the stump, and was very feverish next day. On the 28th he had a decided rigor about 5 A.M., followed by profuse perspiration. The bowels were somewhat relaxed; the tongue dry and coated with dark fur; the pulse 122, and weak.

Slight discharge flowed from the stump on the 29th. At 3 P.M. of the same day he was seized with severe præcordial and epigastric pain, and at 7 P.M. very severe rigors set in, lasting more than half an hour. He was then free until the morning of the 30th, but could not procure any sleep. The rigors returned at 10 A.M., and were accompanied by dyspnœa and much flatus. There was no especial tenderness on pressure over the hepatic region. The discharge from the stump was scanty, dark coloured, and very offensive. The attacks of shivering returned at irregular intervals during the 1st and 2nd of July, and he also suffered much from dyspnœa and inability to expectorate freely. He was propped up by stimulants and nutritive diet, but only lived until the evening of the 4th.

The body was examined forty hours after death. Old adhesions were found in both pleural cavities, and scattered tubercles in both lungs. A considerable amount of serum existed in the abdomen, and the intestines, especially in the hypogastric region, were smeared with recent lymph. There was an abscess between the liver and diaphragm, which was connected with a large hydatid cyst, situated at the upper border of the right lobe of the liver, and containing several hydatids. At the lower margin of the right lobe was a very large cyst, full of hydatids and straw-coloured fluid. There was also a small cyst formed chiefly at the expense of the left lobe. All the cysts contained hydatids, from the size of a pea to that of a large orange. The entire weight of the liver was six pounds. The kidneys were somewhat coarse as to texture. In other respects the abdominal viscera were natural. Pus was found extending for six or seven inches up the femoral vein, and a slightly adherent blood clot had formed in the vessel on a level with Poupart's ligament. The other veins were not examined.

II. DISEASE OF KNEE-JOINT: AMPUTATION: RECOVERY.

Under the care of C. Hawkins, Esq.

R. W., aged 27, was admitted under Mr. Hawkins with long-standing inflammation of the knee-joint, for which he had been under treatment more than a twelvemonth. For two years there had been loss of motion in the joint, and at times there was severe pain. The whole limb was placed on a straight splint for some weeks, and repeated blisters were applied; but the effusion appearing to increase, a puncture was made over the external condyle, and a little pus let out. This was followed by the formation of a considerable abscess over the head of the fibula, accompanied with severe rigors. There was also much swelling and puffiness below the patella towards the outer side of the leg. As the long-continued discharge from the abscess before mentioned weakened him, it was thought better to amputate the limb, and the operation was performed about the middle of April, more than three months from the date of his admission. The joint was found full of foul matter; the patella, femur, and tibia were anchylosed by bone, and the cartilages nearly destroyed. In the head of the tibia was a cavity more than an inch in depth, containing a loose piece of dead bone. The cavity communicated with the joint, and with a recently formed abscess in the popliteal space. After the chloroform he was troubled with vomiting, but to no very great extent. He went on well, but was troubled with profuse perspirations, which were ultimately checked by bark and acid. The discharge from the stump was of a very offensive character

for about a fortnight; but as his health improved a more healthy secretion was established, and he was discharged perfectly cured on May 27th.

III. ACUTE RENAL DROPSY: DIURESIS.

Under the care of W. E. Page, M.D.

J. H., a painter, sixty years of age, caught a severe chill two months before coming to the hospital, which was followed by œdema of the ankles every evening, and puffiness of the eyelids and face coming on during the night. Gradually he had become anasarcous, and on admission last October he presented all the signs of a patient suffering from renal dropsy. There was great pain in the loins, frequent sickness, with thirst and headache. The urine was scanty, smoky, and albuminous. Increased pyrexia, with nephritic symptoms, manifesting themselves, a few days later he was bled from the arm, and free purgation with compound jalap powder was prescribed; he also took chimaphila with nitric ether and ammonia. This severe headache and pain in the loins lasted nearly a fortnight. On making another examination of the urine at this time, the specific gravity was 1008, but not a trace of albumen could be found. Acute dropsical symptoms again appeared, and he was bled once more: urea was found in the blood, which was sizy.

On the 3rd of November the dropsy had decreased; the urine contained a few blood and pus corpuscles. He complained of much throbbing pain in the forehead, for which the bleeding was repeated twice in the course of the following week. After the second venesection, the urine increased in quantity, and crystals of triple phosphate were detected in it: the headache left him until tepid baths were employed, and it then returned in an aggravated form *pro tem.*, but the profuse perspiration following the bath relieved both the head and the lumbar pains. Early in December he had a smart attack of cellular inflammation, confined to the left side of the neck, and which caused considerable dysphagia. At this date plenty of lithic acid crystals were found in the urine, and there was an appearance of a small quantity of albumen. This had vanished by the middle of January; but the lithic acid crystals persisted, and sporules and thalli of the *penicilium glaucum* were found in abundance. He now frequently passed as much as nine or ten pints of urine in the twenty-four hours, and on the 18th of February it was slightly clouded by heat and nitric acid. The lumbar pain was chiefly confined to the left side, but no enlargement or swelling could be detected. There was never any trace of sugar in the urine, and its specific gravity never exceeded 1014. It was in March alkaline, highly ammoniacal, and contained triple phosphate crystals and bladder epithelium.

On February 18th, he commenced taking the nitro-hydrochloric acid, with chimaphila, three times a day; and this he continued with very good effect up to the time of his leaving the hospital. Notwithstanding the drain from the kidneys, he gained slowly in weight. The pain in the left loin shifted to the iliac region, and was sometimes of a very dragging character. Over the right kidney there was considerable tenderness. The pain in the head quite left him by the end of March, although he was often annoyed by muscæ volitantes. Having improved so much, he was allowed to leave on the 8th April, and he has gone on well since, and is now able to do a day's work.

Remarks. This case appears to afford an instance of spontaneous relief to dropsy by the kidneys, when diaphoresis failed. No diuretic remedies were tried; but as the system derived strength and tone from the mineral acid, the renal organs appeared to take on a vigorous action, seemingly injurious, but which must have been an effort of nature to get rid, through this channel, of a vast amount of noxious material which had been lying in the system, keeping up all the cerebral and other symptoms of disordered functions. Skin-action by baths seemed, as above mentioned, to increase the patient's discomfort; and it was not until diuresis was set up that any marked amelioration occurred. The case, to many who witnessed it, seemed anything but a hopeful one, and with the long continued and oft returning acute symptoms, it is wonderful that so good a recovery should have been effected. Altogether it is one of the most satisfactory instances of restoration to health the medical wards have furnished for some time.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

SYMBLEPHARON, OR ADHESION OF THE EYELID TO THE EYEBALL.

Under the care of Haynes Walton, Esq.

It may be well to premise that any mechanical or chemical injury to the conjunctiva, causing loss of substance by slough or ulceration, is followed by contraction, which unites the lid to the globe of the eye, destroying more or less the movements of the organ; the usual, indeed the almost universal condition being, complete and close connection of the parts by a dense cicatrix. Mr. Walton has met with an exception at the hospital, the first of the kind that he has seen; namely, the bridle union or adhesion, by which is meant, an isolated, or isthmus-like, band of connexion between the lid and the eyeball, around which a probe may be passed.

A young man was using melted lead, and accidentally got his face spattered with the molten metal, the left eyelid slightly participating in the injury. A severe attack of erysipelas ensued, and when the severity of the attack had passed away, the injury to the conjunctiva was discovered. It is now a year since the occurrence. The bridle was between the margin of the lower eyelid, just external to the punctum, and the ocular conjunctiva, about a line in length, and, to all appearance, consisting of conjunctiva. At first sight it seemed more extensive than it afterwards proved to be. A slight examination gave a pretty clear indication of its nature, and the ready passage of a probe below it fully confirmed its isolation. The patient applied because of the tethered sensation of the eye and the deformity, which was very apparent, the lid being drawn up. The slight operation required for the relief, we may here correctly say the cure, was quicker done than told. A snip with a pair of scissors across the centre of the band was sufficient. No precaution was taken, and the result showed that none was necessary, as the individual surfaces healed kindly, and the lid righted itself; but very little trace of the abnormal state remains.

Mr. Walton pointed out that this case was valuable in itself as demonstrating a practical fact; but its importance bore also on symblepharon in general, and established the distinction between instances in which operative treatment might be undertaken with almost certain success, and those in which there was but very slight prospect of any improvement: for example, where the adhesion is very extensive, and where, too, although this be slight, the proper tissue of the conjunctiva has been destroyed and bands of lymph form the connexion.

We have seen several unsuccessful operations on the latter by different surgeons, and many appliances used to separate the divided edges. On this point Mr. Walton holds that failure, or the return of the agglutination, is not, according to his observation, due to the adhesion of the opposed surfaces, which he believes to be a very exceptional occurrence; the divided parts come together by means of the contraction of the granulations through which they are healed, just as happens in other parts of the body when cicatrices from burns are removed. Several times, under what appeared to be most favourable circumstances, he has removed the cicatrices, and dissected off the bands and bridles; but the contraction has returned to the same or even to a greater extent: indeed, in two instances only has he obtained a good result. In the first he was partially successful; the band which tied the centre of the eyelid to the globe encroached a little on the cornea, and was narrow, soft, and loose: he merely divided it twice, and each time it returned to its former state. He then removed a small central portion of what appeared to be the cicatrix of the band, and brought the edges of the divided conjunctiva, on the lid and on the globe, severally together by sutures; the result was very gratifying. The last time he saw the patient, several months after the operation, there was but a slight contraction at the lower part of the interior of the lid,—a spot where there would probably be a certain amount of puckering in most of these cases under any plan of treatment. The globe of the eye was no longer unnaturally covered by the lid, and the feelings of restraint to its movements were lost.

There can be little doubt that the symblepharon in the recent case was produced by the inosculation of the granulating surfaces; for how else could it occur, and leave the reflection of the conjunctiva between the eyelid and the eyeball free?

Symblepharon of the upper eyelid is rarer than of the lower, and is not generally so inconvenient. An example has recently been under observation at the Hospital, associated with a remarkable pathological state. The subject of it was a male, 58

years old. The angle of the lid, just where the punctum is situated, was closely adherent to the eyeball by a very red and thick band. Nearly the upper half of the cornea was covered by a membrane resembling an ordinary pterygium, but rather redder. As with pterygia in general, it was continuous with, and seemed to grow from, the ocular conjunctiva. The pupil was partly covered by it. The history was different from that of the other case, there having been none of the injuries from which symblepharon usually springs. A purulent ophthalmia, contracted several months past, would seem to have been the exciting cause. But it is not unreasonable to infer that the treatment might have, from its severity, contributed to the effect, when we learn that solid nitrate of silver and other escharotics had been applied to the conjunctiva several times a week for months—a practice unfortunately common, and which Mr. Walton strives hard to diminish, as he never loses an opportunity of pointing out the impropriety of such measures. Whether, therefore, the adhesion had been from the cicatrix consequent on the destruction of conjunctiva, or whether from the inosculation of granulating surfaces, cannot positively be determined. It was resolved to attempt to check the growth on the cornea (for a slight extension of it would render the eye useless) by cutting off the vascular supply, as in the operation for pterygium; namely, dissecting away a strip from the sclerotica, and, for the present at least, not attending to the symblepharon. The upper eyelid was therefore raised to the extent that its adhesion would admit, and the operation commenced. Not till then was it discovered that the body was a soft and pulpy mass, through which the forceps readily tore: it was separated from the sclerotica with the handle of the scalpel, and trimmed off with a pair of scissors. The portion attached to the cornea was not readily raised, and Mr. Walton determined not to interfere with it, but to watch the result. This new material resembled soft, flabby, and unhealthy granulations. This false membrane, if we may so call it, was continuous with the outer edge of the band that connected the lid and the eyeball, and from which it was readily torn.

We saw the patient a week after he had been submitted to treatment. The beneficial effect was marked. The texture of the cornea was visible, red vessels having taken the place of the pulpy mass. The reason why dissection was continued to this part is because opacity of the cornea is almost sure to follow; whereas, if left to itself, the process of absorption gives a better result. The man was advised to go home to the country, and return in a month.

Original Communications.

CONTRIBUTIONS TO THE PATHOLOGY OF INTRATHORACIC CANCER.

By John Cockle, M.D., Physician to the City Dispensary and to the Margaret Street Dispensary for Consumption, etc.

[*Continued from page* 232.]

In some preceding papers I attempted to point out the occasional difficulty, in cases of intrathoracic cancer, of arriving at a satisfactory diagnosis either from the subjective phenomena, or from the application of those physical methods of exploration so valuable in most intrathoracic maladies. It is therefore, clinically, of the greatest importance to avail ourselves of any additional sign which may throw light upon affections so avowedly obscure and defiant of our usual resources. Upon reference to the last paper published in this Journal, March 21, 1857, it will be seen that the appearance of external tumour most materially contributed to a successful diagnosis—a diagnosis amply justified by the autopsy. I have now to detail another case in which such tumour at once enabled the diagnosis to be formed; the phenomena observed prior to its advent having been ill-defined in the highest degree.

The case was watched almost throughout by Dr. Elliotson, who has kindly placed the following history, with the preparation, at my disposal. For the description of the latter, and the general remarks, I must be considered responsible.

"In the middle of January last, a medical friend of mine took into his service, as butler, a young man three and twenty years of age, who represented himself as a few years older, was pale, but active, and made no complaint. In the beginning of February, my friend observed him to pant without exertion, to grow paler, and to have a little œdema of the eyelids. In the middle of February, the young man complained, and his pulse was found to be 90; in a week it rose to 100; and it never became slower than this. At the end of the month, it was 120, and he had grown weaker, thinner, and paler, and become deaf. He was sent to me on the 4th of March. In addition to the other symptoms, he complained of pain in the loins, so great as to prevent sleep; and sometimes of pain at the occiput, and between the scapulæ, and sometimes in front, and sometimes at the side on which he happened to be lying: he had also vertigo. The ganglia under the jaw on each side were swollen, painful, and tender. His pulse was 115; the urine not deficient, 1020 specific gravity, and without albumen or other morbid contents. Percussion and auscultation were healthy. He coughed, and expectorated a very little frothy mucus, which was sometimes reddish. The tongue was rather white; he was very thirsty; and the tonsils were swollen and ulcerated. His respiration was 20; his pulse 112. Two ounces of blood were taken from the arm, but it was neither cupped nor buffed; he was purged with jalap and bitartrate of potass; and dry cupped on the loins. His pain in this part was entirely removed, so that he slept well. The pain between the shoulders continued, and did not yield to dry cupping. He now took preparations of iron in very minute doses, and continued them, but without any abatement of a single symptom. At first it appeared a case of acute inflammatory anasarca; but I soon saw there was some organic disease, though I could not fix upon its seat or nature. Tubercles began to appear on each side of his abdomen, on his thighs and arms, and ultimately in the orbits. His voice cracked. Percussion was dull at the highest part of the chest in front, and at length all over the right half of the chest; and respiration became inaudible to the same extent; and ægophony was heard to a very limited extent behind, at the highest central portion of the thoracic region. His ankles became œdematous. I expressed my opinion that the disease was malignant, and seated at the highest part of the chest, where an encephaloid mass would be found. He lay in bed for the most part, and always on the right side. He died on the 1st of May."

Autopsy. Upon opening the body, a considerable tumour presented itself in the anterior mediastinum, fusing into the walls of the anterior portion of the pericardium corresponding to the auricles, great vessels, and base of the right ventricle. The tumour was of irregular form, between three and four inches in diameter, occupying the whole of the mediastinum from the anterior to the posterior side of the chest, and extending along the roots of the lung on either side. It was of yellowish hue and firm consistence, and was composed in part of rounded and oval masses, some of which, towards the exterior, were isolated. These portions varied in size from a pea to that of a hen's egg. The largest of them, of botryoidal surface, lay in the triangular space, between the right and left bronchus and upper surface of the left auricle; other portions insinuating themselves between the lobes of the lungs. The central portions of the tumour and that involving the pericardium in front, were of a more homogeneous character, not being separable into masses. The tumour moulded itself around the great vessels; the arch of the aorta, which was not apparently compressed by it, reappeared from the midst of the tumour about the end of the transverse portion. Both venæ innominatæ and cavæ were involved in the tumour, but nowhere obliterated. The venæ innominatæ, however, were lessened in calibre, and evidently compressed. The mass also embraced the anterior portion of the trachea; and the left primary bronchus, in a part of its course, was completely imbedded therein. The second and third ramifications of both bronchi, and the corresponding pulmonary arteries and veins, were, more or less, imbedded in that portion of the tumour which extended to the roots of the lungs in the form of lobulated masses of various size. The trachea and bronchi were nowhere appreciably lessened in size by pressure of the tumour, even when the bronchi were surrounded by it. The same remark appeared to apply to the pulmonary vessels, which were readily injected. The portion of the tumour which involved the pericardium thinned downwards from the great vessels, where it was more than an inch in thickness, to the apex of the heart, where it had almost disappeared. This portion of the tumour presented in the least degree the lobulated structure before described. That portion of the pericardium covering the left auricle and ventricle behind was free from disease. The right

and left phrenic nerves were traced lying upon and at one part just imbedded in the tumour. The left vagus was traced backwards towards the left bronchus, imbedded, to a considerable extent, in the tumour; the nerve appeared healthy, though stretched, and doubtless somewhat compressed by the tumour. The right pleural sac was filled with transparent lemon-coloured serum. The lung tissue proper, liver, and spleen, were healthy. A very small cancerous tumour occupied the right kidney; the other was apparently healthy. There was no opportunity of examining the head. Microscopic examination revealed the elements characterising malignant growth.

Remarks. Upon analysing this most instructive case, we are led to the consideration of the several pathologic conditions with which it might, *in transitu*, have been confounded. The initial phenomena were, apparently, those which indicated simple change of the normal constitution of the blood,—pallor, breathlessness upon exertion, puffiness beneath the eyelids, vertigo, quickened pulse, debility. These symptoms were gradually followed by considerable œdema of the face; increasing pallor; constant and severe lumbar pain preventing sleep; headache; deafness; pain in the chest, interscapular region, etc.; tender submaxillary glands,—symptoms which, in their aggregate, naturally suggested that the kidney might be the seat of some degenerative process. Careful examination of the urine, however, lent no confirmation to this view, inasmuch as the quantity of urine passed was normal, as also its specific gravity; it was, besides, free from albumen or other visible abnormal element; the lumbar pain, also, soon ceased, suddenly and permanently. Coincident with, or immediately successive to the symptoms already recorded, there supervened cough, attended with scanty expectoration of frothy, and occasionally of muco-sanguineous sputa; thirst; white tongue; swollen and ulcerated tonsils; increasing speed of pulse; peculiar cracked voice. In addition to the great œdema of the face, the ankles became slightly œdematous. Physical examination, which at first yielded no results, now revealed marked dulness of the superior sternal region, which gradually extended over the entire right half of the chest; cessation of the respiratory murmur: ægophony. In this phase of the case what did such physical signs import? Aneurism of the thoracic aorta, with secondary pleuritic effusion? The marked œdema of the face and, in a less degree, of the ankles, the cracked voice, early situation of percussion dulness, character of the cough and sputa, certainly favoured, to some extent, the idea of possible aneurismal pressure upon the bronchial tubes and large venous trunks, the latter result inducing the cerebral phenomena alluded to. Still, the early history of the case, the age of the patient, the association and succession of the symptoms, together with the absence of tumour, abnormal impulse or murmur, were scarcely reconcilable with the hypothesis of aneurism.

Could the occurrence of tubercular deposit better explain the observed phenomena? The premonitory symptoms were not dissimilar to those of tubercular dyscrasia; and even at a later phase, some of the signs, and some of the symptoms especially, were not opposed to such disease,—the pleuritic effusion being the possible result of tubercular irritation; still, as on the hypothesis of aneurism, there were residual phenomena which were excluded from, and others wanting which should have been included in, the definition of tuberculous disease. Such were the doubts involved in the very nature of the case, so that a satisfactory diagnosis seemed scarcely possible until the appearance of the external tumours; then the suspicion of malignant disease was at once originated,—such disease affording a sufficient explanation of the hitherto anomalous symptoms.

From this, and many other cases recorded by different observers, the great semiotical value of external tumour occurring in the course of obscure thoracic disease, is strikingly exemplified. Indeed, so great is the value of the sign, that, in the cases named, such tumours should be carefully searched for, and if discovered and determined to be of recent origin, it would probably justify the observer in at once including the case in the category of malignant disease. The widely spread pain, as also the inutility of treatment, are additional points of value in the diagnosis of this class of diseases.

With regard to the lumbar pain, it is worthy of note, that this symptom was apparently limited to the period of actual renal deposit, and definitely ceased with the completion of the process and its extension to, and increase in, more remote organs.

CASES OF DEATH WITH AIR IN THE VEINS.

By George May, jun., Esq., Reading.

Case i. On December 15th, 1855, I assisted Mr. Walford at the *post mortem* examination of Mrs. H., aged 50, who had died the day previous. She had long been ailing, having complained chiefly of spasms in the bowels, especially on the right side; and for a fortnight before her death, she suffered from pain in the throat. She was rather hoarse; but there was no tenderness on pressure. Her abdomen was large, and the veins were distinct; the liver was much enlarged; and the urine was of low specific gravity and albuminous. Although a grave opinion was entertained of her case, neither a speedy nor abrupt termination was expected. She was seen by Mr. Walford at 1 p.m. on the day of her death, and found to be sinking. Her abdomen was tense, and extremely sensitive to pressure; respiration was thoracic; the pulse was feeble and running. She died in the evening.

The next afternoon the body was examined. There was much thickening of the colon, with ulceration of the cæcum and ileo-cæcal valve. There was air in the adjacent subperitoneal tissue, which we traced upwards to the diaphragm and downwards for some distance; it also extended between the muscles of the parietes. There was frothy blood in the heart and in the portal and pulmonary veins. Air-bubbles were also seen in the submucous cellular tissue of the intestine, near the ulcer. The kidneys were very large.

It was not known that there had been any hæmorrhage from the bowel, and no open vessel could be discovered on inspection of the intestine. The uterus was much enlarged, and contained a fibrous tumour.

Remarks. What was the cause of death? The symptoms were those of perforation; and it is well known that emphysema may follow wounds of the intestine; but the ulcer opened into the mesocæcum, and we could not detect any escape of the contents of the bowel into the abdomen. Would subperitoneal emphysema cause thoracic respiration?

Air was traced from the ulcer through the liver to the heart. How did it enter the veins? There had not been any hæmorrhage, and no open vessel could be detected. Was the air produced by the ulceration? We shall see in a subsequent case that air may be locally generated. Small quantities of air may enter the circulation, without producing much effect, especially if it enters slowly.

Case ii. Miss H., aged 42, but looking much older, and being of a very spare habit of body, had usually enjoyed good health, with the exception of occasional attacks of bilious vomiting. She had been suffering from one of her usual ailments for three or four days before her death; but, although I was in attendance at the house, she did not think it necessary to obtain my advice.

On the morning of March 9th, 1857, after violent vomiting, she became suddenly faint. On my arrival, I found her covered with a cold perspiration; her face was pale and anxious; the lips and hands being livid. The respiration was very short and hurried; the pulse frequent, small, and very feeble; the heart was acting tumultuously, but I could not hear any churning sound, nor could I distinguish the ordinary valvular sounds.

After taking some brandy and water, she expressed her ability to sit up in bed; and I found that air entered all parts of both lungs.

I told her friends that she was suffering from imperfect action of the heart, and must be considered in great danger; but I could not satisfy myself as to the cause of such a sudden attack. She was extremely anxious and unwilling that I should leave her; but I went to procure some stimulants, and she died before my return, having survived the commencement of the attack for three hours. She died quietly, and without convulsions.

A *post mortem* examination was made twenty hours after death, the body not being quite cold. On opening the thorax, the heart appeared enlarged, this being caused by the distension of the right auricle with frothy blood. The right ventricle contained a small fibrous clot. The other cavities of the heart were empty. The heart itself was healthy; and there was no fluid in the pericardium. The lungs were healthy; but on pressure frothy blood freely issued from the cut surfaces. The stomach and kidneys were healthy; the liver was enlarged, and contained blood mixed with air-bubbles. The uterus was three and a half inches in length, and much congested. The catamenia had appeared the previous day. The left ovary con-

tained a ruptured Graafian vesicle. There was a fibrous tumour of the size of a large pea on the anterior wall of the uterus, and from it sinuses, large enough to allow a full-sized pen to enter, passed into the lateral ligaments. On dividing the left lateral ligament, frothy blood escaped, and was traced thence to the heart; but there was none in the left femoral vein, nor in the right common iliac. The brain was not examined.

Remarks. It can scarcely be doubted that the presence of air was the cause of death in this case. Violent vomiting was followed by sudden collapse and speedy death.

Air was traced from the veins of the left lateral ligament to the heart. It must, therefore, either have been generated in the uterus, which is very improbable, both from the suddenness of the attack and the healthy state of that organ; or did violent vomiting during menstruation cause air to enter through an unbroken mucous membrane? However improbable this may appear, it seems the only explanation that can be offered.

Case III. Mr. W., aged 49, was brought into Reading April 29th, 1857, by the county police. He was supposed to be suffering from intoxication; but as he did not recover in a few hours, Mr. Walford was sent for, and found him in a very depressed condition. It was with difficulty that his name and age could be ascertained from him; and he was quite incapable of giving any account of his illness. The pulse was very small and feeble, and there was a sore on the great toe, apparently the effects of travel. The foot shortly afterwards became swollen; and inflammation extended up the internal saphena vein. There was also inability to empty the bladder; he lingered till May 4th, and died from asthenia.

The difficulty in inducing him to speak, and the peculiar slow articulation, although without paralysis, led Mr. Walford to think he might be suffering from softening of the brain, and he requested my assistance at the *post mortem* examination, which was made twelve hours after death.

The body was much emaciated, but not yet cold; the anterior half of the left foot was much discoloured, and, had the patient lived, would probably have sloughed; from the great toe a livid mark extended along the internal saphenous vein to a little above the knee; the whole limb was much swollen, and infiltrated with serum. Bubbles of air were observed to exude on a section of the liver. It seemed so improbable that we should have met with a fourth case of air in the veins, within as many years, that we hesitated to believe the fact, and fancied that compression of the divided liver might have caused air to enter the open mouths of its vessels, more especially as the right side of the heart contained fluid blood without air; but on a more careful examination of the heart, we found air in the coronary vessels. There was a firm fibrinous clot in the right ventricle, extending into the pulmonary artery. The left ventricle was empty, greatly hypertrophied, with much ossific deposit in the aortic valves. We found air in the left internal saphenous vein immediately above the foot, and traced it through the femoral and external iliac veins, and the vena cava inferior. This last was much distended, and collapsed on puncture. The left internal iliac and the veins on the right side were not affected. The left lung was collapsed, and presented a marked contrast to the right, which was much congested, readily breaking down under the finger, but not hepatised. The stomach, intestines, spleen, and kidneys were healthy. The arachnoid was slightly opaque, and the vessels a little distended, but in other respects the brain was healthy. On opening the torcular herophili one bubble of air escaped; but as the lateral sinus had been previously opened, its presence during life cannot be insisted on.

Remarks. This case resembles one reported by Maisonneuve in 1853, and called by him *gangrène foudroyante*. It differs remarkably from those in which air enters suddenly. The duration of the illness, the cerebral condition, with paralysis of the bladder, indicate a poisoned state of the blood, whilst in illness dependent on the presence of air the intellect is usually unaffected. In experiments on animals it has been found that the injection of air causes inflammation of the lungs.

In the cases now narrated, and those published in the Journal for June 6th, examples will be found of most of the effects that can be produced by the injection of air into the veins of animals.

Dr. Cless, of Stutgardt, has collected the particulars of thirteen cases, and alludes to eight others; and it is remarkable that, in six deaths from chloroform, air has been found in the heart. If these facts are correct, we are compelled to admit that air may enter the veins and cause death—

1. During surgical operations.
2. Through the uterine sinuses, especially during or after parturition.
3. From local pathological conditions.
4. As a result of the action of poisons.

CASE OF POISONING BY STRYCHNIA: RECOVERY.

By J. M. Bryan, M.D., Northampton.

[*Read before the South Midland Branch, May 21st*, 1857.]

The following case occurred in September 1855; and as instances of the kind are rare in practice, I have made a few notes, thinking they might prove interesting. The symptoms were well marked throughout, and perfect recovery took place; the little patient being at the present time perfectly well.

Frank Esson, aged 2, son of Richard and Lucy Esson, St. James's End, Northampton, had been poorly some few days previously to September 20th, 1855, with bowel complaint; viz., sickness and diarrhœa. In the morning of that day, at half-past eight o'clock, the mother gave him a powder by mistake for another of much the same colour. It was of a light bluish grey colour, and contained in a blue paper. After giving it, she went into a neighbour's house, and was fetched back by her daughter in a few minutes, who said, "Frank could not stand". On seeing him, she thought he had hurt himself, and sat him up in a chair, rubbed his leg, and went into the yard for some water. When she returned, he was quite stiff all over; the stiffness seemed at first to seize his right leg, and then proceeded to the body, arms, face, and jaws; his tongue came out, and was bitten and bloody. She brought him quickly to my house, he being stiff and stretched out all the way, and apparently in strong fits. He was so stiff, that it was not possible to bend him.

As I was from home at the time, Mr. Wm. Daniell, of Newport Pagnell (acting as my assistant), and also some medical friends, attended him. He arrived at 10 A.M., and was immediately placed in a hot bath in my kitchen, the heat being constantly renewed and kept up until towards 3 P.M. He had a dose of sulphate of zinc given him immediately on his arrival; and, this not producing vomiting, repeated quantities of mustard and water were given, but no sickness took place. Several doses of castor oil were then given, and two enemata of gruel with castor oil were administered, whereby some motions were induced. There was great difficulty in giving the castor oil, etc., on account of the great and continued trismus, which was unabated, as was also the tetanus, with arched condition of the body. The case seemed hopeless; and sal volatile, also brandy and water, were administered at intervals. He seemed conscious most of the time, and looked towards his mother when she addressed him. About 3 P.M., he was taken out of the bath, and wrapped in a hot steamed blanket, in which he lay before the fire till 4 P.M., the spasms seeming to become weaker whilst he was in the blanket. Sal volatile was given, and he had some motions, and passed urine. He was quite sensible whenever the paroxysms were off; and occasionally, on their coming on, he said, "mother, it is coming". He was then taken home, and had given to him every four hours small doses of aromatic spirits of ammonia, with spirits of nitrous ether, liquor ammoniæ acetatis, and camphor mixture.

September 21st. He was somewhat better. The medicine was continued, with the addition of small doses of bicarbonate of potass.

September 22nd. The medicine was continued; and with each dose was given a grain of hydrargyrum cum cretâ and three grains of sugar.

September 25th. A mild tonic medicine was given; and the powders were continued.

September 28th. An aperient was given.

September 29th. I saw him, when he seemed languid, but going on well.

His mouth was completely blistered throughout, and no food was taken till the tenth day, excepting arrow-root; and it was a fortnight before he could stand. After that time he required nursing, and seemed to have extreme general weakness.

The powder given was ascertained to be Battle's vermin killer: the active principle of which is well known to be strychnia. The powder was partially tested by Mr. Harris, chemist, of Northampton, who had no doubt of the presence of strychnia, and found faint traces of it by his first test.

British Medical Journal.

SATURDAY, JULY 18TH, 1857.

THE DROPPED MEDICAL BILL.

The Medical Bill of the present session sleeps with those innumerable abortive attempts at legislation on the same subject which have gone before it. We anticipated some months since the failure of this measure, from circumstances over which its promoters could have no control; but we did not anticipate the signal triumph it obtained at the second reading, when, in a full House, the Government, which opposed it, were beaten by a large majority. Still it must have been clear to all parties that, at the present late period of the session, to proceed with the measure would have been useless; and we think Mr. Headlam exercised a sound discretion in moving the discharge of the order for the Committee. In doing so, he took occasion to warn the Government against any attempt to reproduce such a Bill as Lord Elcho's, which neither the House of Commons nor the profession would accept; and to exhort them to bring in a Bill themselves next session, based on similar principles to his own. This we have good reason to believe they will do. The question of Medical Reform has stuck to them for so many sessions; successive Home Secretaries have been brought face to face with so many deputations from different branches of the profession; and the attempt to give them the cold shoulder has proved so utterly unsuccessful, that we feel certain the Government will be glad to get rid of it by granting what we demand. Never have we been so near attaining the object of our wishes as within the last three weeks. In spite of the formidable opposition brought against Mr. Headlam's Bill, it was approved of by a larger majority than ever was recorded for a similar measure. This fact should encourage medical reformers for one final struggle next session; we have the stone at the top of the hill, and it is our own fault if we let it roll back again. Of course it does not follow that the Association will stand pledged to the measure for which they have fought this year, provided a better one is brought forward next year. We were twitted by Lord Elcho for opposing this session the compromise we offered to accept from the hands of the Select Committee; but we only did so with the idea that nothing better could be obtained. We feel certain now that we can get something better; and, therefore, any measure which contains the highly objectionable Government Council clause, will meet with the opposition of the Association. We are not prepared to say that otherwise Lord Elcho's Bill is very exceptionable; but this degrading and enslaving Council we will not have.

The Board of Health party must feel that it will be useless to support a Council of this kind in the teeth of the House of Commons and of the profession; we trust, therefore, that they will see the necessity of following a less egotistical course than they have pursued hitherto—of fighting, in short, for the good of the whole profession, instead of pursuing a course which, if successful, we feel satisfied, would only keep them in hot water with the great mass of the profession, who would rather not have any medical government at all, than one in which they would be totally unrepresented.

OFFICIAL SNUBBING OF POOR-LAW MEDICAL OFFICERS.

We have often had occasion to warn our readers against putting any faith in the promises of the Poor-law Board. We have so repeatedly noticed their absolute contempt of Poor-law medical officers, and their *nonchalant* denial of justice in cases where their interference would have been omnipotent, that we think Mr. Griffin and all other medical Poor-law reformers may as well memorialise Vishnu, or any other idol, as that remarkably self-complacent body. Although they admit that the "parish doctor" is often shamefully used by Boards of Guardians; although they know that, in the present state of the law, they form the only court of appeal against their often misused authority; they refuse to enter into a conflict with such guardians or to interfere in any way in order to repair the injustice they admit. Of course we all know that it is much pleasanter, according to official life, to draw up routine reports, or to write bushels of official letters about nothing at all, than to grapple with a real difficulty, such as cannot be settled by some previous order or cut and dried table; but in these days of "thorough", when shams and compromises are one after another being brought to account, we venture to say that this model state of official mind must ere long be brought to book also. Mr. Bouverie, the mouthpiece of the Commissioners in Parliament, is not only fully up to the official standard of "red tape", so rampant in his office, but he adds a spice of contempt for the parish doctor which is quite his own. We are underpaid as scientific men, he admits; but the Parliament, which throws away hundreds of thousands of pounds yearly on jobs of all kinds, will not listen for one moment to the just demands of such poor helpless creatures as the Poor-law medical officers. Such is the reasoning set forth by Mr. Bouverie for the denial of a bare act of justice. We believe the Chairman of the Poor-law Board was maligning the House of Commons, when he dared to say that they would not pay fairly the public services of a highly educated body of men. We believe that this suggestion arose from his own official selfishness and love of keeping things as they are, regardless of consequences. The House of Commons has never been fairly informed that the union medical officers are vastly underpaid for the discharge of a very important public duty: if they had been, we venture to say that they would have given a far more generous answer to the "parish doctor" than Mr. Bouverie ever conceived.

Thus much we have spoken with respect to the general question of the remuneration of Poor-Law Medical Officers. It appears, however, that the Poor-Law Board deals in retail as well as wholesale injustice. No meanness can be too small for that redoubtable body now, as we shall show from the following remarkable reply made by Mr. Bouverie to Mr. Moody in the House on Wednesday.

"Mr. Bouverie said that under the Poor-Law Amendment Act the overseer was entitled, in cases of urgent necessity, to give an order for medical relief to such persons as he thought required it. A case of this kind, alluded to by the hon. gentleman, had occurred in the Somersetshire union; but afterwards the guardians, not believing it to be a case of urgent necessity, refused to allow such relief. The medical officer, in consequence, brought an action against the overseer in the County Court, and the judge decided that the overseer was not personally liable. As far as he (Mr. Bouverie) had the means of

judging, that decision was right in point of law, nor had the Poor-Law Board (though they had offered some advice to the guardians in the particular case referred to) any intention of altering the general law in this respect. Certainly medical officers of unions seemed exposed to some hardships in such a case; but, at the same time, those gentlemen had the power of protecting themselves, because they could judge whether the case which they were called upon to attend was one of urgent necessity, and if it was not, they could decline to act upon the order of the overseer. Medical officers, however, should be very careful in exercising their discretion in such instances, because if, after all, the case turned out to be one of urgent necessity, they would be held responsible."

Now is it possible to imagine a greater amount of injustice packed into a smaller compass, than that a medical man is, on his peril, ordered to give extra medical relief on the plea that it is a case of urgent medical necessity, and, when he charges for it, the Guardians deny the urgent necessity, and refuse to pay his charge? The medical man thus finding that the overseer, in the opinion of the guardians, has given a wrong order, and taken up his time without warrant, proceeds against that officer in the County Court for the recovery of his fee; he does so as an act of self defence, inasmuch as a spiteful overseer may otherwise flood him with orders for so-called urgent cases. The action, however, goes against the medical man, on the plea that the overseer is not personally liable. Who is then liable? The only certainty in the matter is, that the man who does the work gets juggled out of his pay. Such is the state of the law, and the Board, on being asked if they will not suggest some alteration for such an iniquitous state of things, decline to move in the matter.

Mr. Bouverie may well say, "Certainly medical officers of unions seemed exposed to some hardships in such a case;" but we were not prepared for the manner in which he wriggles out of as clear a charge of injustice as ever came before the public. The medical men, forsooth, have the remedy in their own hands; they can protect themselves, in Mr. Bouverie's opinion, by declining to act upon the order of the overseer, if in their judgment the case is not urgent. But how is the medical man to know whether the case be really urgent or not, unless he pay the patient a visit—it may be, of many miles in the country? If it is not a case of urgency, according to the present state of the law, he will have had the satisfaction of proving that the overseer has made an unnecessary and vexatious order, and that is all.

If, however, judging from the account which he receives, he should not agree in the urgency of the case and refuse to go, and it should afterwards be proved that there was urgency, would the medical officer be held harmless and blameless? Oh no! "he would be held responsible." These are the very words of Mr. Bouverie. So that the overseer may make any number of mistakes, accidental or intentional, and impose a vast amount of extra duty upon the medical officer with impunity, whilst the slightest error in judgment on the part of the latter must be accounted for. There are a few homely proverbs which executive bodies, such as the Poor-law Commissioners, should remember; and among these we would bring to their memory the very excellent one, "That which is sauce for the goose should be sauce for the gander."

THE WEEK.

On Monday last, a deputation of St. Andrew's Graduates, consisting of Drs. Tripe, Dobell, Paul, Newnham, Helsham (of Chichester), and B. W. Richardson, had an interview with Mr. Headlam in reference to the fifth clause of his Bill. The deputation explained, that the Graduates of St. Andrew's had a strong feeling that their University ought to have an independent representative on the council, should his Bill become law. The speakers described the high character of the examination for M.D.s, the great numerical strength of the Graduates, and the unfairness of giving to certain bodies, such as the Apothecaries' Company of Dublin, a separate representative, and only a third of a representative to their University. Mr. Headlam, in reply, said, that his Bill was withdrawn for this session; but that he would be happy to see the deputation again at the end of the year, and would give his best consideration to any plan they should propose. If the St. Andrew's Graduates will, one and all, strive to support their *Alma mater*, they are sufficiently numerous to place their University on an equality with all others in any Medical Bill that may be brought before the Legislature.

At the York assizes, on Monday last, a trial for the criminal production of abortion took place, which strongly exhibited in its details features of superstition on the one part and of villainy on the other. The prisoner, a man named Isaac Rushforth, was indicted for administering seeds of paradise to one Kitty Littlewood, with intent to procure abortion. It appeared from the evidence, that the prosecutrix, a young woman aged 26, having been some time in impaired health, was advised to consult the prisoner, a person having, we suppose, the reputation of being a "wise man". He "ruled her planet, and gave her some pills" and other medicine for some time; but at last he told her that she would never be well unless she had connexion with him. To this she was led to consent, and she became pregnant. The prisoner then committed the offence with which he was charged. The judge (Baron Channell) sentenced the prisoner to imprisonment for eighteen months, with hard labour.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, South Kensington, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

NOTICE OF ADDITION TO LAW VIII, TO BE PROPOSED AT THE NEXT ANNUAL MEETING.

I give notice, in compliance with the request of the Committee of Council, that I shall, at the next Annual Meeting, propose that the President of the British Medical Association be, ex officio, a member of the Committee of Council.

Philip H. Williams, M.D. *Secretary.*

Worcester, July 1857.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Annual Meeting of the British Medical Association will be holden at Nottingham, on Tuesday, Wednesday, and Thursday, the 28th, 29th, and 30th of July instant.

Philip H. Williams, *General Secretary.*

Worcester, June 1857.

MEDICAL BENEVOLENT FUND.

At the annual meeting of the subscribers to the Medical Benevolent Fund, on Tuesday, July 15th, the following officers were elected:—*President:* Sir James Clark, Bart., M.D. *Vice President:* William Newnham, Esq. *Treasurer:* Joseph Toynbee, Esq., F.R.S.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

The third Annual Meeting of the Birmingham and Midland Counties Branch was held at the Hen and Chickens Hotel, Birmingham, on Thursday, July 2nd; Edwin Bartleet, Esq., F.R.C.S., President, in the chair. There were also present: A. Allcock, Esq. (Smethwick); A. Baker, Esq. (Birmingham); R. A. Busby, Esq. (Leamington); Patrick Brown, M.D. (Leamington); S. A. Bindley, Esq. (Birmingham); S. B. Bucknill, M.D. (Rugby); J. M. Coleman, M.D. (Wolverhampton); P. A. Cotterell, M.D. (West Bromwich); J. Davies, Esq. (Dudley Port); W. Downes, Esq. (Handsworth); A. Fleming, M.D. (Birmingham); Bell Fletcher, M.D. (Birmingham); J. J. Hadley, Esq. (Birmingham); H. Hancox, M.D. (Wolverhampton); S. J. Jeaffreson, F.R.C.P. (Leamington); J. Johnstone, M.D. (Birmington); George Jones, Esq. (Birmingham); G. H. Marshall, M.D. (Birmingham); J. B. Melson, M.D. (Birmingham); Langston Parker, Esq. (Birmingham); Oliver Pemberton, Esq. (Birmingham); J. Russell, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); C. Somerville, L.R.C.P. (Bloxwich); T. Swain, Esq. (Birmingham); Spencer Thomson, M.D. (Burton-on-Trent); William Underhill, Esq. (Tipton); Thomas Underhill, Esq. (Great Bridge); C. Warden, M.D. (Birmingham); Joseph Wickenden, Esq. (Birmingham); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham). There were also present, as visitors: M. H. Clayton, Esq.; Dr. Drever; F. Jordan, Esq.; S. Parker, Esq.; W. Tarleton, Esq.; and J. F. West, Esq.

Dr. Jeaffreson, on retiring from the Presidency, thanked the members for the kindness received from them during the past year, and introduced his friend Mr. Bartleet, as one in whose hands the office would lose nothing of its importance and usefulness.

PRESIDENT'S ADDRESS.

The President delivered the following address:—

Gentlemen,—I wish to take the first opportunity of offering my warmest thanks to the friends who proposed me, and the members of our Branch Association, who elected me to this honourable post. I am deeply sensible of their kindness, and highly flattered by the distinction they have conferred upon me. To those of my professional brethren who know me, I need not say how much my habits of retirement and my total inexperience in public matters unfit me for this appointment; and to those who do not, the fact will, I fear, but too soon make itself apparent. Your Honorary Secretaries, however, and the other officers of the Branch, are men of experience and proved ability: upon them the weightier and more important duties will devolve, and on their kind advice and assistance I know I may securely depend. I will take heart, therefore, and enter upon my duties with the determination to devote myself faithfully to their performance, as well as I am able; and shall trust to that kindly feeling which led you to commit these duties to my hands, for the excuse of my incompetence and inefficiency. The more important business to be transacted at this annual meeting would not justify my detaining you long with any speculations on matters of science connected with our profession; and, indeed, my opportunities of elucidating any new theory, or offering any new facts which could interest this meeting, are so limited, since I hold no public appointment, and have had but little opportunity of entering upon such investigations, that I must not even attempt it. Some few subjects, however, which have presented themselves prominently to me, I will, with your permission, briefly allude to.

Dr. Marshall Hall's exposition of the rationale and treatment of suspended animation, or, as he more correctly puts it, suspended respiration, constitutes one of the most important contributions to our art during the past year, and is altogether worthy of that original thinker and astute physiologist. The rules he has laid down for the instantaneous treatment of such cases, even in the absence of a medical man, will become stereotyped for universal adoption; and will, doubtless, prove the happy means of rescuing many who would otherwise perish.

Dr. W. Addison's contribution on *Cell-Therapeutics* will do much to clear the way for a better knowledge of the physiology and pathology of the tissues. The work of Dr. Thomas Addison on bronzed skin, as connected with disease of the suprarenal capsules, and attendant on a peculiar form of cachexia, has excited great interest and attention to those pathological conditions. The prompt and able paper of our late President, Dr. Jeaffreson, on that subject, and the subsequent experiments of M. Brown-Séquard and others, show of how much importance those organs are to animal life; for none of the animals experimented upon survived the removal of even one of the suprarenal capsules for many hours. Convulsions resembling those from strychnia, and death, followed their extirpation more rapidly than that of the kidneys.

Rokitansky has been labouring in the field of the great Laennec; and the continuation of his investigations as to the pathology of tubercle will, it is presumed, throw much light on that very important subject. The experiments of M. Claude Bernard, on the formation of sugar in the liver, and their bearings on the pathology of diabetes (which have since been strongly corroborated by Dr. Pavy), promise to clear up much that is still obscure in that intractable malady; and no doubt they will soon receive further elucidation from Dr. Bryden of Edinburgh, and others, who are now engaged in similar inquiries. M. Bernard's experiments also, on the sources of animal heat, and the important influence which the liver exerts, by increasing the temperature of the blood in its passage through the digestive organs, cannot fail to become valuable contributions to physiology. Schiffe of Frankfort's experiments on the division of the sympathetic nerve in the neck, and of the fifth pair of nerves, show that there is increase of heat, from an increased quantity of blood admitted into the vessels, on paralysis of the vaso-motor nerves. Kiernan's lucid exposition of the minute anatomy of the liver has been perfected by the recent discovery of the ultimate terminations of the biliary ducts within the lobules, by Dr. Beale.

In materia medica there does not seem to have been much advance in the past year. Ergot of wheat is said by Dr. Jobert to be as prompt, direct, and as powerful in its action on the uterus, as the ergot of rye, and its hæmostatic action is as great. Kamila, which is obtained by brushing the powder off the capsules of the *rottlera tinctoria*—a plant found in the hilly parts of India—has been given by Dr. Anderson, of the Indian army, for tapeworm, in doses of two to four drachms, with great success. The worm, it appears, is usually expelled with the third or fourth stool, entire and dead. Santonin, as an anthelmintic, has been given by Mr. Perry of Droxford, in doses of about three grains, followed by a dose of calomel in about two hours, with great success, for the cure of ascarides and lumbricoides. Dr. Goolden, of St. Thomas's, has recommended the extract of belladonna to be applied to the nipple, as a means of arresting the secretion of milk, and preventing milk-abscess. The experience of some of my medical friends appears to confirm Dr. Goolden's as to its value. Bael, an Indian plant, has been introduced as a valuable remedy in dysentery. Pepsine has been strongly recommended by Dr. Corvisart of Paris, in cases of infantile diarrhœa; and Dr. Nelson, of this town, has published a paper in our Journal, in which he gives cases exhibiting its value in some forms of dyspepsia.

Strychnia, as a poison, has, during the past year, been the subject of much investigation, as to its properties, its medico-legal chemistry, its physiological action, and the best means of its detection in the fluids or tissues of the body. Dr. Pavy, of Guy's Hospital, has shown, by experiments on the lower animals, that strychnia is absorbed into the circulation, and produces its effects on the muscular system through the medium of the spinal nerves, leaving the function of the brain, and probably of the sympathetic system, unimpaired. The intellect also remains clear. The muscles of respiration supplied by the spinal nerves are fixed with spasm; whilst the muscular fibres of the heart, not being under the influence of the spinal nerves, remain unaffected; and the action of the heart is uninfluenced. The Woorali poison, which is produced from the *Strychnos Toxifera*, a plant belonging to the same botan

order, has no effect on the heart, but is diametrically opposed in its action on the voluntary muscles, producing paralysis instead of spasm, from the destruction of nervous energy. This has led to the belief that it may be found to be the antidote of that deadly poison; but, if it ever prove to be so, it must be when both have been taken into the circulation in very small quantities. Dr. Rochester has published, in the *American Journal of Medical Science*, two cases of poisoning by strychnine, in one of which four grains were taken; and he states that both were cured by frequently repeated but small doses of camphor, without any cerebral or gastric derangement. Dr. Davy has suggested, in the *Journal of the Royal Medical Society*, a ready method of detecting arsenic, in all its forms and combinations. It consists, essentially, in depositing arsenic, in a metallic state, upon a surface of platinum; as upon a small sheet of that metal, by touching the spot with a rod of zinc, and maintaining the contact for a few seconds, when the metallic arsenic falls in a film, more or less thick, on the surface of the platinum, from which it may be removed by acids, and subjected to further tests.

Psychology has received its share of attention. Particular interest has attached to the subject of moral, as distinguished from intellectual insanity. Dr. Bucknill's prize essay on *Unsoundness of Mind in reference to Criminal Acts*; Dr. Williams, on the *Criminal Responsibility of the Insane*; and a very interesting and valuable paper by Mr. Kitching of York, in the British Medical Journal,—open questions of great interest to the profession, and to medical jurists in particular. Dr. Sutherland's inquiries into the pathology of the urine, in cases of mania and dementia, promise to throw some light on the etiology of mental diseases. His conclusions, as to the excess of phosphates in the blood and urine in cases of acute mania, whilst there is found, by quantitative analysis, to be an excess of phosphorus in the brain—the reverse conditions being found to exist in cases of dementia—may lead us to expect some improved plan of treating these unpromising conditions at no very distant period.

The chief improvements in surgery seem to consist in its general conservative tendency. Limbs, which still require the knife for the removal of disease, otherwise incurable, are now very frequently preserved by excision of the diseased cartilages, or the ends of the bones, especially in the knees and elbows; or the removal of part of the foot only is not uncommonly found to be sufficient, leaving the patient a useful limb, where removal of the leg has formerly been deemed necessary. Excision of the disorganised globe of the eye, for the relief of sympathetic internal ophthalmia, has been practised with marked success; and a new mode of operating for cataract by depression, recently practised at the Birmingham Eye Infirmary by one of our members, diminishes very much the liability to injury of the iris and ciliary body. Aneurisms, for which the exposure and tying of arteries was the only cure, are now frequently cured by compression.

The production of local anæsthesia by the application of frigorific mixtures has been much resorted to, to save the pain of operations, as well as to control hæmorrhage; and is preferred by some to the use of chloroform in many cases, particularly in operations of the mouth.

Dr. Arnott's statistics on the mortality of operations under chloroform, at the different hospitals, would seem to discourage its indiscriminate adoption.

The knife, also, has been less frequently resorted to, for the removal of malignant tumours; and their destruction or enucleation, by the use of escharotics, has been effected with considerable success. An admirable paper by Mr. Langston Parker, the former President of our Branch, called the attention of surgeons very much to this mode of treatment. The chlorides of zinc, antimony, gold, etc., have been variously tried. It is stated in the *Dublin Quarterly Journal of Medical Science*, that Dr. Landolfi has so treated many cases of cancer in different parts, with entire success. In his hands, the chloride of bromine has been preferred, which he uses, either alone or mixed into a thick paste, in the proportion of three parts to two of chloride of zinc, and one each of the chlorides of antimony and gold. The chloride of bromine, he thinks, has removed the malignant character of such tumours, and rendered them curable. A similar mode of treatment has been lately practised, especially at the Middlesex Hospital, by Dr. Fell of America. There were some peculiarities in his mode of application. He mixed with the chloride of zinc, etc., the juice of the *Sanguinaria Canadensis*—a plant, he says, long known to the tribes of North American Indians near Lake Superior, where it grows wild in great abundance, to possess styptic and escharotic virtues in a great degree. Dr. Fell, who has just published his views and treatment, considers that he has been eminently successful; but how far this will be borne out by results, time only can decide. Unless the *Sanguinaria Canadensis has* some specific efficacy, there does not appear to be much novelty in his practice, though there is some in the mode of its application. A new instrument, also, the *écraseur*, has been substituted recently for the knife in the removal of tumours; and, where there has been a dread of hæmorrhage, it has been found useful.

The long agitated question of medical reform is unfortunately still in abeyance; and it is feared that the Bill of Mr. Headlam will not pass, without great alteration, this session. The general agreement, however, which has at length been arrived at by the profession generally, the different colleges, and licensing bodies, forbids the belief that it can be very long deferred: and, if the concord which now exists shall happily be preserved, it must ultimately pass, and will gain in efficiency, rather than lose, by the delay.

Mr. Griffin's movement on the subject of Poor-law medical reform, though at present not so successful as could be wished, has already educed an order from the Board (which has just now come into operation), to the effect that every medical officer of unions shall be at liberty to hold his appointment for life, instead of being annually elected, unless he is legally or morally disqualified. This will, at least, render his position more independent, and free him from the chance of removal from feelings of personal pique or prejudice. In addition to the pressing necessity that the remuneration should be rendered more commensurate with his labours and responsibility, it would seem to be of mutual advantage to the medical officer and his patients if the drugs and a dispenser were always provided by the parishes or unions, at their own expense.

I will bring my already too lengthy address to a close in the words of Mr. Terry, the respected President of the South Midland Branch of our Association:—"Much good, I have no doubt, may be done, and in due time, I hope, much will be done, by judicious legislative enactment; but by far the greatest good must be obtained by ourselves; and, lacking that, no laws can ever make us strong. We call ourselves professional brethren: would that, in our daily course of life, we realised the thought, and ever took delight in aiding the difficulty and supporting the fortitude of him who is oppressed: then, I believe, neither the stern command of the Poor-law Commissioner, nor the barefaced falsehood of the quack, need disturb us. If the former could not obtain our services by payment such as beggars have, they would be obliged to pay us as gentlemen; for, with all their hardihood and all their power, they dare not rid themselves of medical advice. And of the quack I say, let us maintain our course in friendship, let us hold fast our bond of union as other professions do; then let him do his worst, and I believe he will seldom hurt us much. It is our weakness which gives him strength. I believe that empiricism is coeval with time, and it will probably last to eternity. Where there is cunning, cupidity, and a disregard of truth, on the one side, and sickness, weakness, and credulity, on the other, it is but natural that such should be the case. If I, with truthful diffidence, express my fear, and another, with unhesitating confidence, proclaims his power (my patient's judgment being frail), am I surprised that he prefers his foe?" Be it so. For a time it must be. Let us ourselves keep steadily the paths of honesty and honour; faithfully perform our own duties, and ever observe the golden rule, to do unto others as we would that they should do unto us; then we may be content to abide the issue. Truth will ultimately prevail. Duties are ours; events are God's.

REPORT OF COUNCIL.

Mr. Pemberton, one of the Honorary Secretaries, then read the annexed report.

"In meeting the members of the Birmingham and Midland Counties Branch of the British Medical Association at its third annual gathering, your Council cannot but congratulate them on the continued prosperity which has marked the scientific, the social, and the general aspects of the society.

"The discussions at the bi-monthly meetings have been well maintained during the past year, and a variety of subjects connected with medical and surgical science have been selected for illustration by the members, as evidenced by the following list:—

"1. A Case of Hydrophobia. By Oliver Pemberton, Esq.

"2. On a Case of Disease of the Suprarenal Capsules, illustrating a Form of Anæmia. By Bell Fletcher, M.D.

"3. On the Methodus Medendi of the Ancients. By A. B. Rye, Esq.
"4. On Disease of the Suprarenal Capsules. By. S. J. Jeaffreson, F.R.C.P.
"5. A Case of Blighted Fœtus. By J. Simons, Esq.
"6. On Amputation at the Ankle-Joint. By A. Baker, Esq.
"7. On the Treatment of Prolapsus Uteri. By J. Bassett, Esq.
"8. A Case of Wound of the Kidney: Recovery. By J. Johnston, M.B.
"9. A Case of Lupus: with Photographic Illustrations. By J. R. Nicholson, M.D.
"10. On the Nature and Origin of Renal Disease. By J. Russell, M.D.
"11. Cases in which a Disorganised Eyeball was excised for Relief of Amaurosis of the Companion Eye. By J. V. Solomon, Esq.

"Your Council have watched with deep interest the progress of medical reform, as indicated by the discussions which have arisen on Mr. Headlam's and Lord Elcho's Bills, now before Parliament. The former measure promises a satisfactory solution to some of the difficulties which have beset medical legislation for so many years; and its provisions have the cordial support of the British Medical Association, and generally of the great body of the profession. Your Council cannot but express its confident hope that Mr. Headlam's Bill will pass this session, considering the large majority of 147, by which its second reading was only yesterday secured, as a powerful indication of the value set by the real friends of the profession on the measure.

"The attention of Parliament has also been directed to the evils arising from the indiscriminate sale of poisonous drugs. A measure of restriction will, it is hoped, ere long tend to check, in some degree, the frightful crimes which have arisen from the want of legislation on the subject.

"Mr. Griffin, the indefatigable Chairman of the Association of Poor-law Medical Officers for obtaining an amendment of the present unjust system of administration in regard to medical services and remuneration, still labours earnestly, and claims the best wishes for success at the hands of all who are engaged in the practice of the profession.

"The notice given by Mr. Scholefield, one of the members for this borough, in reference to bringing in a Bill to prevent the Adulteration of Food and Drugs, has afforded your Council the utmost satisfaction.

"Since the last annual meeting, when the numbers of this Branch were 149, thirteen fresh members have been elected. The losses by death during the year have been five; by resignation, four; by change of residence, two. This day the names of thirteen gentlemen will be submitted for election, making the total numbers of the Branch 164, showing a gain in numerical strength over last year of fifteen members.

"Your Council have to deplore the loss by death of some valued members—Mr. Ryland, Mr. T. Thursfield, Mr. Rumsey, Dr. Yelloley, and Mr. Simons. The first of these was well known in this town and neighbourhood by his professional talents, and by the charms of his social friendships. Distinguished as a writer of great ability, and as a man of the most unselfish character, his death, at a comparatively early age, has left a void that cannot readily be filled. At Kidderminster, Mr. Thursfield had earned a most extended reputation; and his sudden removal was the source of genuine sorrow to his patients and friends. Mr. Simons' name adds another to the long list of those whose lives have been sacrificed in the performance of the duties belonging to our profession, he having sunk under typhus fever, at the early age of 45. During his life, Mr. Simons had obtained the respect of his professional brethren for the general straightforwardness and zeal which characterised his career.

"In conclusion, your Council would venture to anticipate that the coming meeting of the Parent Association at Nottingham will be productive of the same good feeling and fellowship which so happily marked the meeting in Birmingham of last year."

It was proposed by Dr. MELSON, seconded by Dr. FLEMING, and resolved—

"That the report now read be received, adopted, and entered on the minutes."

TREASURER'S REPORT.

Mr. T. W. WILLIAMS, the Treasurer, submitted his report, which was also received, and directed to be entered on the minutes; a hope being expressed that the members would liquidate their arrears.

PRESIDENT-ELECT.

It was proposed by Mr. LANGSTON PARKER, seconded by Dr. RUSSELL, and carried unanimously—

"That E. H. Coleman, Esq., Senior Surgeon of the South Staffordshire General Hospital, Wolverhampton, be President-Elect for the ensuing year."

NEW MEMBERS.

The following gentlemen, members of the Parent Association, were balloted for as members of the Branch, and elected unanimously:—J. Bailey, Esq. (Wednesbury); P. Brown, M.D. (Leamington); P. A. Cotterell, M.D. (West Bromwich); A. Fleming, M.D. (Birmingham); H. Hancox, M.D. (Wolverhampton); T. M. Harding, Esq. (Stourbridge); T. Holyoake, Esq. (Kinver); David Johnson, Esq. (Birmingham); Dennis Moore, Esq. (Birmingham); Major B. Morgan, Esq. (Lichfield); S. Partridge, Esq. (Darlaston); T. W. Ransom, Esq. (Darlaston); H. Walker, M.D. (Brierly Hill).

COUNCIL OF THE BRANCH.

Mr. T. UNDERHILL proposed, Dr. RUSSELL seconded, and it was carried unanimously—

"That the following gentlemen be the Council of the Branch for the ensuing year:—A. Baker, Esq.; J. J. Hadley, Esq.; J. Johnstone, M.D.; G. Jones, Esq.; G. Marshall, M.D.; J. B. Melson, M.D.; J. Wickenden, Esq.; G. Yates, Esq. (of Birmingham); J. Davies, Esq. (Dudley Port); A. Duke, M.D. (Rugby); J. H. Houghton, Esq. (Dudley); S. J. Jeaffreson, F.R.C.P. (Leamington); E. Moore, Esq. (Halesowen); D. G. Niven, Esq. (Pershore); A. B. Rye, Esq. (Banbury).

ELECTION OF SECRETARIES AND TREASURER.

Dr. MELSON proposed, Dr. JEAFFRESON seconded, and it was carried unanimously—

"That Mr. T. W. Williams be re-elected Treasurer of the Branch."

Dr. JOHNSTONE proposed, and Mr. G. YATES seconded—

"That Mr. J. Vose Solomon and Mr. Oliver Pemberton be re-elected Honorary Secretaries of the Branch."

REPRESENTATIVES IN THE GENERAL COUNCIL.

Mr. BAKER proposed, Mr. Downes seconded, and it was carried unanimously—

"That the following members be elected representatives of the Branch in the General Council:—S. J. Jeaffreson, F.R.C.P. (Leamington); J. Johnstone, M.D. (Birmingham); O. Pemberton, Esq. (Birmingham); S. Thomson, M.D. (Burton-on-Trent); T. Underhill, Esq. (Great Bridge); J. Wickenden, Esq. (Birmingham); T. W. Williams, Esq. (Birmingham); with J. V. Solomon, Esq., one of the secretaries, as an *ex officio* member."

POOR-LAW MEDICAL REFORM.

A petition to Parliament was adopted, praying for the redress of the grievances of the Poor-Law surgeons.

VOTE OF THANKS TO THE EX-PRESIDENT.

Mr. BARTLEET proposed, Mr. WICKENDEN seconded, and it was carried unanimously—

"That the best thanks of this meeting be given to Dr. Jeaffreson for his able and considerate conduct as President during the past year."

Dr. JEAFFRESON, in reply, took the opportunity of delivering a retrospective address, in which he embodied a sketch of the history of the British Medical Association, a forcible statement of its objects and advantages, and some suggestions for making it and the Branches more useful than they had hitherto been.

On the suggestion of Dr. MELSON, it was resolved to forward the address for publication in the JOURNAL, and also to have five hundred copies printed separately for distribution, as it was thought no better plan could be adopted for increasing the number of members.

VOTE OF THANKS TO THE PRESIDENT.

Dr. JOHNSTONE proposed, Mr. HADLEY seconded, and it was carried by acclamation—

"That the best thanks of this meeting be given to the President, Mr. Bartleet, for his conduct in the Chair."

A large party of the members afterwards dined together, under the chairmanship of Edwin Bartleet, Esq., supported by Dr. Jeaffreson as vice-chairman.

SUBSCRIPTIONS PAID.

The following gentlemen have paid their subscriptions to the Branch during May, June, and July:—S. Berry, Esq. (Bir-

mingham); C. Bracey, Esq. (Birmingham); P. Brown, M.D. (Leamington); P. Chavasse, Esq. (Birmingham); S. Chavasse, Esq. (Birmingham); J. Clarkson, Esq. (Birmingham); J. Clay, Esq. (Birmingham); E. H. Coleman, Esq. (Wolverhampton); J. M. Coleman, M.D. (Wolverhampton); P. A. Cotterell, M.D. (West Bromwich); H. Davis, Esq. (Birmingham); E. F. Dehane, Esq. (Wolverhampton); A. Fleming, M.D. (Birmingham); Bell Fletcher, M.D. (Birmingham); J. W. Fletcher, Esq. (H.E.I.C.S.); J. S. Gaunt, Esq. (Alvechurch); H. Hancox, M.D. (Wolverhampton); S. J. Jeaffreson, F.R.C.P. (Leamington); D. Johnson, Esq. (Birmingham); J. W. Keyworth, M.D. (Birmingham); G. Marshall, M.D. (Birmingham); M. Morgan, Esq. (Lichfield); S. Partridge, Esq. (Darlaston); T. H. Ransom, Esq. (Darlaston); J. Russell, M.D. (Birmingham); G. Swinson, Esq. (Birmingham); T. Underhill, Esq. (Tipton); W. Underhill, Esq. (Great Bridge); C. E. Welchman, Esq. (Lichfield); and C. Yarwood, Esq. (Birmingham).

NORTH WALES BRANCH: ANNUAL MEETING.

The annual meeting of the North Wales Branch was held at the Royal Hotel, Rhyl, on Tuesday, July 7th, under the Presidency of Edward Williams, M.D., of Wrexham. There were also present:—T. Davies, Esq. (Llanfairtalhairn); J. Edwards, M.D. (Benarth), retiring President; T. T. Griffith, Esq. (Wrexham); E. T. Hughes, M.D. (Mold); J. R. Hughes, M.D. (Denbigh); R. Jones, Esq. (Carnarvon); G. T. Jones, Esq. (Denbigh); D. Kent Jones, Esq. (Beaumaris); L. Lodge, Esq. (St. Asaph); T. Morris, Esq. (Marford); O. Roberts, M.D. (St. Asaph); J. Salusbury, Esq. (Conway); F. Theed, Esq. (Rhyl); W. Williams, M.D. (Mold; there were also present W. V. Brown, M.D. (St. Asaph); Edwin Jones, M.D. (Rhyl); E. P. Williams, M.D. (Denbigh). Letters and communications were received from the following members, regretting their inability to attend the meeting; viz., Mr. Hamilton A. Roberts (Brynmeurig); Dr. Turnour (Denbigh); Dr. Lloyd Williams (Denbigh); Dr. Lloyd (Llangefni); Dr. Pierce (Denbigh); Mr. H. Williams (Llansaintffraid).

Dr. Edwards, having addressed the meeting, vacated the chair for the President for the ensuing year, who delivered the following

PRESIDENT'S ADDRESS.

I rise, gentlemen, on the present occasion, under a degree of embarrassment which I have seldom, if ever, before experienced; and, did I not feel assured that these gentlemen I see around me would kindly extend their indulgence to one who so much feels his need of it, I should indeed be greatly overcome. I wish it were within my power to convey to you my feelings, or that I had words to express how highly I value the honour you have conferred upon me. Believe me, I am deeply sensible of the position which, through your unmerited kindness, I this day occupy; and I shall ever dwell with unfeigned gratitude upon the many acts of consideration and friendship received at your hands.

Assembled as we are this day, for the first time, under our new name of "The British Medical Association," it is matter for congratulation, gentlemen, that those dark clouds which hung so portentously over our association when last we met, have passed away; and that we have so happily emerged from that most critical period in our history. Many were the fears that our division might have issued in the breaking up of that noble fabric which it had taken more than twenty years to build up; and greatly must we rejoice that the adoption of a code of laws at our last annual meeting in Birmingham has settled those much vexed questions in dispute; and now that those causes which led to annual contention no longer exist, we may hope to see all strife and dissention banished, and rallying around our esteemed founder, we may have the satisfaction of seeing the British Medical Association flourishing upon a broader, a firmer, and a more lasting foundation than it had ever before attained to. And much as the present position of the Parent Association demands our admiration, we, I am sure, one and all, must equally feel, in the flourishing state of the North Wales Branch, no less a subject for self-congratulation; for whether we look to the number of our members, their social position, or high professional reputations; to the eminently practical cases, and scientific discussions at our former meetings, or to that harmony and good feeling amongst the members of our profession which this Branch has so much encouraged in the principality, all point to a state of things most promising for its future usefulness and prosperity.

The changes in the laws of the Parent Association involved changes in those of our Branch; and at our last annual meeting a committee was formed for reconstructing our rules; that committee have given their best attention to the subject, and are prepared to submit a new code of laws for your approval. I would also venture to allude to a change proposed in our financial year, which is, that in future, it shall extend from the 1st of January to the 31st of December, instead of, as at present, from one annual meeting to another. This alteration would the better enable us to keep each year's account separate, and to see, at a glance, our financial position; and in order to facilitate so desirable an object, we should each remember that the subscription is due annually, in advance; and I would take the liberty to observe that, in order to enable our treasurer to meet the current expenses, it behoves us to observe the greatest punctuality in our payments.

The question of Medical Reform is a subject which the legislature seems now more willing to entertain; and I am sure we must all feel deeply indebted to Mr. Headlam for the great interest he has taken in the matter, as well as for the talent and energy he has displayed. The Reform Committee of our Association have also the greatest claims upon our gratitude. And after so many years of suspense and disappointment we are at length cheered with the intelligence of the Bill having passed the second reading on Wednesday last, by a majority of 147. What changes may yet be introduced, remains to be seen. We, however, will hope for the best; and we will not be less hopeful that due justice may be done to that ill-used class of our profession—the Poor Law Medical Officers.

The improvement in the Journal, under the able editorship of Dr. Wynter, claims an expression of our thanks to that gentleman; and we may safely affirm, that the manner in which he has conducted the literary department of the Journal since his appointment, fully bears out the high testimonials which he submitted to the Committee of Council on the day of his election.

REPORT OF COUNCIL.

"In presenting the eighth annual report of the North Wales Branch, your Council congratulate its members upon the new name and constitution of the Parent Association, which has been accomplished since the last annual meeting at Abergele, and hope that this change, effected with such unanimity and good feeling, will bring with it much future prosperity to the profession generally.

"Your Council have to state that the Committee (consisting of Mr. T. T. Griffith, of Wrexham, Dr. E. T. Hughes, of Mold, and Dr. E. Williams, of Wrexham), who were requested, at the last annual meeting, to revise the rules of this Branch, with the view of making them conformable to the new code of laws of the Parent Association, have effected their laborious task in a commendable manner, and offer them for the consideration and adoption of this meeting. The Council feel greatly indebted to those gentlemen, and tender them their hearty thanks.

"Your Council, alive to the important subject of Medical Reform, recently suggested, through the medium of the Journal, that separate petitions be presented without delay by the members of this Branch to the House of Commons in favour of Mr. Headlam's Bill, which, they rejoice to say, has passed its second reading by a very large majority; and they sincerely hope it will be carried as successfully through its remaining stages, and become law during this session.

"Another subject of not only professional but public interest, is the one which is now under deliberation in the House of Lords to check the indiscriminate sale of poisons; and it is to be hoped that a good Bill will soon be passed towards the attainment of that desirable object.

"Mr. Griffin, Chairman of the Poor-Law Medical Reform Association, has forwarded a form of petition to Parliament, and requested that it may be adopted and signed by the members of this Branch now assembled for immediate presentation: he has also stated that Sir Charles Hastings has given it his sanction. Your Council approve of the steps taken by the Poor-Law Medical Officers, and trust their efforts will be speedily crowned with success.

"Your Council recommend that henceforth the finances of this Branch be made up to the 31st of December, and that the 2*s.* 6*d.* annual subscriptions be considered as due on the 1st of January in every year.

"The Treasurer reports that the balance in his hands amounts to £2 : 2 : 9, and that £11 : 7 : 6 are due for present year's subscriptions and arrears, which will probably be handed in before the conclusion of this meeting."

Dr. Williams moved—

"That the Report of the Council be received, adopted, and entered on the minutes."

Mr. Davies (Llanfairtalhairn) seconded the motion, which was agreed to unanimously.

VOTE OF THANKS TO THE LATE TREASURER.

Dr. Hughes (Mold) moved, and Dr. Edwards (Benarth) seconded—

"That this meeting hereby record their regret at the resignation by Dr. J. Lloyd, of Llangefni, of the office of Treasurer of the North Wales Branch of the British Medical Association; and express their sincere thanks for his long and valuable services."

This motion was carried unanimously.

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Mr. R. Jones (Carnarvon) proposed—

"That the best thanks of this meeting be given to Dr. Edwards, the late President, and the other members of the Council, for their valuable services during the past year."

Mr. G. T. Jones (Denbigh) seconded the motion, which was cordially agreed to by all present.

NEW RULES OF THE BRANCH.

Mr. Theed (Rhyl) moved—

"That the new rules now read be adopted for the guidance of the North Wales Branch, and entered in the minutes, and that every member be supplied with a printed copy; also, that the warmest acknowledgments of this meeting be tendered to the Committee who framed them, and for the able manner in which they accomplished their onerous labours."

Mr. Lodge (St. Asaph) seconded the resolution, which was unanimously accorded.

PLACE OF MEETING IN 1858: ELECTION OF OFFICERS.

Mr. Griffith (Wrexham) proposed—

"That the next annual meeting be held in Carnarvon; and that Robert Jones, Esq., of Carnarvon, be nominated President-elect."

Dr. Williams (Wrexham) seconded this motion, and it was unanimously carried.

It was moved by Mr. Griffith (Wrexham), seconded by Dr. Hughes (Mold), and carried—

"That D. Kent Jones, Esq., of Beaumaris, be elected Treasurer and Secretary for the ensuing year."

COUNCIL OF THE BRANCH.

Mr. G. T. Jones (Denbigh) proposed, and Dr. Williams (Mold) seconded—

"That the following members constitute the Council of the Branch, in addition to the President, ex-President, President-elect, and Secretary:—Hamilton A. Roberts, Esq. (Brynmeurig); Hugh R. Hughes, Esq. (Bangor); J. Lloyd, M.D. (Llangefni); Wm. Walthew, Esq, (Holyhead); and J. Salusbury, Esq. (Conway)."

The motion was carried.

REPRESENTATIVES IN THE GENERAL COUNCIL.

Dr. Hughes (Mold) moved—

"That Thos. T. Griffith, Esq., of Wrexham, and Edward Williams, M.D., of Wrexham, be elected to represent this Branch in the General Council."

Mr. Jones (Carnarvon) seconded the motion, which was unanimously carried.

POOR-LAW MEDICAL REFORM.

A petition to Parliament, praying for redress of the grievances of the Poor-Law surgeons, was agreed upon, and signed by all present.

SUGGESTION FOR LIMITING THE PLACES OF THE ANNUAL MEETINGS OF THE BRITISH MEDICAL ASSOCIATION.

Dr. Edwards (Benarth) brought forward a subject for discussion in the form of a resolution, which was seconded by Mr. Theed, (Rhyl):—

"That this meeting recommend to the earnest consideration of the Parent Association, at its forthcoming anniversary at Nottingham, the propriety and policy of in future limiting the places of holding its annual meetings to London, Edinburgh, and Dublin, alternately."

Dr. Edwards dwelt at considerable length upon the merits of his motion, which was opposed by Mr. Griffith, of Wrexham, Dr. Hughes, of Mold, and other members. As the general opinion was against Dr. Edwards's proposition, he consented to withdraw it; at the same time stating his determination to bring it forward again at the next annual meeting of this Branch, and also at the anniversary meeting of the Parent Association for 1858.

NEW MEMBERS.

The following gentlemen were duly elected members of this Branch; viz.—William Valentine Brown, M.D. (St. Asaph); Edwin Jones, M.D. (Rhyl); and Evan Pierce Williams, M.D. (Denbigh).

VOTE OF THANKS TO THE EDITOR OF THE JOURNAL.

Dr. Edwards moved, and Dr. Hughes (Mold) seconded—

"That this meeting look upon the improved state of the Journal with great satisfaction; and hereby tender to Dr. Wynter, its able and talented editor, the expression of their most cordial thanks."

The resolution was carried unanimously.

CASES AND COMMUNICATIONS.

The President read a paper on the history of a case of Induction of Premature Labour.

[This case will be published in the Journal.]

Mr. Jones (Carnarvon), Mr. Griffith, and others, took part in the discussion which followed; and related cases which occurred in their respective practices.

Mr. Griffith and Dr. Edwards made some interesting communications upon the Use of Ergot, and the mode of administering it.

Mr. Jones (Carnarvon) read a paper on Laceration of the Perinæum in a lad 18 years of age.

Mr. Griffith related a similar case in a man 55 years of age.

Mr. G. T. Jones (Denbigh) submitted the knee-joint of a female patient in the North Wales Lunatic Asylum, in which there was an extensive fracture. The woman was seen walking about thirty yards after the receipt of the accident. In the *post mortem* examination of the body made by him and Dr. J. Hughes (Denbigh), there was nothing particular observed in the internal organs; and death was supposed to be caused by pyæmia.

Mr. G. T. Jones also submitted for the inspection of the meeting a case of Scirrhus of the Stomach in a male patient aged 45, who at the time of his death was an inmate of the same asylum.

Dr. Edwards drew the attention of the meeting to some interesting points in comparative anatomy; and detailed some cases where the internal coverings of the stomach of the animals (horses) were almost entirely destroyed by those peculiar insects called bots; the animals being suddenly attacked without any premonitory symptoms, and speedily dying, notwithstanding that the most skilful treatment was adopted in every case.

Dr. J. Lloyd (Llangefni) communicated that he intended to publish in the Journal a paper on "An Easy Method of Making Mineral Waters including the Gas".

A vote of thanks was unanimously accorded to these members for their papers and communications.

VOTE OF THANKS TO THE PRESIDENT.

It was moved by Dr. Edwards (Benarth), and seconded by Dr. Roberts (St. Asaph)—

"That the best thanks of this meeting are eminently due, and are hereby given, to the President, Dr. Edward Williams, for his able address and conduct in the chair this day."

The resolution was carried with acclamation.

The President, in returning his acknowledgments, thanked the meeting for the kind and courteous manner in which he had been received and supported.

THE DINNER.

All the members who were present at the general professional meeting partook of dinner at 4 o'clock, and were joined by the following gentlemen as guests; viz.—Rev. Hugh Morgan, incumbent of Rhyl; — Winston, Esq. (Rhyl); and H. Rees, Esq., surgeon (Carnarvon). The President, Dr. E. Williams, occupied the Chair. The cloth having been removed, the Chairman gave the usual loyal toasts; after which, the following toasts were proposed and suitably acknowledged:—

"The Bishop and Clergy of the Diocese; and the Rev. H. Morgan, incumbent of Rhyl."

"The Army and Navy."

"Sir Charles Hastings, and the British Medical Association."

"The President, Dr. E. Williams, and the North Wales Branch."

"The ex-President, Dr. Edwards, the present High Sheriff for Carnarvonshire."

"Robert Jones, Esq., Carnarvon, the President-elect."

"J. Lloyd, Esq., Llangefni, late Treasurer."
"Dr. Wynter and the Journal."
"D. Kent Jones, Esq., Honorary Secretary."
"The New Members."
"Mr. Headlam and Medical Reform."
"J. Propert, Esq., and the Royal Medical Benevolent College."
"W. Newnham, Esq., and the Medical Benevolent Fund."
"The Visitors, — Winston, Esq., and H. Rees, Esq."

READING BRANCH: ANNUAL MEETING.

The second General Meeting of the Reading Branch was held at the George Hotel, Reading, on Wednesday, July 8th, 1857; C. M. Burnett, M.D. (Alton), President, in the chair. There were also present: J. G. Barford, Esq. (Wokingham); T. Blomfield, Esq. (Reading); G. D. Brown, Esq. (Henley-on-Thames); F. A. Bulley, Esq. (Reading); C. Cowan, M.D. (Reading); J. W. Dryland, Esq. (Reading); A. Fernie, Esq. (Reading); I. Harrinson, Esq. (Reading); F. Izod, Esq. (Mortimer); S. W. Kidgell, Esq. (Pangbourne); J. McIntyre, M.D. (Odiham); G. May, Esq. (Reading); G. May, jun., Esq. (Reading); W. W. Moxhay, Esq. (Reading); G. Pound, Esq. (Odiham); R. B. Sweeting, Esq. (Basingstoke); J. Taylor, Esq. (Wargrave); H. Waldron, Esq. (Theale); H. Watts, Esq. (Thatcham); E. Weight, Esq. (Wokingham); E. Wells, M.D. (Reading); R. T. Woodhouse, M.D. (Reading); J. W. Workman, Esq. (Reading); W. B. Young, Esq. (Reading). There were also present, as visitors: Messrs. F. G. Harcourt (Binfield); W. D. Shee (Wantage); and Cooper.

PRESIDENT'S ADDRESS.

The President delivered the following address:—

Gentlemen,—When I look around me, and see so many of my professional brethren, whose talents and energy are not only well known to you, but are a great public boon to this large and flourishing place, I cannot indeed but feel gratified by the honour you have conferred upon me in placing me in the chair upon this very important occasion. At the same time, it would be presumptuous in me not to be sensible of the numerous and very important duties which have thus been assigned to me. The occasion requires that I should make a few observations, which at this time, and under the particular circumstances which may be said to have called this Branch into existence, can hardly fail to excite your interest. The object for which this great Association was annually brought together still continues to form part of our proceedings at the present time. We still desire in an especial manner to promote and widen the social feeling, which it is not only our wisdom, but our happiness, to cultivate; we still manifest the same active interest in the advancement and the propagation of scientific and practical knowledge, which enables us to extend to mankind at large the most valuable and most inestimable services. We still desire to be in some degree the consolation and support of those of our brethren who, whether by sorrow, suffering, or by losses, have been brought low, and thus, I trust, brought into closer relation to us. The silent and patient submission to the all-wise but inscrutable ways of God, endured by many a noble-minded and highly gifted brother, cannot fail, in a profession like ours, to make us humble, and thankful that we are still permitted to exercise our minds, and to lay out our lives in so divine and so valuable a calling.

Nearly a quarter of a century has passed over our heads since our first efforts were directed to these great and important ends; but, as time has advanced, we have found the objects which have been pressed upon our attention have embraced a wider area, and have placed upon us a more sacred responsibility. Subjects involving the highest and most delicate questions of medical polity—points embracing the most difficult and elaborate conclusions, such as the limits and definition of quackery, or the due amount of power to be given to any of the medical boards of control—delicate and sacred questions affecting, in every variety of shade and degree, the highly sensitive balance of medical ethics,—these and many others have crowded upon our attention, and made it necessary so far to alter the machinery by which we have hitherto been moved as that the greatest fairness and impartiality should be bestowed upon those touchy and difficult subjects. This led, as you all are aware, to the more complete carrying out of the representative principle in our General Council; so that men should not find themselves there, under any circumstances, fit or not, without the voice of the majority of the constituency which places them there.

I assure you it would add greatly to the pleasure I feel in addressing you this day from the chair, if I could say I believed that there has been no obstacle thrown in the way towards carrying out these desirable, and, I must add, indispensable improvements in our Association, which are chiefly embraced in the representative system. But, though I can hardly believe it possible but that all should be united in the desire to attain the utmost fairness and impartiality in a Council professing to decide such abstruse and complicated subjects, yet I am bound to tell you that I do not believe these great desiderata have yet been accomplished. These facts are new in the minds of us all, and they formed some of the more prominent reasons for bringing us together as a separate Branch of the British Medical Association last year; and it is not without some feeling of regret that my present position places the duty upon me of bringing them prominently before you. We have not yet attained practically to that improved and healthy condition in the organisation of our society which we had a right to expect we should after these great points had been carried. But, having carried them, we were many of us too ready to be satisfied that the purposes contemplated by the alteration in our representative body kept us henceforth free from danger; and with this impression, when the great body of the members met last year at Birmingham, they were unprepared to reject any suggestions of the old irresponsible Council: they evidently, in the liberality of their minds, determined to take those committees on who had been elected under the old selfish principle, and to give them credit for that liberality which you now see, to our cost, they never possessed. Had we been more cautious and less confiding, I think I am not saying too much when I state that a far different measure of medical reform would have been brought before your notice, by a new Reform Committee, elected fairly under the new representative principle we had then established. Instead of Mr. Headlam's Bill, which you have so much and so fatally strengthened by your disinterested and generous support, you would have had one emanating from this Association, that would have struck directly at the deep seated and bitter evils which for years—yes, and for centuries past—have been ruffling your minds, curtailing your rights, and exposing you to insult and degradation in the eyes of your fellow-men. As it was, the old Reform Committee of this Association, having no responsible duties, and being composed of those men whose views of medical reform were painfully attached to the very evils we all have so long sought to remove, could scarcely fail to bring us back to the same point from which we started. How much of infirmity there is in all this, and how much there is of conduct which you can scarcely regard in any other light than that of being inimical to your best and highest interests, it is not for me to say. There are, however, many amongst us who, like myself, cannot fail to be struck with the fact that all those great and pressing evils which have degraded and impoverished our noble and generous profession for so long a time are still left untouched by Mr. Headlam's or even Lord Elcho's Bill, and are still uncared for by the self-elected councillors and irresponsible corporations.

It is the opinion of many very able and intelligent men, that no reform in our profession can be regarded with confidence by the great body of the members, as likely to be effected, which simply has for its object the making of laws, while no corporate reform emanates from within. There is much truth in this; and we shall certainly fail in effecting any mitigation of the evils we so smart under, just in proportion as we lose sight of this fact. In other words, we must not only seek to obtain that amount of legal protection which will prevent society at large, or sectional organisations of that society, from imposing either duties or burdens upon us too heavy to be borne: but we must keep steadily in mind, that, within our own pale, there are those of such widely different interests that, unless the constraint of the law is upon them, they can hardly fail in contributing all their weight towards keeping the great body of their professional brethren in a depressed or dependent condition. The magnetic force of wealth and power carries away the will, and draws its votaries, like the law of attraction when exerted on inanimate bodies around us, by a force over which they have no control. We must regard the conduct of all self-elected councillors—of all those who undertake to act for the maintenance either of the professional status of individuals, or for the political rights of the entire body, without having been placed in their responsible office by the voice of the profession—as constituting some of the most formidable obstacles, and the most hurtful opponents, to the attainment of our rights. There are many in this room who are

practically and sensitively alive to the heartburnings and sorrows which are inseparable from the Poor-law administration, where the welfare of parties, and the distribution of money for their support, rest in the hands of those who have the greatest pecuniary interest in that distribution. The same evil principle is maintained in our colleges: the highest pecuniary advantages are held out to those who have obtained, by underhanded and irregular acts, the legal power to degrade and to insult the great body of the profession.

The evils, therefore, both from within as well as from without, must be met before we can hope to see the different departments of the profession placed in positions less degrading than many of those they now occupy. This can never be done while irresponsible men are placed over those departments who have a high money-interest in withholding the rights of those they govern. You all know what a guardian is at a poor-law board, where every case that comes before him touches his own pocket. If you were in the navy or the army department of the profession, you would experience the same difficulties; you would know what it is to witness some of the most noble conduct displayed by your professional brothers; evidences of the highest talent, of the most magnanimous and exalted acts of bravery and self-denial, for which not only no mark of honour or worldly distinction has been awarded, but not the smallest notice has been taken. It is sickening and discouraging in the extreme to think that men rule over these departments, not because they have been placed there by the wise deliberations of a responsible council of the profession, but by a feeble and temporising legislature, who have got the franchise in their own hands, and who hold the ear of the government of the day. Well may it be said, that we can obtain no reform worth our acceptance, in a legislative sense, till we see our representative system altered, and a profession like ours, numbering more than fifteen thousand scholastic minds, and having within its ranks some of the greatest, the wisest, and most intelligent of mankind, is fairly and constitutionally represented in the councils of this great nation. It is not safe, it is not—to take the most depressed view—commonly worldly wise to keep such a powerful body, as we constitute, in so dangerous and unprotected a position, and without any claim to premonition above what we may all possess: I hesitate not to say, such a state of things cannot long be continued. However far from justice we may be removed by a temporising and nominally representative legislature; yet, up to this time, that legislature have partly refused to stereotype afresh all the cumulative errors and oppressions of bygone ages, committed and exercised by our corporate bodies, and to which our profession has been exposed for centuries past. This is only a proof that your less deeply interested and more wide-awake brothers of the legislature choose to ponder a little longer before they consent to do what the blind infatuation of your professional brothers, in irresponsible council, would have them to do. The legislature may be more fully aware than you are, that it is quite possible to endanger even the existence of those very colleges, some of which contain property bought with the nation's money, and placed there by their authority: at least, it may be gathered from Mr. Black's speech, that it is the intention of the Government to oppose in committee that part of Mr. Headlam's Bill, now before the House, which relates to the so-called representative council. Well may Parliament regard the two measures that have lately been brought before them, rather as extensions of a monopoly, or as an increase of our burden, than as a measure of reform. For what is registration there introduced but a great *petitio principii*, put forth as a blind to cover the injustice of that self-elected council?

It is no boon to the profession to find men separating themselves from the water-quacks and homœopaths, to take shelter under a register which blazons them forth with all their honours thick upon them, which honours they have obtained through self-interest or a money consideration. It is quite evident from what has fallen from those who took part in the discussion of the Bills in the House last Wednesday, that the legislature, as well as a large number of our brethren, have been misled by the supposition, that because the representative principle has been introduced into the council of those two Bills, that this is the same thing as if what is called "the representative principle in legislation" had been there advocated. A more artful deception could not be practised, than to allow self-made councillors of a number of bodies—so eaten up with corruption that they only manifest life in its most deformed and repulsive aspect—to reorganise themselves into a great medical council which is to rule the roast over fifteen thousand men practising in this country; and while the educational status of these men is to be raised by a more expensive and complex plan, no more professional status—no more justice is awarded to them than they had before. Thus the same evils are perpetuated by transferring the injustice from individual corporations to a general council. This is truly monstrous! though it is just possible the Bill may pass, having this injustice stamped upon it; yet, when the Bill comes into operation, and men, like the union surgeons, expectant of some mitigation of the evils they suffer from, find they have been deceived, I cannot suppose any other consequence will follow than a more complete disorganisation than that we have hitherto had to deplore. I do not, however, want to exaggerate this matter; but only as one upon whom you have placed so much honour, I feel I should be most unworthy of it, if I were not at this time to record my solemn protest against such reform as we have had offered to us, and which I grieve to think has received the sanction of our Association, by a course which I should be very sorry to be obliged to say was the right one. Having occupied your attention for a short time on that subject I thought most important to bring before you, will now request the secretary to read the Report.

NEW MEMBERS.

Dr. Burnett proposed —— Ross, M.D., and J. Manley, M.D., of the Hampshire Lunatic Asylum, as members of the Association and of the Branch.

Mr. May seconded the nomination; and they were elected.

OFFICERS AND COUNCIL.

The following officers and council were elected: *President elect:* G. May, sen., Esq.; *Representative in General Council:* T. L. Walford, Esq. *Members of Council:* C. Cowan, M.D.; C. Vines, Esq.; E. Wells, M.D.; R. T. Woodhouse, M.D.; J. W. Workman, Esq. *Honorary Secretary:* George May, jun., Esq.

VOTES OF THANKS.

Dr. Woodhouse proposed, Mr. Harrinson seconded, and it was unanimously resolved,

"That the best thanks of this meeting be given to Dr. Cowan, the late President, and to Dr. McIntyre, the Representative, for their services during the past year."

POOR-LAW MEDICAL REFORM.

A petition in favour of a reform of the laws affecting Poor-law Medical Officers was signed by the members present, and will be forwarded to one of the members for Reading for presentation to Parliament.

RETROSPECTIVE ADDRESS. BY J. MCINTYRE, M.D.

Dr. McIntyre (Odiham) read an able retrospective address, reviewing the proceedings of the Reading Pathological Society for the past year, which, in accordance with the wish of the meeting, will be published in the Journal.

The subject of the Journal having been brought before the meeting, an unanimous expression of approval was elicited. The members and their friends afterwards dined together, and spent a most agreeable evening under the Presidency of Dr. Burnett.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

The fifth annual meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Tuesday, July 14th, at 3 P.M. The chair was first taken by the retiring President, George Webster, M.D., who afterwards resigned it to the newly elected President, Edwin Lankester, M.D., F.R.S. There were also present, James Bird, M.D.; Thomas Charles, Esq.; G. D. Gibb, M.D.; A. Henry, M.D.; S. W. J. Merriman, M.D.; E. W. Murphy, M.D.; W. Ogle, M.D.; Joseph Seaton, M.D.; Edward Smith, M.D.; A. P. Stewart, M.D.; T. Ogier Ward, M.D.; and A. Wynter, M.D.

NEW MEMBER.

On the motion of Dr. Webster, seconded by Dr. Lankester, F. Wilkinson, Esq., of Sydenham, was ballotted for and elected a member of the Branch.

REPORT OF COUNCIL.

Dr. O. Ward (Secretary) read the following report—

"The Council of the Metropolitan Counties Branch, in making its fifth report to the members, begs to state that its attention has been directed, during the past year, to the following objects; viz., to increase the number of members, and

to render the Branch more useful by making it better known to the profession within the district; to procure some security against accidental and criminal poisoning; and to obtain for the profession and the public a Medical Reform Bill, in accordance with the principles hitherto maintained by this Branch and by the General Association.

"The first of these objects your Council thinks may be attained by supplying the Honorary Secretary with an efficient colleague, who, residing in London, may be enabled to maintain a closer connexion between himself and the great body of the members, as well as to induce other medical men, who have hitherto stood aloof, or are ignorant of their existence, to join the Association and their Branches; and your Council have great pleasure in being able to inform the Branch, that a gentleman, in every respect most highly qualified to fulfil the desires of the Branch (Dr. Stewart, of Grosvenor Street), has kindly allowed his name to be proposed to you as joint Honorary Secretary, with the other officers of the Branch. The alterations in the laws necessary to effect this purpose were submitted to your notice and adopted at the general meeting of May 12th. In furtherance of the same desire to make the objects of the Association better known, it has been suggested to have evening meetings of the members of the Branch, to which their professional friends might be invited; and in order render the meetings more scientific in their character, Dr. Stewart is about to propose the formation of a Committee to consider and report on the feasibility and propriety of instituting a series of observations on the action of medicines.

"With regard to the second object, your Council observes with satisfaction that a Bill for the Restriction of the Sale of Poisons is before Parliament; and although it cannot approve of all the enactments therein proposed, the necessity for some legislation on the subject has induced the Branch to present petitions to both Houses of Parliament for this purpose.

"The third object—a Medical Reform Bill—appears likely to receive great support in Parliament, if not to become the law of the land, during the present session; and although your Council regrets that the representative principle is not by any means sufficiently recognised in either Mr. Headlam's or Lord Elcho's Bill, yet, believing that the former has, for the first time, united the corporations and the profession in its favour, it thinks the Branch has exercised a wise discretion in determining to give its support to Mr. Headlam's Bill, with a strong hope that certain of the objectionable clauses may be modified before it passes into law.

"Your Council have also to report that, trusting to the well-known sentiments of the Branch with regard to the hardships under which the Poor-Law Medical Officers generally labour throughout the kingdom, and there not being time to call a meeting of the Branch, the President, President Elect, Honorary Secretary, and one or two other members have signed and presented a petition for an improved system of remuneration, and for the removal of the various grievances which Mr. Griffin, of Weymouth, has brought under the notice of the profession.

"Your Council has to express its regret that the Branch has been deprived by death of one of its members, R. Collins, Esq., of Leytonstone.

"Your Council beg to call the attention of the members to the Treasurer's account, from which it appears that, in consequence of the arrears and irregularity in the payment of the subscriptions, and from members retiring from the Association and the Branch without paying up their overdue subscriptions, the money in hand is not sufficient to pay up the demands.

"Your Council therefore earnestly request that each member will immediately pay off all outstanding claims of this nature, the amount of which has been stated to him in the circular. If this were done, as the present income of the Branch exceeds its expenses, there is every expectation that in the course of next year that every debt will be discharged, and a surplus be left applicable to some scientific and useful purpose."

ELECTION OF OFFICERS AND COUNCIL.

The following gentlemen were elected the Officers and Council of the Branch for the ensuing year:—*President:* Edwin Lankester, M.D., F.R.S. *President-Elect:* G. J. Squibb, Esq. *Treasurer:* Joseph Toynbee, Esq., F.R.S., 18, Savile Row. *Secretaries:* T. Ogier Ward, M.D., 9, Leonard Place, Kensington; and A. P. Stewart, M.D., Grosvenor Street. *Ordinary Members of Council:* Henry Ancell, Esq.; James R. Bennett, M.D.; James Bird, Esq.; W. Camps, M.D.; T. Charles, Esq.; Robert Dunn, Esq.; George D. Gibb, M.D.; S. Griffith, M.D.; A. Henry, M.D.; Charles F. J. Lord, Esq.; S. W. J. Merriman, M.D.; E. W. Murphy, M.D.; John Propert, Esq.; Edward Smith, M.D., LL.B.; George Webster, M.D.

Dr. Webster, in resigning the chair, thanked the members of the Branch for the support which they had given him during his year of office, and introduced his successor, Edwin Lankester, M.D., F.R.S.

PRESIDENT'S ADDRESS.

Dr. Lankester, in taking the chair as the newly elected President, thanked the Branch for the expression of confidence they had manifested towards him. He felt the office of President to be one not only of honour, but of great responsibility. The attendance at the meetings of the Branch had fallen off; but by looking back to its past history, the causes of this failure might be found. But at all events it was the duty of the Branch still to move on; for the same reasons which led to its formation still exist. It must be remembered that although the Branch had been active in some matters to which reference had been made by the Council, there had yet been no legislation on these subjects. The object and interest of the Branch was to extend the numbers and influence of the Association, recognising no party nor section. He (the President) trusted that the members of the Branch would give him their assistance in promoting its objects; for himself, he was determined to hold on, and never to waver in what he regarded as the duty of a President of the Branch.

VOTE OF THANKS TO THE PRESIDENT.

Dr. Stewart proposed—

"That a cordial vote of thanks be given to Dr. Webster for his services in the chair during the past year."

Dr. Murphy seconded the motion, which was unanimously carried.

ELECTION OF REPRESENTATIVES TO THE GENERAL COUNCIL.

A ballot having been taken for five representatives of the Branch in the General Council, in addition to the Secretary, the following members were elected: James Risdon Bennett, M.D.; Alexander Henry, M.D.; Edwin Lankester, M.D., F.R.S.; Edward Smith, M.D., LL.B.; and George Webster, M.D.

FORMATION OF A COMMITTEE ON THE ACTION OF MEDICINES.

Dr. Stewart, in an able speech, insisted on the investigation of the action of medicines as an important subject to be taken up by the Branch, and proposed the following resolution:

"That the following gentlemen constitute a Committee to consider a report on the propriety and feasibility of instituting a series of observations on the action of medicines:—J. R. Bennett, M.D.; James Bird, M.D.; W. Jenner, M.D.; E. Lankester, M.D.; E. W. Murphy, M.D.; W. Ogle, M.D.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; E. H. Sieveking, M.D.; E. Smith, M.D.; J. Snow, M.D.; A. P. Stewart, M.D.; A. Ure, Esq.; G. Webster, M.D.; A. Wynter, M.D.; with power to add to their number."

Dr. Webster seconded the motion. He considered that the undertaking of an investigation of the action of medicines would be much to the credit of the Branch.

Dr. James Bird and the President supported the motion, which was put to the vote, and carried.

EVENING MEETINGS OF THE BRANCH.

The President brought forward the subject of holding the Council meetings in the evening, and following them by social meetings of the members of the Branch. After some conversation, in which Dr. Webster, Mr. Charles, Dr. E. Smith, Dr. Wynter, Dr. Ward, and Dr. Seaton, took part, it was resolved, on the motion of Dr. Webster, seconded by Dr. James Bird—

"That the question of holding the Council meetings in the evening, at 7 o'clock, instead of at 4, and afterwards holding general social meetings of the Branch, be considered by the Council at its next meeting."

GRATUITOUS MEDICAL SERVICES.

Dr. Webster proposed, Dr. James Bird seconded, and it was resolved—

"That the following members form a Committee to consider the subject of Gratuitous Medical Services:—T. Charles, Esq.; S. W. J. Merriman, M.D.; W. Ogle, M.D.; J. Seaton, M.D.; G. Webster, M.D.; and A. Wynter, M.D."

It was agreed, on the motion of the President, that, as a slight testimonial of Dr. Henry's services to the Branch, he should be invited to the annual dinner.

THE DINNER.

The members of the Branch dined together at the Freemasons' Tavern, Great Queen Street, at 6 P.M. The chair was occupied by Dr. Lankester, President of the Branch. After the usual loyal and patriotic toasts, the following were given:

"The British Medical Association and the Metropolitan Counties Branch;" by the President.

"The President;" by Dr. Seaton.

"The Ex-President, Dr. Webster;" by the President.

"The President-Elect, G. J. Squibb, Esq.;" by Dr. Merriman.

"The Secretaries, the Treasurer, and the Council;" by Dr. Wynter. Dr. Ogier Ward returned thanks.

"The new Members of Council;" by Dr. Stewart.

"The Journal and Dr. Wynter;" by the President. Dr. Wynter returned thanks.

"The Representatives in the General Council;" by Dr. Ogle. Dr. Henry returned thanks.

Editor's Letter Box.

THE LONDON PHARMACOPŒIA.

Sir,—"A young lady lately requested of me a prescription for a troublesome tickling cough: the following is given to her: ℞ Holloway's pills and ointment, etc. Sumatur, etc., etc. To my astonishment, it is returned, the druggist, in plea, urging that it is not in the *Pharmacopœia*."

Really, it is refreshing to turn from the dull, sensible, scientific, matter-of-fact letters in our Journal to the clever communication which appeared at page 594 last week, and of which the above is a slight parody. But you have not all the fun yet, for the writer adds, "what am I to do, not knowing of any substitute for them?"

Seriously, I had fancied that only qualified men were eligible for admission into our Association; and where, I would ask, are the qualifications of a gentleman who makes such an admission of incapacity? Could he not write a prescription for a cough mixture, drops, pills, or powders? And, if not, why? If the members generally were in such a predicament, their patients would soon "know of a substitute for them."

I am, etc., Another Member.

Sussex, July 13th, 1857.

THE LONDON PHARMACOPŒIA.

Sir,—In reply to "A Member," dating from Barnsley, and asking "what he is to do," as the druggist does not know what the "Troch. Morph. et Ipecac." are which he had prescribed, I would reply, send to a bookseller's for *Squire's Three Pharmacopœias*, published in 1851, and exhibiting, in parallel columns, each formula in the three *Pharmacopœias* of London, Edinburgh, and Dublin, with brief remarks on the actual and comparative strength of each preparation. With this in his possession, "A Member" may order whichever of the troches recognised by the Scotch College he considers suited to the case he is called to.

I calculate that a patient taking twelve of these lozenges would in them take about one-third of a grain of muriate of morphia and one grain of ipecacuanha. Perhaps there are lozenges of this strength on sale, but actual inquiry alone could settle that question.

That it would be convenient to have lozenges for cough and heartburn of the same strength and composition at every apothecary's and druggist's, there can be no doubt; but it appears that no such custom has grown up in England.

I agree with your correspondent in wishing that an alteration were made in this respect; but if he throws stones against the London *Pharmacopœia* for what is superfluous, let him recollect that the Edinburgh is liable to blame for ordering a useful pill (pil. ipecac. et opii) to be made of a powder nowhere else mentioned, but to which one of a different name bears a strong resemblance; yet, if that is intended, any practitioner could prescribe it equally well extempore.

I am, etc., S. W. J. M.

London, July 13th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Wednesday, July 15th.

MEDICAL PROFESSION (No. 1) BILL.

Mr. Headlam, before moving that the order for the committee upon this Bill be discharged, wished to say a few words in explanation. After the House had assented to the second reading of the Bill, it became the duty of those who were charged with the conduct of it to consider whether there was any prospect of being able to pass it during the present session. It appeared to them that it would be useless to proceed at present. He wished, however, to call the attention of the Government to this important and difficult subject, and as the House had, by a considerable majority, sanctioned the measure he had introduced, he thought it would be the duty of the Government to bring in a Bill based upon the same principles. [*Hear.*] Should they do so, he undertook to give it his most earnest support; but if they should not do so, or should seek to legislate in the spirit of their recent Bill, he should offer his most strenuous opposition. The hon. member then moved that the order for the committee be discharged.

The motion was agreed to, and the Bill accordingly was withdrawn.

POOR-LAW MEDICAL OFFICERS.

In reply to Mr. Moody,

Mr. Bouverie said that, under the Poor-Law Amendment Act, the overseer was entitled, in cases of urgent necessity, to give an order for medical relief to such persons as he thought required it. A case of this kind, alluded to by the hon. gentleman, had occurred in the Somersetshire union; but afterwards the guardians, not believing it to be a case of urgent necessity, refused to allow such relief. The medical officer, in consequence, brought an action against the overseer in the County Court, and the judge decided that the overseer was not personally liable. As far as he (Mr. Bouverie) had the means of judging, that decision was right in point of law, nor had the Poor-Law Board (though they had offered some advice to the guardians in the particular case referred to) any intention of altering the general law in this respect. Certainly medical officers of unions seemed exposed to some hardships in such a case, but, at the same time those gentlemen had the power of protecting themselves, because they could judge whether the case which they were called upon to attend was one of urgent necessity, and if it was not they could decline to act upon the order of the overseer. Medical officers, however, should be very careful in exercising their discretion in such instances, because if, after all, the case turned out to be one of urgent necessity, they would be held responsible.

PETITIONS.

Petitions in favour of Poor-Law Medical Reform have been presented from the medical officers of the following unions:—Upton-on-Severn; St. Blazey, Grampound, Mevagissey, St. Austell and Fowey districts; Basford; Newcastle Emlyn; Alderbury; St. Alban's; Skirlaugh; Belper; Bethnal Green; and Whitehaven: also, from the medical students of Manchester; from the Medico-Ethical Association of Manchester; the medical students of the Westminster Hospital; and from medical practitioners in Boxford.

A petition against the Compulsory Vaccination Act has been presented from Lincoln.

A petition for exemption from the operation of the Medical Bills has been presented from the dentists in various places.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Lowdell. On July 11th, at Park Road, Stockwell, the wife of J. L. Lowdell, Esq., Surgeon, of a son.

Mason. At Surbiton Hill, Kingston, on July 14th, the wife of C. J. Mason, Esq., Surgeon, of a son.

Massey. On July 12th, the wife of H. H. Massey, Esq., Camberwell Green, of a son.

Pantaleoni. On July 3rd, at the Villa Ruffinella, Frascati, the wife of Chevalier Pantaleoni, M.D., of Rome, of a son.

Power. On July 10th, at Grosvenor Terrace, South Belgravia, the wife of Henry Power, Esq., Surgeon, of a daughter.

Scott. On July 8th, at Boulogne-sur-Mer, the wife of John Scott, M.D., F.R.C.P.E., prematurely, of a son, who survived his birth only a few hours.

MARRIAGES.

Bedborough—Weeding. Bedborough, Henry, Esq., of Nelson, New Zealand, to Sarah Maria, second daughter of Samuel Weeding, M.D., of Ryde, Isle of Wight, on July 9th.

Jacob—Pilkington. Jacob, Rev. J. A., eldest son of Arthur Jacob, M.D., of Dublin, to Frances Sarah, eldest daughter of John Pilkington, Esq., Mornington Road, at St. Pancras Church, on July 14th.

Jones—Stiff. Jones, James, M.D., of Woburn Place, Russell Square, to Emily, youngest daughter of the late Thomas Stiff, Esq., of Clifton, Bristol, at Clifton, on July 9th.

Kirkman—Edwards. Kirkman, Henry, Esq., youngest son of *John Kirkman, M.D., of Melton, Suffolk, to Elizabeth, eldest daughter of J. B. Edwards, Esq., of Bury St. Edmunds, on July 7th.

Legge—Wallis. Legge, William, Esq., Surgeon, of Wiveliscombe, Somerset, to Laura, only daughter of C. E. Wallis, Esq., of Great Marlborough Street, on July 9th.

DEATHS.

Fincham. On July 13th, aged one year, Agnes Mary, youngest child of G. T. Fincham, M.D., of Chapel Street, Belgrave Square.

Irvine, John, Esq., Surgeon R.N., at Moville, near Londonderry, aged 73, on July 3rd.

Stone, William, Esq., for upwards of forty years a faithful officer of the Royal College of Surgeons of England, at the house of his friend David Powell, Esq., Surgeon, Amwell Street, Claremont Square, aged 76, on July 10th.

Whyte, Robert, M.D., at Naples, on July 4th.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 10th, 1857:—

Adlington, Robert, Blackwell, Derbyshire
Daltera, James Johnson, Dublin
Harding, Edward, The Grove, Hammersmith
Hartley, John Henry, Thames Ditton
Warden, Thomas Messenger, Over Whitacre, Coleshill, Warwickshire
White, George Farr, Boundary Road, St. John's Wood
Williams, John James, late British Medical Staff, Ottoman Army

At the same meeting of the Court—

Ayre, William Gordon James, of the Royal Marines, passed his examination as Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date August 2nd, 1850.

Licentiates in Midwifery admitted at a meeting of the Board, on July 15th:—

Biddle, Henry Cooper, Edmonton: diploma of membership dated March 25th, 1857
Catling, George Taylor, Highbury: June 12th, 1857
Fitzgerald, Edward Ambrose, Calcutta: Nov. 21st, 1856
George, Charles Frederick, St. Thomas's Hospital: March 20th, 1857
Hartley, John Henry, Thames Ditton: July 10th, 1857
Ives, Robert, Chertsey: May 1st, 1855
Littlewood, Joseph, Hampole, Doncaster: March 30, 1857
MacLimont, Robert, London: December 3rd, 1852
Pughe, Hugh Richard, Bala, North Wales
Roberts, John Thomas, New Romney, Kent: August 21st, 1843
Rowlands, Isaac, Lanfair, N. Wales: May 29th, 1857
Skinner, David Shooter, Headcorn: June 5th, 1857
Thane, George Dancer, Hart Street, Bloomsbury
Von Tunzelmann, Julius Woldemar, Brixton Hill: March 16th, 1855

Apothecaries' Hall. Members admitted on Thursday, July 9th, 1857:—

Blackett, Edward Ralph, Piltown, co. Kilkenny
Brookhouse, Joseph Orpe, Brighton
Davies, Jesse Conway, Holywell
Knight, Albert Stanley Prescott, James Street, Buckingham Palace

HEALTH OF LONDON:—WEEK ENDING JULY 11TH, 1857.

[From the Registrar-General's Report.]

In the week that ended on Saturday (July 11th), the number of deaths registered in London was 988, of which 508 were deaths of males and 480 those of females. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 976. But as the deaths of last week occurred in an increased population, it is necessary, for the purpose of comparison, to raise the average proportionally to the increase, in which case it will become 1074. The public health is therefore so far satisfactory at present, that the deaths now returned were less by 86 than the number which would have occurred under the average rate of mortality.

The births registered last week were in excess of the deaths in the same period by 678.

The principal feature in the present return, as compared with those immediately preceding, is the rapid increase of diarrhœa, which has begun to prevail with more force than has been hitherto observed before the middle of July. Last week the deaths from this complaint were more numerous by 100 than those which occurred in the week that ended June 27th. They were then 33, in the following week 65, and last week they rose to 133; the corrected average for ten weeks (of 1847-56) corresponding with last week is 53. Of these 133 deaths, so large a proportion as 124 occurred to infants who had not completed their second year. Nine deaths also are returned as caused by "cholera infantum", "English cholera", and (in one case) "cholera maligna", all of which, with the exception of two, occurred to infants; these are indiscriminately referred to cholera in the tables. It is not out of place to repeat here the observation of the medical officers of the *Dreadnought*, that "during the week the Thames water smelt abominably."

There were seven deaths from small-pox last week, which is more than this disease has caused in any week since January. It has been fatal in two cases recently in a house in Little Clarendon-street, Somers Town; and the Registrar of St. Botolph, in recording a death from small-pox in his district, states, that it is believed that infection in this case was received through indirect communication with a family in Middlesex-street, St. Pancras, in which seven persons were suffering from the complaint. The deaths from typhus increased in the last two weeks from 34 to 41; whilst, on the other hand, hooping-cough declined from 58 to 40, and measles from 25 to 15. A child died from sucking lucifer matches; and the death of a woman, aged 63 years, was caused by fright from thunder, followed apparently by paralysis.

Last week the births of 855 boys and 811 girls, in all 1666 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1354.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·745 in. The highest reading was 30·01 in. at the end of the week. The mean temperature of the air in the week was 59·6°, which is 2° below the average of the same week in 43 years. The mean temperature was the same as the average on Sunday; it was below the average on the following day; 7° below it on Tuesday and Wednesday, and it continued below it, though in a less degree, till Friday. The lowest temperature was 45.7°, on Wednesday; the highest was 79·4 on Saturday; the range of the week was therefore 33·7°. The mean dew-point temperature was 51·5°, and the difference between this and the mean temperature of the air was 8·1°. The mean temperature of the water of the Thames was 64·7°. After Monday, at noon, the wind was generally in the north-west till Friday; at other times it blew from the south-west. There was rain to the amount of 0·30 in., most of which fell early in the week.

The Imperial Society of Physicians of Vienna, in full assembly, under the Presidency of Professor Rokitansky, has conferred on Dr. Black, of Chesterfield, the diploma of Corresponding Fellow, as a mark of the estimation in which his microscopical researches into the Pathology of the Pulmonary Mucous Membrane are held by that distinguished and scientific body.

ASSOCIATION OF MEDICAL OFFICERS AND HOSPITALS FOR THE INSANE.

The annual meeting of this Association was held at the Great Western Hotel, London, on the 2nd instant. The following office bearers were elected for the year 1857-8:—*President:* Forbes Winslow, M.D., D.C.L. *President Elect:* John Conolly, M.D., D.C.L. *Treasurer:* Wm. Ley, Esq. *Editor of Journal:* J. C. Bucknill, M.D. *Honorary Annual Secretary:* C. Lockhart Robertson, M.D. Dr. Forbes Winslow presided at the dinner in the evening. The arrangements at the Hotel gave every satisfaction to the large company present. On the evening of July 1st Dr. Winslow gave a *conversazione* at his house in Cavendish Square, which was numerously attended by the members of the Association, and also by the leading members of the profession and other persons of note, to the number of four hundred, including Sir B. Brodie, Bart., Dr. Andrew Smith, Sir J. Liddell, Dr. Brierre de Boismont, the Chief Justice of Canada, Professor Owen, Mr. Wyld, M.P., the Presidents of the Royal College of Physicians and Surgeons, the Master of the Mint, the President of the Medical Society of London, and the Presidents of the Meteorological, Geological, and Geographical Societies, etc. It is the intention of the Association, in the event of Edinburgh being fixed upon by the British Medical Association as the seat of their annual meeting in 1858, also to visit at that date the Scottish metropolis.

The Royal College of Physicians. The President (Dr. Mayo) and Fellows of this institution issued cards of invitation to a *conversazione* on Saturday evening last, when a numerous assemblage thronged the library and suite of rooms of the College. Among the company were some of the most eminent men of the day in the various departments of the liberal professions. There were present, Lord Campbell; Lord Wensleydale; Vice-Chancellor Sir John Stuart; Vice-Chancellor Sir R. Kindersley; Mr. Grove, Q.C.; Sir Henry Ellis, K.H.; Sir Joshua Rowe, K.C.B.; Professors Willis, Solly, Stephens, and Wheatstone; General Sir F. Smith, M.P.; Mr. Gladstone, M.P.; Mr. Russell, M.P.; Mr. Ayrton, M.P.; Mr. Grogan, M.P.; Mr. Briscoe, M.P.; Mr. Hope, M.P.; Mr. Gregson, M.P.; Mr. Ingham, M.P.; Mr. Tite, M.P.; Mr. Locke, M.P.; the Rev. Dr. Livingston; the Rev. Dr. Whiteside; the Rev. Dr. Major; the Revs. Henry Howarth, John Dyne, George Gowring, Flood Jones, John Kempe, and Baden Powell; Mr. Landseer, R.A.; Mr. Pickersgill, R.A.; Sir B. Brodie; Dr. Andrew Smith; and Alderman Salomons. Several of the ancient and rare volumes with which the library of the College is richly supplied were placed on the tables. Some exquisitely executed photographs of the interior of the Manchester Arts Exhibition, by De la Motte, were much admired; and the astonishing powers of the microscope were displayed in drawing forth the secrets of the spider's claw, the proboscis of the blowfly, and other wonders of creation hidden from the unaided vision. The geological restorations at the Crystal Palace were reproduced on a diminished scale; but the objects which appeared to attract most attention were some very small hermetically closed glass cases containing every variety of preparation of arsenic, cocculus indicus, and other subtle substances, which, seen through the microscope, presented the most wonderful configurations. The refreshments were abundant, and the pleasures of the evening were protracted to a late hour, it being nearly 12 o'clock before the whole of the company had departed.

Medical Benevolent College. On Tuesday, a handsome chapel, which has just been attached to this college at Epsom, was opened for divine service by the Bishop of Winchester. A considerable number of the friends and supporters of the institution were present on this occasion: among others, Earl Manvers, Lord and Lady Dynevor, Archdeacon Robinson, etc. At 11 o'clock the visitors, with the inhabitants of the college and various officials connected with its management, proceeded to the chapel, when divine service was performed by the Rev. Mr. Thornton, head master of the school, and the opening sermon preached by the Bishop of Winchester. At the conclusion of the service the visitors returned to the school-room, where the distribution of the prizes, which had been awarded at the Christmas and Midsummer vacations, was made by the right rev. prelate, who marked the delivery of each reward by a few most affectionate and encouraging remarks to the successful competitors. The company afterwards partook of an excellent *déjeûner*, at the conclusion of which a selection of vocal music was performed by the boys in the school, which spoke well for the care of their harmonic training. The new chapel is a small but handsome building, in the Elizabethan Gothic style. The greater part of the expense attendant on its erection was borne by a number of ladies, who among themselves subscribed the requisite amount.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. G. G. Rogers; Mr. Crosby Leonard; Mr. W. A. Bryden; Dr. H. H. Vernon; Mr. H. Terry, Jun.; Dr. Lankester; Mr. H. G. Trend; S. W. J. M.; Another Member; Dr. Webster; Dr. Cockle; Mr. Haynes Walton; Mr. George May, Jun.; Dr. Bryan; Mr. Stone; Mr. O. Pemberton; Mr. H. Wilkinson; Dr. Cowan; Dr. C. Black; Mr. Kent Jones; Dr. Mc William; Dr. McIntyre; Mr. Toynbee; Dr. Richardson; Mr. G. M. Humphry; and Mr. J. R. Humphreys.

ADVERTISEMENTS.

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	Quekett's Dissecting Microscopes	2	2 0
	Educational Microscopes, from	4	4 0

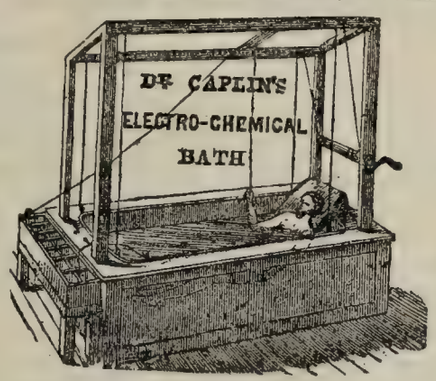
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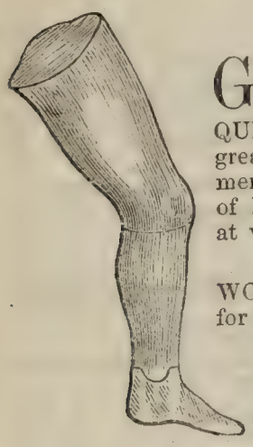
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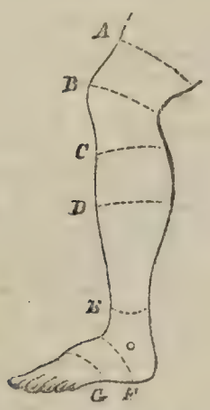


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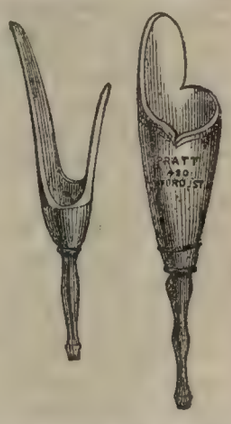
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXX.] LONDON: SATURDAY, JULY 25, 1857. [NEW SERIES.

Diseases
OF
SPECIAL OCCUPATIONS.

No. IV.

DISEASES OF MINERS OF ARKENDALE AND SWALEDALE.

By THOMAS HAYES JACKSON, M.D., Darlington.

THE miners, or "groovers", as they are termed, of Arkendale and Swaledale, reside in a wild romantic district, abounding with craggy rocks, wood, and water, hill and dale. In this picturesque scenery, the sublime, the terrific, and the magnificent, are intimately blended; and the sight will amply repay the tourist who is an admirer of nature, in its primeval beauty, unadorned by the hand of man. The two dales are situated about fourteen miles from Richmond, in Yorkshire; and this out of the way corner of the world has become more accessible since the railroad has been formed to the latter place, and a new road, following the windings of the river Swale, constructed as far as Reeth.

The average number of miners employed in the two districts of Arkendale and Swaledale is six or seven hundred. They are an industrious, sober, intelligent class of people, earning small wages, and therefore not having the means of obtaining the luxuries of life. This circumstance acts as a barrier against intemperance and other excesses. Their daily and nocturnal hours of toil are from five to seven hours, termed day-shifts and night-shifts. In many instances, from the nature of the strata, and the insufficiency of the "way-gates" or driffs, as they term them, they are obliged to work in a constrained position, frequently in a damp and unhealthy atmosphere, so impure and deficient in oxygen, that two candles are obliged often to be placed in a half recumbent or dependent position to produce even a flickering ray of light. Death occasionally results from the foul air; which, in addition to the want of ablution or cleanliness of their persons, has a most detrimental effect on the health of the miners. Their skins absorb the lead; and the fine particles of dust containing lead ore which is raised when the miners are plying the pick, hack, or shovel, permeate the bronchi during respiration. Another exciting cause of ill health is their clothing, which consists of coarse flannel worn in contact with the skin, and covered with a loose harden jacket, or *kitle*. On their return to their domiciles, these garments are cast off, and hung up to dry: thus their dwellings are saturated with damp and noisome exhalations, which arise from the mud and moisture retained in their clothes. These exhalations are most detrimental to longevity; especially, as in many instances there are large families crowded into very small and ill ventilated cottages. In some instances the miners attain to a good old age; but their average duration of life is short, the mean duration being forty-five or fifty.

The smelters in this district, in consequence of the fumes arising from smelting the lead ore, being more deleterious to the organs of respiration, have a mean duration of life shorter by eight or ten years than that of the miner.

The rate of wages is small, the occupation being laborious. In mining phraseology the payment is made according to *fathom-tale*, *wing-tale*, or *shift-tale*. Fathom-tale, in length two yards, is paid according to the nature of the strata; wing-tale, according to the weight of ore; shift-tale is paid by the hour, the average duration being six hours.

The dietary of the miners is meagre, consisting of tea, coffee, milk, cheese, potatoes, bread, and sometimes bacon. In consequence of the low rate of wages, few or any of them are enabled to procure fresh animal food. Formerly, oatmeal was used extensively as an article of diet; at present, it is only used occasionally, being considered by the miners too heating; tea and coffee have in a great measure superseded it.

The miners of this part of the country, unfortunately, have no fund amongst themselves, to which they can appeal when suffering from accident or disease, nor do their employers encourage them to make any provision of the kind. The consequence is, that when a lead miner with a large family meets with misfortune, or has an accident in the mines, or is incapacitated by sickness and disease, he is under the necessity of locating himself in the poor-house to obtain sustenance and medical aid.

The miners commence to learn their calling at the age of 10 or 12. Their first occupation is turning the *windy king*, a species of fan used to ventilate the mines. At the age of 14, they proceed, like their forefathers, to ply the pick, the hack, and the shovel. No doubt, the inhaling a vitiated atmosphere in their boyhood tends greatly to hasten premature disease and decadence. Thus, the worn-out man "shuffles off this mortal coil", and passes into the silent land, unheeded and uncared for by his employers, his place being supplied by new material, which treads in his predecessor's footsteps, until he in his turn is worn out and supplanted.

Fish cannot exist in the rills or small rivulets, into which the washings of the lead ore discharge themselves; though in the other mountain streams, in the immediate neighbourhood, unconnected with the mines, trout is to be found in great abundance.

DISEASES.

The diseases to which the miners are most liable, are congestion and inflammation of the lungs; acute and chronic bronchitis, termed by the miners *belland;* and phthisis, which often assumes the non-acute or chronic form. The sputa, in a great majority of these cases, have a sombre blue appearance, and sink in water. The treatment found most efficacious in the various bronchial affections of the miners, are emetics of ipecacuanha with antimony, sinapisms, and blisters; warm baths; warm stimulating expectorants, such as ammoniacum, squills, and lobelia inflata; and absolute rest from their occupation, more especially for those who have been working in the ill ventilated parts of the mines. Smoking prevails to an enormous extent amongst the miners, both young and old; some consider it most beneficial in relieving the difficulty of breathing, prevalent amongst the miners and smelters of the lead ore, by promoting expectoration. In some localities of this district scrofula prevails.

The females here, as in many other mountainous districts, are very subject to goitre, both the young and the old; and the males are not exempt from it. The females, when pregnant and suffering from immense goitre, are subject to have children born to them deaf, dumb, and idiotic; but when cured by the continued external application of iodine, the same females have borne children with their senses and intellects perfect.

In consequence of the coldness and dampness of the mines, combined with exhalations from drying their wet clothing in their dwellings, the miners suffer from muscular rheumatism, as well as from rheumatic fever. The treatment consists in administering acetate of potass, in combination with colchicum, opiate sudorifics at bedtime, and stimulating counter-irritants.

The miners who toil in the many hives of industry which abound in Swaledale and Arkendale, are not liable either to paralysis, colica pictonum, or lead poisoning. The lead ore, being in the form of galena or sulphuret of lead, is less liable to become absorbed than the carbonate.

ACCIDENTS.

Considering the number of men employed, casualties occur less frequently than in the coal mines. The miners are liable to fracture of the lower extremities, and concussion of the brain and spinal cord, and lacerations of the scalp, from frag-

ments of stone falling, and they are occasionally maimed from the wearing apparel becoming entangled in the machinery or rollers, which are used to crush the stones into small fragments, the lead ore being intimately blended with the limestone found in the mines. The accidents to which the miners are most obnoxious, are from blasting the rocks with gunpowder, termed "shots", producing (from excessive carelessness on the part of the miners) loss of vision, blueness, and disfiguration of the countenance. These unfortunate miners are thus branded for life.

They also suffer frequently from particles of stone and metal embedding themselves in the cornea, which, unless removed quickly by excision, produce inflammation of the eye and its appendages.

I cannot conclude without expressing my acknowledgments to Mr. McCollah, the surgeon resident on the spot, for the statistics embodied in this report.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

NORTHAMPTON INFIRMARY.

RESOLUTION OF ADIPOSE TUMOURS.

By J. H. Webster, M.D., Physician to the Infirmary.

[*Read before the South Midland Branch, May 21st*, 1857.]

Adipose tumours most frequently come under the province of the surgeon, the knife being the *ultimatum* whenever the number, size, disfigurement, or discomfort justifies operative interference; but in some few instances, as the subject of this paper, the rapidity of growth, the number of the parts affected, and a diffusedness of increase, admit of no strictly surgical treatment whatever, and any relief to the patient can be expected only from the most problematical and uncertain influence of internal, constitutional, alterative remedies.

The earliest stages of these growths are seldom noticed by the individual or his professional adviser, there being no pain or discomfort attending their first development, it often being a mere accident that draws attention to them; and when, from their increasing size, they force themselves into notice, the absence of local pain and constitutional disturbance, the uncertainty of their probable extent of growth, as sometimes also of their true character, and, when that is satisfactorily diagnosed, the knowledge that they seldom or never ulcerate, or assume the characters of malignant growths, all tend to dissuade from early and active operative interference.

During that period of expectancy as to the result, and irresolution on the part of both patient and practitioner as to the use of the knife, any simple and innocuous medical treatment, which may have been found by experience to have been beneficial in similar instances, may fairly be tried.

I adduce this case with the more confidence in the interest you will take in it from the fact that, whilst under treatment, the tumours rapidly decreased in size. Persistence in the remedy was attended with persistent reduction of their masses, until some of them entirely disappeared, as our worthy Chairman, who saw the case, as also the patient himself, now present, will testify; but becoming (as it might be expected) heartily sick of constantly taking medicine, the patient unwisely abandoned the remedy, and, shortly afterwards, the tumours began to increase, and have now attained nearly the same size as they were originally. This, to me, is a matter of regret, but it will corroborate in our minds the influence the drug must have had in their dispersion. The case is as follows:

Case. Richard Wright, aged between 38 and 40, formerly a post boy and farm labourer, but during the past eleven years a brewer's man, about five feet five inches in height, stout, and strongly built, of quasi-temperate habits, and always in the enjoyment of good health, was admitted to the Infirmary October 11th, 1856. A year and three quarters back a small pimple formed at the back of his right ear, which itching, he wounded the surface by scratching, when it rapidly increased to the size of a bantam's egg, becoming angry, hot, and painful, and accompanied with much constitutional disturbance. There being some obscure fluctuation in the tumour, it was opened by his medical attendant; some fluid escaped, and there was relief to the pain. The wound healed kindly, but the swelling became very hard and stony to the feel, and slowly increased in size, until it extended from the back of the right ear obliquely across towards the median line, and down as far as the fifth cervical vertebra, occupying, as it were, the exact site of the splenius capitis muscle.

About eighteen months afterwards a second tumour formed in the same region at the back of the left ear, increasing in a similar manner, but unattended with the stony hardness of the first and opposite one. Shortly afterwards, upon shaving, he discovered a swelling of the parts beneath the chin; this rapidly enlarged, giving the appearance of a substantial double chin.

Six weeks prior to admission, when trying on a pair of trousers, he discovered that the walls of the belly had become much larger and distended by four different swellings, two above and two below the umbilicus. Two other symmetrical formations were also observed in the pubic region, one on each side of the penis. These six last mentioned increased so rapidly as to reach their greatest size in the space of nine days.

The abdominal swellings were symmetrical in the supra and infraumbilical regions, and apparently developed in the cellular investments of the two recti muscles. The upper ones measured twelve inches laterally and horizontally, and ten inches vertically, occupying the whole space between the ensiform cartilage, false ribs, and the umbilicus. The two lower ones occupied the space from the umbilicus to within about two inches of the symphysis pubis.

There had been no treatment previous to his admission on October 11th, at which time all the tumours, though less indurated than formerly, were at their greatest size; the circumferential measurement of the abdomen then being thirty-nine inches.

My colleague, Mr. Terry, under whom the case first came, tried alterative mercurial treatment, with iodine inunction, and moderate purgation, which was continued for a fortnight, when I was asked to see the case. Recollecting a very graphic description by Sir Benjamin Brodie, in his work on Pathology and Surgery, of a case nearly identical with this one, and the favourable issue of that case, I suggested the trial of the same simple remedy; namely, the liquor potassæ, largely diluted, in as full doses as could be taken without deranging the digestive function.

October 23rd. The patient was put upon half-drachm doses of the liquor potassæ in the compound infusion of linseed, thrice daily.

November 2nd. He thought himself improved, the tumours having a more doughy, spongy, semi-elastic feel. He had been passing, since taking the medicine, between seven and eight pints of urine in the twenty-four hours. He was ordered to take the medicine four times in the day.

November 6th. The liquor potassæ was increased to forty drops for a dose, four times daily.

November 8th. He reported, that since taking the liquor potassæ all the tumours had become much softer, and the abdominal ones had much diminished in size, he being able now to button his trousers, which two days before he could not do by three to four inches. The urine amounted to from eight to ten pints. He was then made an out-patient, with instructions to continue the medicine in as full doses as he could take, without interfering with his health; but to reduce or intermit it whenever he found his urine becoming alkaline, having been furnished with litmus paper for ascertaining that point.

February 14, 1857. He had taken a cold, and was suffering from hoarseness of voice: he said he was quite well, saving the cold, but he looked pale, thin, and in impaired health, all the tumours were very much shrunk; that beneath the chin nearly gone. The posterior cervical ones had lost their prominency; and his aspect from behind was that of a man having merely a thick bull-set neck; the abdominal walls had so subsided that, in the erect posture, the line from the ensiform cartilage to the pubes was vertical, and the pubic swellings were quite gone. He had been taking thirty-five drops of liquor potassæ, thrice daily. The urine was much in excess. He was ordered to take, in addition, a drachm of compound tincture of cinchona three times daily. I understand that he persisted in the medicine for a fortnight, with continued improvement, and then abandoned it. Shortly afterwards the

swellings reappeared, and increased slowly; and they are now nearly as large as at first.

Remarks. It may be remarked that these depositions commenced, increased, and obtained their maximum development in the space of twenty-one months; that, under treatment, they resolved themselves to the above-mentioned condition in the space of four and a half months; and that the discontinuance of the medicine was followed by their regrowths. Their dispersion was certainly *post* the special treatment, and, under the circumstances, I think we may be justified in assuming that it was also *propter;* and if so, what is the *rationale* of the action of the liquor potassæ? Does it act simply through its diuretic influences? Does it arrest the deposition of fat, and so far favour interstitial absorption, or is it a resolvent of the adeps of the system?

It is believed that these tumours occur only in regions where adipose structure is naturally found, and that they do not form in parts where merely loose cellular tissue exists; so that we look upon them rather as hypertrophy, or excess of deposition in the tissue, than as morbid growths or developments. But whence arises in the constitution that increased tendency to the formation of fat? and why is it deposited in patches and not uniformly distributed over the whole body? I fear that we must conceal our ignorance upon this latter point under the convenient and oft-adopted explanation of a "freak of nature"; but as regards the former, I would submit to your consideration some speculative reasons.

The most satisfactorily recognised function of the liver is the resolution of the saline constituents of the blood into their acids and alkaline bases: the first, to play their part in the digestive function; the latter, in the function of absorption. Also, it is an adopted modern opinion, that the soluble proteine compounds of fibrine, albumen, and caseine, are chiefly absorbed into the circulatory system at once from the stomach; and that the oleaginous and fatty elements, or hydrocarbons, maintained in solution by the alkaline bases from the liver, are absorbed by the lacteals spread over the whole intestinal canal, into the thoracic duct, thence into the venous system, and through the pulmonary structures, to be oxygenised and burnt out of the system under the form of carbonic acid. If, therefore, any change in the circumstances or condition of life occurs whereby this oxygenation is retarded or reduced, or if more material be thrown into the system than those functions can dispose of, there will, *cæteris paribus*, be a cumulative tendency to adipose depositions.

The change in this man's occupation, from that of post-boy and field or agricultural labourer, breathing the fresh pure, cool air, with perhaps a diet chiefly farinaceous, to that of a brewer's servant inhaling a hot atmosphere surcharged with steam-vapour, and consequently retarding the excretion of carbon from the system, may be suggested as one amongst other causes of an excess over expenditure of carbonaceous elements in the circulation. An amusing feature in the history of this patient is, that owing to the proximity of a tanner's yard, he has had the opportunity of obtaining, at small cost, an unlimited supply of ox-tails, making thereof a highly nutritious "aldermanic" soup, which he formerly partook of freely several times in the day: and, as he was a very energetic, hard-working man,—always employed fourteen, and sometimes sixteen, hours out of the twenty-four in his laborious and exhausting occupation,—you may imagine that the consumption was anything but small. Coupling this with the not scanty supply of strong beer or porter which brewers' men are allowed, it will be seen that, whatever the waste of the system, the recreative supply has been most ample, so that it is not improbable to infer that carbonaceous elements, far beyond the requirements, were gradually accumulated in the system.

I have mentioned that the fatty portions of our alimentary substances have to be saponified by the alkaline products of the liver previous to their assimilation; when, therefore, the hepatic function may have been enfeebled by peculiar occupation, by indolence or age, or overtasked by indulgence, the normal alkalinity of the blood may be insufficient to retain in solution those carbonaceous elements. Hence abnormal depositions must take place, so that the circulation may be relieved of that excess, which the pulmonary and other excretory organs are unable to oxydise or discharge.

Lastly, it has been noticed that the medicine acted powerfully as a diuretic, the water having increased to an almost diabetic amount; the urea, consequently, thrown off must necessarily have been much beyond the average. I think it, therefore, not unreasonable to presume, that long continued exposure to an atmosphere of high temperature, saturated with vapour, with the consequent retardation of the pulmonary excretion of carbon, high diet, and full amount of fermented beverages, with sluggish action of the liver and kidneys, were the causes of those fatty or steatomatous formations; and that by the exhibition at particular stages of the digestive and assimilative functions of a free and uncombined alkali, the solubility of such constituents may be maintained, their tendencies to assume concrete forms retarded, and, by their longer retention in the circulation, a more facile decomposition and elimination in the form of carbonic acid from the lungs, and of urea from the kidneys, promoted.

ST. GEORGE'S HOSPITAL.

CASES OF FEMORAL HERNIA.

Under the care of H. C. Johnson, Esq.

[*From Notes by* F. Wintle, Esq., *Surgical Registrar.*]

We are enabled to lay before our readers some interesting cases of femoral hernia which have lately occurred at this Hospital in the practice of Mr. H. C. Johnson, which have all terminated happily; and each of which presents some special features calling for remark.

The first case shows how great mischief may be produced in a very short time by the pressure of the sharp edge which usually forms the stricture in femoral hernia. In this instance, although there was every reason to suppose that the patient had not had a rupture before the day of admission, the vessels of the omentum were much injured, and rapid change of structure would doubtless have soon occurred. This is one of the numberless cases which show the importance of operating early in hernia, especially in the femoral variety.

The second case is remarkable for the peculiar appearance of the contents of the sac. It was impossible to be quite certain about the true nature of the bodies found within it, as the adhesions which existed between them and the sac prevented the operator from drawing them down and so seeing their connexions.

The third case deserves record as one of the few instances of recovery from an artificial anus formed in the operation for strangulated hernia. This is a proceeding which must indeed be adopted in appropriate cases (though these are happily fewer, now that surgeons are fully impressed with the necessity of operating early), but which is usually adopted more as a scientific necessity than from any hope of success in saving the patient's life. It is satisfactory, therefore, to put on record an instance in which the patient has fairly recovered from the operation, and in which she will, in all probability, recover from the artificial anus also. It will be noticed that there was no hiccough in this case, nor any evident sign of gangrene; so that the operation without opening the sac might have been performed, and would of course have occasioned effusion of fæces into the peritoneum.

The fourth case is of interest from the rare circumstance of a large piece of the great intestine being contained in the sac of a femoral hernia. This is a fact which, if our researches do not betray us, is very rarely noticed. The large size of the ring in this instance seems to have acted as rather an obstacle to the reduction of the gut, which was so difficult, that it was at one time a question whether it were possible.

Case I. *Epiplocele: Short period of Strangulation: Sac full of Blood.* Sarah R., aged 53, was admitted on April 12th, under the care of Mr. Johnson. She is a married woman, and accustomed to hard work. On the day of admission, while sitting at dinner after a hard morning's work, she suddenly felt pain in the left groin, and then discovered a tumour there. The taxis was employed unsuccessfully, and she then came to the Hospital. There was then a small tumour in the left femoral region, without impulse, hard, and irreducible. The operation was performed as soon as possible. The sac was opened, and found filled with blood. The stricture was very tight. In the sac was contained only a small piece of congested omentum, which was easily returned. The operation was followed by symptoms of peritonitis; viz., hot skin, pain and tympanitis of the abdomen, rapid pulse (120), flushed face, and great anxiety of countenance, but no vomiting. Calomel and effervescing ammoniated saline mixture were given. In the evening of the next day she was so weak, that it was found necessary give a litttle wine. The bowels had acted after an injection.

It is not necessary to follow this case more in detail: suffice it to say that the peritonitis and fever soon yielded to the treatment adopted, and she was discharged cured on May 6th.

Case II. *Femoral Hernia containing peculiar Growths, probably diseased Omentum.* Susan K., aged 45, was admitted on May 7th. She had had hernia for ten years, and had worn a truss at intervals. The hernia came down, on the present occasion, two days before her admission, while she was making some exertion, and had not been returned since, but the bowels had acted with a purge once on the day before admission. There were no urgent symptoms of strangulation, but great constitutional disturbance, loaded tongue, quick pulse, and tension of the abdomen. The tumour was very large, extending internally to the labium, and externally to within an inch and a half of the anterior superior spine of the ilium. There was little redness, but it was very tender and painful. The tumour was partially separated into two parts, of which the outer was hard and very painful; the inner, separated from the other by a depression, was soft, as if from effusion.

As the swelling was irreducible, it was determined to operate at once. The sac was opened, and the outer part of the tumour was found to contain a mass of dark red growths, much resembling small black cherries, about fifteen in number, and closely adherent to the neck of the sac and to a large mass of omentum in the neighbourhood. It was found impossible, without using undue violence, to draw these bodies fairly down into sight; and it therefore remained uncertain what their real nature was. They were too closely aggregated for appendices epiploicæ, besides that no proof existed of the presence of the large intestine. The more probable conjecture therefore was, that they were portions of omentum altered by disease and congestion. The stricture being divided, they were left in the wound without further interference.

May 8th. The operation was followed by symptoms of fever, and threatened peritonitis, for which effervescing saline mixture, and calomel with opium, were given. This, however, soon subsided. The sloughs, which included the lobulated portion above alluded to, came away from the wound a week after the operation, and her general health remained perfectly good. The cure, however, was retarded by suppuration about the wound, and she did not leave the hospital till July 1st.

Case III. *Sloughing of the Gut: Artificial Anus.* Amelia A., aged 40, was admitted May 8th, under the care of Mr. Johnson. She was a single woman, weak and nervous, who had been working hard as a domestic servant. She had had hernia for three years, but had never worn a truss, and had found no difficulty in returning the gut. Latterly the tumour had caused her considerable inconvenience, and she had been troubled with nausea, but had never vomited till four days before admission, when the hernia came down, and could not be reduced. Taxis was attempted by a medical man next day, who advised her immediate removal to a hospital; this, however, was neglected till four days after the strangulation. In the interval the bowels acted once. On admission, there was found a small hard tumour in the right femoral region, very tender, devoid of impulse, and irreducible. She complained of great pain in the abdomen and frequent sickness, and her countenance displayed much anxiety: there was no hiccough.

Under these circumstances the operation was resorted to at once. As soon as the sac was opened, fluid fæcal matter gushed out. By clearing this away, a small knuckle of small intestine was exposed: this was in a sloughing state, and perforated by a small hole, through which fæces escaped. A ligature was passed through the intestine, which was then opened, and stitched to the margin of the wound. Strong beef-tea was ordered.

May 9th. Two grains of calomel and half a grain of opium were given every six hours. She passed a pretty good night; had no sickness after the chloroform, and did not complain of much pain.

During the next three days fluid fæces continued to pass through the wound in fair quantity. The tympanitis, for which the mercury had been ordered, gradually disappeared, and on May 12th the calomel was omitted. Nourishing diet was then given. She continued without any symptoms for the next week, during which time all the motions passed by the artificial opening. On May 20th an injection brought away some fæces from the rectum, and this was repeated frequently. On June 17, she had a natural motion, but not very free, from the rectum, for the first time since the operation. The wound by this time had contracted very much, but a small opening remained through which the fæces continued to pass. On June 30, for the first time, after the administration of castor oil, the whole of the motions passed through the natural channel. On July 6, it is noted, that nothing had passed by the artificial anus for five days.

She is now nearly recovered: a little fæcal matter does, however, still occasionally pass through the wound, which is now contracted to a narrow sinus.

Case IV. Susan M., aged 38, a healthy single woman, was admitted June 3rd. She had had a rupture on the right side for twenty years, and had worn a truss for a long time. This, however, had lately fitted very badly, and the hernia used frequently to descend; but she could always reduce it till the day before admission, when it appeared of a larger size than usual. The taxis was applied before her admission, with the effect, apparently, of reducing the size of the swelling; but, as the mass remained irreducible, it was determined to operate. The sac was opened, and a large piece of the great intestine (in all probability, the cæcum) was found in the hernia. The intestine was very much thickened, so that its coats felt like thick cloth, and of a uniform reddish colour. It was much distended, but was not adherent; so that it was plainly right to reduce it. This, however, was no easy thing to do, and it took about half an hour's patient perseverance to effect the object. The gut then slipped back into the belly, and the wound was closed. The femoral ring had been dilated to an enormous size.

June 5th. The bowels had been open three times with an injection. She had no symptoms yesterday. To-day there were signs of peritonitis. Pulse full, 90; tongue white. She had nausea and pain in the abdomen. She was ordered two grains of calomel twice a day, without opium; and, as the sickness persisted, effervescing salines were ordered. Under this treatment, she improved gradually; the peritonitis disappeared; and she became convalescent. When last seen (July 21st), the wound was sufficiently closed to allow of the application of the truss.

ST. BARTHOLOMEW'S HOSPITAL.

I. CASE OF FEMORAL HERNIA, IN WHICH THE OBTURATOR ARTERY WAS WOUNDED AS IT PASSED AROUND THE NECK OF THE SAC, AND TIED SUCCESSFULLY.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Susannah F., aged 53, was admitted July 6th, under the care of Mr. Stanley, with femoral hernia, which had been strangulated for sixty hours. She had been treated with large doses of purgative medicine before her admission. On admission, she was very low and weak; the tumour, which was of no very large size, and seated on the right side, was found quite irreducible; and the operation, therefore, was performed without loss of time. An endeavour was made to reduce the gut without opening the sac, but unsuccessfully. On the sac being opened, the gut was seen to be dark from congestion, but glossy and full. When the director was passed between the gut and the seat of stricture, a little dark brown fluid escaped, which had a suspicious appearance; so that it was feared that the intestine might have been ulcerated in the course of the stricture. On this account, the manipulation was even more than usually gentle. Slight oozing of blood followed the incisions necessary to divide the constriction; but it appeared unimportant, and the woman was put to bed. In twenty minutes, however, the house-surgeon was sent for, in consequence of alarming hæmorrhage. He found a large artery (evidently the obturator, from its position) bleeding furiously. This was controlled by pressure with the finger until the arrival of Mr. Stanley, who enlarged the wound by an incision parallel to Poupart's ligament; and, having turned up the flap of soft parts so formed, managed (though not without great difficulty) to cast a ligature around the bleeding vessel, taking up a good deal of the surrounding tissues with it. The bleeding was immediately checked, and did not recur. The ligature has now come away, and the patient has progressed without a bad symptom.

Remarks. The cases in which the obturator artery pursues an unusual course, and encircles the neck of the hernial sac, are known to be of very rare occurrence; and of these, probably, in the majority, the artery does not run so near the edge of the ring as to be necessarily wounded. Cases, however, are every now and then recorded in which this accident does happen; and, in some of those which have occurred of late years at London hospitals, the operator has succeeded in securing the bleeding vessel. Such a case, we believe, oc-

curred to the late Mr. Avery at Charing Cross Hospital, and more recently to Mr. Adams, of the London Hospital. Another case in which the artery pursued this unusual course, and was the occasion of fatal hæmorrhage after the operation, occurred some years ago at St. George's Hospital. In that case, however, it appeared probable that the artery had been laid open by sloughing after the operation, as the fatal bleeding did not come on till after the establishment of that process.

II. LOCAL TREATMENT OF CANCER.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq.]

Sophia L., aged 47, was admitted on May 27, on account of scirrhus of the right breast, which she had noticed for ten years, and which had probably existed for even a longer time. It had been growing with more rapidity during the last five months. A large swelling, of stony hardness, was found occupying the central part of the mamma; the nipple was retracted and the skin puckered. There was, however, no adhesion to the deeper parts, nor any affection of the glands in the axilla. Her general health was very bad; she suffered much from pain in the part; and was much reduced and very feeble. Under these circumstances, it was determined to prefer local treatment by escharotics to a surgical operation; and accordingly, two days after her admission, the Vienna paste was applied to the swelling, the pain being deadened by the continued application of ice and salt through a piece of gutta percha tissue. She was ordered nutritious diet, and was allowed to go about the wards. On June 9th the slough separated, exposing the ulcerated scirrhous mass. The disinfecting fluid of Sir W. Burnett, diluted with nine parts of water, was now applied with the effect of causing the separation of the same leathery sloughs as have been previously described in the notice of similar cases. On July 19th, the use of the caustic was superseded, as the sore appeared quite healthy, was granulating kindly, and, although some inflammatory induration existed at the upper part of the wound, none of the scirrhous mass seemed left behind. It should be noticed, that the application of the fluid was attended with some degree of pain, so that it was necessary to add a solution of morphia to it.

Remarks. This case is the continuation of a series which have appeared from time to time in this Journal. The cure, of course, cannot be pronounced either complete or permanent without longer observation of the patient; still it seems fair to conclude that the cancer has been removed by escharotics, without the risk that would have undoubtedly attended its removal by the knife, and without any extreme degree of pain. Time and opportunities of seeing the same cases at long intervals (which, unfortunately, are so rare in hospital practice) are necessary to enable us to compare the prospect of a return after this method with that after operation. Meanwhile, the form of escharotic used in this patient's case appears to answer as well as any of the others, and to be, at the same time, more manageable and less painful.

Original Communications.

CASE OF THE INDUCTION OF PREMATURE LABOUR.

By Edward Williams, M.D., Wrexham.

[*Read before the North Wales Branch, July 7th*, 1857.]

S. J. was married in 1850; and on the 7th of April, 1851, being at the full term of utero-gestation, she was delivered by craniotomy, after a protracted labour of seven days. In July 1852 she was again delivered by the same means, after great suffering for nine days. It was then pronounced by the gentleman in attendance—a person of great experience—that "she could never give birth to a living child". In June 1853 she was again in labour. After six days great suffering, I was called in; and, finding the pains perfectly ineffectual, though very strong, I felt assured of the existence of some mechanical hindrance. The history of her previous labours confirmed this view; and therefore I brought the child away by craniotomy.

After so much distressing experience, and the apparent impossibility of giving birth to a full grown fœtus, I suggested to her the practicability of inducing premature labour, if ever again she became pregnant. This idea she gladly adopted; and on the next occasion she called upon me to solicit my assistance.

I should mention that she is a very small person, but quite symmetrical, and has always enjoyed good health; and I was unable to account for her difficult labours, except upon the supposed disproportion between herself and her offspring, which on each occasion were represented as being very large, and which certainly was the case in her last confinement. The husband is a large athletic man.

She last menstruated on November 2nd, 1854; and on June 6th, 1855, when she supposed she was seven months advanced in pregnancy, I gave her a mixture of the following ingredients:—

Ergot, three drachms; boiling water, eight ounces. Macerate for half an hour, then strain, and add half a drachm of dilute sulphuric acid, two drachms of syrup, and a drachm of spirit of cinnamon.

Of this she took an ounce every four hours.

She commenced taking this mixture on Wednesday night, June 6th. On Thursday morning, June 7th, she had slight pains, which continued through the day; and, in the evening, I found, on examination, that the os uteri was dilated sufficiently to admit my index finger easily; upon which I discontinued the ergot mixture, and introduced the perforator. I tried in vain to rupture the membranes by mere pressure of the instrument; I therefore pressed forward the stilette, and drew off the liquor amnii. To the instrument I have had a small screw added, to prevent the protrusion of the sharp point, until the instrument is fairly within the uterus. She suffered no pain nor inconvenience from the operation.

June 8th. I found her preparing her husband's dinner. She had but little pain, and the waters were dribbling away from her.

June 9th. She had slight pains.

June 10th, 10 A.M. She had had slight pains all night, and the os uteri was dilated to the size of a crown-piece. At 1 o'clock, P.M., my assistant was sent for. He found labour set in, with a breech presentation. After a severe labour, the child was still born at 3.30 P.M. The child was comparatively large; and the shoulder and head being long in passing, the funis was subjected to long continued and much pressure. The woman rapidly recovered, but the child's death was a disappointment to me.

In 1856, she again became pregnant. It was determined to adopt the same proceedings, and I desired her to come to me again at the termination of the seventh month, which she did.

I will not discuss the various opinions put forth respecting the viability of the fœtus at different periods of its existence, or the prevailing opinion that it is more likely to live at seven than eight months; but reason and experience show that, the longer the fœtus remains *in utero*, the more perfect must it become, and the better able to sustain an existence independent of its mother. Anxious, if possible, to preserve the life of the child, I consulted my friend Mr. Griffiths. He examined the woman most carefully, but could find no deformity; the pelvis was apparently well developed. We therefore resolved to allow her to go on to the end of the eighth month, by which period it was hoped that ossification of the cranial bones would not have advanced too far: and the delay also gave better hopes of a head presentation; for it is observed that fœtuses expelled before the full term of utero-gestation are frequently preternatural presentations.

On the morning of Saturday, May 31st, she began to take the ergot mixture, the same as before. By 9 o'clock the same evening, the os uteri was sufficiently dilated (she had suffered from pains throughout the day) to admit the finger. The perforator was introduced, the waters were drawn off, and the ergot was discontinued. She remained very well, and attended to her household duties until Wednesday morning about 11 o'clock, when regular pains came on; and on Thursday morning, at a quarter before 3, the child was born, being a head presentation. Both mother and child did well.

After the birth of the child, I had a good opportunity of thoroughly examining the pelvis; and I then discovered the obstacle to the passage of the child's head, which was the turning inward, and considerable elongation of the spinous process of the ischium. It was distinctly to be felt, of a pyramidal shape, and encroaching much upon the outlet of the pelvis.

THE BRITISH MEDICAL ASSOCIATION: ITS PAST, PRESENT, AND FUTURE.

By S. J. Jeaffreson, M.B. et L.M.Cantab., F.R.C.P., Leamington.

[*Read before the Birmingham and Midland Counties Branch, July 2nd, 1857.*]

In societies of this kind it is usually the practice to close the official year by an address adverting to the labours of the past and the prospects of the future. Addresses of this nature, often dull and uninteresting, and generally by no means easy to frame, may sometimes be advantageously superseded by entertaining topics of a more general, and therefore more interesting nature,—a plan which I should have felt more disposed myself to adopt, but for the fact that the present may be almost said to be the first opportunity of reviewing our past and present position and our future prospects.

At our first general gathering, in the summer of 1855, the Branch having then existed a few months only, your late talented President, Mr. Langston Parker, delivered his address; and I feel confident that, on his retirement from the Presidency in 1856, he would have given you a far more glowing and interesting sketch of our position and prospects, than I can hope to do, had he not been prevented from so doing by serious indisposition. Let me, therefore, crave your indulgence whilst I offer a few remarks upon the British Medical Association generally, and the Birmingham and Midland Counties Branch of that Association especially.

The Provincial, now happily the British Medical Association, may be said to have drawn its first breath in the board-room of the Worcester Infirmary, on 19th of July, 1832. To Sir Charles Hastings, M.D., of Worcester, our profession owes a great debt of gratitude for the foundation of this noble institution, and for his ardent and zealous support of it during its early infancy and growth; and I feel assured that one and all of us must rejoice to think that he has been spared to witness its present magnitude and importance, and to lend, as it were, the counsel and assistance of a friend where he formerly gave the fostering care and directions of a parent. Nor is the early history of our Association without its proud and pleasing reminiscences for this town, when it is remembered that, at its first meeting at Worcester, your late respected, talented, and venerable townsman, Dr. Edward Johnstone, was unanimously called to the chair, that he was appointed its first President, and that amongst its earliest members in this town may be enumerated, Mr. Hodgson, Dr. Darwell, Mr. Wickenden, and Mr. Sands Cox. In reminding you of the principal objects to which the Association pledged its attention, I shall the better be able to review its past and present position, and to venture a few remarks on its future prospects; nor will you, I trust, think such remarks impertinent or out of place on the occasion of a Branch meeting. The grouping together of members of the parent Association into local Branches presents many important features, to which I may shortly advert; but none more so than the jealous and anxious surveillance which each Branch will hold over the general usefulness, dignity, and importance of the Association as a whole.

The objects proposed by the parent Association at its formation were:

"1. Collection of useful information, whether speculative or practical, through original essays, or reports of provincial hospitals, infirmaries, or dispensaries, or of private practice.

"2. Increase of knowledge of the medical topography of England through statistical, meteorological, geological, and botanical inquiries.

3. Investigation of the modifications of endemic and epidemic diseases in different situations, and at various periods, so as to trace, so far as the present imperfect state of art will permit, their connexions with peculiarities of soil or climate, or with the localities, habits, and occupations of the people.

"4. Advancement of medico-legal science, through succinct reports, of whatever cases may occur in provincial courts of judicature.

"5. Maintenance of the honour and respectability of the profession generally in the provinces, by promoting friendly intercourse and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession."

Let us briefly inquire how far these objects have been carried out during the quarter of a century that our Association has existed.

I think that no one who has attentively perused the volumes of *Transactions* which the society has published, can hesitate to say, that they contain many practical, able, and interesting papers upon a variety of professional subjects; that they contain many valuable contributions from the experience of private practice, as well as of our provincial hospitals and dispensaries; and that they have done much to illustrate the medical topography of many important districts of England. Some years since the Association ceased to issue an annual volume of *Transactions*, but substituted in its place a weekly journal. However desirable in some respects this change may have proved, I cannot but regret that the society should have sacrificed the *Transactions* to the Journal, because the former appears to me the most dignified proceeding, and the most durable monument of its progress and usefulness. Without wishing in any way to disparage the character of our Journal in former years, I think every impartial judge must confess, that it has latterly much improved as a weekly summary of professional knowledge and advancement, and that it bids fair to take a high place among periodicals of this class: I say, bids fair to take a high place,—but why should not our Journal take the highest place amongst medical periodicals, and our *Transactions* the highest place amongst works of its class? The truth must be confessed in reviewing the past history of the Association, that its position and labours have been viewed with an apathy and indolence on the part of the profession generally, the more astounding and the more deplorable, inasmuch as it is, and ever must be, the only general Association combining the variable elements of which our profession is made up,—the only Association which opens its arms to all medical men having a legal qualification. Whence has this apathy arisen? Partly, I believe, because the Association on the whole has been too little scientific,—a fault which, as we shall presently show, promises to be greatly amended through the medium of its Branches. As some evidence of the truth of this conclusion may be cited the perfect success of many purely scientific medical societies in the metropolis and large towns, whose doors have alike been thrown open to qualified practitioners of all grades and kinds of diploma. But perhaps the fault is more especially due to the laws and constitution of the Association itself, which its very rise and success have caused to be more sensibly felt; for as it grew in numbers and importance it was hardly to be expected that the rules, which at first sufficed to regulate its government and progress, would be sufficient to meet all its future emergencies. Hence the disaffection of many energetic and worthy Associates; hence also the apathy of the profession from without. This critical dissension, which, for some time divided the society, and almost threatened its very existence, has happily been removed by the strenuous exertions of Mr. Michael and other reformers, on one side, and the graceful and cordial concession of the tories of the Association on the other; and it will ever be gratifying to this Branch to remember, that in July 1856, in this town, the Provincial Medical and Surgical Association cast off the trammels of its old *régime*, fully adopted the only legitimate principle,—that of representative self-government, and assumed the wider and more comprehensive name of "British" instead of "Provincial Association". The beneficial influence that has been effected by this timely reformation is best seen in the fact, that, when dissolution appeared imminent, the Association maintained its numerical force, and is evincing increased vitality, unanimity, and energy; and to this renovated spirit mainly (not to detract from the merits of its able editor, Dr. Wynter) may be attributed the improved character of the Journal.

There can now be no longer any excuse for indolence and apathy; it behoves every medical practitioner in this land to join the Association: it is not, perhaps, too much to say, that I believe they will, ere long, see their interest in joining it; and that not to be a member of the British Medical Association will be a defect in one's professional position. I shall rejoice to see our noble Association embracing the whole field of respectable practitioners,—exercising its legitimate and healthy influence over special corporations,—taking the lead in not only medical politics, but in medical science, and publishing, as it ought to do, not only a good, but the best weekly medical periodical, and the best annual volume of *Transactions*.

I cannot help thinking, that an increased subscription of half a guinea annually for these purposes would be well laid out, and might be made to pay the working expenses. When we consider that few medical men spend less than from twenty to thirty shillings annually in periodical literature, they could hardly grudge a guinea and a half for the privileges of membership of the Association, conjoined with the supply of a first class weekly Journal, and a valuable annual volume of *Transactions*. Whether this idea be carried out or not, I would humbly suggest that, in every case it is desirable that our publications should curtail as much as possible the mere business details of the Association, and cultivate as much as possible the best class of practical and scientific professional contributions.

Passing from the scientific to the moral influence of the Association, we must, I think, all feel that it has promoted much friendly intercourse and free communication amongst its members, "establishing amongst them much harmony and good feeling, which ought to characterise a liberal profession." Nor has it been indifferent to general professional interests, as testified by its constant and assiduous exertions against all political attacks upon the dignity and usefulness of our common profession; its exertions in behalf of the oppressed and ill-used naval surgeons and poor-law medical officers; and lastly, its steady efforts and exertions in favour of a legitimate and liberal measure of medical reform,—a question in which its opinions may be considered as more important than those of any one other medical corporation, from the very nature of its constitution implying its enrolment of qualified practitioners of every kind of grade and diploma.

Some twenty years ago, the associates in the town and neighbourhood of Bath first formed themselves into a Branch society of the parent Association, since which time no fewer than seventeen Branches have been established. Gentlemen, I can hardly find expressions too strong to convey to you my sense of the importance of these Branches. First, the field of our Association is so wide as entirely to preclude more than an annual gathering of all its members; and even then, many of those members who enjoy the largest share of public confidence and patronage, and whose practical experience it is the object of such an Association to draw out, can ill afford the leisure to attend these great public gatherings; whilst they can find no excuse for not occasionally, at least, attending the meeting of their Branch. The Branches encourage the meeting and fraternising of neighbouring practitioners,—an object of paramount importance to the dignity, union, and strength of our common profession. The Branches again, each representing an especial district, represent, when combined, the entire profession, and so add unity, precision, and force to the proceedings of the entire society, whilst they must ever preclude the "British" from degenerating, on the one side, into a mere Metropolitan, on the other, into a mere Provincial Association,—a fear, especially as respects the former condition, which a short time since operated strongly on the minds of many of our members. Then, apart from the social and medico-political influence of the Association, the Branch meetings, being more numerous and more accessible than the general meetings, enable us to devote a far larger share of time to the scientific proceedings of our society,—a point upon which we cannot too strongly insist, since on it hinges the character and usefulness of our body as a profession, and the "mark of our high calling", which separates us from the mere money-seeking charlatan, and enforces the dignity and honour of our position. And whilst on this point, I may be excused for throwing out the suggestion, that it would be well for each Branch to adopt some scheme, either through a special committee selected for that purpose, or by the mouth of the general meeting assembled, for marking their sense of the value of such papers as may be read before them, as to which should be recommended for publication in the Journal, and which they think sufficiently important for publication in the society's *Transactions*, should such a volume be again established, as I firmly hope to see. This latter recommendation must of course be subject to the decision of the general committee, on whom the selection for the *Transactions* may depend. Having spoken so far on the general subject, it only remains for me to say a few words on the Branch of which I have enjoyed the honour of presidentship for the last year.

I think I may fairly congratulate you on the entire success of our Branch, whether in respect of its numbers, respectability, or pecuniary position. Our Branch has as yet only existed two years and a half, having been first inaugurated in December 1854; at this time we numbered one hundred adherents, and now, in this short period, can count one hundred and sixty good men and true. I think it may fairly be said, that we have not been behindhand in supporting the parent society, to the best of our ability, in every good public work it has taken in hand. Within its own sphere it has promoted much friendship among its members; its meetings have been numerous and well attended; and I can speak with much feeling of the propriety, decorum, and friendly spirit which has prevailed in all the meetings over which I have had the pleasure, as well as the honour, to preside. The papers which have been read before the Branch consist of

1. A Case of Hydrophobia. By Oliver Pemberton, Esq.
2. On a Case of Disease of the Suprarenal Capsules, illustrating a Form of Anæmia. By Bell Fletcher, M.D.
3. On the Methodus Medendi of the Ancients. By A. B. Rye, Esq.
4. On Disease of the Suprarenal Capsules. By. S. J. Jeaffreson, M.B. et L.M., F.R.C.P.
5. A Case of Blighted Fœtus. By J. Simons, Esq.
6. On Amputation at the Ankle-Joint. By A. Baker, Esq.
7. On the Treatment of Prolapsus Uteri. By J. Bassett, Esq.
8. A Case of Wound of the Kidney: Recovery. By J. Johnston, M.B.
9. A Case of Lupus: with Photographic Illustrations. By J. R. Nicholson, M.D.
10. On the Nature and Origin of Renal Disease. By J. Russell, M.D.
11. Cases in which a Disorganised Eyeball was excised for Relief of Amaurosis of the Companion Eye. By J. V. Solomon, Esq.

Time will not allow me to enter especially into the merits of these papers, and the discussions to which they gave rise; and it would be invidious to discuss their comparative values: but this I can say, as a member or visitor of several medical societies in the metropolis or elsewhere, that the papers and discussions of these meetings may be fairly classed as equal to those of any medical society with which I am conversant. I would strongly urge upon my fellow-Associates, from no small personal experience, the great good that may be derived from such *réunions*, and the still greater good from the mental discipline of putting together their experience and knowledge on various subjects, in the form of papers, to be read before the society. I should rejoice to see the day when our secretaries may be overburdened by the number of papers sent to them, and when the formation of a committee for their acceptance or rejection shall become a matter of necessity.

The past year has not been without its sources of pain and regret, as well as of prosperity; and the council have already announced to you that "we have to deplore the loss, by death, of some valued members: Mr. Ryland, Mr. Thursfield, Mr. Rumsey, Dr. Yelloly, and Mr. Simons. The first of these was well known in this town and neighbourhood by his professional talents and by the charms of social friendship. Distinguished as a writer of great ability, and as a man of the most unselfish character, his death, at a comparatively early age, has left a void that cannot readily be filled. At Kidderminster, Mr. Thursfield had earned an extended reputation; and his sudden removal was the source of sincere sorrow to his patients and friends. Mr. Simons' name adds another to the long list of those whose lives have been sacrificed in the performance of the duties belonging to our profession; he having sunk under typhus fever, at the early age of forty-five. During his life, Mr. Simons had obtained the respect of his professional brethren for the general straightforwardness and zeal which characterised his career." I feel sure that the feeling terms in which these deaths have been announced by your council, and the just meed of praise which has been bestowed on the labours and characters of our fellow-labourers, will have met with your most cordial sympathies.

In taking leave of you, it only remains for me to thank you sincerely for your indulgence to me during my year of office, as well as on the present occasion; and to wish the British Medical Association, and our Branch, all the success and prosperity which they so richly deserve, and to remind them that an Association, which already numbers over two thousand members, and a Branch over one hundred and sixty, cannot fail to be successful, if it be but energetic and true to its own good cause.

British Medical Journal.

SATURDAY, JULY 25th, 1857.

THE ANNUAL MEETING OF THE ASSOCIATION.

On the eve of the twenty-fifth Annual Meeting, we feel no slight gratification in congratulating the members on the condition of the Association. Since the last gathering at Birmingham, when the change in the laws was confirmed by the general meeting, the associates have witnessed the working of our new constitution; and, to use an engineering phrase, there has been no "over-heating in the new machinery". At least, we gather so much from the local meetings, the greater portion of which have now been held. The admirable tone of these meetings proves that the body corporate is in a healthful and hopeful condition. Our local parliaments, forming, as they do, centres of medical discussion in every portion of the island, have ventilated most subjects pertaining either to the public life or the professional progress of medicine. Never, perhaps, since the establishment of the Association, has the power of the Branches been exercised with more effect upon questions pertaining to medical reform, than during the present session. The number of petitions presented to the House of Commons, from associates located in all parts of the kingdom, had a most powerful effect upon that body, and contributed in a great measure to the victory obtained over the Government on the second reading of the Medical Reform Bill. We refer with pleasure to this fact, inasmuch as it proves that the Association, since it has lost the stimulus of angry discussion, has not fallen into a condition of apathy. We have proved that we are more than a mere bundle of federates, knit together by no superior power. The centralised action of the Branches has been a real power in Mr. Headlam's hands; and Mr. Griffin has had no more potent ally than the British Medical Association in his struggle on the behalf of the Poor-law medical officers.

It is clear, however, that we must not content ourselves with resting upon our laurels. Had the Association been of double its present strength, in all probability we should have been able to put such a pressure upon the Government that, instead of opposing us, it would have gone hand in hand with us in passing Mr. Headlam's Bill through the present Parliament. It is pretty generally understood that Her Majesty's Ministers intend to take the subject of Medical Reform into their own hands next session; and we shall require all our strength, used in the most undivided manner, to keep the Reform movement, so urged on, in the right direction. The Government that has fought so hard to get the medical profession to deliver themselves bound hand and foot into their power, will not, in all probability, be too chary of our liberties in a Bill of their own construction. The necessity, therefore, of increasing the powers of the Association—the only body of medical men, be it remembered, in the kingdom which *represents the free element* of of the profession—is urgent. On all sides this free element is threatened; and if our body is to be considered anything better than a mere bundle of medical clubs, we must so increase and concentrate our strength as to make ourselves felt once more on the floor of the House of Commons. We trust, therefore, that means, equal to the crisis at hand, will be taken to recruit our ranks at the forthcoming meeting. We must not be content to see our strength hovering between two or three thousand members—we may, with little effort, at least double them, and by so doing make the Association *the real power in medical affairs.*

It has been suggested that the time has arrived at which we need no longer avoid the metropolitan cities of the empire. We have ceased to be a purely provincial body; and it does seem to follow that it is something like playing *Hamlet*, with the part of Hamlet left out by particular desire, to visit all the large towns of the island in succession, with the exception of its capitals. It has been suggested that our next meeting shall be held at Edinburgh; and, without in any way venturing to interfere with the Committee of Council in their decision as to the advisability of the step, we must say that we devoutly trust to find ourselves receiving the hospitalities of Auld Reekie in the year 1858. We feel certain that the Association would meet a splendid reception in that renowned city; and we are equally certain that our strength in Scotland would be greatly augmented by our showing ourselves in a city which has long been celebrated as one of the principal European seats of medicine. And if we go northward, why not southward? Why not cruise the succeeding year to London? The Metropolitan Counties Branch is one of the most powerful in the kingdom, and we may be sure that all the leading medical men in the capital would be but too happy to welcome their brethren from the provinces, with the greater number of whom they are always in correspondence, and with some on close terms of intimacy. We want what, in the language of boating, is called a "spurt" in the Association; and we feel convinced that this would be supplied by a visit to the metropolitan cities, where so much of the moving medical element of the day is concentrated. At the same time, we must say that we cannot agree with the suggestion, to *limit* the meetings of the Association to the three metropolitan cities. We recommend merely that they should be visited in their turns, in common with large provincial towns. Numbers are undoubtedly a great element in enthusiasm; and in any of the capitals we could without doubt command such a gathering of the medical body as we have never before witnessed. The moral influence of such meeting upon the Association, we believe, would be very great. It is a fact that we are better known in the provinces than in the metropolis; and we cannot help stating that we constantly have the mortification of meeting medical men in the metropolis, who never even heard of the existence of our body. Of course our friends must have been exceedingly dull—but we take it as a reproach that even the dullest should be unaware of the existence of an Association that has gone on pursuing the even tenour of its way for five-and-twenty years. Happily, there seems to be little chance of any renewal of old differences; we therefore trust that the energies of the Association will henceforth be devoted to increasing our strength; and we especially trust that the Nottingham meeting will not only be large in numbers, but in heart, and that every member will come determined to afford that spring and movement to the Association which it requires.

THE WEEK.

There is a vulgar proverb, not destitute of truth, which refers to the possibility of driving a coach and six through an Act of Parliament. To the process implied in this figurative language, as was shown by Lord Shaftesbury in the House of Lords on Thursday week, the Lodging Houses Act of 1851 has been subjected. This Act, while it has effected great good, contains a clause which has enabled the owners of tenements to cram a frightful number and an equally frightful assortment of persons into single rooms, under the pretext of their all belonging to the same family. Thus the Commissioners of Police report that, in one room in St. Giles's, thirty-seven persons, of both sexes and all ages, were found lying on the floor of a room occupying about 210 square feet. To obviate as far as possible such evils, Lord Shaftesbury proposes, with as little invasion as possible of the rights of property, to bring private dwelling houses under the operation of the Act, by empowering the Commissioners of Police to call on the local authorities to put in force, in required cases, the Nuisances Removal Act of 1855. To those who do not render themselves amenable to this law, it will of course have no terrors; while those who abuse the Englishman's privilege, by turning their "castles" into dens of misery and disease, will have to find that the celebrated national privilege does not confer the right to do wrong.

We were glad to see in the *Times* of last Thursday, an advertisement headed "A Treat for the Poor," in which the "clergyman of one of the largest and poorest parishes at the East-end of London" intimated his anxiety to "give his very poor parishioners a treat by taking them into the country for a day"; and asked the aid of the benevolent to enable him to carry out his plan. The reverend advertiser (who conceals, at present, his name, though there is no need for him to be ashamed of it) honestly and truly declares his opinion to be that "while the primary object of the Church is to confer religious benefits, the comfort and social attention of the poor should largely engage the attention of its ministers." It is to be hoped that he will be enabled to carry out his project. We should like to see a few more such clergymen in our crowded cities and towns—men who would feel it their duty and their interest to consult for the bodies as well as for the souls of their parishioners.

Public attention has recently been directed, through the medium of the *Times*, to the frequent and fatal occurrence of yellow fever on board the vessels of the Royal Mail Steam Company, in the West Indies. The case which has been most prominent is that of the *Orinoco*, which, in the voyage home, lost 28 men out of 75 attacked with fever—one man dying within a few hours sail of Southampton. Fortunately, none of the passengers—168 in number—were attacked; but, separated from the sick, as many of them were, by a canvass screen only, their discomfort and apprehension must have been great and depressing. The focus of the disease appears to be the Danish island of St. Thomas. In this island, on account of geographical convenience, the Royal Mail Company have established a coaling *depôt*. On a wharf, formed out of an old wreck, have been deposited several thousand tons of coal; the lower part of which "is undisturbed for years, and rests on a decaying foundation, with no breeze to carry off the miasma." Under these circumstances, it is not surprising that yellow fever should break out periodically at St. Thomas's, and that the epidemic should appear in every steamer which visits the wharf. The subject is one which calls for immediate attention; and it is to be hoped that the Directors of the Company will see the necessity of taking early and effectual measures to diminish or prevent the occurrence of such wholesale sacrifices. The correspondence to which we have referred is contained in the *Times* of July 18th and 20th; and in it we would specially direct attention to the letters of "A West Indian Traveller," and of the Reverend J. Radcliffe, Chaplain on board the *Orinoco*. Both these writers suggest means of improvement, which are worthy of attention.

We are glad to hear that another of the famous Leeds wizards, Isaac Rushworth, has got his deserts on the treadmill. The villain, it appears, not only obtained the money of one of his foolish female dupes, but seduced her in the most systematic manner. He actually persuaded her that she would not get well unless she allowed him to have connexion with her. The dastard, not content with thus far injuring her, continued to work upon her even after his committal for trial, by causing threats to be conveyed to her, that in case of any harm coming to himself she should be haunted by devils. The poor weak girl, thus worked upon, has since actually gone mad, and is now in the Wakefield Asylum, a violent lunatic. If our Leeds friends know of any more wizards in their neighbourhood, we trust they will hand them over to the authorities, in order that they may keep company with this villain and Harrison, who has been for some time expiating his roguery in the jail of that town. A brace of such wizards would cause greater trouble among the foolish population of a large town, than a dozen of the regular mediæval kind we read of in old story books. The kind of people who go to such impostors are exactly the class to be rendered lunatic by their threats, and it is the duty of every good subject to hand them over to justice wherever they may be found. How is it that Leeds is so full of wizards? We fear it does not augur well for the state of education in the town, notwithstanding the efforts of Dr. Hook.

A singular instance of the manner in which the ends of justice are sometimes defeated occurred at Leicester last week, where a girl of the name of Elizabeth Smith was indicted for causing her mistress to take a certain noxious drug; to wit, nitrate of mercury, with intent to do her grievous bodily harm. The girl, it appears, admitted having given the drug in deadly quantities, out of revenge for having been scolded by her mistress on a previous occasion. Nevertheless, she was allowed to go scot free, because the indictment did not appear to have been drawn properly. We find it reported that

"The learned Judge, after hearing the opening statement, expressed his opinion that the evidence would not sustain the indictment, which was framed upon an Act of Parliament directed against an entirely different class of offences. It was the statute 9th and 10th Victoria, cap. 25, sect. 4, whereby it was enacted that 'whoever shall unlawfully and maliciously cause any gunpowder or other explosive substance to explode, or send, or deliver to, or cause to be taken or received by any person any explosive substance, or any other dangerous or noxious thing, or cast or throw at or upon, or otherwise apply to any person any corrosive fluid, or other destructive or explosive substance, with intent in any of the cases aforesaid, to burn, maim, disfigure, or disable any person, shall, although

no bodily injury be effected, be guilty of felony.' Now, although the words 'cause to be taken any noxious thing' were found in that section, yet, looking at the whole context, he was clearly of opinion, that they did not apply to the taking of poison internally, but only to the taking in hand or receiving of dangerous substances calculated to do external bodily injury; and Mr. Justice Erle, whom he had consulted on that point, entirely concurred with him."

No doubt this is very good law, but it is very poor justice. A most malignant attack is made upon the health, if not the life, of a poor woman, and the perpetrator of the outrage receives no punishment, because the Act under which she was tried seemed to imply that the noxious drug should be administered outwardly instead of inwardly, to incur punishment. Even provided this reading of the statute is the right one, should not the girl have been put upon her trial afresh for the crime? It does seem that our law is so stiff and unbending, that it cannot convict the criminal although the crime be confessed.

A new Hospital, under the name of the Great Northern Hospital, has recently been established at King's Cross, in the vicinity of the railway station of the same name. There is stated to be accommodation for fifty in-patients; and the aid of the public is asked for, to enable the Committee at once to fill the wards from the numerous cases which apply to them. The following are the names of the medical officers:—*Consulting Physician*—Dr. Copland; *Physicians*—Dr. Handfield Jones, F.R.S., Dr. C. P. Croft, and Dr. Leared; *Junior Physicians*—Dr. C. T. Coote, Dr. Stallard, and Dr. H. Hardinge; *Consulting Surgeon*—F. C. Skey, Esq., F.R.S.; *Surgeons*—John Gay, Esq., S. F. Statham, Esq., and W. S. Savory, Esq.; *Junior Surgeons*—P. C. Price, Esq., G. Lawson, Esq., and — Maunder, Esq.; *Ophthalmic Surgeon*—R. M. Lawrance, M.D.; *Aural Surgeon*—W. Harvey, Esq.; *Dentists*—J. F. Statham, Esq., C. J. Fox, Esq. This is a very full staff, and contains some well known names; while others among its members have yet to make themselves known. We wish them and the promoters of the hospital success, and a safe and successful passage through all the difficulties which beset the establishment of a charitable institution dependent on voluntary contributions. One thing which we would suggest is, that they should take good care that the benefits of the hospital are not bestowed on improper objects. This is one of the causes which keep such institutions in poverty, and unable to help those who really want aid.

The inauguration of the statue of the celebrated anatomist and physiologist, Bichat, took place in Paris on July 17th, with great *éclat*. The Minister of Public Instruction presided; and speeches, eulogistic of the life and labours of Bichat, were delivered by the President, by M. Amedée Latour, Baron Larrey, M. Serres, and M. Paul Dubois. The statue, which is in bronze, is the work of the celebrated sculptor David. Bichat is represented, in the costume of the time of the consulate, standing in an attitude of meditation. His arms are folded across his chest. The right hand holds a pen; from the left falls a roll, on which are written the names of his great works—*De la Vie et de la Mort*, and *Anatomie Générale*. At his feet, and behind, lies, half covered, a subject prepared for dissection. The pedestal of marble on which the statue rests bears the following simple inscription:—"A Xavier Bichat: le Congrès Médical de France de 1845."

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, South Kensington, S.W.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: REPRESENTATIVE MEMBER OF GENERAL COUNCIL.

The name of J. B. Melson, M.D. (Birmingham), was accidentally omitted last week from the list of representative members of the General Council for this Branch.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, July 1857.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

The Anniversary Meeting was held at the Bristol Institution, on Thursday, July 9th, at 3 P.M.; Augustin Prichard, Esq., President, in the chair. There were also present: G. Allen, Esq. (St. George's); F. Brittan, M.D. (Clifton); W. Budd, M.D. (Bristol); G. F. Burder, M.D. (Clifton); J. B. Burroughs, Esq. (Clifton); R. W. Coe, Esq. (Bristol); J. Crang, Esq. (Timsbury); W. Davies, M.D. (Bath); R. W. Ellis, Esq. (Bristol); R. S. Fowler, Esq. (Bath); F. R. Fox, M.D. (Brislington); H. C. Fripp, M.D. (Clifton); J. Godfrey, Esq. (Bristol); J. Humpage, Esq. (Bristol); W. Hutchins, Esq. (Keynsham); J. Lancaster, Esq. (Clifton); Crosby Leonard, Esq. (Bristol); S. Martyn, M.D. (Bristol); E. S. Mayor, Esq. (Bristol); J. Metford, Esq. (Clifton); G. Norman, Esq. (Bath); W. F. Morgan, Esq. (Bristol); W. H. Paine, M.D. (Stroud); R. H. Ruddock, Esq. (Bristol); T. Sawer, Esq. (Clifton); W. Sheppard, Esq. (Bristol); C. Smerdon, Esq. (Clifton); N. Smith, Esq. (Clifton); J. Soden, Esq. (Bath); J. K. Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); J. G. Swayne, M.D. (Clifton); S. H. Swayne, Esq. (Bristol); J. Tunstall, M.D. (Bath); G. Vicary, Esq. (Warminster); and as visitors: W. Henderson, M.D.; R. Watts, Esq.; R. Watts, jun., Esq.; — Barretti, Esq.

The Retiring President, Dr. Davies, having taken the chair, requested the Secretary to read the notice of the present meeting and the minutes of the last anniversary meeting at Bath, which were confirmed.

ELECTION OF NEW MEMBER.

Thos. B. Anstie, Esq., of Devizes, having been proposed, was balloted for, and elected a member of the Branch.

Dr. Davies, the Retiring President, having briefly expressed his thanks to the members, resigned the chair to Augustin Prichard, Esq., who delivered the following

PRESIDENT'S ADDRESS.

The first duty of a man who attains the elevated and dignified position which I now occupy, is to express, as best he may, his thanks to his fellow members in the Bath and Bristol Branch of the Medical Association, for the honour which they have paid him in electing him their president,—the highest professional distinction it is in our power to bestow. I therefore now beg to assure the members present, that I fully appreciate the honour they have done me, and heartily thank them for it, and that I am determined to do my best for the welfare of the Branch.

The acceptance of the office is, in my own case, not untinged with grave thoughts. Many of my predecessors have, I doubt not, felt that they were following a list of learned and eloquent presidents; and it is no slight task to take up the duties where such able men have left them, and to perform them in the same efficient way. This difficulty I as fully appreciate, as I have especial reason to do; but with the kind forbearance of the members, and with the aid of the Secretaries and Council, I trust that I shall not find the responsibilities and duties of the situation beyond my power, and that at the end of my year of office I may be able to leave to my successor the presidential chair surrounded by as many difficulties of this kind as I now find. I feel, too, that in passing through the year of presidential office, a man passes, as it were, the boundary line, and steps over from among the juniors to join the ranks of the seniors of the Branch; and this feeling becomes more striking, and not unalloyed with sadness, when I find myself in a place a few, and but a very few, years ago occupied by my father, my uncle, or by some respected teacher under whom I have carried on my studies, who have, within a few short years, been called away from the scenes of their labours to reap elsewhere the reward for lives well and actively spent for the benefit of mankind. The spot, too, upon which I stand to read my address, is hallowed by associations in the memories of my Bristol hearers; for here have stood in their turn all the men of science whom Bristol has known for the last thirty years, who have lectured here, and otherwise laboured for the advancement of science, literature, and the arts.

To tread so soon—for soon it seems—in the steps of a former generation, is but another proof, if such were wanting, of the speed with which the noiseless and unceasing stream of time flows on. The simple practical lesson deducible from these solemn thoughts is one which I trust all present appreciate, although it is out of my province, and I am unworthy to inculcate it on such an audience as the present; viz. the necessity of active exertion in a manly, straightforward, and truthful life, each one doing his duty fearlessly in the particular sphere of usefulness in which he happens to be placed, so that we in our turn may leave behind us names, not only unsullied by any taint of selfishness, hypocrisy, or dishonesty, but on the contrary, held up as good examples for our successors in the profession, both by the honest and straightforward performance of what we know to be right, and by the zeal we have shown in extending the range of our professional acquirements and experience. There are many in our Branch whose names will long be remembered with respect and affection, and whose opinions on professional topics will long be quoted with deference.

The report of the Council, which will be read presently, will give you a short account of what we have done during the past year, and the position we hold at present; and I think you will admit that we have reason to be satisfied. I may take the present opportunity of expressing a hope that, during the coming year, the zeal of the members may not relax, but that a good supply of cases and papers on various subjects will be forthcoming at our quarterly meetings.

We are indebted to the periodical medical press for our principal knowledge of what passes around us; and to the spread of information through their pages the art and science of medicine unquestionably owe a considerable degree of advance. There is a tendency with most of us to run into extremes in matters of opinion, and also to assume that others hold extreme views one way or the other; and this latter tendency is especially mischievous, for it leads to harsh criticisms, which are generally unjust and undeserved. When, after a day's hard work, a man sits down to write out the notes of some interesting cases, or some essay or letter upon professional topics, for publication, or to bring before the meeting of the Branch, I consider that credit and thanks are his due, and that it is ungracious to utter or publish severe and stinging strictures upon productions intended to add something to the common stock of knowledge. I would never restrict the power of fair discussion or of just criticism, or the right of maintaining one side in an argument; but it would be well to remember always, that a single quiet word, kindly spoken at the proper time, is far more effectual and convincing in argument, than an eloquent speech which bears the impress of heated feelings.

I intend to-day to review one or two points of professional interest, which have come before us during the past year; and if the subjects I have proposed to discuss appear dull to any of my audience, I must plead, as my excuse, the increasing difficulty of finding a general subject for the president's address.

1. *General Bleeding.* To bleed or not to bleed, is a question which our northern neighbours have been arguing without much effect upon the opponents themselves, and, I should think, without convincing many others; and although I do not expect to succeed better than they, yet I will take this opportunity to bring the subject before you, to show how it stands at present, and to try to give it some further illustration.

Inflammation is fairly assumed to be present, when, besides one or all of the signs of redness, heat, pain, and swelling—long considered to characterise it—there is a product of some kind in the form of exudation, as pus, or lymph, or fibrine. Guided by these four signs and by general symptoms, without the means of precisely determining the condition of the organ, *i. e.* the fact of exudation and its amount, our predecessors attacked what they considered to be inflammation of the internal organs by vigorous bleedings; while Dr. Hughes Bennett implies that the present state of our knowledge of pathology is such as to induce us to mistrust the practical results of their observations, and to conclude that they frequently made a vigorous attack with the lancet on the symptoms of swelling, heat, pain, and redness, and on the general symptoms without the presence of *true* inflammation.

Dr. Bennett denies that there is any change in the type of disease, and from his position and experience his opinions are entitled to respectful attention; at the same time, I do not clearly see how a question of this nature is to be proved. My own impression is that ordinarily received; viz. that during the last few years we have not had so many active and acute inflammations (or sthenic, as they are termed) to contend with as formerly, and that so many patients do not require bleeding, nor such vigorous treatment generally; but I think also that we have unquestionably gone too far into the other extreme, and that many patients have to pass through a tedious period of slow, and often imperfect convalescence, for want of a full bleeding at the beginning of the treatment. I do not believe that the change in the type of disease will account for the sudden disregard to bleeding which has occurred; but I do believe that the type of disease, as it is termed, is again changing in the opposite direction, and that we are beginning again to see cases of a more sthenic nature than has lately been the case. Dr. Bennett also denies that an accelerated and strong pulse in inflammation ought to be interfered with, and its frequency diminished, because nature accelerates and strengthens it; and he says, that it is injurious to diminish, by bleeding, the nutritive processes themselves, when they are busily engaged in operating upon the exudation and eliminating the morbid product. He also tries to prove that an inflammation once established cannot be cut short, and that the only end of judicious medical treatment is to conduct it to a favourable termination. Now, with the last line I trust we shall all agree, viz. that the end of treatment is to cure the patient of his inflammation; but I think the other opinion just quoted contains very dangerous doctrine, which appears to be the natural consequence of an idea of Dr. Bennett's,—that inflammation is in some sort a salutary process, and that, like small-pox and fever, it runs through a definite natural course, which it ought to be allowed to run through under the physician's guidance; in other words, that treatment will not cut short inflammation when once established. I can imagine no theoretical views on pathology likely to lead to such lamentable results in practice as this idea of Dr. Bennett's, if it were once widely spread and acted upon.

Dr. Bennett argues from a fractured bone, and says, that a surgeon does not bleed and interrupt the vital changes by which exudation, the product of inflammation, is poured out, and its conversion into bone carried on; and in like manner a physician ought not to bleed and to interrupt vital changes, which he considers parallel to those in the bone, in the case of pericarditis or pneumonia, in which suppuration and adhesion are the effects of this salutary process.

Never were cases so little parallel. In fracture there is

scarcely ever any acceleration or strengthening of the pulse,—two of the symptoms which would have led older practitioners to say that inflammation was present, and which they took for their guide in bleeding—for the local inflammation and disturbance of the system are insufficient to produce it; but if there were, then, in my opinion, bleeding would be the best treatment. In fracture, we wish to have exudation; in the inflammations of internal organs, we wish to have it stopped at once. In fracture, a little more of the effused matter is not only of no consequence, but sometimes rather an advantage; in pneumonia and pericarditis, one would consider that the less fibrine is deposited the better. I suspect that there is scarcely one among my hearers who cannot recall cases in which he felt convinced that a free bleeding, or other active treatment, has suddenly stopped internal inflammation; but Dr. Bennett distinctly denies the possibility of this, and here is a point where the two parties are apparently hopelessly at issue.

The most accurate representation, on a small scale, of what takes place internally is to be seen in the eye; and the resemblance of the structural changes consequent upon inflammation of the iris, with those taking place in the lung, is complete. But, in the eye, we consider the exudation of lymph and the formation of adhesions anything but salutary; for the deposit of a very little fibrine will destroy the use of the organ, and our efforts are directed to cut short the process of inflammation and prevent its results, and generally, as it happens, with success. The influence of mercury is what we principally rely upon, with local bleeding, blistering, and purgatives, and I have repeatedly seen cases of the following nature: a patient, with the pupil partly blocked up with lymph, and the vessels of the iris and sclerotic gorged, with his mouth sore, and but little signs of amendment, takes one or two active purges, or has leeches applied around his eye, and immediately the lymph begins to lessen, the vascularity diminishes, and the sight returns,—further inflammation being checked, and absorption being hastened by the antiphlogistic treatment. Or, in the same disease, I constantly see patients at the Eye Dispensary with the first stage of iritis, the pupil fixed, and not perfectly circular, the iris discoloured, with circumorbital pain and intolerance of light. The examination of the iris shows that exudation has begun, and that therefore there is true inflammation, according to the definition with which we begun; although the other symptoms would as accurately have determined the point, as the general and local symptoms guided Cullen and Gregory to diagnose inflammation of the organs within the chest, without a knowledge of auscultation. In these early cases we blister the temples freely with liquor vesicativus, and give calomel, with jalap, as a free purgative every day for two or three days. The ordinary result is, that within a week the patient is well; or in other words, the antiphlogistic treatment has cut short the inflammation, which otherwise would have gone on to destroy the sight. In former days, as a pupil, I had to bleed these cases, and with similar results; and I consider these two methods of treatment to be similar. In the eye these pathological changes are under view, and their course is determined absolutely; and there is every reason to believe that an identical process goes on in the lungs and serous membranes of the chest under parallel circumstances.

While, therefore, I believe that there is great evil in either extreme, and that we have thrown aside the use of the lancet too completely, I think we have reason to rejoice that practice has changed from what it was fifteen or twenty years ago; for at that period, as the surgical pupil of the week at the Bristol Infirmary, I have bled as many as forty out patients in one day by the physicians' orders. As to diagnosis, the medical man who most thoroughly in his own mind combines the facts he obtains by manipulation of any kind, or by auscultation, or by any other physical means, as to the exact state of the inflamed organ with the general condition of the patient and the amount of functional disturbance, is the one who will be most trustworthy with regard to the pathology, and who is most adapted to treat the patient.

Since I have written the above, I have taken an opportunity of reading the June number of the *Edinburgh Medical Journal*, and am glad to find that Dr. Watson, of London, has written upon the subject; and that he has taken the same side of the question with very similar views to those I have attempted to advocate.

2. *Nature and Art in the Cure of Disease.* As having a partial connexion with this subject, I cannot help noticing a little work which has lately issued from Mr. Churchill's medical press. It is called "*Nature and Art in the Cure of Disease.* By Sir John Forbes, M.D." As I think that its tendency is to do harm by destroying the faith of the professor and the public in the effects of remedies upon diseases, I will venture upon a quotation or two, that you may be able to verify my opinion. It is true, he admits that the surgeon exercises a noble art, productive of much service to mankind; but this is in contradistinction to the physician, to whom but very little credit is given throughout the work. He says:—

"If we pass to that noble department of the labours of medical men termed *surgery*, the illustrations of the efficacy and power of the medical art are found in much greater number, of a much more positive kind, and of higher importance. Surgery, indeed, must always be admitted to exhibit the least equivocal successes and the most splendid triumphs of the art. When we see the life that is manifestly ebbing away from a bleeding wound instantaneously saved by the ligature of an artery; when we see the displacement of an organ or limb producing in the first place most distressing pain, and necessarily leading to permanent incapacity and death, removed at once by the skilled manipulations or by the knife of the surgeon; when we see in the case of a portion of the body crushed into hopeless disorganisation by external violence, or smit with a mortal gangrene that cannot be stayed, the dead or diseased portion severed at once from the organism it would have destroyed, and life so saved and health restored; we need no reasoning to prove to us the reality and potency and inestimable value of an art which can do such great and admirable things. It is, indeed, to such feats as these—it is to surgery, even taken as a whole—that the practitioner conversant only with internal diseases and possessing no other means of combating them but the feeble and uncertain armoury of drugs, must often look up for consolation in his difficulties, in his blind gropings, and amid the insignificant or dubious results of his labours. It is a perpetual comfort for him to know with certainty, that in one of the fields of its display, at least, the noble art he professes leaves no room for doubt as to its vast powers or as to the incalculable good worked by these in the cause of humanity; and this knowledge yields, moreover, a perennial and lively stimulus to his exertions, by fostering the hope that the time may yet come when the treatment of internal diseases may attain something of the like certainty and power." (p. 185.)

In the beginning of this book, and in fact running throughout it, is the sentiment that when patients recover from internal diseases, it is rather in spite of what their physicians have done for them than with their aid. Thus:—

"Since the medical art assumed its present formal, bold, and complicated character, it is only in very rare or exceptional cases that the disease is left to nature, or treated merely regiminally. On the contrary, the strongest and most effective powers of art are usually employed for the very purpose of setting aside or counteracting, or modifying in some way or other, the powers of nature. Generally speaking, we may even say that all the heroic arms of physic are invoked purposely to disturb and obstruct and overwhelm the normal order of the most natural processes." (p. 28.)

The chief argument appears to be that most diseases will gradually subside by the efforts of nature; but the evidence brought forward is of the feeblest kind. Thus:—

"Among some savages, no internal remedies are used.... their whole medical treatment consisting of invocations and sacrifices to their deities. Here, at least, we may safely take the results as Nature's, whatever they may be; and we are assured that if often unfavourable, they were also not seldom the contrary.

"Among the sacrifices intended to procure relief from disease, some were curiously impersonal: in the case of a middling great man, a finger or two would be amputated from one of his dependants; but for a chieftain, nothing less would suffice than the strangling of a child....

"The *saphias* or charms used by the Africans are equally efficacious. One popular form of these, mentioned and prescribed by Mungo Park, consists in writing the charm on a board, and drinking the matter of the words when it has been carefully washed off: a mode of practice very analogous to, and we doubt not as efficacious as that of, the homœopathists, who, in point of fact, if they adhere rigidly to the original Hahnemannian dose, do literally prescribe words and not things." (pp. 142-4.)

The author seems to be arguing against the idea, that physicians consider that all diseases, if left to themselves, are incurable—a notion which, I imagine, nobody has ever been sufficiently rash to maintain: and he inclines to the opinion that the treatment of maladies by charms, by amputating

another man's finger, or by homœopathy, is about as effectual and more safe than the usual treatment by the hands of a physician with his "armoury of drugs".

Some disorders are enumerated in a list, under the title of *diseases specifically curable*, as being those in which the drugs named with them are commonly supposed to be efficacious; but the assent to the power of remedies, even in these cases, is given with a bad grace, and in a very qualified way. The list is:—

"1. Ague and some forms of remittent fever: cured by cinchona and its salts, and by arsenic.
"2. Syphilis: curable by mercury.
"3. Scorbutus: curable by fresh lemon-juice, more certainly by fresh animal and vegetable food.
"4. Bronchocele: curable by iodine.
"5. Chlorotic anæmia: curable by iron.
"6. Periosteal and other swellings on the surfaces of the bones: cured by the iodide of potassium.
"7. Gout: curable by colchicum (?).
"8. Iritis, hepatitis, pericarditis, and other inflammations of serous membranes: cured by mercury (?).
"9. Hemicrania and intermittent neuralgia: cured by iron, arsenic, quinine, etc.
"10. Chorea: cured by iron, zinc, and arsenic (?).
"11. Delirium tremens: cured by opium (?)." (pp. 218-9.)

Besides adding a note of interrogation to express his doubt respecting the curability of gout, iritis, hepatitis, pericarditis, chorea, and delirium tremens, by the remedies appended to their names, the author says:—

"In the majority of the instances adduced, the remedies have occasionally been found useful, but have more frequently failed to display anything like a special or specific power to cure the respective diseases."

In concluding my notice of this work by the Physician of the Queen's Household, I am sorry to add that it is his intention, on some future occasion, to publish another volume of the same size as the present, consisting of the original article "On Homœopathy, Allopathy, and Young Physic", published in the *British and Foreign Medical Review* in 1845, together with a selection from the correspondence elicited by it at the time from his medical friends; and I need scarcely remind my hearers that this was the notorious article considered at the time to do so much for the advance of homœopathy.

Let us turn for a short time from these troubles of the physicians, and refresh ourselves with a little surgery.

3. *Treatment of Carbuncle.* The great northern professor of surgery has published a paper on carbuncle, in which he assumes that all surgeons, himself excepted, treat it indiscriminately with stimulants and opium, while he considers that the opposite method is the best. Some cases will require stimulants, and others will make good recoveries without; and although it appears rare to meet with a fatal case (and I have never seen but one), yet the fact that *ninety-four* deaths occurred from carcuncle in the metropolis alone in 1854, is sufficient to prove that it not unfrequently is so. My object, however, in introducing the subject is to bear my testimony to the plan of treatment lately recommended: it was introduced by the late Dr. Physic, of Philadelphia, and practised and recommended by Mr. Benjamin Travers, jun., and others, and improved upon by Mr. Higginbottom of Nottingham. The improved plan is to apply the nitrate of silver freely around and beyond the red and hard part of the swelling, and the caustic potash in the centre, to destroy the skin in that part just as it is beginning to slough. The nitrate of silver acts as a preservative, and checks the progress of the carbuncle, and the potassa fusa opens the centre, and it melts down into pus and discharges freely. I have tried this method, and can very strongly recommend it. It is also perfectly free from danger; whereas a certain amount of risk accompanies the incision. The risk is small, it is true: but I have been told by a surgeon in the East India Company's service, a man of great experience and observation, that among the natives the section of carbuncle is not unfrequently followed by death from pyæmia: a very intelligible result of opening veins by section with a sharp instrument whilst they are bathed in pus, and their divided extremities kept patulous by the induration of the surrounding tissues; and besides the avoidance of this risk, this caustic method of treatment expedites the cure in a wonderful way, by checking the disease and saving the skin. I should add that Mr. Higginbottom states that he has never prescribed alcoholic stimulants, and never saw a fatal case.

4. *Treatment of Cancer by Caustics.* The revival of the old plan of treating cancer by caustics has lately attracted unusual attention, because it has been brought forward as a secret method, with the authority of the surgeons of one of the London Hospitals.

That a tumour may be made to slough by the continued application of the chloride of zinc, has been known for some time; and I have proved it recently in a case of cancer of the breast; and thus the caustic effects as much as the knife does, *i.e.*, it removes the tumour or the local disease.

In favourable instances, if in so dreadful a disease any case may be called favourable, *i.e.*, when the tumour is isolated from surrounding parts, without adhesion, and not very deep-seated, the knife will rapidly remove it, and the patient will generally improve for a time afterwards; the chloride of zinc will also remove the tumour, and with a like result. With respect to the choice of means, I do not know why, in cases that are considered suitable for operation, the choice should not be left to the patient; for what is a favourable case for the knife is also generally suitable for the caustic. I believe, however, that there are cases of large tumours adherent to the integuments or neighbouring parts which no surgeon would think of cutting away, and which may be safely and completely removed by the continued application of a solution of chloride of zinc; and it was in fact in a case of this kind that I lately used it. Thus far, the revival of this old plan of treatment is likely to be of service; but to say that a cure for cancer has been discovered, is a deception upon the public and the profession, which cannot, by any ingenuity, be justified; and I would caution my hearers against imposing too great faith in the accounts given by sanguine inventors of new modes of treatment, particularly of those professing to be available in all cases of the disease they are supposed to cure. I mean such accounts as those of chloride of zinc for cancer; or of Marshall Hall's operation of tracheotomy for the prevention of epilepsy, theoretically most ingenious, and likely to succeed, but practically a complete failure; or of injecting with iodine for the cure of ovarian dropsy, said to be quite safe, but of which many fatal cases have occurred; or, lastly, such as the account given last year of amylene.

5. *Anæsthetics.* Some months ago we were startled by the announcement that a new anæsthetic had been discovered, equal to chloroform in every respect, and superior to it in this one most important particular, that it was devoid of the amount of danger to life which all reasonable persons admitted to be connected with the use of chloroform. It at once struck many of us to ask, with some degree of doubt, how any agent which has so powerful a control over the nervous system as to make the recipient of it insensible to every kind of stimulus can be called free from danger? and how this opinion could be hazarded of it, *à priori*, by one who had not the least experience of it practically? The result of the experiments was not long delayed, and amylene proved fatal much sooner than chloroform had done.

Is it true that chloroform has affected unfavourably the results of operations? This is a very serious question, which ought, if possible, to be answered. But as yet no answer has been given deserving of reliance. How can the decision of such a question be rested upon the statistical account of operations performed over a course of two or three years only, and these not the same years, and by cases numbered by tens or twenties, and not by hundreds or thousands. The point must be settled during the lifetime of the present race of operating surgeons, or probably not at all; and if the numerical method is to be employed, and statistics called in to decide the matter, the experiments must be on a large scale, and established simply to ascertain the truth. My friend and colleague, Mr. Harrison, told me that when he was first appointed surgeon to the Bristol Infirmary, at the time when many more legs were cut off than is the case at present, of his first twenty amputations he did not lose a patient, and began to think his success certain, and the operation not so fatal as was supposed; but three or four deaths followed in rapid succession, bringing the average down to what it was with his colleagues. I believe that chloroform has materially lessened the frequency of amputations, and has thus indirectly saved many more lives than it has destroyed. We are able to perform tedious operations in the neighbourhood of joints, such as the removal of diseased bone, or the opening of cavities in the cancellous structure of their articular extremities, which, without chloroform, would not have been attempted, because of the pain and the degree of uncertainty as to the result; but notwithstanding this item to the credit of the anæsthetic, if we are in the constant habit of using any agent which destroys life once in the course of

many thousand cases, which chloroform certainly does, it is a very grave matter; and although I have always been an advocate for it from the first, and use it constantly, my deliberate opinion is that we are not justified in using it for every trivial operation, and that if we wish to relieve pain in those cases we must do the best we can with local anæsthetics, such as the application of cold.

In an ancient book upon medicine and surgery, printed in old English, in the latter part of the fifteenth century, or not long after the discovery of the art of printing, is the following account of the administration of an anæsthetic dose, which is not without interest. In treating of wounds containing thorns or splinters of wood, the author is recommending the enlargement of the opening first by means of spongetents, and then he adds:—

"The second manner is that ye shall cutte the wounde wyder with a payre of cysars or with sheres thereto belongynge, as here is fygured, but that is dredfull to the woundyd pson for to beholde. Therefore it is my counsell for to occopy the fornamyd tentes. But if those can nat eas, and yt ye diseasyd psone can nat for great feer abyde ye cutting, Than must ye make this slepe drynke and geve it hym to dryuk, whereof he shall fall in slepe and fele nother cuttynge nor payne; and thus must ye make it. Take ye rote of solatrum mortale and semen jusquami, of eache an ounce; whyte popy sede and black popy sede, opium thebaicum, a dragma; croci orientalis, corticis mandragora, lignum aloes, cinamomi, castorum, a dragma of eche. And of all these make a course powder, and of this powder take ij dragmas, and sethe it with malvesye, and give it him at a droght. And whan he is in slepe, then cut up ye wounde as moche as nedyth, till it be wyde ynough..... And whan thou wylt have hym wakend agayne, than put a pece of a sponge in his nose that hath been wet in vinegre or in ye joyst of rewe or fenell, and therwithall he wakeneth again."

Thus, four hundred years ago, there were experiments and efforts made to destroy the pain of operations.

In the same work I find the following advice to medical men in consultation; and I quote it to prove that the rules of "medical etiquette", as it is improperly termed, or the conduct of one medical man towards another, are the same now as they were then: in other words, they were then, as they are now, simply the rule of doing what is right and honest.

"Therefore, whan ye go two or more about the pacyent, take hede that ye make no discorde: in lyke wyse, whan any of you be present alone with your pacyent, blame not the other that is absent, nor dyffame him not; But what ye have to say withe eche other, let that be secrete within yourselfe..... Ye shall for no golde nor sylver take in hande yt thynge that ye thynke is incurable..... and ye should knowe and understande parfytly your anathomia, which is the gaderynge and also the dysmembrynge of the lymmes of the body.... yf it nede requyred that ye sholde cut hym in any place without doynge to him any scathe, and to yourselfe an everlastynge shame and grete dishonesty."

There were two or three other surgical points which I proposed to myself to include in my present address; but I have already occupied the meeting sufficiently long, and I may hope for other opportunities during the year. I will therefore conclude by again expressing my thanks to you for the honour you have done me by giving me this position, and for the attention with which you have listened to my address; and I will at the same time add a hope that the year to come may pass away as smoothly and harmoniously as the last has done under the able presidency of my friend Dr. Davies.

REPORT OF COUNCIL.

Mr. C. Leonard, the Bristol Secretary, read the Report of Council, which commenced by congratulating the members on the harmony and good feeling which had characterised the meetings of the Branch during the past year. No difficulty had been experienced in obtaining materials for the additional ordinary meeting; and the subjects brought forward were of a varied and interesting character. The attendance of members had been more than usually large, showing the increasing interest taken in the meetings. There was a slight decrease in the number of members, as compared with last year, there having been 135 in 1856, and at present 133. Since the last annual meeting, eight members had resigned, and an equal number had been elected; and the Council regretted the removal by death of two much valued members, who had for many years been connected with the Branch; viz., Messrs. Hay of Hambrook, and Washbourne of Corsham. The report then alluded to the change of name of the Association, and to the question of medical reform. The Council recommended a petition from members present to the House of Commons in behalf of Mr. Headlam's Bill; also one in support of Mr. Griffin's movement in Poor-law medical reform. Attention was drawn to the Medical Benevolent Fund in connexion with the Association; and the report concluded with stating the result of the ballot for the Local Council, by which Messrs. Norman, Stone, Vicary, and Parsons, were elected for the Bath District; and Drs. Symonds, Budd, Brittan, and Messrs. Godfrey, Collins, and Mayor, for the Bristol District.

On the motion of Dr. Tunstall, seconded by Mr. Coe, the report was unanimously adopted.

ELECTION OF REPRESENTATIVES TO THE GENERAL COUNCIL OF THE ASSOCIATION.

The meeting then proceeded to ballot for six representative members. The gentlemen receiving the highest number of votes were—W. Budd, M.D., 26; G. Norman, Esq., 25; W. Davies, M.D., 23; J. S. Soden, Esq., 20; A. Prichard, Esq., 18; F. Flower, Esq., 14.

VOTES OF THANKS.

Votes of thanks were unanimously accorded to Dr. Davies, the Retiring President; to the Council; and to Messrs. Bartrum and Leonard, the Honorary Secretaries.

A vote of thanks was unanimously accorded to the Committee of the Bristol Institution, for their kindness in allowing the use of the theatre for the annual meeting.

ELECTION OF OFFICERS.

Mr. Soden proposed James Crang, Esq., of Timsbury, as President-Elect for the ensuing year.

Mr. Smerdon seconded the proposition, which was carried by acclamation.

Messrs. Bartrum and Leonard were reappointed Honorary Secretaries.

MEDICAL REFORM.

After some little discussion on Mr. Headlam's Bill, a petition to the House of Commons in its behalf was unanimously signed.

POOR-LAW MEDICAL REFORM.

A petition to the House of Commons, in support of Mr. Griffin's movement, was agreed to, and signed by the members present.

After a vote of thanks to the Chairman, for his ability in presiding, had been passed by acclamation, the meeting broke up.

The members dined together in the evening, at the White Lion Hotel.

CAMBRIDGE AND HUNTINGDON BRANCH: ANNUAL MEETING.

The annual meeting of the Cambridge and Huntingdon Branch was held at the Angel Inn, Peterborough, on Tuesday, July 14th: W. G. Porter, Esq., in the Chair. There were also present:—C. P. Bates, Esq. (Ramsey); T. Cammack, M.D. (Spalding); J. Chapman, Esq. (Thorney); R. H. Crisp, Esq. (Whittlesea); A. W. English, Esq. (Ufford); W. Few, Esq. (Ramsey); M. Foster, Esq. (Huntingdon); W. Hale, Esq. (Wisbech); J. Hemming, Esq. (Upwell); J. H. Hemming, Esq. (Kimbolton); G. M. Humphry, Esq. (Cambridge); E. Morris, M.D. (Spalding); J. Muriel, Esq. (Ely); L. Newton, Esq. (Alconbury); T. O'Connor, Esq. (March); W. Paley, M.D. (Peterborough); B. Pinchard, Esq. (Cottenham); H. Porter, Esq. (Peterborough); S. Pratt, M.D. (Stamford); N. G. Scott, Esq. (Cambridge); W. A. Skinner, Esq. (Cliffe); F. Southam, Esq. (Wansford); T. Southam, Esq. (Peterborough); O. Sprigge, Esq. (Peterborough); H. Terry, jun., Esq. (Northampton); H. G. Trend, Esq. (Eye); T. Walker, M.D. (Peterborough); W. Ward, M.D. (Huntingdon); J. H. Webster, M.D. (Northampton); J. Whitsed, M.D. (Wisbech); W. Wilkinson, Esq. (Spalding); C. Woods, Esq. (Godmanchester); F. Woods, Esq. (Northampton); and H. Wright, Esq. (March).

PRESIDENT'S ADDRESS.

The President in his address, after giving a brief account of the history and objects of the Association, called attention to the improved character of the Journal under the editorship of Dr. Andrew Wynter. He thought it bid fair to be the leading medical periodical of the day; and that with the kind co-operation of the members of the Association it must eventually become so, but much depended upon their exertion. He spoke

of the benefits likely to result from Mr. Headlam's Bill, which he thought was in the right direction. He concluded by speaking of the great benefit which in the course of forty-five years practice he had derived from attendance at the meetings of medical societies.

QUESTIONS IN MEDICAL SCIENCE.

Notice had been given in the circular calling the meeting, that certain subjects would be proposed for discussion.

1. "*Are experience and observation confirmatory of the view that there are critical periods and crises in common fever?*" It was held that the analogy of the whole physical world, of various phenomena in the human frame, and of the peculiarities of regular, intermittent, and other fevers, small-pox, scarlet fever, typhus, etc., was in favour of such periods and crises, but was this confirmed by actual observation? A lively discussion took place, participated in by Dr. Cammack, Dr. Ward, Mr. Porter, Dr. Webster, Dr. Morris, and others, and the opinion of the meeting was nearly divided. The majority, however, were of opinion that actual observation is *not* confirmatory of the view that there are critical periods and crises in common fever.

2. "*Is consumption ever curable; and what plan of treatment has been found most beneficial upon the whole?*" This was brought forward by Dr. Paley, who, judging from the statistics of the Peterborough Dispensary, prepared with much care by himself, and based upon cases treated by himself and very carefully watched, was of opinion that even when the disease was well marked and cavities formed, recovery occasionally occurs. That is to say, the physical signs of the malady may pass away, the patient may regain health, and the chest may fall in at the part affected. Of this, he had seen several well marked and clear instances; and he thought it fair to consider these as examples of cure, although the disease might return at a subsequent period and destroy the patient. The treatment which he had found most successful was that which most promoted the general health; viz., out-of-door exercise (on this he laid great stress), nutritious diet, avoiding stimulants, for there was commonly a tendency to feverishness in phthisis, and cod-liver oil. For the latter he had substituted—in some cases where the stomach was intolerant of it—glycerine; and he was disposed to think favourably of this, though he had not used it a sufficient length of time to arrive at a decided conclusion. He did not think counterirritation was often of much service, but rather did harm by the distress it caused. Neither was he so much in favour of change of climate, or of confinement of the patient to one temperature, etc., as many physicians appear to be. He thought that frequently the patient's health was sacrificed, and an impulse given to the real disease, by the attempts to combat the real or imaginary attendant bronchitis. The feeling of the meeting was entirely in accordance with the views propounded by Dr. Paley.

3. "*In what cases is it justifiable to tap the chest in cases of fluid collected in the pleural cavity?*" Dr. Paley introduced this subject, also relating several cases which had fallen under his observation, which will form the subject of a separate paper in the Journal.

4. "*Employment of issues after the removal of cancerous tumours.*" Mr. Humphry had found, in collating the records of many cases that had occurred within his observation, that the disease had, on the whole, returned most quickly when the wound had healed most readily—that, on the other hand, the patients had remained longest free from a recurrence of the terrible malady when there had been much suppuration, sloughing, erysipelatous inflammation, etc., after the operation. This had suggested to him that the maintenance of a discharge by means of an issue in the arm, might have some influence in retarding the recurrence of the disease. Of late, therefore, when the patient had recovered from the operation, he had adopted the practice of making an issue in the arm and maintaining it there. Sufficient time had not yet elapsed to test the value of the practice; and he merely called attention of the members to it, begging them to watch over such cases as might fall under their care, and report to him.

CASES AND COMMUNICATIONS.

Rupture of the Bladder. Mr. Terry, jun. (Northampton), read the case of a man over whose body a cart-wheel had passed, followed by great prostration, etc. Some hours afterwards, a pint and a half of bloody urine was drawn. Smaller quantities were, on subsequent occasions, drawn by the catheter. He died four days after the accident, from restlessness, vomiting, etc. A considerable rent was found through the fundus of the bladder into the peritoneal cavity.

The chief point of interest was the fact of so much water being drawn by the catheter, when so large a rent existed in its fundus. This was explained by Dr. Webster and Mr. H. Porter (who had reported a somewhat similar case in the Journal) on the supposition that the catheter had traversed the rent in the bladder, and drawn the urine from the peritoneal cavity, whither it had escaped. Dr. Walker and others inclined to the opinion that, owing to the pressure of surrounding parts and the contraction of the bladder about the rent, which might not have been quite complete, the urine had been retained in the bladder, and had been drawn from it by the catheter. The length of time that elapsed between the accident and the fatal termination of the case was in favour of this view.

Badly united Fracture. Mr. Wright (March) produced a specimen of badly united fracture of the femur. It was in the middle of the shaft; and the displacement was of the kind usually found; viz., the lower fragment was drawn up beneath the upper, and rotated outwards.

Forcible Extension of Knee-Joint. Mr. Hemming (Kimbolton) called attention to the practice of forcibly straightening the limb (under chloroform) in contraction of the knee from some forms of rheumatic disease, when much structural change had not taken place; and related two cases in which he had adopted the plan with very satisfactory results.

Syme's Operation. Dr. Walker introduced a patient in whom he had performed Syme's operation at the ankle, for removal of the foot. The flap formed from the heel had in great part sloughed, but the bone had been covered by granulation, in which so firm a cicatrix had formed that the man was able to walk upon the limb very well.

Mr. Humphry showed the following specimens:—

1. The femur of a man aged 90, and another of a man aged 80. They showed the alteration in the angle of the neck with the shaft, that takes place in age. It was in each reduced to 110°, the average angle of the adult bone being 130°.

2. A head of the femur, with the acetabulum, exhibiting the effects of chronic rheumatic disease; the former flattened and spread out to double its natural size, deprived of cartilage, and in some parts porcelain-like; the acetabulum widened to a proportionate extent. They were taken from a female aged 76, in whom the affection had commenced forty years before death, after a bad confinement.

3. An enormous cystic tumour, connected with the fore part of the sacrum and coccyx of an eight and a half months fœtus. It filled up the pelvis, and projected from the hinder part of the child, obstructing delivery till it was punctured, and the contents evacuated. It was associated with spina bifida in the sacrum, but had no direct communication with it.

4. A long polypus hanging from the fundus through the body and neck of the uterus, in the walls of which were the remnants of enormous fibrous tumours. These had undergone partial softening, so as to present fluctuation, and simulate ovarian disease so closely that paracentesis had been performed by an eminent metropolitan accoucheur, but little or no fluid passing through the canula.

5. An example of cancerous stricture in the bulbous part of the urethra, from a man aged 60. There was cancer (scirrhus) in the bladder and in several other organs; and Mr. Humphry concluded that the appearance of the disease in the urethra, which was a very rare event, was secondary; and that it was engrafted upon an ordinary stricture, which the history of the case showed had existed many years.

The dinner took place at the Angel Inn; and it was decided that the meeting should be held next year at Wisbech, under the Presidency of J. Whitsed, M.D.

SHROPSHIRE BRANCH: ANNUAL MEETING.

The annual meeting of the Shropshire Branch was held at the Queen's Head Hotel, Oswestry, on Tuesday, July 14th, under the Presidency of William Fuller, M.D. There were also present:—S. G. Bakewell, M.D. (All Stretton); R. Blaikie, Esq. (Oswestry); P. Cartwright, Esq. (Oswestry); J. G. Darlington, Esq. (Westbury); W. Eddowes, Esq. (Pontesbury); J. R. Humphreys, Esq. (Shrewsbury); H. Johnson, M.D. (Shrewsbury); J. Meredith, Esq. (Oswestry); E. Sandford, Esq. (Baschurch); J. V. Solomon, Esq. (Birmingham); J. Stephens, Esq. (Shrewsbury); F. Whitwell, Esq. (Shrewsbury); E. Williams, M.D. (Wrexham; and G. H. Williams, M.D. (Oswestry).

PRESIDENT'S ADDRESS.

It is customary at our anniversary meetings for the president for the year to inaugurate the business of the day by an address to his brother Associates; and, in deference to this good custom, I will occupy your attention for a few minutes, while I advert to some subjects of current interest, and not foreign to the business of our Association.

My first duty, however, is to express my acknowledgments for the honour you have conferred upon me in electing me your president, and thus officially connecting me with that great Association which has been established for the advancement of medical science, and as a bond of brotherly union between all classes of medical practitioners.

One great pleasure I derive from the honour of being in the president's chair, is that of welcoming to our ancient borough of Oswestry, the members of the Shropshire Branch of the British Medical Association. I have also to express the gratification it affords my brother Associates, and the medical practitioners of the town generally, to have had Oswestry selected as the place of our meeting this year. Our town, though a small one, is a place of great antiquity, and by no means destitute of historical interest and importance; whilst in its physical attributes and relations it is also interesting, in a sanitary point of view. It stands on sloping ground, and at an elevation of about four hundred and fifty feet above the level of the sea. It is thus situated on higher ground than any other town in Shropshire, and it possesses facilities for the most efficient drainage and water-supply, not exceeded in this respect, indeed, by any other town in the kingdom. These facilities, I must observe, have as yet not at all been made available to the extent of which they are susceptible. In the heights immediately above our town, there are several springs whose streams pass in open or covered channels through its streets. These heights command a range of landscape scenery which, for grandeur, beauty, or variety, is not surpassed in any part of the kingdom. The panoramic view that may be had from our church tower, or even from the old castle hill, within the very walls of the town, will well repay the trouble of a visit.

This latter spot is, moreover, one of the most remarkable objects of historic interest in our neighbourhood; for besides the many battle-scenes of which the old castle and its vicinity have been the theatre, it is a fact not so generally known, that the castle itself—of which but a few fragmentary masses are all that now remain—was, in the reigns of the first Henry and Stephen of England, and of David the First of Scotland, the family seat of Alan, the son of Flaald and father of Walter, and who was made governor of the castle and manor of Oswestry by William the Conqueror; and Walter the son of Alan was the founder of the royal family of Stuart, according to the researches of Lord Hailes, Scott, Chalmers, and other Scotch historians. It was "during the troublous conflicts of Maud and Stephen, in their competition for the crown of England, that Walter fled from the family seat at Oswestry, and settled in Scotland," where he became hereditary steward under Malcolm IV. Thus the history of our town and its castle is, though remotely, connected with the genealogy of the reigning sovereign of Great Britain.

Amongst other objects in the town, I would mention the old parish church as interesting from its antiquity and the massiveness of its noble tower.

Although the drainage of Oswestry has been extended and improved of late, it is far from complete; and nuisances and sources of impurity exist, which it is difficult for the authorities to remove, as our people have not as yet put themselves under the operation of the Health of Towns Act. The outbreak and spread of epidemic diseases are undoubtedly thereby fostered and promoted. The town has not, however, been at any time visited by cholera, and but seldom, indeed, by epidemics of a severe form. The mortality returns, too, testify to the general salubrity of the place. The deaths in the entire parish for the year ending June 30, 1857, amount to only 177; which, taking the present population of the parish at 9,000 (8,794 was its number at the last census), will give 1 death in 51, or a percentage for the year of 1·966. On referring to the last report of the Registrar-General we shall find the corrected average percentages of deaths in Shropshire for the last two years that they have been printed, viz. 1853 and 1854, to be 2·030 for each year; and that for the whole of England and Wales to be 2·352 in 1854, or 1 in 43 of the population. From these facts it may be safely inferred, that (as from its advantages of situation we might *à priori* expect) Oswestry is a healthy town, and its inhabitants enjoy the full average of longevity.

There is but one public medical institution in the town,—the Dispensary, the duties of which are efficiently performed by a staff of four surgeons and a dispenser. To this institution are attached public baths,—hot, cold, vapour, and shower,—also a plunge bath, of which the poor man may at any time have the use for a penny.

You are all aware that at the last general meeting of our Association in Birmingham, the proposed alteration of the name of our society, as also that of the constitution of the General Council, were ratified and confirmed. The change of name, I think you will agree with me, was justified by circumstances; and yet I am sure it was in no narrow or exclusive spirit that the name *Provincial* was originally adopted, or with any intention of excluding our metropolitan brethren; but the Association having originated in the provinces, its name was assumed, rather as a bond of union between provincial members in particular, who were necessarily widely scattered and destitute of societies for promoting medical science. The Council of our Association is now established on the representative principle, through the medium of the Branches. These changes seem to have completely averted the disruption with which our Association was at one time threatened, and the greatest harmony now prevails.

Our Association has not been unmindful of the necessity for continuing its efforts in the cause of Medical Reform,—a cause which has made considerable progress within the past year, but the final settlement of which might have been as far as ever from our reach but for the untiring efforts, energy, and zeal of this Association, and its Reform Committee in particular. The different medical and surgical corporations, and other licensing bodies, seeing, perhaps, their privileges or their revenues in danger of confiscation, have at last become reformers themselves; and, after mutual concessions, they have come to an understanding with us, and are now in concert with our Reform Committee, exerting themselves to forward through the House of Commons the Bill brought in by Mr. Headlam. This Bill, if passed into law would, I believe, as far as legislation on the question can go, secure the objects which our Association has had in view in fighting the battle of Medical Reform. The Bill, as you know, has passed the second reading by a large majority; and though our hopes, as to the Bill becoming law this session of Parliament, may be doomed to disappointment, yet I feel I am warranted in congratulating you on the near prospect we have of a final settlement of this long vexed and much agitated question.

I would now refer to another movement of much importance in the profession, it being one in which many of us cannot but feel a personal interest: I mean that for bettering the position of some of our brethren who are Poor-Law Surgeons. The amount of remuneration that many of these valuable public officers receive for their services is, indeed, a disgrace to the country. A knowledge of the grievances under which they labour has now become generally diffused and appreciated, chiefly through the exertions of their indefatigable fellow-labourer, Mr. Griffin of Weymouth. The College of Surgeons and the Society of Apothecaries, who had hitherto, apparently, manifested a total indifference to the just complaints of their *alumni*, have now taken up their cause, and forwarded petitions to Parliament on behalf of this much injured portion of our brethren. Mr. Griffin, who never tires in his exertions to obtain a more adequate remuneration for their services, has shown, from the returns made to him from all parts of the kingdom, that the average payment per case amounts to only 2*s*. 9½*d*.; and that the salaries are, moreover, extremely unequal, in some agricultural districts being as low as 3*d*. per case; while the average duration of illness is just twenty-eight days one hour. Now, it is utterly impossible for medical men, with salaries so totally inadequate to their services, to do their duty to the poor without making the greatest personal sacrifices; so great, indeed, that 539 medical men have thrown up their poor-law appointments within the last two years. It is not to be denied, however, that to themselves they are indebted, in a great measure, for the evils under which they suffer. The ruinous competition amongst medical men for poor-law appointments throughout the country, is greatly to be deplored, and is at once a degradation to themselves, and unjust to the whole of their fellow-labourers. This competition it is which has caused the Guardians of the different Unions to set so low a value on their services. For what can they think, but that appointments, so eagerly sought after, must be worth having, and that increase of salaries is therefore un-

called for? Much might be done, however, towards remedying those disorders, by a Government acting solely for the public good, and especially the good of the poor themselves, who must be the greatest sufferers by the evils to which I have referred.

As regards the present position and prospects of our own Association, there is much cause for congratulation and confidence; whether we regard its numerical strength, the unity that characterises its proceedings, the respectability and the professional and scientific acquirements of its members, or the influence it is capable of exerting on all questions of medical polity. Its primary object you know to be the advancement of medical science, and the promotion of harmony and friendly intercourse between the distant and scattered members of our common profession. All good men will sympathise with and admire these noble aims. It unfortunately happens that in our profession, unlike others, the social principle is weak. Each member of it is but too much bent upon what concerns his own individual interest, regardless of the injury that others may suffer in character or public estimation. This evil will be best overcome by the habits of association and mutual intercourse which such meetings as these are calculated to engender; and, I am sure, the reason why our provincial brethren do not join us with one accord, must be sought for in the fact that they do not sufficiently estimate the many advantages that would arise from our meetings, the facilities which those meetings present for the free interchange of professional opinions, feelings, and courtesies, and the friendships that may thereby be formed and cemented. These advantages are doubtless at the present time being better understood and appreciated than formerly, and large accessions are made year after year to our numbers. The number of members to which our Association has attained proves the favour with which it is regarded by the profession, of whose interests and feelings it may be regarded as the true exponent. I would, before I close my address, urge those gentlemen who may this day honour us as visitors—indeed, I would urge every medical man who respects his calling and desires to promote his own usefulness—to seek admission to the roll of our Association, and assist us in promoting the noble objects it contemplates.

NEW MEMBERS OF THE ASSOCIATION.

The following gentlemen were elected members of the Association:—Robert Cockerton, M.D. (Montgomery); Robert Blaikie, Esq. (Oswestry); John Meredith, Esq. (Oswestry); and Edward Sandford, Esq. (Baschurch).

ELECTION OF OFFICERS.

Mr. Cartwright proposed, and Mr. Stephens seconded, that W. Thursfield, Esq. of Bridgnorth, be chosen Vice-President elect. Dr. Drury and Mr. J. R. Humphreys were re-elected Honorary Secretaries. The President and Mr. Cartwright were elected to represent the Branch in the General Council.

FRACTURES OF THE SKULL. BY J. R. HUMPHREYS, ESQ.

[This paper will be published in the Journal.]

The members afterwards partook of a most excellent dinner, when they were joined by the Rev. L. Wynne Jones, the Mayor of Oswestry, and M. B. Evans, Esq.

Editor's Letter Box.

THE LONDON PHARMACOPŒIA.

Sir,—It appears by the queries in the letter from your correspondent in Sussex, that I have not been sufficiently explicit. The druggist did indeed propose that one Cramer's stamped lozenges should be sent instead. This I could not consent to. Justice, and the dignity of the profession, loudly demanded that I should deal a Wat Tyler blow at any attempt to impose a tax on my patient. Nothing remained but to take refuge under the cloak, not of a substitute, but of a makeshift.

Again, this town being near the high moors and eastward of them, is, as the world knows, very *bleak* in spring and winter, which, in connexion with our geological position (on the sandstone), causes the place at those seasons to be much infested with catarrh and pulmonary affections. In such cases I have sometimes wished to give the tinctura opii ammoniata; knowing something of its efficiency, it is tantalising to think that I cannot do so, nor do I know of any substitute for it.

I am, etc. A Member.

Barnsley, 22nd July, 1857.

Parliamentary Intelligence.

HOUSE OF LORDS.—Thursday, July 16th.

CROWDED DWELLINGS PREVENTION BILL.

The House having resolved itself into Committee on this Bill—

The Earl of Shaftesbury said that a justification of the additional powers which the Bill would grant to remedy the evils of crowded dwellings, would be found in a report of the Commissioners of Police on the subject. The Act of 1851 had been beneficial beyond expectation. A better class of lodging houses had sprung up, and accommodation of a higher standard was provided without increased payment. Forty-eight metropolitan medical officers of districts, living in the most densely crowded parts of the metropolis, stated that there had been a complete cessation of fever in these lodging houses; that there had been a great diminution in other diseases, a disappearance of vermin, and an increase of cleanliness, decency, and order. Forty medical men from the provincial districts gave their testimony to the same effect; as did also the report of the Commissioners of Police, issued a few weeks ago. He remembered the state of the lodging houses of the metropolis before the Act of 1851; and he could assure their lordships that the change approached the marvellous. Instead of dirt, impurity, and indecency, there was now cleanliness, decency, and order. He felt bound to express his deep gratitude to the Commissioners of Police for the manner in which they had carried into effect the provisions of the statute. The labour thereby imposed upon the police had been very great. The weekly distance travelled by the police in carrying out this Act was 800 miles, exclusive of the labour of mounting up stairs, diving into cellars, going to fetch medical men, and making their reports. Every night, from 40,000 to 50,000 persons slept in these registered lodging houses; and, whenever he had paid night visits to these places, he had found the Act duly carried out, and the rooms strictly sweet, wholesome, and well ventilated. There was, nevertheless, something to be done; and it was necessary that a certain class of houses and rooms should be brought within the regulations of the Act. These were tenement houses, or tenement rooms as they were called, which were occupied by a number of persons professing to be members of a single family, one of whom paid the rent. The principle of English law, that "every man's house (or room) was his castle," was here grossly abused. The magistrates, whom he did not blame, had ruled that, although a single room might be tenanted by a vast number of people, yet if the person who hired the house or the room, and who paid the rent, declared that all the persons living with him were members of the same family, that was a private room or house, and could not be brought within the Act. The Report of the Metropolitan Police for 1857 described one of these tenement rooms, measuring 14 feet 6 inches by 14 feet 6 inches, as containing thirty-seven men, women, and children, all lying together on the floor like beasts, with scarcely any other covering than the clothes taken from their persons, which they had worn throughout the day. A scientific man would tell their lordships that, "in such a polluted atmosphere, it was not surprising that epidemic and other infectious maladies should almost decimate the population." The definition of the word family, as given in the Bill, embraced within its compass the relations of grandfather and grandmother; and would, in fact, leave a large number of homes which would be untouched by the law; and yet the testimony of the inspecting sergeants of police, as well as of medical men of the greatest eminence throughout the country, was to the effect that, unless those houses containing single families were brought under the control of legislation, the ravages which fever and disease committed among the lower classes could never effectually be put an end to. But, although he felt that the Bill did not go so far as it was desirable that it should, he had to a great extent paid regard to the dwellings of private families; but it was his opinion that no great hardship would be inflicted upon them if they were, as far as possible, brought under the operation of the Common Lodginghouses Act. The fourth clause of the Bill gave to the Commissioners of Police the power of calling upon the local authorities to put into operation the Nuisances Removal Act of 1855, section 29. The measure was very simple and very short. It conferred no new powers, although it assigned some

new duties; and, if it were permitted to pass into a law, it would, be felt assured, conduce to the removal of many evils.

The Bill then passed through committee.

HOUSE OF COMMONS.—Friday, July 17th.

LUNATICS (SCOTLAND) BILL.

The House went into Committee on this Bill.

Progress was made up to Clause 108.

Upon a clause brought up by the Lord-Advocate, empowering the Home Secretary, if necessary, to appoint two medical persons to be deputy commissioners under the Act, with salaries of £500,

Mr. Buchanan said the intended appointment of these persons was quite unknown to the Scotch members. He thought that altogether the passing of this Bill had been too much hurried.

The Lord-Advocate observed that, instead of proceeding too hurriedly, they had been more than ten years employed in the work of legislation. [*Hear.*] He should have thought that the House had greatly failed in its duty if some attempt had not been made in the present session to remedy the evils at present existing in the system.

Mr. Blackburn thought the House had delayed too long and hurried too much at last in legislating upon this subject. [*Hear.*]

Mr. Kinnaird quite agreed with the Lord-Advocate. The neglect that had taken place with regard to lunatics had brought reproach upon Scotland; and if something had not been done this year, he believed there were members in the House who would have compelled legislation in the matter.

Mr. Scott thought the subject required early legislation and mature deliberation, whereas there had been late legislation and very little consideration.

Mr. Buchanan explained that he had not meant to say that no legislation ought to have taken place this year; he only contended that the House had been too much hurried at last.

The clause was then agreed to.

Several other clauses were brought up and agreed to.

The House then resumed, when the Chairman reported progress.

Monday, July 20th.

ASYLUMS FOR CRIMINAL LUNATICS.

In answer to Mr. J. Ewart—

Sir G. Grey said it was the intention of the Government to establish asylums to be exclusively devoted to the confinement of criminal lunatics; and a vote would be taken this session for the purpose.

PUBLIC INFIRMARIES IN IRELAND.

On the vote of £1,895 for public infirmaries in Ireland,

Mr. W. Williams expressed his opinion, that this was one of those items which ought not to continue in the estimates. It might have been defensible before the establishment of the Poor-law in Ireland, but he thought the charge of such institutions ought not to be thrown upon the public taxes.

Mr. Wilson could console his hon. friend by informing him that under the 14th and 15th of Victoria, chap. 68, these allowances would be gradually discontinued.

The vote was agreed to.

WESTMORELAND LOCK HOSPITAL IN DUBLIN.

On the vote of £3,985 for the Westmoreland Lock Hospital in Dublin,

Mr. Cowan objected to the item, and stated, that Lord J. Russell, when he was at the head of the Government, had proposed to reduce the allowances to the Dublin hospitals at the rate of 10 per cent. per annum, until they altogether ceased. In 1854, on the motion of the hon. member for Dublin, the subject was investigated by a committee, who recommended that the grants should be continued. The commissioners appointed at the suggestion of that committee recommended that the total sum granted for the support of the Dublin hospitals should not exceed £15,600, while the aggregate amount now asked for was £19,017, or an excess of nearly £4,000. In Liverpool, Manchester, Birmingham, and other large towns, there was a large immigration of poor Irish, for whose support the ratepayers were compelled to provide. The people of Scotland were also about to be called upon for large contributions for the establishment of lunatic asylums; and if it was right that grants, similar to that now under consideration, should be continued, the House ought to decide upon what principle the money of the State was to be applied to such objects. He therefore proposed that the recommendation of the committee of 1854 in favour of a certain fixed and specified sum should govern the House on the occasion, and that £2,600, less the £850 voted on account last session—in other words, £1,750—should be the sum granted for the Westmoreland Lock Hospital for the present year.

Mr. W. Williams said it was extraordinary that, in the face of complaints from year to year, the grant for this hospital should on this occasion be £2,770 more than the grant of last year.

Mr. Wilson had opposed the appointment of the committee mentioned by Mr. Cowan, but unsuccessfully; and when it reported to the House no other course remained to the Government than to carry out the recommendations which it made. A commission was also appointed for the purpose of inquiring how the £16,000 granted by the House for the support of those hospitals should be applied. That commission recommended a certain distribution of the funds, which the Government, of course, adopted. Besides, an Act of Parliament passed last session confirmed the proceedings both of the committee and the commission. As to the charge, that the Government was this year exceeding the vote of last year in respect to the Westmoreland Lock Hospital, he could explain how that was. Only £1,215 of the estimate of 1856 happened to be voted, so that £1,385 was advanced from the Civil Contingencies Fund to make up the estimate, and that £1,385 had now to be repaid, and was included in the vote for the present year.

After a few words from Sir J. Trelawny,

Mr. Cowan reminded the committee that he opposed the Bill last year, which passed into a law, and took a division upon it, on the ground that its object was to make the grants for these hospitals more permanent than they ought to be.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Godfrey. On July 17th, at Enfield, the wife of Benjamin Godfrey, M.D., of a daughter.

Rugg. On July 17th, at 7, Clapham Road Place, the wife of George Philip Rugg, M.D., of a daughter.

Turner. On June 4th, at Poona, the wife of J. Turner, Esq., in medical charge, Head Quarters Horse Artillery, of a son.

MARRIAGES.

Ayr—Sledden. Ayr, the Rev. Thomas D., to Margaret, only surviving daughter of the late William Sledden, Esq., Surgeon Madras Medical Establishment, at Alva Street, on July 14th.

Ellison—Clark. Ellison, the Rev. J., curate of Farnley, Yorkshire, to Mary Wake, second daughter of *Thomas Clark, Esq., Surgeon, Wellingborough, at Wellingborough, on July 17th.

Phillips—Hickman. Phillips, George, Esq., to Hannah, second daughter of the late Henry Hill Hickman, M.D., of Tenbury, Worcestershire, at Oxon Church, Salop, on July 16.

DEATHS.

Ancell. On July 18th, after a few hours illness, at 3, Norfolk Crescent, Hyde Park, Mary Ann, wife of *Henry Ancell, Esq., Surgeon, aged 68.

Badham, the Reverend Charles, M.D., at East Bergholt, Sussex, aged 51, on July 14th.

Robertson, John, M.D., Inspector-General of Hospitals, at Madrid, on July 13th.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 17th, 1857:—

Chapman, William Edwin, Skelton, Yorkshire

Coote, James Richard, Mallow, co. Cork
Cross, Richard Hamilton, Dublin
Crossley, William Henry, Wath-upon-Dearne, Yorkshire
Galton, Edmund Hooper, Brixton Rise
Langley, Edward Harley Raynsford, Killiney, Dublin
Millard, Joseph, Claremont Square, Pentonville
Moore, John Daniel, Leicester
Palk, Henry, Southampton
Rendle, Charles Bainbridge, Plymouth
Wilkinson, Alfred George, Birmingham

Apothecaries' Hall. Members admitted on Thursday, July 16th, 1857:—

Bannister, Alfred James
Galton, Edmund Hooper, Brixton Rise, Surrey
Harris, Lewis, Broadhampton, Totnes, Devon
Ince, Eugene Seys, 3, Wilton Street
Rowland, Rowland, Strata, Florida
Thomas, John Little, Carmarthen
Ward, Isaac Dunlin, Clifton, York

HEALTH OF LONDON:—WEEK ENDING JULY 18TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London in the week that ended on Saturday (July 18th), exhibit an increase on those of nine previous weeks. The number is 1061, of which 550 are deaths of males, and 511 those of females. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1028. But as the deaths of last week occurred in an increased population, the average, to admit of comparison, must be raised proportionally to the increase, in which case it will become 1130. From these statements, it may be inferred that the present condition of the public health is at least as good as is usual at this period of the year.

The deaths from diarrhœa, which in the three previous weeks were 33, 65, and 133, rose last week to 150. The increase which this disease now shows is therefore not so great as that which appeared in the preceding return. The cases of last week occurred in proportions considerably uniform in the several divisions of the metropolis; though it will be seen in comparing sub-districts that in many no cases are returned, whilst in others the numbers vary from one to six. None occurred in the St. Olave district; and only one in that of Wandsworth. Of the 150 deaths from diarrhœa, 140 occurred to children, all of whom, with the exception of 33, were infants less than a year old. Besides these, the deaths of 14 persons (all children, except two) are referred to cholera; this complaint being described in most instances in the returns as "choleraic diarrhœa", "infantile cholera", etc. In all fatal cases of cholera, it is desirable that the duration of the previous stage of diarrhœa, when it can be ascertained, should be stated by the medical attendant on his certificate.

Only one death from small-pox was registered last week; but it is stated by the registrar of Somers Town, that in Little Clarendon Street, in his sub-district, there are 21 cases of illness from the disease. Of 21 deaths from measles, 10 occurred in the east districts. Four persons died of carbuncle. Two widows died at the advanced ages of 96 and 98 years.

Last week the births of 860 boys and 826 girls, in all 1686 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1379.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·998 in. On four days, the mean reading was above 30 in. The highest reading was 30·19 in., on Monday. The mean temperature of the week was 68°, which is 6·3° above the average of the same week in 43 years. The mean daily temperature was above the average throughout the week: and on Wednesday it was 72·7°, which is 11° above the average. The highest temperature in the week occurred on that day, and was 89·7°. The lowest occurred on Friday, and was 50·9°; the range of the week was therefore 38·8°. The mean dew-point temperature was 57·0°, and the difference between this and the mean temperature of the air was 11°. On Wednesday, the highest temperature in the sun was 115·6°, the highest point attained in the week. The mean temperature of the water of the Thames was 67·3°. The wind was for the most part in the south-west. There was rain to the amount of 0·15 in. It fell at a late hour on Thursday, and early on the following morning.

EAST INDIA COMPANY'S MEDICAL SERVICE:

EXAMINATION FOR ASSISTANT-SURGEONS, JULY 1857.

The following questions were put at the late examination for Assistant-Surgeons in the East India Company's Service. This examination occupied two days; and on the following days candidates were examined orally, and were also called on to examine patients, and to perform operations on the dead subject. Only fifteen appointments were vacant, and for these forty-one gentlemen contended. The names of the successful candidates are not yet known.

Anatomy and Physiology. Monday, July 13th, 1857.—10 to 1 o'clock. Examiner, Mr. Busk. I. *Anatomy.* 1. Describe the shoulder-joint, enumerating in their order the muscles surrounding it, and noticing the mode in which the various movements of the joint are effected by them. 2. Describe the surgical anatomy of the external iliac artery, and the operation for the ligature of the vessel. 3. Describe the parts exposed by the entire removal of the pectoralis major muscle. 4. Describe the parts concerned in the different kinds of inguinal hernia, and the distinctive anatomical characters of each. II. *Minute Anatomy and Physiology.* 5. Describe the blood in man, including its physical and chemical characters; and noticing the distinctive peculiarities of the blood in man and other mammals, birds, fish, and reptiles. 6. Describe the structure of the permanent cartilaginous tissues in the human body, noticing the parts in which they occur, and the uses to which they are subservient. 7. Describe the processes of digestion and absorption of bread, meat, and milk.

Surgery. Monday, July 13th, 1857.—2 to 5 o'clock. Examiner, Mr. Paget. 1. Describe and explain the symptoms of complete paralysis of one of the third, or oculo-motor, pair of nerves. 2. Give some account of rigors or shivering-fits occurring after surgical operations, stating what they may indicate according to the times and manners of their occurrence. 3. Describe the usual characters of dry gangrene, as it occurs in the lower extremities; enumerate the chief causes of it; describe the process of separation of the gangrenous part; and, if there be any cases of the kind in which you would amputate a limb above the line of demarcation, state what they are. 4. Give an account of urinary perineal fistulæ; stating, particularly, the chief causes and manners of their formation, and the appropriate modes of treatment. 5. Describe the process of cicatrisation, as it may be seen after the separation of the eschar of a burn extending deep into the subcutaneous tissue; describe also the contraction of scars formed after such burns, and, briefly, the best means of preventing it. 6. State the symptoms of dislocation of the head of the humerus into the axilla; indicating, particularly, those among them which are most trustworthy in diagnosis. 7. Write prescriptions in Latin for what are or may be used in Hospital practice, as lead wash, spirit wash, zinc wash, black wash, alum gargle, black draught, jalap and calomel pills, colocynth and calomel pills, morphia draught. 8. A girl, ten years old, cut her wrist, three days before her admission into an Hospital, with a piece of a broken jug, which entered just to the inner side of the median line of the wrist, on its palmar aspect. The wound, it was stated, bled severely at the time of infliction, and was immediately padded and bandaged. No further bleeding ensued; but, when she was admitted, the wound was not healed, but contained a clot of blood, and was near the highest part of a pulsating swelling, which extended down to the palm. The radial artery in its whole length, and all the digital arteries, pulsated naturally; the ulnar artery pulsated as far as the swelling, into or beneath which it seemed to pass. Pressure on the radial artery at or above the wrist stopped the pulsation in the swelling; pressure on the ulnar did not affect it. State what you think had happened in this case, and how you would have treated it.

Natural History. Tuesday, July 14th, 1857.—10 to 1 o'clock. Examiner, Dr. Hooker. *Botany, etc.* (Answer five or more of the following questions.) 1. Give examples of plants having esculent or medicinal subterranean stems, and describe shortly the nature of their stems. 2. Describe the flowers and fruits of wheat, oats, and barley. 3. What are the characters of the flowers of *Orchideæ*, *Irideæ*, *Labiatæ*, *Compositæ*, and *Leguminosæ*? Give examples of each order. 4. How does the woody root of a dicotyledonous plant differ from the stem of the same? 5. What plants produce galbanum, sagapenum, myrrh, aloes, and cloves?—what are these products, and what countries do they come from? 6. What

natural orders or species of plants abound most in oxalic, malic, and prussic acids?—what are the properties of those acids?—how may they be recognised, and what are the antidotes for poisoning by any of them? 7. In what respect as articles of diet do wheat-flour, pea-flour, cruciferous and umbelliferous vegetables differ from one another? 8. What does the process of assimilation in plants consist of? 9. What are the usual products of decomposition of animal matter, and what of vegetable? 10. How would you distinguish a cotton from a linen fabric?—what are their respective properties as articles of clothing? 11. What are woody fibre, spiral vessels, cork, and bast? 12. What parts of what plants are usually employed in making common thread, rope, and cotton thread? 13. What are the differences between boiled and unboiled water; and between hard and soft water?—and how may hard water be rendered soft? 14. What are land and sea breezes, what are the causes of them, and what their general effects in hot climates? 15. If required to find the best site for a permanent station on a damp tropical coast, to what local circumstances in the soil, climate, etc., would you direct your attention? *Zoology.* (Answer two or more of the following questions.) 1. How do the teeth of rodents, ruminants, and carnivora differ; and what modifications of food do these differences indicate? 2. Describe in general terms the eyes in mammalia, reptilia, aves, insecta, and cephalopoda. 3. To what classes of animals do the teredo navalis, Guinea-worm, leech, water-newt, and tape-worm belong? Give short characters of any or all these animals, and of their habits.

4. Define the terms morphology, comparative anatomy, histology, psychology, class, order, genus, and species. 5. Write down the scientific name of a mammal, bird, insect, and fish, together with the names of the classes, orders, and divisions of the animal kingdom to which they severally belong.

Medicine. Tuesday, July 14th, 1857.—2 to 5 o'clock. Examiner, Dr. Parkes. 1. What are the causes, symptoms, and treatment of paralysis of the portio dura? 2. Describe the general and microscopic characters of the several forms of softening of the brain. 3. Give the causes, anatomical characters, symptoms, and effects of vesicular emphysema of the lungs. 4. What are the chief causes of hypertrophy of the left ventricle of the heart? What are the physical signs of such hypertrophy, and of the most usual coincident cardiac lesions? 5. How would you tell that a liver is enlarged? Give the diagnosis of the several kinds of enlargement or tumour of the liver. 6. Enumerate the causes of hæmatemesis and melæna. Prescribe for a case of hæmatemesis supposed to depend on simple ulcer of the stomach, and write the prescriptions in full. 7. What are the symptoms, causes, and treatment of rickets in children? 8. What are the causes and treatment of puerperal convulsions? 9. A man, aged thirty-six, supposed to be in good health, was employed in the month of November in work which obliged him to stand in water to his waist. In three or four days he noticed that his legs were swollen, and on the following day he had voiolent pain in the head, dry cough, and difficult respiration. When first seen, nine days later, there was general anasarca, excessive headache, dry tongue, albuminous urine, and general dry bronchitis. These symptoms continued for some days, and were then attended by palpitation, enfeebled vision, increased cough, viscid reddish expectoration, crepitant râle, and then bronchial respiration at the apex of the right lung. On the following day there was delirium and almost complete suppression of urine, and in a few hours afterwards coma and death. State generally what was the course of events from the period of attack till death; describe fully the condition of the urine during the case, and the condition of the kidneys and lungs after death. State what nosological term you would have applied to such a disease, and what treatment you would have adopted. 10. What modifications in the quality and quantity of food would you recommend for adult Europeans who are suddenly transferred from a temperate to a tropical climate?

Hospital for Disabled Merchant Seamen. An influential meeting was held on Friday, July 17th, in the Egyptian Hall, at which the Lord Mayor presided, to promote the formation of a hospital for aged and disabled master mariners and seamen of the mercantile marine. Many naval officers of high rank were present. The Lord Mayor having adverted to the importance of the object in view, Lord Henry Cholmondeley read a statement from the Board of Management of the Shipwrecked Mariners' Society, going at some length into the subject, and recommending that there should be a hospital founded for 500 men, and that a plan should be adopted for giving out-pensions as a part of the institution. Captain the Hon. F. Maude, R.N., then moved a resolution in favour of the formation of such a hospital as was contemplated. The resolution was carried, and it was also agreed,—"That a building be raised on the banks of the Thames, within the port of London, to be called (with Her Majesty's permission), 'The Royal Hospital for Worn out and Disabled Merchant Seamen.' That the said building be prepared for the reception of 500 persons selected from the different grades of the mercantile marine, and that it be commenced so soon as there is a fair prospect of £50,000 being subscribed, and that a plan of out-pensions be grafted on the institution." Mr. W. Phillips moved the next resolution, to the effect that the meeting viewed with much satisfaction the donation of £5,000 from the corporation of the Shipwrecked Mariners' Society in aid of the movement for the foundation of the proposed hospital, and pledged itself to use its utmost endeavours to carry out so noble and important an object. The motion was seconded by Mr. Montagu Gore, and carried. Other resolutions of a business character were agreed to, and thanks to the Lord Mayor concluded the proceedings.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. W. Fuller; Mr. T. W. Nunn; Dr. G. F. Parkes; Mr. Stone; Mr. T. Holmes; Dr. T. Hayes Jackson; Dr. J. H. Webster; Dr. S. J. Jeaffreson; Dr. Edward Williams; Mr. J. I. Ikin; Dr. H. H. Vernon; Mr. G. M. Humphry; A Member; Dr. R. U. West; Dr. Lauder Lindsay; Dr. M. J. MacCormack; Mr. O. Pemberton; Dr. J. McIntyre; and Dr. H. Payne, jun.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Medical Profession in Great Britain and Ireland, with an Account of the Medical Organisation of France, Italy, Germany, and America. Part I. General Remarks: Foreign Medical Organisation. Part II. British Medical Organisation. By Edwin Lee, M.D. London: John Churchill. 1857.
2. The Baths of Germany, France, and Switzerland. By Edwin Lee, M.D Third Edition. London: John Churchill. 1857.
3. The Structure and Functions of the Eye, Illustrative of the Power Wisdom, and Goodness of God. By *Spencer Thomson, M.D. London: Groombridge & Sons. 1857.

ADVERTISEMENTS.

TO ADVERTISERS.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SALOP INFIRMARY.

FRACTURE OF THE SKULL.

Under the care of J. R. HUMPHREYS, Esq.

[*Read before the Shropshire Branch, July 14th*, 1857.]

THE subject of fractures of the skull is of itself so important, both as to its immediate and to its remote consequences, that anything relating to it cannot fail to be acceptable to the profession. I will therefore give a short history of three cases of compound fracture of the skull, which I have recently had under my care in the Salop Infirmary. They were all received within twelve months. The patients were all boys, from 11 to 13 years of age. They were each fractured on the right side of the forehead, and in each the injury was done by the kick of a horse.

CASE I. In the first case, there was a hole, of about the size of a shilling, punched in the right side and upper part of the forehead; the bone was driven into the substance of the right hemisphere for at least an inch and a half; a good deal of the substance of the brain was lying about the wound, which had been forced out by the bone which had been driven in. The boy was perfectly sensible, could walk, and told us how the accident had happened. He did not complain of much pain. He was put into bed; and soon afterwards, about two hours after the accident, he was seized with a most violent convulsive fit. A pair of forceps were introduced through the wound; and the bone, which had been broken into three or four pieces, was removed; whereupon the fit ceased. The wound was dressed with water dressing; a smart dose of calomel was given to him; the room was darkened; and the strictest antiphlogistic diet, with absolute quiet, were enforced. The lad recovered without a single bad symptom.

CASE II. The second patient was kicked over the right eye, causing a compound fracture, the bone being depressed about three-fourths of an inch below its level, and firmly fixed in its new position. This patient, like the former lad, was very little affected by the accident, being perfectly sensible. The wound was drawn together by strips of plaster; a dose of calomel was given; and the same treatment was adopted as in the former case. This patient also recovered without any drawback.

CASE III. The third patient was kicked on the outer side of the right orbit, also sustaining a compound fracture of the skull, with a deep indentation of the bone, and considerable loss of the brain substance. The bone in this case was comminuted. The loose portions were removed; the sides of the wound were drawn together with strips of plaster; and the same treatment was carried out as in the other cases. This lad also made an excellent and rapid cure, without any untoward symptom.

REMARKS. In the last two cases, there was considerable depression of the skull, which was not interfered with, simply because there were no symptoms that called for it; and yet both made an uninterrupted progress to recovery. In short, the treatment recommended by Abernethy was carried out; viz., "Whenever the patient retains his senses perfectly, I should think it improper to trephine him, unless symptoms arose which indicated the necessity of it." Sir Astley Cooper, Dupuytren, and Liston, were of the same opinion. I remember a case in point in the practice of the last named surgeon, when I was a student at University College Hospital. A railway guard was brought into the Hospital, with a fracture and depression running right across the occipital bone. The depression was deep enough to bury the three fingers in. The man, after a time, was perfectly conscious, and told how the accident happened, which was as follows. He was sitting on his seat at the top of a carriage, with his back to the engine; and, while the train was running at full speed, the back of his head was struck against the arch of a bridge. Mr. Liston did not interfere with it; and the man left the hospital well. Sir B. Brodie and Velpeau also are of the same opinion as the other mentioned surgeons. Sir Benjamin Brodie says: "The removal of a part of the cranium is not to be viewed as a trifling matter, or as an operation which we are warranted in performing without a very sufficient reason; it is most prudent to abstain from the use of the trephine where there is fracture with depression of the cranium, producing at the time no unfavourable symptoms."

I think I have adduced sufficient evidence to show that, in cases of fracture of the skull, with depression, causing symptoms of pressure on the brain, whether it be the milder state of paralysis, or the severer one of coma, there is only one plan of treatment to be adopted; viz., to trephine and elevate. When, however, that injury is not accompanied by any untoward symptoms, we shall give the patient a better chance of recovery by not meddling with the depressed bone, but trusting to nature, at the same time keeping a strict watch for the first indication of anything going wrong in the circulation, and adopting such an amount of antiphlogistic treatment as will check it.

Original Communications.

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

By H. HANNOTTE VERNON, M.D., Physician to the Great Northern Hospital; Physician to the Blenheim Dispensary; formerly Resident-Accoucheur to St. Mary's Hospital.

[*Continued from page* 585.]

PART II.—PATHOLOGY.

A PHYSIOLOGICAL analysis of labour is the fittest introduction to an exposition of the pathological conditions which affect the motor functions of the uterus, whether these be of such a nature as to suppress, diminish, or excite them. It may further be said that uterine motor physiology is, in reality, the key to uterine motor pathology. An aberrant form of motor action of the uterus is not something having an independent existence; it is an altered mode of action developed upon a physiological basis. The elements of all modes of uterine motor action antedate morbid actions; they are preexistent to the latter; and these are developments of, or are engrafted upon, them. It will be endeavoured to make as rigorous an application of the physiological analysis contained in the last paper to the pathology of the subject as possible.

FIRST PHYSIOLOGICAL BASIS.

Peripherical arrangements of Nerve endowed with Sensibility: either Cerebro-spinal or Sympathetic.

PATHOLOGICAL DEVELOPMENT.

The morbid conditions which arise out of this first element of uterine motor action may be included in two general ideas: *Hyperæsthesia* and *Hypæsthesia*; that is to say, exaltation and diminution of sensibility. These negative and positive developments of the physiological condition may be confined to such

cerebro-spinal and sympathetic nerve-terminations as pertain strictly to the uterus itself. Or it may happen, that the peripherical arrangements of nerve, supplying organs in close sympathy with the uterus, may be in a state of morbid sensibility, and reflected irritations may thus supply the place of those purely local actions. Hypæsthetic conditions of organs in sympathy with the uterus would appear to be not worth considering; and the same may, perhaps, be said even of the uterus itself, with but little reservation, inasmuch as defective polarity of nervous centres completely overrides and obscures defective irritability of nerve-terminations. With regard, however, to *hyperæsthetic* states of nerve-terminations, the case is very different. A very large number of the cases of spasmodic, painful, and irregular contractions of the uterus, which fall under the observation of the obstetrician, are of this nature.

As regards the uterus itself, it may be stated that the remnants of antecedent ulcerations, abrasions, and indurations, give rise to a large proportion of those cases of uterine mobility which depend upon eccentric irritations. When I speak of remnants of inflammatory actions, it is because, so far as my own individual experience will carry me, I can, with but very few exceptions, only refer to conditions which are left behind after graver morbid states have subsided. Notwithstanding the most profuse leucorrhœa, having its source as well from the cervico-uterine surface in the vagina as from the vagina itself, it most rarely happens that any breach of continuity of surface affects the pregnant cervix uteri; indurations are of a more persistent nature, but even here it is curious to observe how, as pregnancy advances, they become softened, partially removed, and in a great measure reduced to comparative insignificance, though formerly of no small extent and accompanied by symptoms of no small acerbity. The general result of such morbid states as those referred to is an engorged and irritable state of the cervix uteri and vagina, both of which frequently pour out an abundant and acrid discharge. Constitutional syphilis declares itself in a very similar manner, only here the morbid state arises during pregnancy and subsides shortly after delivery; it is essentially a disease of pregnancy, called into existence apparently by the general excitation of the uterine economy. Plethora of the uterus would appear to act in a most capricious manner; or, to speak more correctly, it should be said that a general supervascular state of that organ affects its motor functions differently at different stages of labour. In the act of dilatation (generally so called) the influence of uterine plethora is declared in the form of lingering and persistent pains, having few and short remissions; when the more energetic throes of advancing parturition should succeed these, it is found that they are inefficient, short as regards muscular contraction, long as regards pain, and partaking of a crampy nature, very distressing to the patient. Inflammations of the placenta and amniotic sac are not generally recognised as influencing the act of labour, but I am persuaded that, in premature labours especially, it frequently happens that much suffering accrues to women from undiscovered conditions of these structures. The various forms of tumour which affect the uterus almost invariably exalt its irritability. Fibrous tumours, polypus, scirrhus, etc., are attended by perverted forms of motor action. Their influence arises partly from their effect upon the vascular condition of the organ they inhabit, and partly from their mechanical influence.

Passing on from the uterus itself and its contents, we are next met by irritations reflected from other organs which are in close sympathy with the uterus, and are themselves in a condition of hyperæsthesia, either temporary or persistent. The ovaries, the bladder, the rectum, the kidneys, the stomach, and the mammæ are the organs with which we are concerned. Subacute inflammation of the ovaries, and that chronic irritability which appears to accompany many persons through the whole period of fruitfulness, though not, as far as we know, very intimately related to labour at the full period of gestation, does undoubtedly exercise a powerful influence over the motor actions of the uterus in the earlier months of pregnancy. Acute pain during menstruation, membranous dysmenorrhœa, abortion, and premature labour, are nothing more than consecutive terms in a series of progressive pathological developments essentially identical in their nature. Such morbid excitations act either purely in a reflex manner, or by frequent recurrence and long persistence, they throw the ganglia of the uterus proper into a state of exalted polarity. It is in this manner that eccentric and centric hyperæsthesiæ become so closely related. The comparatively rare affection, calculus in the female, induces an excitable condition of the uterus; and the commoner vesical prolapse is no unfrequent source of increased uterine mobility. Fissure of the rectum, hæmorrhoids, general varicosity of the rectal veins, and lodgments of scybalous masses, exercise a prejudicial effect upon the motor functions of the uterus. The same may be said of renal congestions, and more especially of that form of renal irritation which coexists with the albuminuria of pregnancy. Every case of labour which has fallen under my observation, in connexion with this condition, has been more than ordinarily painful; indeed, a more marked illustration of the manner in which reflected irritations influence the early stages of uterine motor action can hardly be adduced. Hyperæsthetic conditions of the gastric nerves are similarly related to uterine action. It is true that both the emesis of pregnancy and the emesis of the first stage of labour are sympathetic actions, but there is a considerable difference in the way in which they severally affect labour. The vomiting of labour is purely a symptomatic sympathy, indicative of a process going on elsewhere; the persistent vomiting of pregnancy is a manifestation of hyperæsthesia of the gastric nerves, which, however produced and established, is capable of reacting upon the uterus; and such indeed is the fact in practice—labour occurring in women who have been the subjects of constant vomiting during pregnancy is usually marked by irregular and painful action of the uterus. With regard to the mammæ, I can only speak to having seen two cases in which they were in an irritable and extremely vascular state during labour; but in these two cases the pains of the first stage of labour were peculiarly incessant and distressing.

The effect of all these hyperæsthesiæ is expended principally upon the earlier stages of labour. The more purely peristaltic the action of the uterus, and the more it acts under the control of the sympathetic only, the more marked is the effect of hyperæsthetic conditions of its own nervous apparatus, and the more obvious the influence of reflected irritations. When as labour advances and wider sympathies are called into action, when the spinal cord takes up its accessory action, when the uterus begins to act consensually with the powerful voluntary efforts of the later expulsive stages, the morbid actions of the first stage are swallowed up in the intensity of the general parturient effort. It is not to be supposed, however, that the morbid states just reviewed are wholly inoperative as regards the expulsive stage of labour; whatever influence they possess is generally exerted in the way of increasing the rapidity and vigour of the uterine contractions, sometimes to an inconvenient degree. In one point of view, however, they lose their interest, because they cease to provide the salient features of the particular case under notice, and to require the interference of the practitioner. Their importance has, in fine, passed away with the introductory stage of parturition.

SECOND PHYSIOLOGICAL BASIS.

An arrangement of Nervous Fibres capable of conveying to certain Nervous Centres the Excitor Stimuli applied to their Extremities.

SECOND PATHOLOGICAL DEVELOPMENT.

It is unnecessary to dwell upon this section of the subject further than to say that, as far as is known at present, we can speak of no morbid actions of the uterus arising out of malperformance of the functions of the excitor nerves, beyond such as are the result of mechanical causes. Tumours of any kind pressing upon nervous trunks will, of course, in some way impede the transmission either of excitor stimuli or motor impulses. But as far as any other sources of mal-action are concerned, there is little but conjecture to go upon.

THIRD PHYSIOLOGICAL BASIS.

Various Nervous Centres: either endowed with a power of originating Motor Impulses, or of reflecting Impression conveyed to them, in the form of Motor Impulses.

THIRD PATHOLOGICAL DEVELOPMENT.

At this stage of our inquiry we arrive at the most important of the various conditions which affect the motor functions of the uterus. I shall apply to each nervous centre the antithetical ideas of *hyperæsthesia* and *hypæsthesia*. It is with the latter of these two that obstetricians are principally concerned. In considering the morbid conditions which affect peripheral arrangements of nerve, it could not but be remarked that *hyperæsthesia* was the dominant disturbing influence. Thus we light upon a broad distinction, which has a valuable practical equivalent, viz., that *eccentric* aberrations of uterine nervimotor action are related almost solely to hyperæsthesia, while *centric* aberrations are mainly related to hypæsthesia. Six distinct nervous centres, or classes of nervous centres, were spoken of as ruling the physiological actions of the uterus,

and these same six determine in like manner its pathological actions.

1. *The Ganglia of the Uterus proper.* There having been claimed for these structures a large influence over the motions of the uterus under normal conditions, it is to be expected that much of the pathology of its aberrant operations will be referred to the same nervous centres. It appears to me to be beyond reasonable doubt, that the fundamental and essential nervous impulses which determine the contractions of the uterus issue from its own ganglia. The rhythm of such contractions, their peristaltic nature, their independence to a very large extent of the integrity of the spinal cord, their consentaneous development with the ganglia under consideration, the broad distinction which exists between the earlier contractions of the uterus and those which we know to be much influenced by the spinal cord, and, above all, the total absence of any reliable evidence that cerebro-spinal nerve-centres ever govern any rhythmical actions at all,—all these considerations, I say, appear to furnish almost irrefragable proof that, in the ganglia of the uterus proper, we have the ruling and paramount nervous centres of the uterus. The importance of these fountains of nervous energy does not by any means necessarily imply any very great complexity in the morbid states to which they are subject.

Whatever circumstances modify their endowments, the result, whether the modifying agencies act from a distance, or topically upon the ganglia, is exaltation or diminution of their polarity. But such simple morbid elements arise out of a great variety of causes. Many of these are identical with those which underlie hyperæsthetic states of the peripherical arrangements of nerve pertaining to the uterus; while others are idiosyncratic, and involve ultimate facts which can be pushed no further back in the chain of causation. As regards hyperæsthesia of the ganglia proper of the uterus, it may be remarked that such a condition is more frequently idiosyncratic than not. It is, however, not an isolated nervous phenomenon; it does not stand alone as a single manifestation of undue nervous polarity; it is in consent with a general hyperæsthesia. The persons in whom it most frequently obtains are those of great nervous mobility. Individuals whose intestinal canals answer with extraordinary promptitude to the stimulus of irritant purgatives, who are subject to palpitations, fits of hysteria, immoderate blushings, and rapid successions of emotional modality out of due proportion to the moral causes acting upon them,—such are the women whose uteri act spasmodically, in an irregular and clonic manner, or, more frequently still, so rapidly, fiercely, and independently of cerebro-spinal adjuvation, that labour is begun and ended before time has elapsed for the most hurried preparation. Cases of painless labour do from time to time come under observation, in which it is easy to satisfy ourselves that the accessory influence of the spinal cord has hardly been exerted at all, and in which the share ordinarily taken by the brain and little brain has amounted to absolutely nothing, whether in the way of sensation, volition, or co-ordination of movements. It may be urged that such cases occur only with women who have most capacious pelves; but this consideration only fortifies the view which regards uterine motor action as essentially peristaltic, and dependent upon sympathetic, not cerebro-spinal nervous centres. The fact is, that a wide pelvis involves absence of resistance from and impingement upon those structures which are supplied with spinal nerves; and thus we have the influence of reflex spinal action in a measure eliminated, and one of those natural experiments provided to our hands which we may seek in vain to institute for ourselves artificially.

Leaving behind us these idiosyncratic cases of morbid excitability of the uterine ganglia, we come to the consideration of hyperæsthesiæ arising out of more strictly topical conditions. The various modifications and results of inflammatory actions going on in the uterus itself or neighbouring organs, and which produce the eccentric hyperæsthesia spoken of before, in like manner produce a morbidly excitable condition of the uterine ganglia. The anatomical juxtaposition of these diverse elements brings them both under the influence of identical causes. Moreover, irritations of organs in sympathy with the uterus are reflected to the uterine ganglia, and either act merely temporarily, or else induce a permanently exalted polarity of these centres. The details of the sources from whence such irritations are reflected have been entered into in a former section: it is unnecessary, therefore, to do more than refer to the general fact, that such remote conditions do actually throw the uterine ganglia into a state of morbid excitability.

The most important departure from normal polarity of the centres under consideration is, however, on the negative side. In practice, hypæsthetic conditions of all kinds of nervous centres will attract the attention of the obstetrician most frequently, and require a remedy at his hands far oftener than the opposed condition of hyperæsthesia. The causes which jointly or severally produce such defective action are very numerous. Particular forms of general debility and idiosyncratic feebleness of nervous constitution will account for a large number of those cases of *inertia uteri* which encounter us in practice. In such states of the prime element of uterine motor action, the usual physiological stimuli appear quite incapable of rousing the organ to action. In other instances the immobility of the uterine ganglia is so stubborn, their polarity reduced to so low an ebb, that the most powerful artificial stimuli utterly fail to procure a single response. Oftentimes this passivity of the uterine ganglia is all that can be recognised in cases of *inertia uteri.* The most careful inquiry will fail to discover any topical or remote morbid states which can in any way bear a causative relation to absence of due excitability. Here, then, we must frequently stop and concentrate our attention upon a morbid state of sufficient simplicity, as far as our comprehension of its nature is concerned, but of terrible import to the patient as regards her chances of life. But in another category of cases ganglionic hypæsthesia of the uterus can be distinctly referred to antecedent morbid states. General plethora is very frequently at the bottom of sluggish uterine action, especially in the earlier part of labour, *i.e.*, until the fœtal head is down upon, or nearly down upon, the perinæum. Fat, gross, full blooded women present a marked contrast in the force and character of their labour pains to women of spare habit and sanguineo-nervous temperament. The vital force of such persons would appear to be almost wholly expended upon the nutritional or vegetative aspect of their functions, and innervation generally is in a languishing condition. Shock of various kinds depresses the excitability of the uterine ganglia more or less, and for a longer or shorter period of time. Operative procedures of all kinds, galvanism, and sudden birth of the fœtus, would all appear to act occasionally in this way. Hæmorrhage has a similar effect, though the importance of this cause is diminished by its providing, to a certain extent, its own remedy. Prolonged and excessive pain, whether uterine or not, will, after producing a diametrically opposite effect for a certain time, terminate in exhaustion of the irritability of the uterine ganglia. The torpor succeeding such expenditure of polarity, reminds one very forcibly of the prostration of the gymnotus after its conflict with the horses driven into the water it inhabits. It would appear that defective volition exercises no small influence upon uterine action in all its stages. The influence of the encephalic centres, however, is unequally distributed amongst the several centres themselves, as well as over the periods of parturition. The voluntary movements, which are the product of hemispherical cerebration, relate more to the latter part of labour; but still there can be no doubt that even from the very commencement the will has a collateral influence upon the motor actions of the uterus, which cannot entirely be explained by reference to the law of consensual action. Direction of the mind to some subject of thought which absorbs the interest and taxes the intellect, derives from the energy of uterine action at all stages of labour from first to last. But it is to the emotional influences issuing, as we believe, from the great encephalic ganglia, that we must look principally for the action of the encephalon on the uterine movements during the purely peristaltic stage of labour. There is no emotion to which the human mind is subject which will not, if in excess, suspend the peristaltic actions of the uterus. A totally opposite effect is sometimes produced, whereof historical instances will readily occur to the reader, but these were instances in which the moral affection initiated labour. As a general rule, obstetricians are concerned with labours which, having already commenced under ordinary circumstances, become suspended by the intervention of fear, anxiety, and other emotional causes of even an opposite nature. Fatigue diminishes the polarity of all nervous centres, and concerns the uterine ganglia as it does other centres. It would be interesting, knowing what we do of the powerful influence of malarious emanations over the sympathetic system of nerves, to inquire into the manner in which the uterine motor functions are performed in agueish districts. The uterus is certainly the seat occasionally of an agueish neuralgia. Is there not some hitherto undescribed peculiarity in the motor actions of the uterus in persons whose systems have been invaded by the periodic constitution? There are some very curious facts relative to the action of quinine upon the uterus, which appear to me to give a very strong probability to

the idea, that there are such modifications of uterine action in connexion with the periodic constitution. These facts, which bear a very interesting practical, as well as theoretical, relation to the question in hand, I shall give in detail hereafter.

2. *The Sympathetic Nerves generally.* The preceding observations upon the ganglia of the uterus proper, apply for the most part to the sympathetic ganglia generally. The modifications of pathological import, arising principally out of anatomical differences, can, of course, be supplied by the reader.

It remains now to investigate the morbid states which affect the spinal cord, the encephalic ganglia, the great brain, and the little brain. Having accomplished this, I shall pass on to a consideration of the modifications of uterine motor action which arise out of morbid states of the motor nerves and the structures of the uterus itself.

[*To be continued.*]

THE WATERY DISCHARGES OF PREGNANT WOMEN.

By R. U. West, M.D., Alford.

As a pendant to Mr. Harrinson's paper on this subject in the British Medical Journal, p. 543, I forward the following notes from my general registry of midwifery cases:—

"*No.* 222. *March* 14*th*, 1837. Breech presentation; premature; living child. The membranes gave way more than a month before delivery, and the liquor amnii escaped at different times in great gushes, each discharge being attended with pains. Portions of the membranes, in an almost putrid state, were discharged from time to time. During the continuance of this state, about five weeks, the woman was much troubled with palpitations, headache, flatulence, etc."

The case above quoted was merely an example of premature rupture of the amnion, and escape of liquor amnii—a circumstance which occurs very frequently: the labour, however, mostly following in a few days, seldom being delayed more than a fortnight. Without being exactly an example of the kind of cases which Mr. Harrinson discusses, it must nevertheless be regarded as a case of *watery discharge in a pregnant woman.* To say that she was five weeks *in labour*, would be preposterous. The following case is more in point:—

"No. 770. Sept. 20th, 1842. A natural labour. A discharge of watery fluid took place from the vagina or uterus on the 27th of August, and continued in large quantities up to the time of delivery, unattended with pain. It must have been formed between the chorion and the amnion, as the latter proved to be entire at the time of the labour."

Mr. Harrinson very correctly sums up his observations on the subject of these watery discharges by expressing the opinion that they *may* be attended with danger when the placenta is partially presenting. The following case will illustrate that opinion:—

"No. 2176. Feb. 5th, 1854. Hæmorrhage *ante partum.* Ergot. At 10.30 P.M., Feb. 4th, Mrs. R., of this town, was suddenly surprised by an immense gush of blood. She fainted, and was carried up stairs to bed. As I was detained at the time in attendance on another case at a considerable distance from home, I did not see her till 1.30 A.M.; meantime, she was under the care of one of my professional neighbours. On my arrival, I found the cranium presenting in the first position; the os uteri dilated to the size of a shilling, rigid, and rather thick. There were very slight pains at considerable intervals, each accompanied by a gush of slightly coloured serous fluid. I immediately ruptured the membranes, after which the flow of fluid ceased entirely. There was, however, some faintness felt occasionally; there was frequent yawning, and a very blanched countenance. I then gave a full dose of ergot. This speedily brought on nice pains, and the labour was safely completed at 4.15 A.M. The child was quite dead, probably in consequence of the hæmorrhage, as it had been felt to move just before the labour began. Immediately after the child was born, a very large firm coagulum, larger than the after-birth, was expelled. I think it probable that the gushes of pale fluid which took place with the first slight pains were composed chiefly of the serum of the blood, the coagulum of which was expelled after the birth of the child. The opening through the membranes was found to be close to the edge of the placenta. I could not feel any portion of the placenta during the labour. A considerable portion of the maternal surface of the after-birth, near the opening through the membranes, was found to be covered with a thin layer of very adherent and firmly coagulated blood.

"During the remainder of that day, Mrs. R. felt exceedingly well, the pulse and appetite being perfectly good. The next day the pulse was quick, but there was no other unfavourable symptom. On the third day, in the morning, I found her suffering from great pain in the abdomen, with tympanitis, and great tenderness on pressure. The pulse was 140, weak; tongue clean; no shiverings; lochia and milk all right. There were frequent eructations. I ordered fomentations. She had some difficulty in micturition. I gave her—

℞ Liq. morph. acet. (Ph. Lond.) ʒss; spiritûs ætheris nitrici ʒj; aquæ ad ℥iss. M. Fiat haustus statim sumendus.

"A calomel and compound scammony powder was ordered to be taken an hour after, the bowels not having been moved since the confinement; and she was directed to go on with the following mixture.

℞ Pulv. ipecac. comp. ʒss; magnesiæ sulphatis ʒvj; spiritûs ætheris nitric. ℥ss; aquæ menthæ piper. ad ℥vj. M. Fiat mistura cujus sumantur cochlearia ij 3tiis horis.

"In the evening she felt better; she had less pain and tenderness; could pass urine; the bowels had acted once slightly; pulse 120. There had been no headache to-day, though some was felt last night.

"Fourth day, A.M. Pulse 125, very feeble and indistinct; no pain; tenderness and swelling nearly gone. She was flatulent, and had been sick several times. The bowels had acted three or four times in the course of the night. (*Query*—Acute tympanitis?) She complained of thirst, and was *very smiling.*

℞ Confectionis aromaticæ ʒiss; tincturæ opii ʒiss; spiritûs ammoniæ aromatici ʒij; magnesiæ calcinatæ ℈j; aquæ menthæ piperitæ ad ℥vj. M. Sumat cochlearia ij 3tiis horis.

"Pulse at noon, 125, fuller; at night, 140, *fluttered.* The bowels were acting too much. The mixture was continued.

"Next day (fifth), the pulse was feeble and palpitating, 125–130. She had had a good night; was not sick; had no appetite; tongue clean; forehead hot. The bowels had acted again very freely after I paid my visit last night.

℞ Cretæ præparatæ ʒss; confectionis aromaticæ ʒiss; ammoniæ sesquicarbonatis ʒss; tincturæ opii ʒij; aquæ menthæ piperitæ ad ℥viij. M. Sumat cochlearia ij 4tiis horis.

"4 P.M. She was better; pulse steadier, 120. The bowels were quieter.

"Next day (sixth), A.M., pulse 100.; P.M., 90. Her appetite was returning; bowels quiet; and so she recovered rapidly."

Although not precisely a case of watery discharge *during pregnancy*, yet this is so far similar to Mr. Harrinson's cases that it affords an example of the escape of a considerable quantity of watery fluid, *in consequence of the partial detachment of the placenta.* There was danger, too, both at the time of the labour and after.

Happening to be in correspondence with Dr. Ramsbotham shortly afterwards, I took occasion to send him a copy of the note above quoted, because I thought that the puerperal disease which took place bore out his views on the subject of *acute tympanitis.* As, in his reply, he comments on the circumstances attending the labour, and on the discharge of watery fluid in particular, I here append his remarks:—

"The case you oblige me with is exceedingly interesting. The placenta was evidently placed close to the os uteri; so that hæmorrhage necessarily occurred when dilatation took place. That portion of the placenta covered with the layer of tough coagulum was the part separated: this, as no doubt you know, is very general, and has been taken by Dr. Simpson as a proof that the bleeding proceeds from the placental vessels, and as an indication of the correctness of his practice in withdrawing the placenta first in cases of unavoidable hæmorrhage; but I do not think his premises correct. I have no doubt that the pale serum was, as you suppose, the more fluid part of the blood, whose coagulum remained behind in the uterus. I have seen this very many times; and usually the distension occasioned by the collection of coagulum in this way has been attended by violent spasmodic pains."

In the three cases given above, we have examples of three different forms under which we may have an escape of fluid more or less aqueous during pregnancy. In the first, it was undoubtedly liquor amnii; in the second, it was probably a redundant fluid between the two membranes; in the last, it was the serum of the blood which was extravasated through premature detachment of the placenta. It is obvious that, with re-

spect to this last case, a similar escape of serum may take place *strictly during the pregnancy*, provided the portion of placenta detached be very small; but then the quantity of fluid evacuated would be limited in proportion. Usually, however, labour must be brought on, the case becoming one of "unavoidable hæmorrhage". I have met with other cases in which I have found this layer of tough coagulum adhering to the placenta: they are cases of what may be termed *internal hæmorrhage* before delivery.

"No. 601. March 8th, 1841. Premature. There was a very firm little coagulum adhering to one edge of the placenta, which itself appeared to be indurated at that point. *Query*—Did the premature separation of that diseased portion of placenta bring on the labour?"

No. 620. May 8th, 1841. Breech presentation; a six months fœtus, still born. There was a firm coagulum adhering all round the edge of the placenta, proving that there had been premature detachment of part of that organ—the probable cause of the death of the child, and of its premature expulsion."

"No. 899. Feb. 6th, 1844. There was considerable hæmorrhage when the os uteri began to dilate, though the placenta was not to be felt. It ceased on the rupture of the membranes. When the placenta was expelled, I found a large and firm coagulum adhering to one of its edges, which proved that the placenta had been attached very near the os uteri; that a corner of it had consequently become detached when labour commenced, and that the blood that escaped had passed between the membranes and the uterus. The pressure of the head after rupture of the membranes stopped this flow, and thus the coagulum formed."

In the first two of this last little series of cases, there was no premonitory hæmorrhage; and in none of the three was there any noticeable escape of serum, although undoubtedly the serum of the blood furnishing the coagula in them all must have escaped somehow. That its escape was not noticed, is not to be wondered at.

I think most of the cases in which water or serum escapes during pregnancy may be explained in one of the three ways suggested above.

Reviews and Notices.

On Stricture of the Urethra. By Henry Smith, F.R.C.S., Surgeon to the Westminster General Dispensary, formerly House-Surgeon to King's College Hospital. pp. 280. London: Churchill. 1857.

Although we have heard a good deal lately about stricture of the urethra, at meetings of medical societies, in essays and treatises, in correspondence, in notes of newly invented instruments, and the like, we nevertheless open Mr. Henry Smith's book with much pleasure, and, it must be confessed, a strong prejudice in favour of the author, whose enthusiastic pursuit of surgery under difficulties has rendered him quite remarkable.

If we remember rightly, one of the first steps in the elements of surgery made by our author was his alleging to be fallacious the then current doctrine concerning the seat of stricture; and we think he deserves considerable credit for "dispersing" one of the traditional fictions in the art and mystery of surgery. Not fifteen years ago, one was pretty sure to hear a "Jones, M.R.C.S." (lately promoted), say to a "Brown" (going up), "Be sure, if *they* ask you at the College, 'What is the most common seat of stricture?' that you reply, 'The membranous portion.'" It has been argued, on the other side of the question, that the museum specimens on which Mr. Smith made his observations were selected on account of their exceptional peculiarities. This objection is not, however, worthy of much consideration. At page 28, he quotes his former observations; and shows that, in eighty-five specimens of urethral stricture, the seat of stricture in less than one-fourth part only of the whole was at the membranous portion.

We propose to take the opportunity of calling the attention of writers on stricture to a curious mental phenomenon which may be observed in all patients who have long suffered from stricture of the urethra, and who have been in the hands of several surgeons, and which has hitherto been quite unrecognised as a form of mental disorder. We would denominate this disorder *delirium coarticum*, or the stricture-delirium; the principal characteristics being a tendency to recount imaginary histories of dreadful suffering undergone by them, and of horrible tortures and injury inflicted on them by the surgeons whom they have previously consulted. A patient will say, for example, that, on one or more occasions during the attempt of a surgeon to pass a catheter (an attempt which, by the way, is invariably reported as a failure), he felt the instrument give a jump; and that simultaneously he experienced a sharp pain, and afterwards lost a large quantity of blood from the urethra; and that he was ill for several days in consequence; and that his stricture was not relieved; etc. For our own part, whenever a patient shows this symptom, we write him down as labouring under the particular form of dementia named above; and a certificate of sanity from a committee of psychologists would fail to enforce our belief in such wild stories. But yet, oddly enough, we have not yet seen this peculiar form of delirium described by any of the authors on the subject of stricture. Can it be possible that illusional maundering, such as we have indicated, can have been mistaken for real histories? Most books on stricture contain passages which would favour an affirmative reply, and which suggest the suspicion that, if gentle measures, such as Mr. Smith advises, were intelligently employed, less of such distressing circumstances would be heard.

"It is well to state," says Mr. Smith, "that no one method singly will suit every form of urethral contraction. There will be found several instances in which one plan of treatment alone may suffice for a satisfactory result; but in others it may be advisable and necessary to employ more, or even a modification of the whole combined, so various are the forms of stricture, and so many difficulties may arise during treatment. Before undertaking the treatment of any one form of stricture, it is necessary to bear in mind with what a delicate structure we have to deal. Even in the healthy state, the urethra is a highly sensitive canal, is easily irritated, and rejects force; its mucous membrane is so arranged as to be with facility torn by the introduction of any foreign body. Moreover, the system at large quickly sympathises with the local disturbance which is produced by any interference with the urino-genital organs." (p. 63.)

We have often heard one of the most experienced specialists say, "Whenever I hear a surgeon declare that he invariably uses one form of instrument, I at once conclude that his practical acquaintance with stricture is very limited."

Mr. Smith's mode of conducting dilatation is as follows:—

"Having ascertained the position of the stricture, I take a wax bougie of that size which will enter; and in a bad case this may be No. 2 or 3. This is slowly passed into the stricture and through it, if possible, and the effect upon the parts ascertained. If the bougie traverses the contraction pretty easily, and produces no pain, it may be taken out, and one of a larger size may be put in. As a general rule, the bougie is permitted to remain in the urethra from five to ten minutes . . . . . in a great number of cases the surgeon will be able to proceed with the treatment in the course of two or three days. . . . . If the stricture is a very tight one, and there is much difficulty found in introducing a bougie of this size (one a little larger than the last used), it will be desirable to pass first the very same instrument that was used on the last occasion as the parts in this way will be less stretched. This treatment should be pursued twice or three times a week, until a bougie equal to the size of a No. 6 or 7 can be passed through the stricture. When this has been effected I lay aside the wax bougie, and now begin further dilatation with the metal instrument, either the silver catheter or the solid steel sound." (p. 85.)

The chapter on the treatment of stricture by caustics fully discusses the mode of cure. Mr. Smith, however, omits to mention that Mr. Courtenay, the well known critic of Mr. Syme's perinæal section, and his father before him, have been amongst the earliest and most successful followers of the potassa fusa

treatment. Mr. Courtenay has long been a persevering advocate of the gentle treatment which we have shown Mr. Smith approves and practises, an additional reason for our drawing our author's attention to the oversight, which may perhaps be corrected in a future edition.

Have our readers come to a conclusion, relative to the value of Syme's operation? Do they believe in impermeable strictures? To such as are practically interested we recommend Chapter X. The cases reported are well and most fairly detailed, and have afforded us a better basis for our own private opinion on this matter than any we have yet read. Mr. Smith observes: "The surgeon must not fall into the error of supposing that external incision, as recommended by Mr. Syme, will produce an effectual cure, as he would be led to expect by the perusal of the cases which have been related in his original book on *Stricture and Perinæal Fistula*."

With this verdict we will conclude our notice of the valuable practical work before us.

Lives of British Physicians. Linacre: Caius: Harvey: Browne: Sydenham: Radcliffe: Mead: Huxham: Pringle: Fothergill: Heberden: Cullen: W. Hunter: Warren: Baillie: Jenner: Parry: Gooch: now, for the first time, added—Merriman: Halford: Paris: Chambers: Clutterbuck. With four Portraits. pp. 416. London: W. Tegg and Co. 1857.

This is a second edition of a very readable series of the lives and doings of some of the past great men of our profession; commencing with the learned Linacre, a name to be honoured alike by the classical scholar and by the physician, and ending with the late venerable and respected Dr. Clutterbuck. For the lives of Sir Henry Halford and Dr. Paris, the Editor states in his preface that he is indebted to Dr. Munk, the librarian to the Royal College of Physicians. For those of Drs. Merriman, Chambers, and Clutterbuck, the Editor declares himself responsible; and (whoever he may be) he has performed his task very creditably; although we could wish that a little more care had been devoted to the revision of the earlier parts of the work. There have been left some errors, which would better have been corrected; but, with the exception of these, and of the parading of a page of a language called by Sir Thomas Browne Saxon, but which would scarcely be recognised by King Alfred or the Venerable Bede, this little volume of *Lives of British Physicians* has our hearty commendation. We should like to see another volume of the same kind. There are, we believe, materials to fill it, if inquiries were made for them.

Periscope.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

PYROPHOSPHATE OF IRON.

Messrs. Follet and Baume, writing to the *Gazette Hebdomadaire de Médecine* of May 29, call attention to the advantages of the pyrophosphate of iron and soda as a remedy in anæmia, and the diseases of which that condition is a symptom, or with which it is coincident. They state that, in 1849, Dr. Leras presented to the Academy of Sciences a work on "The action of the Gastric Juice on the preparations of Iron employed in therapeutics;" and that in 1855 he presented to the Academy of Medicine a memoir, in which he expressed the following opinions:

"1. The ferruginous preparations employed in therapeutics are all more or less precipitated, or transformed into oxide of iron in the stomach.

"2. The pyrophosphate of iron and soda is an exception.

"3. This salt seems destined to take a place among the most efficacious preparations of iron."

Dr. Leras prevailed on several medical men to try on their patients a solution of pyrophosphate of iron and soda, prepared by himself, and the results have just been published by Messrs. Follet and Baume in a "A Report on the Clinical Service at the Asylum of St. Athanasius during the year 1856." They say that even in cases where there is no longer any hope of curing the mental maladies, there may still be a means of retarding the physical decline, which supervenes in almost all the patients in the same form, by a gradual failure of general innervation,—a decline which is shown frequently in the decomposition of the blood, from which result those dropsies which are met with in all the tissues. In such cases, all the efforts of medication ought to be directed to the reconstitution of the blood, and when this result is obtained, it is not unfrequently seen that the system recommences its functions,—a reaction in the inverse direction of the disease sometimes taking place: it is the prelude of an unexpected cure.

Messrs. Follet and Baume know no tonics which act so promptly and favourably as the pyrophosphate of iron and soda, prepared by M. Leras, in a liquid form; it is easy to administer, rapidly absorbed, and does not produce fatigue to the digestive organs. They then give the particulars of seven cases in which the medicine was tried during the year 1856: the results are certainly remarkable.

COLLODION AS AN ESCHAROTIC.

Dr. Macke states, in the *Medicinische Cent. Zeitung*, that he has used with advantage an escharotic composed of one ounce of collodion to one drachm of corrosive sublimate. He has used it principally in nævi, and small excrescences which patients wish to get rid of without the use of the knife. It is applied with a camel's-hair pencil, dries rapidly, and cannot be rubbed off easily. Applications of cold water may be made in cases where the inflammation runs high, without interfering with the action of the caustic. The eschar is thin, and falls off after three or mostly six days; pain is very slight, and the author has not found that any absorption of the bichloride takes place. (*Lancet, June 20th.*)

CHLORIDE OF GOLD AND SODIUM AS A SOLVENT IN THE TREATMENT OF CERTAIN TUMOURS.

Dr. Rouault relates some cases observed by Dr. Debreque and himself, in which it was found that the preparations of gold possess a special elective action in the treatment of glandular tumours. In chronic adenitis in general, and particularly in cervical adenitis, the solvent properties of the preparation alluded to appeared even more energetic and certain than those of iodine. One of the circumstances favourable to its employment is the presence of several tumours, separated or united in the form of a chaplet or of ganglionic knots. Its efficacy was less evident when there existed only a single ganglion, the resolution of which then only takes place with extreme slowness, and often not at all. Gold is also useful in benignant tumours of the breast, such as simple engorgement, hypertrophy, and sub-inflammatory tumours; and it also appeared to Dr. Rouault to be undoubtedly efficacious in certain tumours which were evidently of a malignant nature. The chloride of gold and sodium was the preparation generally employed, being combined with starch and gum arabic, and made into pills. With one of these pills friction was made every evening on the tongue, the gums, and the inside of the cheeks. The friction should be employed for some minutes, and the patient ought not to spit, so as to swallow any remains of the matter which is rubbed in. This plan is to be followed for at least six weeks. Several cases are related in which this plan appears to have been attended with success. (*L'Union Médicale*, Feb. 21, 1857; and *Brit. and For. Medico-Chir. Review.*

PREPARATION AND THERAPEUTICAL EMPLOYMENT OF SUBCARBONATE OF BISMUTH.

The following mode of preparation of the subcarbonate of bismuth is described by M. Hannon, Professor at the University of Brussels. The bismuth is first purified by melting this metal in powder with ten times its weight of powdered nitre. After cooling, the metal is again powdered, and mixed with ten times its weight of nitre, and after a second fusion the bismuth may be considered as entirely free from the arseniurets and sulphurets which it almost always contains. Then three parts of nitric acid are put into a retort, and one part of pure bismuth is added. When the reaction is complete, about a third of the liquid is evaporated, then the solution is poured, drop by drop, into a solution of carbonate of soda, and a white precipitate is obtained, which is subcarbonate of bismuth. The precipitate, after having been washed five or six times with distilled water, is thrown upon a filter, and washed again, to remove the last traces of carbonate of soda. It should be preserved in well-stoppered bottles. . . The subcarbonate of bis-

muth is soluble in the gastric juice, its action is rapid, it produces no sensation of weight at the stomach, it rarely constipates, colours the stools less than the subnitrate, and may be employed for a long time without oppressing the stomach. The action of the subcarbonate appears to be sedative during the first days of its employment, and subsequently to excite all the phenomena which result from the action of tonics.

All cases of gastralgia consecutive upon phlegmasia of the digestive passages, cases in which the tongue is red and pointed, and cases in which the digestion is laborious and accompanied with putrid or acid eructations, or in which there is a tendency to diarrhœa or spasmodic vomiting, demand the employment of the subcarbonate of bismuth. This salt is also required in the vomiting of children, whether caused by dentition or succeeding to frequent fits of indigestion, and in the diarrhœa of weak children, especially when occurring at the time of weaning. One great advantage possessed by the subcarbonate of bismuth is, that it neutralizes the acids in excess which are found in the stomach. In all the cases where the subcarbonate has been taken, the pain in the digestive passages is first found to disappear; then the eructations cease, together with the vomiting or diarrhœa; the digestion becomes less and less laborious, the tongue gradually receives its normal form and colour; and if the use of the subcarbonate is continued, the appetite increases from day to day, the yellow tint of the countenance disappears, and the face becomes coloured at the same time as it ceases to be shrivelled.

The subcarbonate of bismuth is perfectly insipid, and excites no repugnance. It is given before meals. Adults take it in a little water, and children in honey. It may also be made into lozenges. The dose for adults is from one to three grammes, taken three times a day, in increasing doses. (*Bulletin de Thérapeutique*, Feb. 1857; and *Brit. and For. Medico-Chir. Review*, July 1857.)

British Medical Journal.

SATURDAY, AUGUST 1st, 1857.

MEDICAL REFORM.

At the meeting of the Association on Thursday, Sir Charles Hastings stated that he had that morning received a letter from Mr. Cowper announcing the intention of the Government to bring in a Medical Bill next session, and requesting an interview with Sir C. Hastings on the subject. A resolution was passed, expressive of the satisfaction felt by the Association at the intelligence; and it was decided to leave the negociation with the Government in the hands of the Medical Reform Committee.

MILITIA SURGEONS.

The memorial of the Militia Surgeons, published at p. 656, is a document worthy of attentive perusal. On former occasions we have directed attention to the hardships undergone by that useful class of public servants, and have shewn their position to be altogether anomalous. Our associate, Mr. Ikin, also, in his interesting and instructive Medical Notes on the Militia, published in this Journal in December 1856 and January 1857, has described the onerous duties which devolve on them; and for an especial description of these, as regards the keeping of returns and forms, we will refer our readers to the second page of this Journal for the present year. But the object of the memorial, which was presented to Lord Panmure some time ago, is to point out the unequal manner in which the militia surgeons are remunerated, both in comparison with regimental surgeons of the line and with private practitioners who may be called in to give occasional aid in the examination of volunteers. Thus the sixth paragraph of the memorial says:

"Your memorialists would also direct your lordship's attention to the difference of remuneration allowed for the examination of recruits for the line (*4s.* for each recruit), and that for the militia (*2s. 6d.* for each); as the same time and trouble are required in both cases, they respectfully solicit the same remuneration for the militia volunteer. Again, your memorialists would direct your attention to the remuneration granted to a private practitioner, and to a militia surgeon, for the examination of militia recruits; if beyond six are examined in one day, the militia surgeon receives but fifteen shillings; whilst the private practitioner receives two shillings and sixpence for the first eight, and one shilling extra for each volunteer above that number."

Then again, with this disproportion of pay for the examination of recruits; with the ridiculously small remuneration of twopence *per* head *per* case for attendance (with medicines and appliances) on the militia men, their wives and children; the militia surgeons, who are, for the most part, men engaged in private practice, suffer often a great injury; and this remark is specially applicable to those who were called to do duty during the late war. They then

"Inspected many thousands of men for the line, and did not shrink from doing duty for the regular service in garrison, in camp, or on foreign service, including, in many instances, much anxious attendance upon invalids from the Crimea; by which they were compelled to abandon their private practice, rendering it most difficult for them ever to regain their former position in their private calling."

Besides this, the constant liability to be called away from their private practice must materially, as they urge, damage them in the consideration of the public.

In this state of hardship under which the militia surgeons labour, we are glad to find that they have formed themselves into a society, with the object, it appears, both of endeavouring to improve their condition, and of providing for those emergencies of distress which will happen sometimes in the families of such men, but for the relief of which the state seems to have made no provision. The necessity for this step—that of forming a Benevolent Society—it will be remembered, was last year proved by the melancholy circumstances attendant on the death of Mr. Molloy, of the Northampton Militia, at Gibraltar, in the discharge of his duties. We heartily wish the militia surgeons all success in their endeavours to obtain that which is just and honest for themselves. The prayer of their memorial has our warm approval; and we trust that the Government will not resist the just claims of a body of men who, in the majority of instances, sacrificed, with but small chance of recovering them, positions of standing and emolument to serve their country in the day of its need. The claims of the militia surgeons are worthy of the attention of all members of our profession.

THE WEEK.

Mr. Ikin's letter, at p. 653, seems to us more commendable for the zeal with which he supports the merit of his Yorkshire *confrères* than for discretion in the statement of details. The paragraph which we quoted in an article on July 4, and which has roused the jealousy of Mr. Ikin, certainly contained an assertion too sweeping to meet with credence—even, it is probable, from those to whom it was immediately addressed; and Mr. Ikin almost performs a work of supererogation when he enumerates the teachers of the Yorkshire medical schools—men

whose fame is world-wide, and whose ability is unquestioned by all competent judges. We quite admit the perfect competency of the members of the profession in the West Riding to give instruction in physiology to the people; and it is gratifying to be assured that the diffusion of this important branch of knowledge has not been neglected by them. We cannot, however, but think that there is still much room for well directed exertion in this direction; that there is necessity for vigorous and steady action, to sow with the good seed of sound knowledge that field of ignorance from which men like as Harrison, Rushworth, and their wizard brethren, reap so rich a harvest. As for the subjects which should be taught, we imagine that neither the Society of Arts, nor ourselves—nor any other sensible person—would think it requisite or proper to teach clerks and shopboys the details of "secretion, excretion, the development of the embryo, and the physiology of generation." But still we think that a sufficient amount of the principles of the doctrines of respiration, circulation, the functions of the brain and senses, and a few other points, might be taught *systematically*, in a *few* lectures, with great advantage. And, after all, this would only be putting into more regular order the list of important subjects which Mr. Ikin has given in his postscript. With Mr. Ikin's condemnation of the paid lecture system we cannot at all agree; and we cannot endorse his insinuation that popular lecturing, for gain, is taken up as a resource only by men who are "hard up" and unable to provide for themselves in any other way. We make these remarks in the best feeling towards Mr. Ikin; for we believe that both he, and the learned society whose proceedings he criticises, and ourselves, all have the same object in view, though we may appear to hold somewhat different opinions as to the best plan of carrying it out.

A few weeks ago, we called attention to the valuable influence exercised by a due system of physical training in promoting the development of national vigour: and we quoted from an American paper some excellent comments on the manner in which the mind is developed at the expense of the body in the western continent. Since that time, there has come before us, in the *American Journal of the Medical Sciences* for July, an extract from the biennial Reports of the Illinois State Hospital for the Insane, which is so much to the purpose, that we quote it without comment. The reporter, remarking on solitary indulgence as a cause of insanity, observes that it is unfrequent in Europe among the higher classes, because of the athletic sports in which they are accustomed to indulge. He then says:—

"So long as we have no national amusements whatever; so long as mirth and sport are considered exclusively as puerilities; so long as the college is without its gymnasium and its traditional sports, and the school-house has no well trodden playground; so long as we are in an iron-bound and close rivetted dollar-grinding automaton, which bends every moment at some false shrine of morality or respectability; just so long will the wards of American institutions for the insane be thronged with such subjects as we have described. If society will constantly wear its Sunday dress of enforced restraint, it must pay for the privilege in such coin as violated nature chooses to exact."

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, South Kensington, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRITISH MEDICAL ASSOCIATION:

ANNUAL MEETING.

The twenty-fifth annual meeting of the British Medical Association was held at Nottingham, on Tuesday, Wednesday, and Thursday, of the present week. A full report of the proceedings will be given in the next number of the Journal.

The first general meeting for the transaction of business was held in the Assembly Room, on Tuesday, at 8 P.M.

The retiring President, Dr. James Johnstone, having taken the Chair, addressed the meeting, and introduced his successor, Booth Eddison, Esq., who delivered an address.

REPORT OF THE COUNCIL.

The Report of the Council was read by the General Secretary, Dr. Williams: and was ordered to be received and entered on the minutes.

VOTE OF THANKS TO DR. JOHNSTONE.

It was unanimously resolved:—

"That the most cordial thanks of this meeting be given to Dr. James Johnstone, the retiring President; and that he be appointed a Vice-President of the Association."

A vote of thanks was also given to the Council.

APPOINTMENT OF AUDITORS.

Dr. J. B. Melson and Mr. J. J. Hadley, both of Birmingham, were elected to audit the accounts of the Association for the present year.

ELECTION OF SECRETARY.

On the motion of Sir C. Hastings, Dr. P. H. Williams, of Worcester, was unanimously re-elected General Secretary to the Association.

ARMY AND NAVY MEDICAL REFORM.

It was resolved, in accordance with a recommendation made by the Council:—

"That a Committee be appointed to draw up such resolution or memorial as they may think proper, to carry out the recommendation of the Council on the subject of Army and Navy Medical Reform; and that Mr. Flint, Mr. Soden, Dr. Budd, Dr. Wynter, Mr. Tidmas, and Mr. Nunneley, be such Committee."

On Wednesday morning, the Committee brought forward a memorial, which was adopted, and ordered to be forwarded to Lord Panmure, Sir C. Wood, and the Royal Commissioners for inquiring into the Medical Department of the Army.

DR. HORNER AND HOMŒOPATHY.

It was unanimously resolved:—

"That the name of Dr. F. R. Horner, of Hull, be erased from the list of Vice-Presidents of the Association."

COMMITTEE OF COUNCIL.

On Wednesday morning, the newly elected Council met, and chose the following ten members of their body, to form, in conjunction with the President, the President of Council, the General Secretary, and one Secretary from each Branch, the Committee of Council:—P. Cartwright, Esq. (Oswestry); T. T. Griffith, Esq. (Wrexham); J. Heygate, M.D. (Derby); W. D. Husband, Esq. (York); James Johnstone, M.D. (Birmingham); Ellis Jones, Esq. (Liverpool); E. Lankester, M.D. (London); E. Lyon, M.D. (Manchester); J. S. Soden, Esq. (Bath); T. Watkin Williams, Esq. (Birmingham).

REPORT OF THE MEDICAL REFORM COMMITTEE.

Dr. Henry, one of the Secretaries to the Medical Reform Committee, read the Report of the Committee, which will appear next week.

It was resolved, after some discussion—

"That the proceedings of the Medical Reform Committee be approved; that the Report now presented by them be adopted; and that they be requested to continue their services for the ensuing year, with the addition of the following members:—W.

Budd, M.D. (Bristol); W. Davies, M.D. (Bath); A. Prichard, Esq. (Clifton); B. W. Richardson, M.D. (London); and J. Vose, M.D. (Liverpool)."

It was also resolved—

"That the thanks of this meeting be given to Mr. Headlam, for his ability and zeal in promoting the passing of a Medical Bill; and also to the 230 members of the House of Commons who formed the majority by which the second reading of the Bill (No. 1) was carried."

ADDRESS IN SURGERY.

The Address in Surgery was read by G. Southam, Esq.

ADDRESS IN PHYSIOLOGY.

The Address in Physiology was read by E. Lankester, M.D., F.R.S.

Votes of thanks were unanimously given to Mr. Southam and Dr. Lankester.

MEDICAL BENEVOLENT FUND.

The Report of the Medical Benevolent Fund was read by William Newnham, Esq.

Reports of Societies.

ANNUAL REPORT OF THE READING PATHOLOGICAL SOCIETY.

By John McIntyre, M.D.

[*Read before the Reading Branch, July 8th*, 1857.]

INTRODUCTORY REMARKS.

In presenting a narrative of the year's proceedings, I beg you will consider as understood, all that might be said as to the advantages that attach to such retrospects, all that might be said as to the importance of the duty that devolves upon him to whom their preparation is intrusted, and all that could with truthfulness be uttered as to the deficiencies of the individual to whom it has been committed on the present occasion. By your doing so, I shall be enabled to proceed at once to the consideration of the subjects that have engaged your attention, with the simple announcement, that I have adopted a *regional* classification of them, and have reserved a few general remarks for the conclusion of the paper.

The Head.

SOFTENING OF THE CEREBELLUM: DISTENSION AND RUPTURE OF A VEIN. BY I. HARRINSON, ESQ.

Mr. Harrinson presented the brain of a man, aged 54, a coach trimmer, who, on Friday, October 3rd, retired to bed in his usual health after his day's work. He awoke at his usual hour in the morning to resume his avocations, when he complained to his wife that "his head was bad," and that he feared a return of his old bilious attacks. At 9 A.M. he began and continued to vomit large quantities of bilious matter till 1 P.M., complaining that his head was *distracted*. At this hour Mr. Harrinson found him in a state of restlessness and jactitation, pointing to the back part of his head, and saying "it was all there." He was talking incoherently, with strange visions before his eyes of ten thousand people. A calomel pill and a black draught were ordered. He became comatose, and died two hours afterwards. On examining the head four hours after death, at least a pint and a half of blood escaped on dividing the membranes posteriorly; and there was a large quantity of coagulated blood at the base of the brain, extending down the spinal chord. On turning up the brain, a large vein was seen plugged, and enlarged to the size of a writing quill. On tracing it into the left side of the cerebellum, it was found ruptured, and the centre of the cerebellum filled with coagulated blood. The adjacent brain substance was diffluent; the rest was healthy. There was no ear disease.

Mr. Harrinson remarked, that it was difficult to explain the relation of the enlarged, plugged, and ruptured vein to the softened cerebellum. The most plausible explanation he could offer was, that the cerebellum became diseased—softened—from some unknown cause; that accidentally the vein became plugged, enlarged, varicose behind, and then ruptured; that extravasation necessarily occurred into the cerebellum and the neighbouring medulla oblongata, producing pressure and death.

Mr. G. May said, there were two theories by which he thought the phenomena of the case might be explained:—1. That, as there were evident marks of inflammation of the vein at its junction with the sinus, the obstruction had led to the softening of the cerebellum and rupture of the vein. 2. That softening of the cerebellum had led to inflammation of the vein and subsequent rupture.

Mr. Walford thought that the vein had become varicose before softening of the cerebellum took place, which last condition involved rupture, sooner or later, and extravasation.

As, at present, we only know of two causes of softening, viz. inflammation and starvation, it appears to me, in the absence of evidence of disease in the arterial coats, that we must in this case put it down to inflammation. In consequence of the softening, the vein lost the support of the brain substance from without. The repeated bilious attacks, accompanied with vomiting, by causing at the time turgescence of the intracranial veins, occasioned dilatation; the inflammation by degrees involved the vein itself nearer the sinus; the vein became blocked up by the effused lymph, and, in consequence of the last attack of vomiting causing fresh engorgement of the vein, through anastomosing channels behind the blocked up portion, its coats gave way at, or soon after, the commencement of the present attack, and the effusion, being increased by the renewal of the vomiting, ended in death.

SOFTENING OF THE BRAIN IN A CHILD. BY I. HARRINSON, ESQ.

The patient was a pale, thin-faced, irritable boy, aged seven years. Two days before being visited, he had had improper food, felt sick, and vomited. When visited, he complained principally of his head. The seat of the pain then and afterwards was invariably stated to be the forepart of the head. There was no morbid heat, and no fever. The pupils were large, but obedient to light. He had occasional pain in the stomach, but there was no fulness nor tenderness. For the first few days the symptoms and treatment were those of an ordinary bilious attack. His tongue was coated; the bowels were obstinate; the stools foul; the urine loaded. A powder given him on the first day of treatment made him sick,—the only time he vomited during his illness, except on the occasion mentioned. He took his food, milk and beef-tea, eagerly. Sleep—at times sound—was frequently interrupted by cries of pain in his head. There was nothing significant in his aspect. His intellect was perfect. He had, however, a peculiar whining tone of voice, fitful impatience, and an irregular catching movement of his hands. At times he was slightly delirious. There was no intolerance of light, some of sound; he had no convulsion nor paralysis; the action of the sphincters was perfect. Mr. Harrinson's diagnosis was divided between the stomach and head, though it was evident he was labouring under some depressing influence; grave, if not profound,—without power and without reaction. The treatment, consisting of aperients, with calomel or grey powder (as his bowels were very inactive), enemata, blisters, mustard, etc., was continued for eleven days, without benefit. On the twelfth day he had, for the first time, unmistakable signs of cerebral mischief. There was, for the first time, an expression of hebetude. There was ptosis of the right eyelid. The right pupil was dilated and fixed; the left pupil was dilated, but sluggishly obedient. He answered questions with hesitation. The pulse was quick and feeble. There was catching of his hands. He whistled and grated his teeth. From the twelfth to the sixteenth day, the day of his death, his progress was retrograde. The signs and symptoms of cerebral effusion became developed, and he died by coma. On the twelfth day, he had one grain of calomel every four hours, and a blister on the forehead. In the evening, Dr. Cowan saw him. The same treatment was continued, and, in addition, he was cupped behind the ear. Dr. Cowan thought that the boy had meningitis, and softening of the central white portion of the brain. Next day, leeches, blisters, and calomel, were persevered in, but with no apparent benefit: his mouth was made sore. On the morning of the fifteenth day, he was apparently dying. In the evening, however, he roused up, became sensible, took food, and then soon lapsed into irrecoverable coma.

At the *post mortem* examination, the head only was examined. Nothing was found, but that the central white portions of the brain, the septum lucidum, and the fornix, to the very base, were in a state of diffluence.

Mr. Harrinson was unable to define the nature of the softening, and referred to a case published by Dr. Churchill of Dublin, presenting many features of resemblance to his own. Mr. Harrinson thought there was not, at any time, any indica-

tion for antiphlogistic treatment; but that, on the contrary, considering the powerlessness of the boy, and the probable profundity of the lesion under which he was labouring, the indications pointed in the opposite direction. The antiphlogistic plan, in such cases, had had its trial and its failure, and he thought supporting, if not elevating, measures were needed.

Dr. Cowan did not think such cases uncommon; he had seen many; one very lately, in a young man, aged 22 years. He had been ailing some months: there were no special symptoms, he was only weak and failing. Tubercular mischief was suspected; but it could not be discovered. At length he became quite deaf; had irregular pupils, but no symptoms of acute meningitis. The ordinary signs of cerebral effusion followed, and he died comatose in a few days. Leeching, blistering, mercury, etc., produced no effect whatever. The same morbid appearances were found as in Mr. Harrinson's case, viz. diffluence of the central white structure, the septum lucidum, and fornix. Dr. Cowan considered it inflammation of the white portions; he believed that neither redness nor discoloration was a necessary consequence of such inflammation; and that the remedies for inflammation were fairly indicated.

Perhaps, in the whole range of medical science, no subjects are involved in greater obscurity than the relationships between abnormal conditions of the brain and the modifications of its functions. It cannot be wondered at, therefore, that cases at times present themselves, in the progress of which our light only serves to show our darkness, and to inculcate more forcibly the necessity for increased observation. Mr. Harrinson's case appears to be one of those in which, with few of the usual manifestations of grave organic lesion, there existed, as I think, from the commencement of the case, a low form of inflammation, involving the portions of brain found softened. To suppose that the softening arose from starvation of the parts, would be running a-tilt at generally recognised conditions, as that kind of softening—the so-called white softening—arises from diseased states of the vessels of supply, —a condition little likely to be found in a patient so young. Whilst I, therefore, cannot but think, from what I have seen and read, that softening to diffluence is a rare termination of brain inflammation in children so young, I must entirely concur with Dr. Cowan in viewing the case as one of inflammation of the portions implicated; and in doing so, whilst I should have avoided largely evacuant treatment, and endeavoured to support the system by mild nourishment, I should, before the expression of grave mischief, have resorted to careful local depletion by leeches or cupping, blisters, and, above all, to the use of mercury to ptyalism.

The resemblance of this case to that reported by Dr. Churchill, alluded to by Mr. Harrinson, is very striking. The patients were both young; one aged 7, the other 9½ years. Both complained chiefly of pain in the head. There was no intolerance of light, and no convulsion in either; no intolerance of sound in one, whilst in the other it was doubtful or slight. In both vomiting occurred twice, and twice only. The tongue was coated in both; the sleep was sound at intervals in both: there was moaning in both; the intellect was clear in both, until quite the close of the scenes. In Dr. Churchill's case, a smart feverish attack preceded, by four days, the patient's death. In both cases the appearances on dissection were almost identical, with the addition, in Dr. Churchill's case, of considerable serous effusion into the ventricles (which, by the way, has often been found accompanying softening of the septum lucidum and fornix) beneath the arachnoid of the cerebellum, and at the base of the brain; but nowhere did the membrane exhibit marks of inflammation. Dr. Churchill's impression was, that his case was one of inflammation of the central portions of the brain; that the feverish attack was coincident with the participation in the morbid action by the membranes; that the effusion did not occur until the morning of the day on which the patient died, and that the effusion was the immediate cause of death. It is to be regretted that, in Mr. Harrinson's case, the colour of the different portions was not noticed, or the comparative condition of the surrounding brain substance, as to hardness or redness,—conditions which would, if different, have aided somewhat in solving the nature of the origin of the malady. In Dr. Churchill's case, there was no modification of colour. One symptom frequently observable in cases of softening, is a state of tonic spasm of the flexor muscles. This either did not exist, or was unobserved, or was omitted in the reports of both cases. These individual symptoms, though not universally occurring, are valuable as aids to diagnosis, and often enable one to express an opinion in more positive language, than, without their existence, it would be either judicious or sound to do. If it be right to place the origin of the softening in these cases to the credit of inflammation, it is worthy of remark, that the parts softened, viz. the white portions of the brain, are those least liable to such a change, because the least vascular; and this, of course, holds true whether the softening arise from inflammation or from degeneration of arterial tissue.

CASE OF CHOREA. BY E. WELLS, M.D.

Dr. Wells presented the heart, trachea, etc. of a girl who died from chorea in the hospital. She was 15 years old; had never menstruated; and accounted for the attack by stating, that she had been in a situation in London for a fortnight, when she had been much excited. On admission, the movements were very violent and constant. The usual treatment by sulphate of zinc, etc. was had recourse to, but with no advantage. The bowels were obstinate, and only acted after a variety of treatment had been adopted. There was no sleep, and opium failed to induce it. The movements at last became so distressing, that it was determined to bring her, and keep her, under the influence of chloroform. This was done; but only with temporary advantage, and she died from asthenia ten days after her admission. A loud systolic murmur was heard over the region of the heart during the whole period, and during the last few days she had a troublesome croupy cough. The *post mortem* examination showed that the mitral valves were imperfect: one was fringed with granular deposit. There were numerous fibrinous masses in the various cavities. The trachea was lined by false membrane, of considerable thickness, and a question arose as to the mode of its production: whether it had been produced by the irritating effect of the long continued use of the chloroform, or whether it was exfoliation of the mucous membrane, from the same cause. The general opinion was in favour of the former explanation.

The points most worthy of remark in this case are the severe character of the convulsive movements; the præcordial *bruit* arising from the mitral disease; the use of the chloroform; the tracheal membrane, and the fatal termination. It occurred in the sex most liable to such affection; within the range of years during which it most usually is witnessed; and it was traceable, as so frequently it is, to emotional excitement through fear. It is just to conclude, from the mode of death, that the fatal termination was not attributable in any way to the valvular lesion of the heart that was discovered, but to the general exhaustion of the powers of life consequent on the severity of the disease. It would have been satisfactory if the patient's history, as to rheumatism, had been given, as we should probably have had additional proof of the close connexion that exists betwixt these diseases. The results of treatment by chloroform have been generally the same. The movements for a time have been controlled, but not cured. In many severe cases, however, it has given time for the administration of food and medicine, and in this way, and by its somniferous influences, has aided in the cure. It is not mentioned in the report whether cold water splashing was resorted to. If not, I can speak, from personal experience, most highly of its power. In one case,—a recurring one,—no other remedy was used, and the cure was speedily accomplished. I entirely concur with the opinion expressed as to the mode of origin of the plastic tracheal inflammation.

The Chest.

BRONCHIAL PHTHISIS: DEATH IN THREE WEEKS. BY I. HARRINSON, ESQ.

The patient was a man aged 40, a saddler and harness-maker, spare and delicate, but who had never been laid up with acute disease. His family history was good, except that *his father died quickly from bronchitis.* He had had slight cough, with expectoration, until about three weeks before his death, when he was attacked with hæmoptysis. The sounds on percussion of the chest were everywhere clear; the respiration was natural, except at the lowest part of the right lung, where there was mucous rattle. Day by day this extended to the apex; then it commenced at the base of the left lung, and extended equally rapidly to *its* apex, so that in a few days the entire lungs were involved. The chest on percussion remained clear to the last. The symptoms were a high state of fever; constant profuse perspiration; and rapid emaciation. Hæmoptysis occasionally occurred; the cough was frequent; expectoration was profuse, and in large thick opaque masses. The disease resisted all treatment, and in three weeks he died from asthenia.

The necropsy revealed the right pleura adherent throughout,

from old standing mischief. The bronchial tubes were filled with tubercular matter, mostly so at the lowest parts. The pleura of the left lung was free. The bronchial tubes were in the same state as the right, though in a lessened degree. There was great congestion of both lungs.

Mr. Harrinson remarked that this case illustrates pretty well the fact that, in cases of phthisis, we must *not* place extreme reliance on *physical diagnosis*. Physical examination told nothing more than bronchitis; the general symptoms nothing less than phthisis. The physical signs were contrary to those of phthisis, beginning at the base; the apices were not involved; percussion was clear.

Dr. Wells said that in acute phthisis there was no reason why the deposit should begin in the apices; and he spoke truly. The blood in such cases seems surcharged with tubercular matter—with diseased fibrine; it cannot take time, so to speak, to lay it down in its usual favourite localities, but pours it out unsparingly in all directions into the parenchyma, and on to the mucous surfaces of the lungs. Its anatomical characters consequently vary very much. Dr. Walshe reduces them to three states. In the first the disease is limited, as in ordinary cases, to the apices. In this state death has not occurred in his experience sooner than the eleventh week. In the second there is a general accumulation of crude tubercles through both lungs, softened irregularly, small excavations existing in various parts, and patches of hepatisation presenting themselves here and there. And in the third there is general studding of both lungs with semitransparent grey granulations, coupled with the first stage of pneumonia—that of bright arterial injection or hepatisation: the acute miliary form. To this last Mr. Harrinson's case seems reduced; and I cannot do better than transcribe what Dr. Walshe says respecting it, as it forms a good commentary on the case. He says, "Inspection, mensuration, and application of the hand give results either completely negative, or those observed in acute bronchitis—results more calculated to mislead than to enlighten the observer. Neither does percussion furnish any trustworthy sign: the conditions of dulness are not only absolutely speaking very slight in amount, but they so equally pervade both lungs, that any slight defect of resonance discoverable would naturally be ascribed to individual peculiarity. The respiration is uneven, harsh, slightly bronchial, mingled here and there with dry bronchitic rhonchi, or with subcrepitation: vocal resonance gives no sign to be trusted to."

The next case in order is that of one of our members—one younger than most present, and whose lamp of life seemed less nigh extinguished than our own: it is that of Mr. Jeston, jun. There are no circumstances in the report that call for *professional* remarks, however much it embodies in the way of teaching for ourselves. Busied in the duties of our every day life, the hand of disease laid hold upon him, and ere a week had elapsed he was numbered with those that were. Let us, with our renewed sympathy to surviving friends, again express our sense of the loss that, as a Society, we have sustained by the death of so valued and so useful a member, and our ardent hope that he has passed on to that better land, where disease is unknown, and where death shall never enter.

PURULENT INFILTRATION OF LUNG (?). BY G. MAY, JUN., ESQ.

Mr. George May presented a lung which had all the appearance of purulent infiltration or pyæmia, taken from a man who died after the amputation of the penis for cancer. He went on well for the first ten days, when he had rigors and symptoms of pneumonia. The general conclusion arrived at by the members was in favour of the view that the case was one of pneumonia. Mr. May referred to the observations of Mr. Bullock, as published in the *Lancet*, who, upon evidence scarcely to be resisted, has come to the conclusion that pyæmia is to be attributed to a vital, and not to a mechanical cause; that the phlebitis so usually accompanying or forerunning the marked symptoms of the affection is the result of the extension of the general inflammation of the part primarily affected, or caused by contact with the contaminating material circulating in the blood; and that the pathology of pyæmia was, that in certain conditions of structure, accompanied by the formation of pus, the fibrine which was about to be formed into pus-globules underwent a retrograde metamorphosis, was carried on in the circulation, and consequently caused like actions to go on in the circulating fluid; that on reaching some secreting organ there was a tendeney to throw off the morbid material; that the unhealthy fibrine then took on a progressive metamorphosis, underwent that degree of development which it was about to undergo originally, and so formed pus. In proof of the theory, he adduces the small quantity of pus introduced into the veins, the extent and magnitude of the symptoms produced, and that there must be some process of development going on in order that the morbid material might be distributed all over the vast area of the circulation.

PLEURITIC EFFUSION: RENAL DISEASE: ALBUMINURIA: FATAL PULMONARY HÆMORRHAGE: QUESTION AS TO THE USE OF MERCURY IN RENAL DISEASE. BY R. T. WOODHOUSE, M.D.

C. P., aged 26, a farm labourer, of temperate habits, was admitted into the Royal Berkshire Hospital on December 2nd, 1856. He had enjoyed good health until three months previously, when he was much exposed to wet and cold. On admission, he was œdematous throughout, which led to the conclusion that he was the subject of kidney disease. He had a slight cough; his breathing was short, and the right side of chest was dull on percussion. There was tenderness on pressure over both loins; the urine was scanty (about four ounces) of dirty drab colour, of specific gravity 1045, and becoming almost entirely solid on the application of heat or nitric acid. The pulse was feeble; and the bowels were regular. Dry cupping over the kidneys, hot air bath, and diaphoretic mixture, were ordered. No benefit accruing from their use, on December 6th, four days after admission, elaterium was given. This, with the addition of a small blister over each loin, was continued up to December 13th, when, in consequence of the vomiting produced, the sudorific plan was again had recourse to. On December 26th the report states that the urine was less muddy, but still laden with albumen; specific gravity 1020. The anasarca continued; the skin was less tense. The patient sweated much from the vapour bath. Several pustules had appeared over the back. Acupuncture was now tried, but with no success; the fluid seemed too thick to exude. Diuretics with iodide of potassium were now tried; but, in consequence of the rapid supervention of iodism, they were relinquished, at which time the anasarca was more marked. The purgative plan, by croton oil, combined with creasote, was then tried, but to no purpose—the vomiting induced necessitating its discontinuance. Mercury, squill, and digitalis were lastly resorted to; and on December 16th the urine had increased from half a pint to nearly a quart, with less albumen; specific gravity 1010. His cough at this time was troublesome. The pills were continued, and an anodyne cough mixture was prescribed. The symptoms continued much the same until February 4th, when a large carbuncle was found in the left iliac fossa, which he said had commenced a fortnight before. On February 10th the cough was very troublesome. The right side of the chest was full of fluid, and the base of the left dull also. The mercury having been given for a month, saline diuretics were again tried, and next day the urine had increased to nearly a potful. On March 1st the urine was very copious, only slightly albuminous. The œdema was much diminished. The pleural cavities were nearly empty. The breathing was easier. He looked pallid. His cough was troublesome, and his pulse feeble. Steel was now given, and afterwards with cod-liver oil. The latter was discontinued, as he could not retain it, but the steel persevered with. On March 27th the urine was abundant, of pale orange colour, of specific gravity 1008; it was still albuminous. The same afternoon the chest symptoms became aggravated. He expectorated a quantity of bright blood, preceded by cough, tickling in the throat, and dyspnœa. The pulse was quick and irregular. Astringents were ordered. Next day rusty expectoration showed itself. His cough was troublesome, and his breathing short, and there was dulness over back part of right lung. The bowels were free; the urine copious; pulse 124. A blister and tartar emetic were ordered. On March 29th he was much better. The pulse was 104, soft; the chest sounds were much improved. On March 30th he was sitting up. The sputa were free from blood; pulse soft; breathing free. He walked from the fire to his bed, was attacked with hæmorrhage, bright in colour, into the trachea, which he could not expectorate; he fell back and expired.

Dr. Woodhouse remarked upon the obstinacy of the case in resisting the usual modes of treatment, and on the fact of its yielding after the system had been ptyalised. Authorities condemn the use of mercury under such circumstances, on account of the ravages it commits on the system locally and generally. But whilst suspecting that its action had something to do with the pustules and carbuncle, yet he was certain of its beneficial action in the case. Whilst asking what is the stage, and what are the conditions under which we may venture on its use, he said that the short duration of the disease in this case, its

origin from cold and not from abuse of stimulants might indicate that it is a chronic inflammatory stage, rather than one of more advanced disorganisation, which not only admits, but requires mercury for its relief.

No note is made of the appearance of the kidneys at the *post mortem* examination. The pulmonary hæmorrhage arose from the rupture of a large vessel into a tubercular cavity. The query Dr. Woodhouse has put is one of difficult if not, at present, of impossible solution. In the case before us the specific gravity of the urine was high, the albumen copious, the case of short duration, and was somewhat relieved by diaphoretic and cathartic treatment. We may, therefore, conclude that it was a case, *up to* the point of its yielding, of engorged kidney; and we may also conclude that, seeing no further benefit accrued, we had a further stage of disease to deal with, viz., inflammation; that this view was supported by the tenderness on pressure over the kidneys; and that mercury was the only remedy likely to cope with it. Whilst I concur with Dr. Woodhouse, therefore, in thinking that it can only be in inflammatory conditions of the kidney that mercury could be beneficial, with our present knowledge, I think it would be impossible to diagnose, during life, the states of kidney disease that would be benefited by mercurial action. I think, however, it may be said with safety and with truth that in all cases where the specific gravity is high, and the albumen abundant, with or without the further evidences—as anasarca, etc.—of impaired renal action, when diaphoretics and cathartics have failed to do good, or have ceased to do good, we are not only justified but bound to resort to its cautious administration. It is not in such stage of kidney disease that we have to fear the ravages of mercurial action, but in more advanced disorganisation, when the secreting portions of the organ have become partly obliterated, and other serious disturbances in organs essential to life have, in consequence, been induced. Mercury, in times past, has been administered in all dropsical affections, whether affecting the serous cavities or the areolar tissue, and without respect to their mechanical or their vital origin; but as we progress in our intimate analysis of diseased conditions, and know more of the *modus operandi* of remedial measures, it will be found, I believe, that our remedies have been abundant over much; that those which cure have been associated with those that do no harm, or, worse than that, with those that kill; and amongst the last, in advanced kidney disease, may mercury be placed.

The Abdomen and Pelvis.

LITHIC ACID CALCULUS FROM URETHRA. BY W. B. YOUNG, ESQ.

Ranked amongst abdominal cases, we first have a lithic acid calculus, manipulated from the urethra of a man aged 64, by Mr. Young. It weighed fourteen grains, was three-eighths of an inch in its longest, and a quarter of an inch in its shortest diameter.

RUPTURED ILEUM. BY A. FERNIE, ESQ.

The specimen was taken from a boy who had been kicked in the abdomen by a horse. He went on for the first few days very well; but, after taking a dose of castor oil, effusion of feculent matter took place into the peritoneum, and death ensued. No particulars of the case are given; but I may be allowed the expression of the *caveat*—Beware of aperients in abdominal injuries and disease.

UTERINE TUMOUR SIMULATING PREGNANCY. BY C. COWAN, M.D.

A woman had been delivered of a child during the night. Dr. Cowan saw her the following day, twelve or fifteen hours after the birth of the child. The uterus was found large, as if there were another fœtus in the organ lying athwart the abdomen. There was no presentation of membranes at the os uteri, as in twin cases; yet the outline of the uterus could be felt, large and bulky, as if containing another fœtus, and the stethoscope, even to Dr. Cowan's accomplished ear, gave the distinct double sound of a fœtal heart. Others heard it in like manner, or thought they did. The woman died of exhaustion; and on inspection, the uterus was found bulky, as if containing another fœtus, but, when laid open, was found to contain a large mass of solid matter and no fœtus. The treatment of course was not influenced by the diagnosis. This surely is a case worthy of remembrance, where ears abundantly accustomed to stethoscopic revelations had been deceived, and that, too, under circumstances which may to us at any time arise.

REMARKABLE DISTENSION OF BLADDER. BY C. COWAN, M.D.

A man was in a great state of excitement and constant jactitation, threatening to jump out of the window, and suffering great pain. In laying the hand on the abdomen, there was a large tumour on each side of the belly, which was supposed to be hepatic, but which proved to be distended bladder. The catheter drew off a whole potful of urine, and all uneasy symptoms disappeared.

PERFORATING ULCER OF STOMACH. BY R. T. WOODHOUSE, M.D.

A maid servant, aged 32, had suffered from dyspepsia, with acute pain in the stomach on taking food, and had had cough for twelve months. She was suddenly seized with violent pain in the left hypochondrium after a fit of sneezing, on the morning of November 26th; and prostration and collapse instantly ensued. Pure brandy, given immediately, increased the pain. The medical attendant, suddenly summoned to her, gave restoratives and aperients, applied sinapisms to the abdomen, and afterwards a blister. Reaction, with much distension of the abdomen, soon afterwards set in. Her bowels, at first constipated, took on diarrhœa, which persisted till her death. On December 2nd, six days after the seizure, she presented herself at the hospital, in a state of great exhaustion, with tender and tympanitic abdomen, great pain in the left hypochondrium, and countenance expressive of great anxiety. Her pulse was rapid, small, and feeble; she had considerable dyspnœa and some cough. On examining the chest, there was no inordinate resonance. Some mucous *râles* and a peculiar metallic tinkling were heard at the base of the left lung, more audible in front than behind. There was no evidence of tubercle, nor other signs of pneumothorax. She died on the fourth day after admission—the tenth after the seizure. At the autopsy, there were seen the marks of acute peritoneal inflammation. Lymph had been poured out, in large quantities, over the whole peritoneal surface, especially over the left half of the diaphragm. All the viscera were also coated with plastic effusion. A large ulcer had penetrated the anterior wall of the stomach, near the lesser curvature, which appeared to have been attached to the under surface of the left lobe of the liver; and opposite to this, on the posterior wall, was another small ulcer, with sharp defined edges, as if punched out. The lungs were healthy; a little congested at the base, but everywhere crepitant. The other organs were healthy.

Dr. Woodhouse remarked that the chief points of interest in this case were—1. The latent ulcer, and no hæmatemesis. 2. The length of time the patient survived the rupture and effusion, death generally occurring in from twenty-four to thirty-six hours. 3. The metallic tinkling. How was this last to be explained? There was no pneumothorax or large cavity; no excessive resonance on percussion; the seat of maximum intensity was referrible rather to the stomach than the lungs. 4. The ulcers of stomach; the posterior, apparently, not adherent; both being near the lesser curvature.

Dr. Cowan remarked on the obscurity of the case, that, as the sound was so near to the ear at the base of the lung, and following so closely after the cough, it was most difficult to say where the cavity was, in the absence of signs of pneumothorax.

Mr. Harrinson remarked, that Dr. Law of Dublin had explained these sounds by the air-distended stomach.

In conjunction with this case, I may add the brief notes of two others of ulcer of the stomach narrated by Dr. Cowan, in which there was hæmatemesis of recent florid blood to the amount of a pint. The hæmorrhage was arrested by opium; ice, internally and externally; strict regulation of diet, or rather abstinence; and nutritious enemata.

In Dr. Woodhouse's case, there is to be observed its occurrence, as often is, in a maid servant. The poor certainly are most affected by it; but why, has not been satisfactorily explained. She had reached the years beyond which it usually occurs; but cases present themselves at all ages. I had the pleasure of submitting one to you, on a former occasion, where the woman—*a poor woman*—was upwards of 50; and where, as in Dr. Woodhouse's case, there were two ulcers, and in like condition. The existence of more than one is unusual; Rokitansky having found that, of seventy-nine cases, sixty-two were single. Dr. Woodhouse's patient had had the ordinary dyspeptic symptoms, and the increased pain after eating, arising, no doubt, from the increased contractions of the organ at those times, and the presence of the gastric juice in greater quantity. It is stated that no hæmatemesis occurred. In both Dr. Cowan's cases there was; but it is not stated whether death ensued from it. It seldom, however, does; and when so, almost without exception, where the ulcer has eaten into the gastric or the splenic artery—in cases, therefore, when the ulcer is located on the posterior surface, or the smaller curvature of the organ. It is the site, therefore, and not the size of the ulcer, that de-

termines the hæmorrhage. The perforating ulcer in Dr. Woodhouse's case was, as in mine, on the anterior wall, where they are much less frequently found than on the posterior. The unusual time the patient lived may be explained by a portion of the lymph effusion having been thrown out before the perforation, as soon as the ulcerative action had involved the peritoneum. The effusion of the contents of the stomach, when perforated, was probably small; and the former lymph effusion on the surrounding surfaces defended in some measure the peritoneum from its action. The metallic tinkling is with difficulty to be accounted for, and, except on the supposition of a stomach phenomenon, unexplained by the autopsy. The treatment adopted prior to admission was not such as the symptoms indicated; and, although the fatal issue of the case was probably not affected by it, still it was such as to interfere with the means of relief. Rest, opium, starvation by the mouth, nutritious enemata, and ice externally and internally, according to circumstances, would probably have afforded her greater comfort, and a better chance of recovery.

CHRONIC PERITONITIS (?) IN A CHILD. BY I. HARRINSON, ESQ.

Mr. Harrinson presented specimens taken from the second of two children, the elder being very healthy. There had been slight diarrhœa, which yielded to the ordinary means. A few days afterwards, he was called to it with bleeding from the nose and mouth. Patches of ecchymosis were found on the abdomen, which was large, the liver appearing to extend below the umbilicus. The child was plump and well nourished. The mother had abundance of milk, but was extremely pale. Calomel and quinine were given, with a view of unloading the liver; but diarrhœa, with vomiting of blood and bloody stools, followed; and the child sank rapidly. On examination, the liver was found extending below the umbilicus, of a perfectly white or fatty appearance. The intestines were matted together, and covered with a pale plastic matter, which filled the pelvis; and about the umbilicus there was a cavity containing nearly a wineglassful of a purulent fluid. Mr. Harrinson supposed it to be a congenital disease of the liver and peritoneum.

The case was probably allied to those we meet in adults of chronic peritonitis with fatty liver in strumous constitutions. No mention is made of the existence or otherwise of tubercular matter on the peritoneal surfaces; but I presume they were too much covered with the plastic effusion to enable the observer to decide. The hæmorrhagic and diarrhœal tendencies would also indicate the similitude of the state.

DIGITALIS IN MENORRHAGIA. BY G. MAY, ESQ.

Mr. May drew the attention of the Society to the use of digitalis in cases of menorrhagia, and alluded to a paper on the subject by Mr. Dickenson in a recent number of the *Medico-Chirurgical Transactions*. Mr. May had tried infusion of digitalis in six cases, in doses of four drachms, every six hours during the period. In two, its good effects were evident; but in four it appeared to be of no avail. It appears that Mr. Dickenson's attention was called to the remedy by its having been given for the relief of a cardiac affection in a patient at the time the subject of menorrhagia, and in whom the discharge was entirely arrested by it. This led to further use of the infusion; and, in every case of uterine hæmorrhage unconnected with organic disease requiring the employment of active remedies, that was admitted into St. George's Hospital after October 1854, the administration of digitalis was had recourse to as the sole treatment; and the discharge was invariably arrested by it. The time that elapsed before the hæmorrhage subsided varied with the dose in which the digitalis was exhibited. When large doses were given, as an ounce to an ounce and a half of the infusion, the discharge never appeared after the second day; when smaller doses were given, it never continued beyond the fourth day. In uterine hæmorrhage connected with organic disease, the remedy acted with less certainty; its exhibition was required for a longer time, and the effect was somewhat transient. In the hands of others in this country, its effects have been equally striking; and I find also that M. Brugmans, in the Parisian *Medico-Chirurgical Review*, states that "its influence on the generative organs is very marked and powerful; that it is only necessary to take it for four or five days, when complete flaccidity and loss of all virile desires will be produced." He instances several cases of gonorrhœa, epididymitis, etc., that were cured in a few days by its use. Such results, however, as these last, have been doubted; but should they, on further experience, prove true, we shall have added a valuable agent to our remedies in such ills.

SCIRRHUS OF PANCREAS. BY R. T. WOODHOUSE, M.D.

Dr. Woodhouse presented a specimen of an enormously enlarged scirrhous pancreas, taken from a man who died in the hospital. The symptoms were, as usual in such cases, very obscure, and the diagnosis difficult. There was not the usual sympathetic salivation mentioned by authors; and the liver, from the shape of the most prominent part, was supposed to be the organ chiefly affected. The absence of bile in the stools for many days before death, and the absence of jaundice in the slightest degree, or bile in the urine, excited much surprise; and a diversity of opinion was expressed as to whether the absence of bile in the stools was an evidence of pressure on the duct, or whether it might not arise from disease of the liver itself. The position and enlargement of the pancreas would readily account for it mechanically; but, in the absence of evidence as to the condition in which the liver was found, it would be useless to reason respecting it. It should, however, be remembered that, whilst congestion of that organ is usually accompanied in its beginning with increased secretion, it shortly becomes diminished; and I see no reason why, with enormity of congestion, the secretion may not be entirely arrested. The absence of jaundice is very remarkable, and would rather favour the view that secretion *had* been arrested. As the stools were watched, we may conclude that the fatty conditions of them frequently observed in conjunction with cancerous affections of the pancreas did not exist.

TAPEWORM EXPELLED BY OIL OF MALE FERN. BY F. A. BULLEY, ESQ.

Mr. Bulley exhibited the head of a tapeworm which was expelled from an out-patient, under the care of Dr. Woodhouse, by means of the ethereal tincture of male fern.

STRANGULATED HERNIA. BY W. W. MOXHAY, ESQ.

Mr. Moxhay presented two specimens taken from a patient who was operated on for strangulated hernia, which had existed for fifteen hours, and who died on the fourth day after. One was a large mass of thickened omentum, which lay behind and below the intestine, and was irreducible. The other was a portion of the ileum, so contracted by inflammation that the tube was obliterated, and the operation thereby rendered ineffectual.

CASES OF SUDDEN DEATH FROM AIR ENTERING THE UTERINE AND OTHER VEINS. BY GEORGE MAY, JUN., ESQ.

[This paper has been published in the Journal.]

[*To be continued.*]

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 9th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

ON THE EFFECTS OF THE BULGARIAN CAMPAIGN ON THE SUBSEQUENT HEALTH OF THE BRITISH TROOPS IN THE CRIMEA: AND ON THE INCREASED RATIO IN THE LOSS OF STRENGTH DUE TO OTHER CAUSES. BY WILLIAM AITKEN, M.D.

[*Communicated by* Dr. Jenner.]

The author stated that the pernicious influence of the residence in Bulgaria had been hitherto entirely disregarded in estimating the sanitary condition of the troops during the first seven months occupation of the Crimea, and that in all future pathological inquiries into the nature of the diseases from which our troops suffered, not only in the camp before Sebastopol, but also at Scutari and other local hospitals, the influences noticed in this paper must occupy a prominent place. He observed that the great comparative losses which seem to have been sustained by the drafts of new men also required investigation, but that unless we are put in possession of the ages of the recruits sent out, their exact numbers and periods of service, their admissions to hospital, deaths, and invaliding, as distinct from those of the other troops, the comparative losses they sustained cannot be accurately determined. In this paper the author classified the Crimean army into two parts—namely,

1. The troops which served both in Bulgaria and in the Crimea, and which may be called the ex-Bulgarian part of the army.

2. The troops which served in the Crimea only, and which may be simply termed the Crimean troops.

The statistical information upon which the statements contained in the paper are founded exists in the following records—namely,

1. Parliamentary paper, No. 42, of the session 1857, giving the date of arrival and strength of each regiment.

2. Parliamentary paper, No. 218, of session 1855 (pp. 474—479), giving the same information regarding the drafts sent out.

3. It is known from various sources what were the respective regiments which served in Bulgaria, (*e. g.*, Parliamentary papers, No. 218 and No. 42, and Russell's War.)

4. The returns the author had been permitted to use, collected from the individual regiments, giving the monthly state of the strength of each regiment, and the diseases by which its losses were caused. From these tables, the general abstract was made up, which is published by Sir Alexander Tulloch at page 171 of his volume, entitled *The Crimean Commission and the Chelsea Board.*

The conclusions arrived at by Dr. Aitkin were—1. That the inactive residence in the malarious district of Bulgaria, during a period of three months, exercised a persistent pernicious influence upon the subsequent health of the troops in the Crimea, which continued to make itself felt, more or less, throughout the campaign, and more especially during the first seven months. 2. That the loss to the strength of the army during the first seven months was greatly more in those regiments who had been in Bulgaria, than amongst those troops who had not lived there, but who served during the same period in the Crimea, and who went through precisely similar hardships during the campaign. 3. That the loss of strength to the whole army was greatly increased by the proportionably very large amount of loss sustained by the drafts sent out to recruit the regiments. 4. That the general mortality was increased amongst the ex-Bulgarian troops, and that the invaliding was nearly doubled amongst them. 5. That the persistent pernicious influence of the residence in Bulgaria showed itself in a remarkable manner by the unfavourable results of the surgery of the war amongst the ex-Bulgarian forces, compared with the results in the forces which served only in the Crimea; but that on the whole the results of the surgery of the war were highly favourable compared with what is obtained in our large London Hospitals.

The statistical results obtained were offered as approximative conclusions to the truth, from data not sufficiently extensive to give such conclusions with absolute accuracy.

When the sanitary state of the ex-Bulgarian division of the army was contrasted with the Crimean, it was observed—

1. That the admissions to hospital were greater amongst the Crimean portion of the army than amongst the ex-Bulgarian, and contained a greater proportion of enteric diseases, cholera and scorbutus; while amongst the admissions from the ex-Bulgarian part, fevers and pulmonary diseases exhibited a higher ratio than in the Crimean part. 2. That while the admissions were greater from the Crimean portion, the mortality, compared with the amount of admissions, was much greater amongst the ex-Bulgarian portion of the army than amongst the Crimean.

The causes of death which produced the greatest mortality stood in the following order:—1. Cholera. 2. Frost-bite. 3. Enteric diseases; and, 4. Fevers, amongst the ex-Bulgarian part. And 1. Cholera. 2. Enteric diseases. 3. Fevers. 4. Frost-bite, amongst the Crimean troops.

With regard to fevers, it was observed that the pernicious influence of the residence in Bulgaria showed itself in the deteriorated constitution of the soldier; and while the admissions to hospital were greater in proportion to strength amongst the ex-Bulgarian forces, the deaths were also more numerous (the per centage nearly doubled), thus proving how readily that portion of the army succumbed to disease; being "used up" when they left Bulgaria, they were less able to cope with disease, and more of them died. With regard to cholera, it was interesting to notice the similarity of pathological phenomena presented by the history of that disease in Bulgaria and in the Crimea, compared with its known phenomena as an epidemic disease. Up to, and including, the period from October till May 1855, two separate epidemics may be said to have affected the army. The ex-Bulgarian campaigners were exposed to both of them. During the first epidemic, while in Bulgaria, they suffered severely; and, indeed, so long as they remained in the vicinity of Varna, the disease never left their camps; they carried it with them to the Crimea, and it continued to seize upon, and kill, many victims on the march from Old Fort to Balaclava, and more especially after the battle of the Alma, and on the famous flank march, when the fate of the more feeble soldiers was at once sealed by death. The Crimean epidemics of cholera presented the following remarkable antithesis compared with the other classes of diseases:—

1. The per centage of admissions on the average strength of the troops serving in the Crimea only was much greater than the ratio of admissions amongst the ex-Bulgarian troops and the per centage of deaths from cholera was also greater in the former than amongst the latter.

2. But the per centage of deaths, calculated on and compared with the admissions, was greater amongst the ex-Bulgarian forces than amongst the Crimean troops.

According to what is known regarding the nature of this remarkable disease, it may be noticed that already, during the Bulgarian campaign, the more susceptible of the troops had been seized with the disease, and many had already died. The disease, to use a common expression, "had worked itself out" upon them; so that fewer were in a condition to take the disease subsequently amongst the ex-Bulgarian troops while in the Crimea; and, therefore, fewer of this part of the army died in the Crimea from cholera compared with the strength. On the other hand, it may be observed, that on account of the "used up" condition of the ex-Bulgarian troops, a much larger per centage died amongst them of those who were attacked than amongst those who were attacked amongst the Crimean troops. The ratio of admissions for pulmonary diseases was nearly the same in both divisions of the army; but the deaths amongst the ex-Bulgarian troops were greater than amongst the Crimean forces, and the number invalided were also greater amongst them. It would be interesting to know how far such affections were purely idiopathic, and how far a tendency to the development of tuberculosis had, or had not, been engendered by the Bulgarian or Crimean campaigns. In the personal experience of the author, as well as that of Dr. Fraser, of the North London Hospital, phthisis was a rare disease at Scutari. The period of latency of malarial poison is another topic deserving of especial investigation in the experiences of the Bulgarian campaign. It is known that on the return of our troops from Walcheren, fresh cases of fever continued to occur so late as five, six, eight, nine, and even ten months afterwards, so that the persistent pernicious influence of the Bulgarian campaign was not without a parallel. The reduction of strength of the ex-Bulgarian part of the forces compared with the Crimean is approximatively inferred from the following considerations—namely: 1. The actual deaths in each portion of the army, and the ratio of these to the admissions and to the original strength. 2. The ratio of deaths and invaliding compared to the admissions, and to the original strength of each of the two divisions of the army. 3. The per centage of drafts to recruit the strength of the troops in each of the two divisions of the army. 4. The actual loss of strength by sickness, deaths, and invaliding, in each of the two portions of the army if drafts had not arrived. The severe duties of the front being chiefly borne by that portion of the army which served in the Crimea only, the loss to the ex-Bulgarian part could not be said to be increased by the severe and necessary operations of war during the siege. Great as was the loss of the corps in front, it was much below what some of the corps suffered who were not in front—*e. g.*, the 46th, the 95th, 63rd, 33rd, 23rd, 44th, 28th, and 50th regiments. The loss in those eight corps averaged seventy-five per cent. during the seven months (Colonel Tulloch); and it is worthy of notice, that six out of these eight regiments were ex-Bulgarian forces; and with the exception of the 46th, whose great loss appears to have been from cholera immediately after their arrival, the cause of the great mortality amongst the other regiments is not accounted for. More full and accurate details will yet, no doubt, show how malarious influences imbibed in Bulgaria developed themselves by a zymotic-like action, under the melancholy state of things which Sir Alexander Tulloch and Sir John M'Neill so energetically and boldly brought to light.

Dr. A. P. Stewart remarked, that the latency of diseases, especially those of an intermittent kind, was often overlooked; but had been clearly established in the paper. He (Dr. Stewart) had met with two cases in which malarious disease had remained latent for a long period prior to its manifestation. One was that of a soldier who, during the war in Spain, had been exposed to great privations and malarious influences of an intense kind, to which many of his fellow soldiers had succumbed. It was not until thirteen or fourteen months after his exposure to those influences, that the intermittent disease declared itself, and then he experienced one of the most violent attacks he (Dr. Stewart) had ever seen. He remembered a similar case about two years ago in the Middlesex Hospital. The long residence of the troops in Bulgaria he thought one of the most culpable pieces of mismanagement, the authorities having been warned that the very places where the troops were encamped were those that ought especially to be avoided.

Dr. Webster said it had been long observed that persons

living in an unhealthy climate occasionally exhibited the effects of such residence after a considerable time had elapsed. He remembered the case of a child who, six weeks after her return from Lincolnshire, was attacked with ague, the disease having been no doubt induced by her residence in that county. In like manner persons residing in the malarious districts of Italy frequently gave no indications of disease till some time afterwards. As to the residence of the troops in Bulgaria, it was a military and political movement, and ought not to be regarded only in a sanitary point of view. He had heard it stated that the whole mortality of British troops in the Crimea, from all causes, was less than 20,000 out of 102,000 men—a considerably less proportion than was consistent with the author's statements.

Dr. Fraser was one of the medical officers at Scutari, and he did not agree with the author in thinking the hospital an ill chosen one. The Smyrna Hospital he considered badly selected. He had remarked the small number of cases of phthisis admitted—a proof, he thought, of the good selection of the recruits originally.

Editor's Letter Box.

POPULAR INSTRUCTION IN PHYSIOLOGY.

Letter from J. I. Ikin, Esq.

Sir,—In a leading article of the number of the Journal for July 4th, you quote a remark of a member of the Society of Arts, Mr. F. Curzon, which, I think, requires some notice from the provincial lecturers on physiology and anatomy. As one of this class of lecturers, I do not feel disposed to allow Mr. Curzon's opinion to pass unnoticed, either in these pages or at the meeting of the Society about to be held; though you have given an importance and publicity to the remark, which it probably does not merit.

To quote the passage itself: "*There was no one within fifty miles of Huddersfield qualified to give instruction in physiology.* He believed, if a competent person would state what salary would induce him to take up his residence in the North, by an union of the institutions of the large towns like Halifax and Wakefield for that purpose, a qualified lecturer on that science might be fully employed."

As regards the first division of the paragraph, Mr. Curzon* has certainly a most contemptible opinion of us poor West Riding provincials; and he does not hesitate to state it to the world. Allow me to thank him for such an honest expression of opinion! Doubtless this opinion has been formed from a practical knowledge of the sort of lecturers the great towns of the North possess, and is confirmed by the fact, that few if any candidates for honours in physiology present themselves at the examinations of the Society of Arts: hence it follows as a *legitimate* consequence, and justifies the very *modest* and complimentary expression of opinion, that "there is no one within fifty miles of Huddersfield qualified to give instruction in physiology". If this opinion is a correct one, our provincial schools of medicine ought to have been abolished long ago, and the labours of such men as the Heys, Thackeray, Williamson, Teale, Smith, Garlick, Nunneley, etc. (speaking now of the Leeds School only), have been fruitless, and they have not left a student, much less a teacher of physiology, worth naming. Are my colleagues at the Medical Schools in York and Sheffield, or my brethren in Halifax, Bradford, and Huddersfield, such a set of humdrums, and so indifferently qualified in physiological and anatomical science, that, though they may have succeeded in becoming M.D.'s at a University, or in qualifying at the College of Surgeons and Apothecaries' Hall, they yet are not fit to teach the principles of physiology to a class of mechanics, or amuse and edify the more fashionable audience of some so called (in our provincial vanity) Philosophical Society? If Mr. Curzon speaks the truth, the sooner we abolish the title of our learned societies, the better; for, if the country towns cannot find a teacher—a popular teacher—of physiology, I am sure the learned professions cannot assume to themselves the title of learned. No, the lovers of wisdom, and the students of nature and its wonderful workings, as manifested in the varied functions of man and animals, live not in the barbaric localities of the provincial towns (though Priestley, Hey, and Thackeray, did happen to live in Leeds, and were natives, not exotics), but are confined to the sublime regions of the metropolis, and to the list of lecturers recommended by the Society of Arts.

But, joking apart, I am quite willing to admit, in common with the rest of the community interested in these matters, that the *most eminent* teachers and lecturers *do* belong to the great universities and to the metropolis; but I cannot admit, or allow to pass unnoticed, either in the Journal or in other quarters, the sweeping assertion that "there was no one within fifty miles of Huddersfield qualified to give instruction in physiology". This opinion, if true, proves that our professional education has been an utter failure, and renders us unworthy to join any scientific body, much less to attempt to instruct others: or, if it is not true, and not warranted by facts themselves, I am justified in calling it a libellous and impertinent remark, which Mr. Curzon ought to be made publicly to withdraw. My brethren in Huddersfield should insist on an explanation and apology at the meeting on the 29th; and I hope that Mr. Knaggs (whose name you have cited as well able to instruct in popular physiology), or some of my old friends in that rising town, will not allow the opportunity to be lost. I am sure my late lamented friend, Professor Taylor, would have vindicated the profession from such a disparaging assertion, had he been spared to meet Mr. Curzon in his native town.

Now for facts. For years past my brethren in the different large towns and country villages in the West Riding have been amongst the most constant supporters of, and lecturers to, the mechanics' institutions, and philosophical and other societies. They do not, it is true, profess or volunteer to teach the various branches of physiology of man and animals to a popular audience in a few popular lectures: such an idea is too preposterous to be entertained, as they know, and know from experience, that a systematic and lengthened course, extending over weeks if not months, can alone do this; and they naturally feel disposed to question whether hard worked mechanics, industrious clerks, and long confined shopboys, have the time at their disposal to become students in physiology, and to acquire a sufficient amount of physiological knowledge as would warrant them subjecting themselves to an examination and to public competition. They know very well that the study of chemistry, the art of drawing, and a practical knowledge of mechanics and the various branches of natural philosophy, are more likely to be really useful and profitable in the struggle for their bread, than even an intimate knowledge of the action of the heart and arteries, the functions of the lungs and skin, or the process of digestion. A few clear short lectures, well illustrated, on the principles of physiology, the natural modes of preserving health and enjoying it, and on the luxury of personal cleanliness, will always be useful and appreciated, and have for years past been delivered at times to the various public institutions; but to discuss details in physiology before a popular audience—*e. g.*, on secretion, excretion, development of the embryo, and the physiology of generation, etc.—neither can nor ever will be done by any man of eminence or real scientific attainments, though Mr. Curzon may be pleased to think that the young men and women of the West Riding require instruction in these matters! The Society of Arts can and may stimulate the rising talent of the age to compete in other branches of knowledge; but the *study* of physiology as a *science* is somewhat beyond the reach of our labouring population, though a knowledge of it is essential to the medical man and to the cultivator of high art. To aid mechanics' institutions, and instruct and interest the members of our philosophical societies, gentlemen in all stations and professions have come forward to lecture and read papers; and the provincial members of the medical profession have not been the least active supporters of these bodies, and have even been thought by their neighbours qualified to be so. I fear, as far as physiology is concerned (and this general term we may consider here to include natural history), we must now, under Mr. Curzon's sweeping denunciation, be content to hide our diminished heads, and give place to some learned metropolitan, or to some Professor A. or Dr. B. (out of a situation), who will condescend to enlighten our benighted understandings in the rudiments of physiology, pocket a good fee, astonish a lot of young lads and lasses by dwelling "on the wonders of their frame", and return to town with a good share of the funds of an institution perhaps supported with difficulty. Paid popular lecturers do more to beggar mechanics' and philosophical societies than any other cause. The system of popular lecturing for fees is one of the humbugs of the day;

* I am not aware who Mr. Curzon is; whether he is a metropolitan or provincial. At least, he considers he has a right to set up as a *public censor*.

and, when a man cannot succeed any other way, he turns public lecturer, or goes about displaying an anatomical Venus! We have plenty of provincial talent to support our own institutions, if it could only be brought out; and if we would only determine to rely more upon ourselves than on paid talent from London, the country would be a gainer. I hope the institutions in the West Riding will never give their money to a paid lecturer on physiology: if they want sound suitable lectures on this subject, let the societies apply to their professional members, who can give them the information they require, without calling for help from London; and the societies will save the outlay as well. In Leeds and our other towns, our most eminent professional men have aided the societies in this way from their very onset, and have given lectures on such branches of physiology and natural history as could with propriety be brought before a general audience. I have no doubt they will continue to do so, and even extend their assistance to the Society of Arts, if requisite, and properly applied to, notwithstanding the uncalled for and contemptuous opinion expressed by Mr. Curzon.

As a friend and supporter of the mechanics' institutions of the Riding for the last twenty years, I could not allow such a paragraph as I have quoted at the commencement of these remarks to remain unnoticed; and, none of my brethren having as yet taken any notice of it, I feared the matter might be overlooked, and the statement go unchallenged to the world. Having given popular lectures on the principles of physiology, and on public hygiene, to most of our institutions in Leeds and the West Riding, and those lectures having been well attended, I can only, in conclusion, recommend my younger and more accomplished professional friends to try their hand and use their pencil in a way that will prove to every one that there *are* parties even "within fifty miles of Huddersfield" who are qualified to give instruction in physiology. I am, etc.,

J. Ingham Ikin, F.R.C.S.,

Leeds, July 18th, 1857. *Lecturer on Anatomy and Physiology.*

P.S. What our mechanics really require teaching is the comfort and necessity to health of personal cleanliness; how to use their stomach, and not *abuse* it; how (dangerous doctrine as, to a teetotaller, it may seem) they *may* take a *little* wine for its sake, without injury to their bodies or peril to their souls; why an impure and tainted atmosphere poisons their blood and diseases their lungs; why pigging together in bed shortens life and destroys health; why over exertion and excitement have the same effect; how their brains and mental faculties are made to be used and cultivated; and how the *disuse* of them reduces them in the scale of creation, and renders them unfit to benefit themselves or glorify their Creator! J. I. I.

MR. A. PRICHARD ON AMYLENE.

Letter from John Snow, M.D.

Sir,—There are some paragraphs respecting amylene in the address of the President of the Bath and Bristol Branch of the Association, published in the Journal of to-day, which seem to call for some remarks from me; and I shall therefore be obliged if you will allow me a little space for them.

Mr. Prichard appears to me to be entirely misinformed with respect to every statement which he makes regarding amylene. He commences by saying, "Some months ago we were startled by the announcement that a new anæsthetic had been discovered, equal to chloroform in every respect, and superior to it in this one most important particular, that it was devoid of the amount of danger to life which all reasonable persons admitted to be connected with the use of chloroform." I did not make the announcement of the use of amylene in a way to startle any one, but, on the contrary, tried to explain why a greater number of volatile narcotics had not been already introduced, and expressed an expectation that others would be discovered. What is of more importance, it was not announced that amylene was equal to chloroform in every respect, or that it was superior to it in this one most important particular, etc. I gave an account of certain advantages which amylene has over chloroform, and of one or two disadvantages which it has in comparison with that agent; but I did not place its probable freedom from danger either in one scale or the other. I spoke separately of the probable freedom of amylene from danger, and I said no more in its favour than I had frequently said of chloroform. My words were as follows: "While I cannot venture to predict for it the absolute safety which seems to attend sulphuric ether under all circumstances, I confidently trust that it will be perfectly safe with careful management." (*Medical Times and Gazette*, January 1857, p. 84.) Although these hopes have not been literally fulfilled, I believe that, in course of time, they will prove not to be without reasonable foundation. There are some circumstances connected with the accident which has occurred, which indicate how a similar result may be most probably avoided.

Mr. Prichard is in error in saying that amylene proved fatal much sooner than chloroform had. He is not speaking of the relative extent to which the two agents were probably used, either in this country or elsewhere; for sooner is an adverb of time. Now, chloroform was first used in its undiluted state by Dr. Simpson, in the early part of November 1847; and the first death from it occurred near Newcastle, on January 28th, 1848, or between two and three months afterwards; and it was soon followed by others. Amylene was first employed on November 10th, 1856; and the accident which happened from it occurred on April 7th, nearly five months afterwards. I have not heard of any other casualty from its use, although I believe that it is still used largely in many of the hospitals in France. I have administered it in 94 cases, many of them capital operations, since the accident above alluded to, making in all 238 cases. I compare its effects with those of chloroform, which I exhibit to a much greater extent; and I see no reason to alter the opinions which I gave in a paper, an abstract of which appeared in the Journal of January 17th. I may remark, in correction of one statement of Mr. Prichard, respecting practical experience, that I did not publish any opinion respecting amylene till I had administered it in some capital operations, as well as several minor ones.

Mr. Prichard is so entirely mistaken on every point respecting amylene, that I cannot feel personally concerned with the tone of his remarks; but, supposing he had been correct regarding the circumstances, and that amylene had been introduced in a sanguine manner, and with great praise, and that it had been already abandoned, I doubt whether the style of sarcastic reprimand, if not exultation, which he has employed, would be calculated to encourage other laborious attempts to advance the science and practice of medicine.

I am, etc., John Snow.

Sackville Street, July 25th, 1857.

MORPHIATED LOZENGES.

Letter from Walter Garstang, M.D.

Sir,—I cannot too strongly animadvert against the sneering tone in which "Another Member" has taken upon himself the trouble to reply, in your last, to the letter of the Barnsley correspondent on the question of morphiated lozenges. His *nihil ad rem* epistle appears to me to be in the most liberal sense uncalled for; and, moreover, he might have refrained from attempting to hide his shame under the guise of a *scriptor ignotus*, had he couched his sentiments on the subject in such terms as the question naturally implies, and as befit gentlemen of an honourable profession to use in their intercourse with each other on matters regarding science or art. Seriously, it is incredible that "Another Member" has ever been led away, by "parody" or by experience, to prescribe *an ointment* to be taken for the relief of a "troublesome tickling cough".

That morphiated lozenges are a useful, agreeable, and truly efficacious form of medicine, is a statement which cannot admit of a single doubt in the mind of any conscientious practitioner, and even in that of "Another Member". Can it be that our Sussex friend denies that, in the treatment of a "troublesome tickling cough" in a child (young lady) or adult, whether due to phthisis, bronchitis, pneumonitis, or to that commonest of all ordinary causes, pharyngeal irritation, lozenges containing morphia, allowed to dissolve gradually in the mouth, have a less important remedial agency, or are less pleasant, than his own cough mixtures, drops, pills, or powders? Or can it be that he has forgotten the physiological anatomy of the nervous supply of the mucous membrane of the tongue, pharynx, etc.; the connections of the œsophageal and tonsillitic plexuses with the branches of the pneumogastric nerves; or, in short, the abundant supply of absorbents of the tongue itself, by which so very soluble a salt as that of the hydrochlorate of morphia may at once be taken up, and be directly discharged into the venous system, without undergoing the very circuitous route of the lacteal vessels? I surely need not write thus on anatomy and the *rationale* of therapeutics, to refresh the mind of "Another Member"; but I do need to inform him that he has not offered a substitute for the troch. morph. et ipecac.

Permit me, then, to supply "A Member" with formula for a morphiated lozenge of a very manageable strength—a lozenge typical, in my opinion, of what an officinal preparation bearing the same name should be—and, withal, one which can be *extemporaneously* prepared by the dispenser, on whose accuracy, in a matter of this nature, it would obviously be much safer to rely than on that of the mere confectioner.

Trochisci Morphiæ.

℞ Morphiæ hydrochloratis puræ gr. iss; sacchari in pulverem subtillimum redacti, pulveris acaciæ, āā ℈iiss; olei limoni vel cinnamomi, gtt. iij; misce optime, dein adjice mucilaginis acaciæ q. s. Contunde in massam omnia. Hanc divide in *pilulas* quatuor et viginti; denique singulas pistillo leviter feri, ut fiant trochisci.

One of these is to be taken four or five times a day, by holding it in the mouth till it be slowly dissolved.

I am, etc., Walter Garstang.

Blackburn, July 21st, 1857.

THE BATH AND BRISTOL BRANCH AND MR. HEADLAM'S BILL.

Letter from George F. Burder, M.D.

Sir,—In your report of the recent meeting of the Bath and Bristol Branch, it is stated that a petition to the House of Commons in favour of Mr. Headlam's Bill was "unanimously signed".

As this statement compromises all whose names appear in the list of members present, and as I, in common with many others, regarded the Bill as an extremely complex, clumsy, deceptive, unjust, and otherwise objectionable measure, I trust you will allow me, on my own part, to disclaim having signed any petition in its favour.

Discussion upon this particular measure is now, happily, unnecessary; but I cannot forbear expressing a hope that, when the subject is next brought forward, the profession may have become more generally alive to the fact that the interests of the medical corporations are not necessarily those of the profession at large, nor yet of the public.

I am, etc., George F. Burder.

Clifton, July 28th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Acton. On July 24th, in Queen Anne Street, Cavendish Square, the wife of William Acton, Esq., Surgeon, of a daughter.

Clark. On July 25th, at Twickenham, the wife of Alfred Clark, Esq., Surgeon, of a son.

Haldane. On July 28th, at 12, Manor Place, Edinburgh, the wife of D. R. Haldane, M.D., of a daughter.

Henderson. On July 24th, at the Vale, Ramsgate, the wife of T. A. Henderson, M.D., of a daughter.

Lane. On July 24th, at 1, Grosvenor Place, the wife of James R. Lane, Esq., Surgeon, of a son.

Noyes. On July 24th, at Lee, Kent, the wife of H. G. Noyes, M.D., of a son.

MARRIAGES.

Call—Brabant. Call, Wathen Mark Wilks, Esq., of Bideford, to Elizabeth Rebecca Hennell, daughter of R. H. Brabant, M.D., of Bath, at St. Pancras Church, on July 23rd.

Gifkins—Rumball. Gifkins, Henry G., Esq., of Milton-next-Sittingbourne, to Selina, third daughter of J. Q. Rumball, Esq., Surgeon, of Harpenden, Herts, on July 22nd.

Johnson—Borough. Johnson, the Rev. William, M.A., one of the assistant masters of Repton School, to Penelope Marian, eldest daughter of Charles Borough, Esq., Surgeon, of Derby, at All Saints Church, Derby, on July 21st.

Packman—Aldersey. Packman, Alfred W. K., M.D., of Puckeridge, Herts, to Mary Anna, only surviving daughter of H. S. Aldersey, Esq., of the same place, on July 23rd.

Philips—Browning. Philips, William P. T., only son of Benjamin Philips, Esq., F.R.S., Surgeon, of Hendon, Middlesex, to Clara Matilda, eldest daughter of Henry Browning, Esq., of Grosvenor Street, Grosvenor Square, at St. George's, Hanover Square, on July 23rd.

DEATHS.

Bright. On July 12th, at Civita Vecchia, Italy, Louisa Elize, the wife of Joseph Bright, Esq., and only child of George Bateman, M.D., of Leamington, Warwickshire.

Heward. On July 23rd, at Walthamstow, Charlotte Florence Emily, infant daughter of T. Spencer Heward, Esq., Surgeon, of Grosvenor Street, Grosvenor Square.

Holyoake. On July 22nd, aged 18, George Frederick, eldest son of *Thomas Holyoake, Esq., Surgeon, Kinver, Staffordshire.

Kipling, William, Esq., Surgeon, of Barnard Castle, at Howgill, near Sedbergh, on July 9th.

Leachman, Frederick, Esq., Surgeon, at New York, on board the *Victoria*, aged 25, on June 8th.

Pickess, George, Esq., Surgeon, at 13, Caledonian Place, King's Cross, aged 34, on July 14th.

Scratchley. On July 18th, at Kensington, Maria, widow of James Scratchley, M.D., late of Paris, and of the Royal Artillery.

APPOINTMENTS.

Pope, J. J., Esq., elected Senior House-Surgeon to the Liverpool Southern Hospital.

Welford, George, Esq., elected Surgeon to the Sunderland Infirmary.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 24th, 1857:—

Albert, George Pascal, Sevenoaks
Barker, Samuel, Ramsgate
Carey, Francis Edward, Guernsey
Duchesne, Robert, London
Graves, Frederick George, Southam, Warwickshire
Harley, Thomas, Cleobury Mortimer, Salop
Harries, John Davies, Shrewsbury
Herdson, Robert, The Grange, Edinburgh
Thomas, Richard, Seacombe

East India Company: Medical Service. The following are the names of the successful candidates at the recent examination for appointments in the Honourable East India Company's Medical Service. The names are arranged in order of merit:—

Playfair, William S., M.D.Ed., M.R.C.S.Ed.
Clark, Hugh, M.D.Ed., M.R.C.S.Ed.
Sutherland, George, L.R.C.S.Ed.
Grylls, William R., M.D.St. And., M.R.C.S.E.
Caird, William E., M.R.C.S.E.
Banbury, Richard, M.R.C.S.E.
Bremner, James, M.D.Aber., M.R.C.S.Ed.
Bonaira, Emmanuel, M.D.Malta, M.R.C.S.E.
Mott, Albert A., M.R.C.S.E.
Taylor, Adam, M.R.C.S.E.
Doyle, James T. J., M.R.C.S.I.
Dickson, Lindsay F., M.D.St. And., M.R.C.S.E.
Daly, Denis B., M.D.St. And., M.R.C.S.I. & E.
Riddell, Andrew N. E., M.R.C.S.E.
Marshall, Alfred, M.R.C.S.E.

HEALTH OF LONDON:—WEEK ENDING JULY 25th, 1857.

[*From the Registrar-General's Report.*]

The mortality of the metropolitan districts exhibits an increase. The deaths registered in London were in two preceding weeks 988 and 1061; in the week that ended on Saturday (July 25th), they rose to 1209. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1102; but the deaths of last week occurred in an increased population, and, for the purpose of comparison, the average must be raised in proportion to the increase, by which it will become 1212. The rate of mortality now prevailing is therefore as high as the average rate, although the period from which the latter is derived includes the last week of July in

1849, when epidemic cholera had spread to a considerable extent, and was fatal in 783 cases.

In the last two weeks, the mean temperature of the air has been 68°, and on seven of the fourteen days the thermometer has risen above 84°. In London, diarrhœa, or the complaint now known as "the summer cholera", is the result of a high temperature; and, as the heat is greater than usual, the disease has developed itself with more than its usual vigour. The following numbers of deaths from diarrhœa exhibit its progress during the present month: in the week that ended July 4th they were 65, in the two following weeks 133 and 150, and last week 259. Last year, in one week, the deaths from diarrhœa rose to 253 under a mean temperature of 67°, but at a period when the summer was three weeks more in advance. In a very large majority of the 259 cases, young children are the victims; 206 occurred in the first year of life, 26 at the age of one year and less than two, 11 at ages varying from two years to ten, and 16 at the age of twenty and upwards. Besides these, 28 cases are referred to cholera (comprising deaths by "English cholera", "choleraic diarrhœa", etc.), and under this head also a large proportion, viz., 23, occurred to children. In all fatal cases of cholera, it is desirable that the duration of the previous stage of diarrhœa, when it can be ascertained, should be stated by the medical attendant on his certificate.

Typhus and common fever were fatal in 44 cases; measles in 40; hooping-cough is now reduced to 37; and it is satisfactory to find that only 13 are due to scarlatina, and that not a single death from small-pox is returned. Three persons died from carbuncle; two from intemperance. Five nonagenarians are returned, the oldest of whom was a widow, and who died at the age of 96 years.

Last week the births of 779 boys and 852 girls, in all 1631 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1430.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·828 in. The mean temperature of the week was 68·3°, which is 6·7° above the average of the same week in forty-three years. On Thursday and Friday, the mean temperature was 71°, which is more than 9° above the average. The *highest* temperature in the week was 86° on Thursday in the shade; and the highest point in the sun (110°) was attained on the same day. The *lowest* was 51·7° on Tuesday. The range of the week was 34·3°. The mean dew-point temperature was 57·1°, and the difference between this and the mean temperature of the air (representing the dryness) is so great as 11·2°. The mean temperature of the water of the Thames was 69·5°. The direction of the wind was generally south-west. It blew strong on the last three days. There was no rain, excepting some in-driving showers on the evening of Tuesday.

MILITIA SURGEONS' MEDICAL SOCIETY.

The first annual meeting of the Militia Surgeons' Medical Society was held at Oxford on July 18th and 20th. It was well attended: and the greatest unanimity and good feeling prevailed. The members dined together on July 20th. The Society has been formed for the purpose of mutual co-operation and assistance in matters affecting the interests of the militia surgeons. One of the resolutions adopted at the meeting was to extend the advantages of the Society by forming a fund for the assistance of the members, and of their widows and orphans, in cases of necessity. A memorial, of which a copy is subjoined, was some time ago presented to Lord Panmure by a deputation of the Society.

"*Copy of a memorial presented to the Right Honourable Lord Panmure, Secretary of State for the War Department.*

"My Lord,—1. We, the undersigned surgeons of the militia of England and Wales, on behalf of, and by the authority of, the other surgeons of England and Wales, respectfully solicit your lordship's gracious consideration of the following memorial:—

"2. Your memorialists have hitherto diligently performed the duties required of them, viz.: 'the examination of volunteers, and medical attendance upon militia regiments during the time of training.' They now furnish medicines and medical attendance, etc., to the permanent staff of the militia, their wives and families, in conformity with the Militia Acts and regulations. During the late war, they inspected many thousands of men for the line, and did not shrink from doing duty for the regular service in garrison, in camp, or on foreign service, including in many instances much anxious attendance upon invalids from the Crimea; by which they were compelled to abandon their private practice, rendering it most difficult for them ever to regain their former position in their private calling.

"3. Your memorialists would also observe that the attendance upon their regiments, although generally at head-quarters, is not so at all times, and will probably be less so in future years; and being, for the most part, men engaged in private practice, they humbly submit that the attendance upon their duties during training, if away from head-quarters, in camp, or barracks, is necessarily attended not only with much expense, but with considerable and continual loss in their private practice. Moreover, their compulsory residence at head-quarters prevents their seeking a livelihood elsewhere, and the continual fear that they may be called upon even yearly to leave their private practice, materially depreciates them in the consideration of the public, as private practitioners.

"4. And as the permanent staff is composed of middle-aged men, who, from long service in different climates, are liable to disease, and as their wives and young families require almost constant attention, the remuneration granted by the militia regulations is found by your memorialists to be very inadequate to the time and attention they are obliged to devote to them; the sum of two-pence per head per week (to include attendance, medical, surgical, and obstetrical, with medicines and appliances) being scarcely sufficient to cover the expenses incurred.

"5. Your memorialists were moreover given to believe that, as some compensation, or equivalent for not being placed on the permanent staff, they would be allowed the privilege of discharging the duties of a military medical officer, wherever there was no such officer of the regular service stationed; and thus receive some slight additional remuneration, by the examination of recruits for the line, royal artillery, and royal marines, deserters, and sick upon furlough; but they however find in almost every instance that an entirely private practitioner has supplanted them; and, moreover, your memorialists can quote cases where medical attendance on militia staffs and the examination of militia recruits are given to private civil practitioners, to the exclusion of militia surgeons, who may be living at the head-quarters of regiments of militia.

"6. Your memorialists would also direct your lordship's attention to the difference of remuneration allowed for the examination of recruits for the line (4*s.* for each recruit), and that for the militia (2*s.* 6*d.* for each); as the same time and trouble are required in both cases, they respectfully solicit the same remuneration for the militia volunteer. Again, your memorialists would direct your attention to the remuneration granted to a private practitioner, and to a militia surgeon, for the examination of militia recruits; if beyond six are examined in one day, the militia surgeon receives but fifteen shillings; whilst the private practitioner receives two shillings and sixpence for the first eight, and one shilling extra for each volunteer above that number.

"7. Your memorialists had fully expected that when the militia was again made a permanent force, the surgeons would have been placed, as before, upon a permanent staff, with corresponding pay; especially as the duties they are called upon to perform are of a responsible, onerous, and continuous nature: and they cannot but view with dismay the risk they incur to their future means of gaining an honourable livelihood in private practice, by the calling out of the militia for yearly training, or the chance, however apparently remote, of any future national necessity for requiring the embodiment of their various corps.

"8. They cannot, therefore, refrain from expressing to your lordship their disappointment that the surgeon is the only individual permanently employed on the staff, who is not in the receipt of any permanent pay, or any adequate remuneration; especially as his services are always requisite and liable to be more so.

"9. In submitting these points to your lordship's consideration, your memorialists have every confidence that the above mentioned grievances and the general interest of the militia surgeons, will receive the kindest attention and consideration at your lordship's hands.

"And your memorialists will ever pray, etc."

Epidemiological Society. At the next meeting of this society, at 37, Soho Square, on Monday, August 3rd, at 8 P.M., the following paper will be read:—"On the Local Causes influencing the Diffusion and Type of Epidemics." By W. I. Cox, Esq.

TRIAL OF THOMAS FULLER BACON FOR POISONING HIS MOTHER.

The trial of Thomas Fuller Bacon, for the alleged murder of his mother by poisoning her with arsenic, took place on Saturday, July 25th, at the Summer Assizes held in Lincoln, before Mr. Justice Erle. The prosecution was conducted by Mr. Mellor, Q.C., and Mr. Brewer. The prisoner was unprovided with counsel; but, at the request of the learned judge, Mr. Stephen undertook the defence. The counsel for the prosecution elected not to proceed on the indictment for murder, but on one charging him with twice administering to Ann Bacon, at Stamford, arsenic, with intent to murder. The principal features of the case appear in the statement made by the counsel for the prosecution.

The deceased Ann Bacon, the prisoner's mother, was 63 years of age at the time of her death. She lived in Stamford. On the 12th of May, 1855, she was in her usual state of health; and on the following day, Sunday, the 13th, she dined with the prisoner. During the dinner she was seized with sickness, and she suffered very much all that afternoon from vomiting and purging, accompanied with pain and thirst. Her medical attendant, Mr. Barber, was sent for, and she was removed to her own house. On the Monday morning she was better, and continued to improve during the whole of that day, but in the night she became much worse; fresh symptoms set in; she was unconscious on the Tuesday, and in the evening of that day she died. During that illness, the prisoner was constant in his attendance upon her, and behaved apparently as a son should. At the same time, from expressions used by him at the time, it appeared that he confidently anticipated her death; and, in the course of her illness, he had been observed to administer something to his mother out of a small square bottle, which was not one of those sent by the doctor, and which he himself took away after her death. Mr. Mellor did not, however, attribute much importance to that circumstance, because, looking at the other evidence, the jury would probably be of opinion that the real cause of the illness of the deceased was something which she took at the prisoner's house on the Sunday. It was true that, after the Sunday, the deceased got better, and a change in the symptoms took place before her death, not inconsistent with the administration of arsenic, but so far consistent with other causes that the medical men were not quite prepared to say that her death was occasioned by arsenic; and it was on that ancount that he had, with the sanction of the learned judge, elected to proceed upon the present charge instead of that of murder. When the body was exhumed and carefully examined, and certain portions subjected to chemical analysis, after the body had been buried nearly two years, about three-quarters of a grain of white arsenic was discovered in the body; and the medical testimony would establish beyond a doubt that not only had arsenic been taken by the deceased in her lifetime, but that it must have been taken recently before death. The deceased was taken ill at the house of the prisoner, immediately after dining there. She was the owner of some small houses, of which she was in the habit of collecting the rents for herself; but on the Monday the prisoner took possession of the rentbook; and it appeared that he expected to become entitled to the estate on her death. A week before his mother's death, the prisoner had sent his apprentice to purchase arsenic, telling him to say at the chemist's that it was wanted for the purpose of hardening iron. The druggist refused to let the apprentice have it; and the prisoner, being told of that, said, "Then I'll get it myself." Accordingly, on the 8th of May he went to another chemist's, and there bought an ounce of arsenic, which he said he wanted to poison rats in his cellar.

The medical evidence adduced was that of Mr. Barber, the medical attendant of the deceased; Mr. Jackson, who examined the body; and Professor Taylor. The evidence of the last two witnesses was substantially the same as that given by them at the inquest, and which was published at p. 162 of the Journal for February 21st.

The jury found the prisoner *Guilty*. Sentence of death was recorded against him; with the intimation from the judge that the extreme penalty of the law would not be carried out.

Detection by Ether of a Sham Idiot. The application of the process of etherisation has just been resorted to in Belgium as a means of acquiring judicial information. After a considerable robbery committed at Brussels in November last, two men, named Lorch and Daubner, were arrested and brought to trial. The former was condemned to hard labour for life; but in consequence of the latter pretending to be dumb and idiotic, his trial was postponed, in order that a medical investigation should take place. It was found impossible to get even a sign of intelligence from him. As it was, however, known that he was not born dumb, and that he had spoken, when he said that he could speak no language but German, he was etherised, and while labouring under the effect of that application, he spoke perfectly, and in French. He was in consequence again brought before the tribunal, and condemned to ten years hard labour.

A New Premonitory Symptom of Cholera. The Academy of Sciences has received from Dr. Poznanski an important communication, in which it is stated—1. That during the prevalence of cholera it frequently happens that the pulse is extremely low, and reduced to 45 or even 42 in persons apparently in perfect health. 2. That this symptom is unaccompanied by any other denoting a morbid state. 3. That when the pulse is low, the blood becomes dark and viscous; while in persons whose pulse is in a normal state during the epidemic, the pulse is perfectly healthy. 4. The cholera only attacks those that have previously experienced a diminution in their pulse. 5. That this diminution, which often occurs weeks before the regular attack, may be considered a pathognomonic symptom of the approach of cholera. 6. That those who have experienced the diminution in question have always escaped the disease whenever they have followed a regimen calculated to accelerate the circulation. 7. That the falling off of the pulse, and therefore the predisposition to the disease, are in general proportional to the want of energy in the circulation of the blood and to the excess of atmospheric pressure. 8. That this diminution does not occur in healthy subjects when the epidemic has ceased.

A Ship's Crew Poisoned by Mussels. A few days ago, whilst the schooner *Olivia* was lying in the Victoria Dock, Hartlepool, the crew were suddenly seized with an illness which at once assumed an apparently dangerous character—the symptoms being somewhat similar to those produced by the action of an irritant poison. Medical assistance was procured, and the usual remedies for poisoning administered, which happily proved successful—the crew being enabled to proceed with their vessel in the course of three or four days. One man was an exception to this. His symptoms were from the first of a more violent character than those of the others, and he was seized with paralysis of the upper and lower extremities. It appears that the sudden illness came on shortly after the crew had eaten heartily of some common mussels, which they had fished up from the lower part of the dock wall, where they grow in great abundance. Large vessels, almost invariably copper sheathed, lie alongside this part of the wall; and it is surmised that the proximity of the copper to these shell-fish, and its action upon them, renders them unfit for human food.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. T. H. Smith; Mr. W. C. Williamson; Mr. J. R. Humphreys; Mr. T. Holmes; Dr. John Snow; Dr. J. McIntyre; Dr. Walter Garstang; Dr. P. H. Williams; Dr. T. Hayes Jackson; Mr. Booth Eddison; Dr. Kidd; Dr. Mc William; Dr. R. U. West; Dr. H. H. Vernon; Mr. J. I. Ikin; Mr. T. Holyoake; Dr. J. F. Churchill: Mr. W. D. Husband; Mr. Stone; Mr. W. Collyns; Mr. T. G. Graves; and Dr. G. F. Burder.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. How to Work the Microscope. A Course of Lectures on Microscopical Manipulation, and the Practical Application of the Microscope to different Branches of Investigation. By Lionel S. Beale, M.B., F.R.S. London: John Churchill. 1857.
2. The Use of the Microscope in Clinical Medicine. Illustrated. By Lionel S. Beale, M.B., F.R.S. London: John Churchill. 1857.
3. Hydropathy: or, the Natural System of Medical Treatment. By Edward W. Lane, M.A., M.D.Edin. London: John Churchill. 1857.
4. Inquiry into the Opinions of the Commercial Classes of Great Britain on the Suez Ship Canal. By Ferdinand de Lesseps. London: John Weale. 1857.

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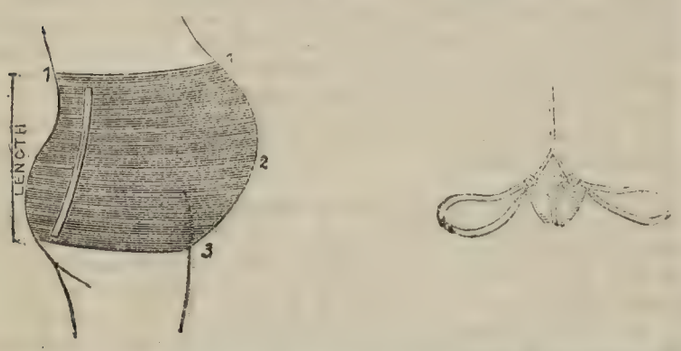
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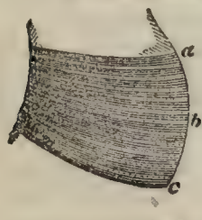
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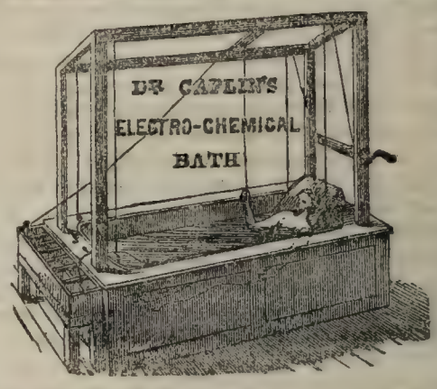
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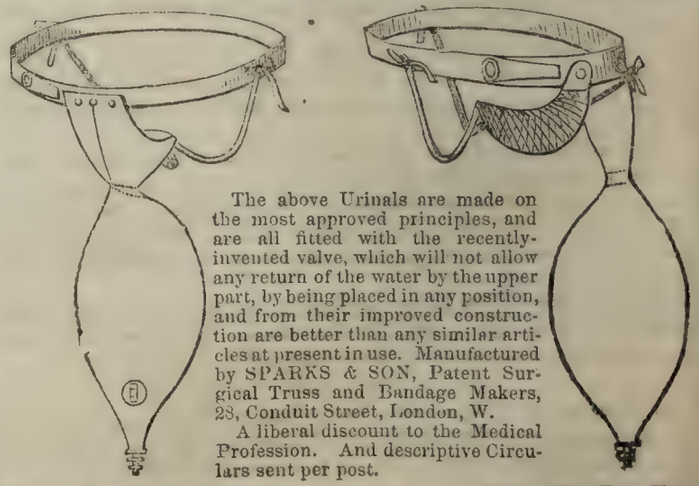
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

YORK COUNTY HOSPITAL.

CASE OF CARBUNCULAR INFLAMMATION OF LOWER LIP: PYÆMIC OR SECONDARY PLEURITIS, ETC.: DEATH.

By W. D. HUSBAND, Esq., Surgeon to the Hospital.

MARY TODD, aged 33, a widow, who described herself to have enjoyed good health, and to be living as a domestic servant with a respectable family, was admitted a patient of the Hospital late on July 18th, 1857.

July 20th. I saw her at the request of Mr. Hanbury, the house-surgeon, for the first time this morning, when I found her condition as follows. There was general tumefaction of the left side of the face, of a dusky red colour, which was firm and unyielding to pressure. The lower lip was enormously swollen, of a dark purplish colour, perforated by several openings, through which disintegrated tissue might be seen; but no purulent discharge had been established. The upper lip was slightly swollen, and two or three dark coloured pustules had formed upon it. The swelling of the face was harder as it approached the lip, and softer in proportion to the distance from it. She described the affection as having commenced four or five days previously, with a small pimple near the margin of the lower lip, which did not at first cause much annoyance. The pulse was quick and feeble; the tongue coated with a thick creamy covering; the countenance anxious; the skin cool and perspiring. The patient complained of severe pain on the right side. There was no dulness on percussion, but the stethoscope furnished evidence of pleuritic inflammation, and of capillary bronchitis.

A free incision was made into the affected lip, to the extent of the disorganised tissue; and a strong nitric acid lotion was ordered to be applied, with a large warm poultice over the lip and face. Cataplasms were ordered to be frequently applied to the side; beef-tea, with wine and brandy, were ordered to be given freely; and the following draught to be administered every three hours

℞ Ammoniæ sesquicarbonatis gr. v; ætheris chlorici gtt. x; potassæ chloratis gr. x; liquoris cinchonæ (Battley's) gtt. x; decocti cinchonæ ad ℥j. M.

Vespere. The lip was less swollen and painful; the chest symptoms were much the same.

July 22nd. The patient is evidently weaker; pulse smaller and more frequent. The lip is gradually diminishing in size, and regaining its natural colour; and the face is generally less swollen and softer. There is considerable pain in the right side, but no dulness or true crepitation can be detected in any part of the chest; but a sub-crepitant *râle* can be readily heard over a considerable portion of both lungs. Low muttering delirium is occasionally present. The patient was ordered to have as much support as she could take, and to continue the remedies.

July 23rd. The woman continued to sink during the day. There was no aggravation of the chest symptoms; no great dyspnœa nor cough; and the pleuritic pain did not occasion much annoyance. The condition was that usually seen in the last stage of pyæmia. She was bathed in most profuse perspiration. The conjunctivæ gave evidence of the icteric condition so generally present; and the prostration was extreme. She died about 10 P.M.

POST MORTEM APPEARANCES, twelve hours after death. The pleuræ were coated with recent fibrine, not of a firm consistence, but soft and semi-purulent. The lungs were highly congested, and filled with frothy mucus; but no consolidation of any portion of either lung could be detected. Three or four very small lobular abscesses were found in the right lung. The liver and kidneys were healthy, and no other organ presented any abnormal appearance.

REMARKS. For the last seven or eight years, carbuncular, furuncular, and paronychial affections, have been so common as to have been by some considered as varieties of an epidemic depending on some atmospheric or telluric condition influencing the public health, but not recognisable by the senses, nor indicated by the aids which science lends us for the investigation of meteorological phenomena. But may not a more simple solution of the frequency of these troublesome affections be found in the present low type of disease, as evidencing further a low standard of vitality or power of resistance to external impressions in the animal economy of the "ἄνθρωποι νῦν"? Every form of inflammation is now of an asthenic character; hence the human tissues must have now a lower vitality, and be less able to resist or repair morbid action or the effects of external injuries. Hence change of temperature, or other external causes acting on tissue lowered in vitality, and part of a frame having diminished constitutional power, may produce, according to the modifying circumstances of each case, carbuncle, paronychia, or boil; and the specific poison thus produced, and taken into the *pabulum vitæ*, the blood, may produce more boils, another carbuncle or whitlow on another finger; or even, as in the case just narrated, carbuncular disorganisation of the lip may be followed by secondary pyæmic inflammation of a distant organ, the result of a toxæmic poisoning of the blood acting principally on the capillaries of an emunctory organ.

But, to leave the region of hypothesis, and to descend to plain practical facts, boils, carbuncle, and whitlow, the last often in an almost malignant form, have been prevailing now very extensively for several years. They may be said to be varieties of a common type, modified by individual health or special cause. They attack generally the feeble, and those especially whose health has suffered from other diseases; they are asthenic in their character, and run on rapidly to disorganisation of the affected tissues, unless promptly subdued by appropriate local and constitutional treatment.

The case reported is an interesting illustration of the foregoing observations. A woman apparently in good health, but of course, with her fellows, under the present low state of vitality, has a small pimple on the lip; a morbid poison is thus generated; the surrounding tissue is implicated; a low form of cellular inflammation or disorganisation is set up, until the lower lip is almost entirely involved; the blood next becomes contaminated; and then distant organs, those usually involved in secondary pyæmic complications, evidence the secondary constitutional disease.

Why carbuncle of the lip should be more frequently followed by secondary mischief in the chest, than when it attacks some other locality, it is difficult to explain; but that such is the fact, under certain phases of the carbuncular epidemic, there can be no doubt. In the *Medical Times and Gazette* for Sept. 18th and October 2nd, 1852, Mr. Harvey Ludlow gave an interesting account of several cases which occurred in St. Bartholomew's Hospital, in the years 1851 and 1852, of carbuncle of the lip, and in which cases secondary pyæmic mischief occurred when prompt measures had not been immediately adopted to check the local disorganisation by free incisions and active cauterisation. I was not aware of the cases reported by Mr. Ludlow when I first saw the case under notice; but I considered then that the only chance of preventing the loss of the whole lower lip, and of relieving the constitutional irritation, depended on free incisions into the disorganised tissue; and the subsidence of the local mischief, as a result, was marked and satisfactory: but some days had passed over between the invasion of the disease and my first acquaintance with the case. Already the chest symptoms evidenced the constitu-

tional taint; and the poisoned blood and the congested and inflamed lungs soon hurried the patient to a rapid death.

In Mr. Ludlow's cases, where free early incisions were not made, and only palliative treatment was adopted, the patients all died, the disease running much the same local and constitutional course as in the one now reported. Where free incisions were made early, and strong nitric acid or other powerful escharotics applied, the constitutional complication was averted, and the patients recovered. In all, the feeble condition, as in my case, indicated the use of generous diet and a tonic stimulant treatment. In all low forms of cellulitis, I have found the chlorate of potass, combined with bark and ammonia, to be of essential service; and hence, in carbuncle of the lip, the rational treatment appears to be early free incisions (not caring for small arterial branches, which can be readily tied or compressed), the application of lint dipped in strong nitric acid to the exposed tissue, the free use of strong animal broths, with wine and brandy, and of a combination of chlorate of potass, bark, and ammonia, as prescribed in the case of Mary Todd.

ST. GEORGE'S HOSPITAL.

I. COMPOUND FRACTURE OF THE LOWER JAW: PYÆMIA: PUS IN THE ANTERIOR CHAMBER OF THE EYE.

Under the care of Cæsar H. Hawkins, Esq.

Edward D., aged 37, a hostler, said to be of temperate habits and good health, was admitted on July 13th, in consequence of an accident which occurred five days before. A horse had kicked him in the mouth, and occasioned a compound fracture of the lower jaw, a little to the right of the symphysis; the mucous membrane of the mouth was torn, and the fracture thus exposed. He was admitted into the house on account of a cough with profuse expectoration.

For the first two or three days no symptoms occurred to call special attention to the case; but on July 15th he had a rigor, and on the following day two other and more severe attacks of shivering. His general condition also became more threatening; there was much prostration, loss of appetite, and want of sleep. The tongue was white and the pulse quick. His cough was still very troublesome. He was ordered ammoniated saline draught, and a diet drink containing chlorate of potash. On July 18th (ten days after the accident), he complained of his sight being dim; and the next day, a small quantity of pus was seen in the anterior chamber of the left eye (which had previously been quite natural). The rigors now became more frequent and severe, and his intellect began to be affected. He remained in a delirious condition at intervals during the 18th; and in the morning of July 19th, was seized with violent convulsions, in which he died. The effusion into the anterior chamber had continued to advance, but not very rapidly.

On *post mortem* examination it was found that there was a considerable quantity of pus in the anterior chamber of the left eye, but no appearance indicating previous inflammation of its structure. Lymph was found in the cavity of the arachnoid, forming a false membrane, very easily separated, in the right middle fossa. There was considerable congestion of the vessels of the scalp and dura mater, causing adhesion of the skullcap on both sides. The cellular tissue of the neck and the anterior mediastinum were loaded with ecchymosis, and the walls of the heart were much infiltrated with blood. There were numerous secondary deposits in both lungs, and recent effusion of lymph into the right pleura. The left was quite free from recent deposit, and its cavity was almost obliterated by old adhesions. The spleen, like the other viscera, was much softened, and putrefaction was advancing rapidly. The liver was healthy; the kidneys were coarse in structure and soft, but not, apparently, more so than the other organs.

Remarks. This case presents some points of interest. In the first place, it reminds us of the fact, that fractures of the lower jaw, even when no great amount of laceration has been inflicted either on the bone or the soft parts, are not so devoid of danger as we are apt to think them. Indeed, a very large proportion of these fractures are compound, and therefore involve the usual dangers of compound fracture. These dangers are, however, less in proportion to the vascularity of the part; and this is, doubtless, the reason why grave consequences—such as erysipelatous affections, hospital gangrene, and pyæmia—so much more commonly follow fractures of the lower extremity, and so rarely those of the facial bones. That such consequences, however, do occasionally happen is, doubtless, within the experience of most of our readers. Another and more curious point connected with the case, is the occurrence of hypopyon, as one of the phenomena of secondary infection. There could be little doubt that this was the real cause of the suppuration, as no symptoms or appearances of inflammation were observed, nor had the injury involved the eye or upper part of the face in any manner.

II. DEATH UNDER THE INFLUENCE OF AMYLENE.

We regret to have to record a fatal accident which occurred to a patient of Mr. Cæsar Hawkins at this Hospital from the administration of amylene in a surgical operation. The anæsthetic was administered by Dr. Snow. The operation was a comparatively trifling one, being merely the excision of a small tumour, not much larger than a nut, upon the back. The tumour was of the recurrent nature, and, on examination after a previous operation, had been pronounced epithelial. The patient had been operated on three times before, each time under the influence of chloroform, and no particular ill effects had followed, although he had suffered a good deal the last time from subsequent sickness. He was a man 24 years of age, stout, but of an unhealthy appearance, and was not known to have any visceral disease. On the day of the operation (July 30th) he was placed under the influence of the anæsthetic. This was accomplished without difficulty in two minutes; but when he was turned on his side for the operation, he struggled a good deal, his manner being exactly like that of a man violently intoxicated. When this paroxysm was over, he appeared to become insensible, and the operation was performed. This having been done, the amylene was removed from the mouth, the patient having been in the semi-prone position during the interval. About half a minute after the last inhalation, and eight minutes after the first application, of the drug, it was observed that his pulse had ceased, although some imperfect attempts at breathing were made at intervals afterwards. Dr. Snow immediately commenced artificial respiration, mouth to mouth, and the galvanic apparatus was made ready as soon as possible, the stream being directed to the thorax. Afterwards, the method of artificial respiration recommended by Dr. Marshall Hall was employed sedulously; and these remedies were kept up for an hour and a half. For the first half hour occasional attempts at respiration were noticed, but at long intervals, but no pulse could be felt. As a last resource, two needles were passed into the walls of the heart itself, and the stream of galvanism directed through them. This, however, failed to stimulate the heart; and after some time longer had been spent in fruitless attempts to restore respiration, the case was abandoned.

On *post mortem* examination, the blood was found fluid, free from any odour of amylene; the cavities of the heart were all semi-relaxed, and full of dark blood; its substance was healthy on microscopic examination. The lungs were gorged with blood, which had been extravasated here and there. The brain and spinal cord were healthy. Four small tumours, similar to the original disease, were found scattered through the left lung. The needles had entered the wall of the right ventricle, but had not penetrated into its cavity. A large cyst was found in one of the kidneys.

Remarks. Little comment is needed on the foregoing case. It merely shows that amylene is not safer as an anæsthetic than chloroform. It is the second fatal case which has been reported. The other was reported by Dr. Snow in the *Medical Times and Gazette* a few months ago. In both, the patients were young men in apparently good health, and no visceral disease existed which could account for the fatal result. In the present case an opinion was expressed, from cursory survey of the heart, that it was affected with fatty degeneration. This, however, was not confirmed by microscopical observation, and was, indeed, in all probability, merely a deduction from the appearances of commencing putrefaction; nor, if that state of the heart had been present, could any great weight have been attached to the circumstance; considering that in deaths from other anæsthetics the majority of the patients have not presented this condition; and also that some amount of fatty degeneration must be present in a large majority of the cases in which chloroform or amylene is administered with safety to persons advanced in life.

ST. BARTHOLOMEW'S HOSPITAL.

LACERATION OF THE BLADDER: FRACTURED OS PUBIS: SYMPTOMS SIMULATING PERITONITIS.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Martin M., aged 8, was admitted July 7th, under Mr. Stanley's care, in consequence of an accident, in which an iron gate had fallen on the lower part of his abdomen. He was brought in immediately after the accident. There was then no collapse, and he appeared to suffer little, except the pain resulting from the contusion. He had, according to his own account, passed urine a short time before the accident. The pelvis was examined; but as no fracture was apparent, and the existence of such an injury would not have modified the treatment, the examination was not pushed to such an extent as to cause pain. A narcotic was given, and he was put to bed. Next morning he was found complaining of severe pain in the left hypogastrium, and had passed no urine since his admission. Ecchymosis was beginning to show itself in the perinæum. A catheter was passed, without any difficulty, and drew off a large quantity of urine mixed with blood. Leeches were applied to the abdomen, and another dose of opium was given. Next day—the bowels had not acted since the accident—there were tympanitis, constant vomiting, sharp pulse, and furred tongue. The symptoms connected with the bladder continued. The leeches were repeated; he was put on a course of calomel and opium, and mercurial inunction was practised. He did not, however, benefit under the treatment. The bowels continued constipated, but acted once after an injection on the fourth day, the motion being healthy and free from blood. The other symptoms continued; he began to sink on the fourth day, and died on the sixth after the accident.

Post mortem examination showed the peritoneal cavity quite healthy. The ramus of the right pubic bone was fractured in two places; viz., near the symphysis, and at its outer end, thus breaking off a large portion of bone, including nearly the whole of the horizontal ramus. There was also partial separation of the right sacro-iliac synchondrosis. The bladder showed four small rents through its mucous and muscular coats, the edges of which where ulcerated. They did not open into the peritoneum, that membrane remaining entire. The bladder was contracted, contained no urine, and did not show any traces of having been injured by the broken bones. The cellular tissue of the pelvis was dark, and partly sloughing.

Remarks. This case is adduced as a companion to another of the same nature, also occurring under Mr. Stanley's care, and which was reported in our number for Feb. 7. The cases, however, present some interesting points of contrast. In the one before us the laceration was only partial, the serous coat having escaped injury; in the other, all the coats of the viscera were torn through, and a free communication was established with the peritoneal cavity. Yet in the latter case the symptoms did not resemble those of peritonitis so much as in this, notwithstanding the effusion of urine into the peritoneal cavity. The present is one among a set of cases occasionally met with in which injury to viscera produces many of the constitutional symptoms of peritonitis, doubtless from the impression made upon the same system of ganglionic nerves in both cases. The diagnosis is obscure, yet it is very important, if possible, to establish it; as the antiphlogistic treatment, so necessary in the one case, is obviously superfluous in the other, unless indicated by the state of the pulse and the habit of the patient. Unfortunately the peritoneum does not reveal its morbid conditions by physical signs like the thoracic serous membranes; still the fact of this false peritonitis—if we may use such an expression—occasionally occurring, is one of interest; and, if borne in mind, may sometimes lead the surgeon to a diagnosis which would otherwise escape him.

II. TREATMENT OF HYDROCELE BY EVACUATION OF THE FLUID INTO THE CELLULAR TISSUE OF THE SCROTUM.

Under the care of E. Stanley, Esq.

A simple way of treating hydrocele, which was rapidly successful in effecting at least a temporary cure, was seen here a short time ago in the case of a patient of Mr. Stanley's. The man had laboured for four years under the disease, and the tumour had attained a large size. He had never been under any treatment for it. The method consists merely in puncturing the swelling with a common darning needle, which is then rotated about for a few minutes, and the fluid thus allowed to escape into the cellular tissue of the scrotum. In the case before us, this took place with great facility, so as to produce rapid œdema, and the fluid was very speedily absorbed from the cellular tissue. The patient was quite well in forty-eight hours. He was kept under observation for a week, when, as the fluid showed no disposition to reaccumulate, he was discharged. The simplicity and painlessness of this method would suffice to recommend it in those numerous cases in which the patient will not submit to the cure by injections, even if it held out no prospect of a permanent cure. It is believed, however, that the more favourable result will follow in a tolerably large number of cases.

WESTMINSTER HOSPITAL.

EXCISION OF THE HEAD OF THE FEMUR.

Under the care of Barnard Holt, Esq.

[*Reported by* G. Nayler, Esq., *House-Surgeon.*]

[We quote the two following cases of excision of joints, in the words of the gentlemen who reported them. These operations are regarded in a very different manner by different schools of surgery; but, on the whole, the modern practice in London and elsewhere is evidently tending to the more frequent use of such conservative methods. In the case of strumous disease of the hip, indeed, there must always, as in Mr. Holt's case here cited, be much difficulty in ascertaining before operation the state of the acetabular cavity; yet, considering the very unfavourable termination which usually attends the disease among the children of the poor, surgeons are often inclined to give the patient the benefit of a doubt, and to attempt a radical cure of the complaint before the general health has too far deteriorated. In the other, the principal doubt is usually whether the joint cannot be saved altogether, as the operation itself is by this time beyond criticism.]

William Prendergast, aged six years, a delicate child, and one of a numerous family, was admitted Jan. 6th, under Mr. Holt, with disease of the hip-joint. At the period of his admission, the upper half of the thigh was enormously swollen, and the superjacent vein red and inflamed. The orifices of three sinuses were present on its surface, in the vicinity of the joint; they discharged a large quantity of pus. There was no dislocation of the head of the bone. The knee-joint was bent at a right angle, and inclined over its fellow of the opposite side. To these symptoms may be added an elevation of the heel to the extent of about two inches. The least attempt at motion in any direction caused great pain. Chloroform having been given to the child, the nature and direction of the sinuses was examined; they were found to extend deeply, but no diseased bone could be detected.

The disease first commenced about two years ago, and presented, as far as could be learned, the usual characters of incipient disease of the hip-joint, among which pain referred to the inner side of the knee constituted a prominent sign. He had been under treatment at two provincial hospitals, but obtained no relief.

To improve his general condition, he was ordered cod-liver oil and steel wine thrice daily, together with a liberal diet and wine, etc. Bread poultices were applied to the thigh, and subsequently warm water dressing. This treatment was continued for several months, the oil being from time to time omitted, and its place supplied by quinine and other tonics. The inflammation finally subsided; but the sinuses showed no disposition to close, and at length they were found to lead to necrosed bone. Under these circumstances, and considering the length of time the child had been in the hospital, Mr. Holt resolved to excise the head of the femur, which was done in the following manner.

July 7th. Chloroform having been administered, an incision was made with a large sized scalpel, somewhat of the shape of the letter T, and about four inches in length, in the direction of the femur. The bone being laid bare, the capsular ligament was divided, and the head dislocated from the acetabulum: it was then removed with the saw, near its junction with the femur, and found to be in an extensively necrosed state. The acetabulum, on examination, proved to be in a similar condition; and a considerable quantity of diseased bone was removed from this also with the aid of the gouge. The divided parts

were then brought together in the usual way; a long straight splint, reaching from the foot nearly to the axilla, was applied to the outside of the limb, having a deficiency opposite to the wound, where its place was supplied by an iron bar. There was still some inclination of the limb inwards. Water dressing was applied to the wound.

July 10th. He has been doing well; the limb is brought into a better position.

July 14th. The wound is looking healthy. The child's health is very good.

July 23rd. He has been progressing most favourably since last report.

Remarks. The disease in this instance had proceeded so far as to render ultimate recovery doubtful, unless the child could have had the benefit of a residence at the sea-side, and great attention paid to his general health—advantages which it was hardly expected he would have been able to obtain; and, even if he could, the limb must have been, from its position, almost useless. Neither the symptoms nor the operation present any peculiar points of interest; but the subsequent restoration of the limb to its natural shape and position form an important subject. It was thought that the long straight splint, as above described, offered the best chance of securing this desirable object, as by its means gradual extension could be more effectually maintained, and any deviation of the limb from its proper position more easily rectified; while, at the same time, the interruption of the splint at the part corresponding to the wound greatly facilitated the daily renewal of the dressings, and removed all pressure. Much care was required for the first few days; and it was only by very gradually extending the limb, and the application of bandages, that complete success was attained. The patient is now free from pain; the shortening scarcely amounts to half an inch; and the limb is in an excellent position.

UNIVERSITY COLLEGE HOSPITAL.

STRUMOUS DISEASE OF THE ELBOW: EXCISION.

Under the care of J. E. Erichsen, Esq.

[*From Notes by* W. F. Teevan, Esq., *House-Surgeon.*]

Thos. M., aged 7½ years, was admitted into the Hospital July 8th. He had always lived in a salubrious locality, and never suffered from privation of food. He had three brothers and two sisters; these, together with the parents, are all alive and well. Although he appears in very good health, and is cheerful, yet there is a certain amount of struma about him. With a large head and plump cheeks, he has a small developed chest and limbs. He states positively that he is as stout now as he ever was. When at school four months ago, it was noticed that his left elbow began to swell gradually, and to become rigid. All this was unattended with pain or any derangement of health. About six weeks later, an abscess formed on the outer side of the joint; this was opened, and through the sinus diseased bone was discovered a few weeks afterwards. He was then sent down to the sea-side; and as, after his return, the arm was worse, and the disease increasing, it was determined to excise the joint. At the time of his admission, the left elbow was about twice the size of the right. Several sinuses led down to diseased bone. The apertures of the former were encircled with pale fungoid-looking granulations.

At 2 p.m., July 8th, he was placed under the influence of chloroform; and a T-shaped incision having been made, the joint was excised in the usual manner. There was nothing special to remark about the operation, except that the articular surfaces were found extensively diseased. Water dressings and a straight splint were then applied.

On July 10th, the lowly organised plastic matter around the joint assumed a sloughy aspect, and poultices were used for the four following days, at the end of which time it had entirely dissolved away, and healthy granulations were springing up. The arm was now put on an angular leather splint, and water dressing or red wash applied; and the boy was allowed to get up.

At the present time (August 2nd), the wound is all but healed. His health and appetite have continued good throughout; and, in the course of a day or two, the splint will be discontinued.

Original Communications.

SEQUEL OF A CASE OF PUNCTURE THROUGH THE ABDOMINAL PARIETES IN IMPASSABLE OBSTRUCTION OF THE BOWELS.

By Sir Henry Cooper, M.D.Lond., Physician to the Hull Infirmary.

[*Read before the British Medical Association, July 30th*, 1857.]

In February last I communicated to the British Medical Journal a case (with comments) of obstructed bowels, treated by puncture through the abdominal parietes. The subject of this history has since died from causes independent of the intestinal obstruction. I purpose now to relate the sequel to the Association, premising a very short review of the case, in order to connect the result with the previous history.

Case. M. A. K., an unmarried female, aged 34, robust, healthy, and without apparent predisposition to disease, had experienced for many weeks difficulty in evacuating the bowels. This difficulty increased, with occasional attacks of colic, till December 1855, when I was requested to see her in consultation with Mr. J. H. Gibson. She had then been entirely without relief for ten days, and had had very imperfect evacuations for a much longer period. She was suffering from the ordinary symptoms of obstruction in an aggravated form, including meteorism, vomiting of suspicious matter, hiccup, and prostration. The usual means had been judiciously employed by Mr. Gibson during this period, and, in a modified form, were persevered in for two days longer, without relief, when, the patient being apparently moribund, and relief by ordinary means hopeless, an opening into the bowel was proposed and assented to. After much deliberation, we were induced, partly by the uncertainty as to the seat of the stricture, but principally by the patient's exhausted condition, to select the most prominent point of distension (which must *necessarily* be *above* the stricture), and puncture it with a large sized trocar. Immediate and complete relief was the result of this simple proceeding; the patient rallied and did well, recovering so far her health and strength as to have been able, at the time the case was communicated, to walk several miles, and to attend to her usual household duties. For the details of the management of the case, I must refer to the British Medical Journal of February 21st, 1857, where the precautions deemed necessary to secure success, and the advantages held out by this operation over the opening of the bowel in the loin, and especially over gastrotomy, are fully discussed.

In March of the present year (fifteen months after the operation), Miss K. began to fail in flesh and strength; her appetite left her; and she had feverish attacks, with much abdominal tenderness. In May, while making an extraordinary effort in moving some heavy article of furniture, she felt "something give way" in her body; and from that time her symptoms steadily and rapidly advanced. A tumour for the first time became perceptible above the pubes, occupying the position and having something of the feel of a gravid uterus; the tenderness increased, with some distension. Once only in the course of this last illness was any interference necessary with the artificial opening into the gut. It was examined with the finger, which it readily admitted; and some scybalous accumulations were washed out of the distended bowel into which it directly opened. After this no further difficulty was experienced. The tumour increased quickly, with severe constitutional symptoms; aphthæ, and the usual symptoms of failing vital power, showed themselves, and she died on June 10th.

Twenty-four hours after death, a *post mortem* examination was made. The body retained considerable embonpoint; the abdomen was much distended, and partially tympanitic; there were several pints of effused fluid, with floating flakes of lymph, in the peritoneal cavity; but no other marks of recent serous inflammation. A large mass occupied the lower part of the abdominal cavity, reaching nearly to the umbilicus; its size equalled that of the adult human brain, and its appearance so similar that it might almost at first view have been mistaken for that organ. On section, it presented all the characters of encephaloid cancer; in the interior, and toward the lower portion, were several cells of the size of walnuts, filled with gelatinous fluid. There was much difficulty in tracing the connexions and origin of this mass, so much were the character

and relations of the organs disturbed by its size and structure; but eventually no doubt remained in our minds that the seat of the disease was the right ovary. The colon, especially the ascending portion, was much enlarged; it could be traced down, still much distended, to the commencement of the sigmoid flexure, where all traces of its structure were lost, and its calibre entirely obliterated by a growth of similar character to that of the ovary, but much denser and smaller. In front, the mass thus formed was crossed by a firm rounded band, which tied it tightly down to the neighbouring vessels. The uterus and left ovary were easily distinguishable, and quite healthy. The trocar was found to have punctured the cæcum in the widest and most prominent part; the gut itself was quite healthy, the opening patent, and the connexion between the mucous membrane and the skin precisely like that which occurs in other similar positions. There were no marks of inflammation or injury, except the firm old adhesions which had glued the surface of the gut to the abdominal parietes: in fact, nothing could look more natural and free from disease than the new opening and surrounding parts.

Remarks. It would seem that the first link in the chain of diseased actions was the disease of the ovary, which, by its growth, either directly or through the medium of the ligamentous band, pressed upon and *partially* obstructed the calibre of the gut. The increase of the ovary caused progressive interference with the intestine, and, eventually, total occlusion; which could not, however, have been so close at the time of operation as it was afterwards found to be, as it then allowed freely the passage of the long tube, and of very bulky injections. But there can now be no doubt that the sigmoid flexure was the seat of the obstruction, and that Amussat's or Callisen's operation would have been admissible so far as regards the mere relief of the distended bowel. Probably the bowels had lost their expulsive power from over distension; and hence no fæcal matter or gas passed, though the stricture was sufficiently imperfect to admit the tube. The further progress of the case is due to the development of the cancerous masses, and to their mechanical effects on the neighbouring parts, but chiefly to the *general* effect of the disease in lowering and extinguishing the powers of life.

The practical object of making this statement is to point out that the operation performed was *in itself* perfectly successful; it at once and perfectly evacuated the canal, and restored the patient from imminent death; it produced no local ill effect; it answered its purpose for eighteen months, and might, as far as appears, have continued to do so to any period to which life might have been prolonged. The development of malignant disease, however, prematurely closed the scene.

ENLARGEMENT OF THE TONSIL AND UVULA, IN RELATION TO DEAFNESS.

By W. C. Williamson, F.R.S., Surgeon to the Manchester Institution for Diseases of the Ear; Consulting Surgeon to the Chorlton-upon-Medlock Dispensary; and Professor of Anatomy and Physiology in Owen's College, Manchester.

[*Read before the Lancashire and Cheshire Branch, June 24th*, 1857.]

There are some forms of disease which have hitherto defied all known remedial agents; hence, on the alleged discovery of specifics capable of arresting their progress, the profession is usually prepared to give each new remedy a fair trial. But such trials are too often indiscriminately made. The fact being known that benefit has been derived in a given disease from some new plan of treatment, the latter is often resorted to with little reference to the peculiarities of the case; failures are frequent, and the new appliance falls into unmerited disuse.

Such epidemic recourse to new curative agents is not unknown in aural surgery. Oil of almonds, glycerine, syringing, and tonsil-cutting have had their turn, and with equally slight reference to the pathological causes of deafness in the cases to which they were applied. The real value and operation of the last of these methods of treatment is the subject into which I propose to inquire this morning.

When the excision of enlarged tonsils, for the cure of deafness, was first suggested, the treatment did not appear unpromising to men superficially acquainted with the anatomy of the throat. Under a vague impression that the orifice of the Eustachian tube was located somewhere behind the tonsil, it appeared not improbable that the former might be so compressed by the latter, when abnormally enlarged, as to impede the free entrance of air into the tympanic cavity. But a more accurate knowledge of the anatomy of the throat renders the impossibility of such interference obvious, as both Mr. Harvey and Mr. Wilde have so properly pointed out. At the same time we must guard against the opposite error of considering that enlarged tonsils in no way interfere with the hearing, or that their partial excision is a useless operation. How and to what extent do they exercise such an influence? A correct answer to this query will guide us to sound and beneficial practice.

Every surgeon familiar with cases of deafness is aware how many of them originate in catarrhal attacks. Ordinary catarrhal inflammation of the mucous membrane of the throat, spreading in various directions, frequently extends along the Eustachian tube, and enters the cavity of the tympanum. Having reached this confined cavity, it soon effects injurious changes in the contiguous soft tissues, which not unfrequently extend to the surrounding osseous structures, especially in strumous subjects, or after attacks of scarlatina. In the class of cases to which I have now referred, irritation of the mucous membrane of the throat and nares is the primary cause of the aural disease; but whatever tends to perpetuate such irritation, indirectly increases the mischief in the ear.

Enlarged tonsils and uvulæ are equally sources of pharyngeal irritation; hence they often require to be reduced to normal dimensions before much improvement can be effected in the impaired auditory function. If this cannot be effected by improving the general health combined with the topical application of astringent remedies to the throat, recourse must be had to excision. I need not remind a medical audience how much enlarged tonsils predispose to ulceration of the throat. The frequent recurrence of such attacks is sometimes regarded as indicative of a defective constitution; whereas neglected hypertrophy of the glands in question is often the local and sole cause of the mischief. But repeated accessions either of ulceration or enlargement of the tonsils, rarely occur without occasioning more or less of deafness: hence the necessity for a prompt removal of what may so soon prove the exciting cause of serious aural disease. The following case illustrates the opinions just uttered.

Case I. E. B., a girl 15 years of age, consulted me early in June 1856. She had frequently suffered from catarrhs, accompanied by ulcerated tonsils; and when I first saw her the tonsils were large, the velum and uvula were much relaxed, and the voice presented the thick, non-resonant character so often noticed in these cases. The Eustachian tubes were closed, and the distance at which the tick of my watch could be heard was one inch on the right side and three on the left: the former being the side on which the tonsil was most enlarged. The use of astringent gargles and of the Eustachian catheter so far ameliorated the girl's deafness, that, by the beginning of August, the hearing distance on the right side was from twelve to fourteen, and on the left fully fifteen, inches, but beyond this we failed to make any progress. On August 12th, I removed the right or largest tonsil; and by the 9th of the following September so comparatively rapid had been her improvement, I found the hearing distance on both sides increased to twenty-four inches; and on October 2, she was discharged cured. But, having only removed one of the hypertrophied glands, I was not surprised to see her return early in March of the present year, with a recurrence of the deafness. I endeavoured for some time to remove it by means of astringent gargles and the Eustachian catheter; but we made little progress until March 27th, when I removed the other tonsil, and beneficial results ensued so quickly that in ten days afterwards she was discharged cured, and has continued well up to the present time.

The following case illustrates my statement, that precisely similar conditions result from an enlarged uvula, and its removal.

Case II. M. B., a Spanish merchant, first consulted me early in April last. He had been deaf, in varying degrees, during eight years, the affection becoming worse each winter, as well as during any accession of catarrh. When I first saw him, he could only hear my watch when in direct contact with his right ear, and at the distance of one inch from the left. I tried the effect of astringent gargles and the Eustachian catheter for some days, without producing much improvement; the hearing distance being only prolonged on the right side to two inches, and on the left to four. On April 15th I removed the excess of uvula; and on the 22nd of the same month the hearing distance on the right side was prolonged to two feet, and within a month from that time he was perfectly cured.

But whilst I recommend the prompt removal of any excess of tonsil or of uvula, let it not be inferred that I regard the operation as a specific for the cure of *any* form of deafness, or, indeed, one of frequent applicability. The proportion of cases in which enlarged tonsils exist is very small. Mr. Wilde, in his published table of 200 cases of ear disease (*Practical Observations on Aural Surgery*, p. 114), records only five examples of enlarged tonsils. In my own practice, the proportion of cases in which this symptom was present has been much larger. Of 300 cases of deafness, I found enlarged tonsils in 29, and relaxed and enlarged uvulæ in 57 instances; the former thus occurring in 9⅔, and the latter in 19 per cent.,—a proportion which the humid climate of the district around Manchester will probably explain.

Whilst, as I have just suggested, the numerical proportion of cases of deafness, accompanied by enlarged tonsils, is too small for their excision to be regarded as a remedy of wide applicability, it is equally true that, even where they do exist, their removal not unfrequently fails to be followed by any improvement of the hearing power; on the other hand, I have had some cases in which, though enlarged tonsils were present, astringent applications to the throat, and the use of the catheter effected a complete cure, without my resorting to excision of the glands, which still continued enlarged. I should anticipate some future recurrence of the deafness in these latter instances; but meanwhile they illustrate my observation, that the mischief does not result merely from the enlargement of the organ, but from the concomitant, and often resultant, state of the surrounding mucous membrane.

I have not seen any cases like those quoted by my friend Mr. Harvey, where excision of the tonsil is affirmed to have further impaired the defective sense. That it has sometimes failed to do good, even when the enlarged gland had obviously co-operated in causing the mischief, is a fact easy of explanation, when we remember how soon irritation of the tympanic cavity, however originated, may be followed by structural changes, which are wholly incurable. The time for applying the remedy has been delayed too long. Such cases of failure only demonstrate the necessity for prompt attention to all irritations of the throat, especially such as threaten to be chronic, without waiting until the hearing faculty is impaired. I too frequently find that when the diminished power has become so obvious as to force itself upon the patient's attention, the time for successful action has gone by.

After the removal of all local causes of irritation has been effected by the means already referred to, aided occasionally by counterirritation, and even local depletion, the Eustachian catheter becomes a valuable adjunct to other remedial appliances. My experience has satisfied me, that on the continent this instrument is employed with unnecessary frequency; but our English practitioners are, perhaps, in some danger of falling into an opposite error, from a desire to avoid an abuse which savours of empiricism. I am convinced that the Eustachian catheter is an instrument of the greatest value. There appears to exist in many professional men an undefined dread of its use; but I am convinced that this is a groundless fear. I am certain that, in ordinarily skilful hands, the operation is not half so hazardous as catheterism of the urethra. Indeed, it is difficult to imagine what real evil Eustachian catheterism can inflict. The utmost mischief that I have seen it do, has been in two or three cases, where it has occasioned slight inflation of the areolar tissue of the throat with air,—an inconvenience of which nature in a very few hours effects the removal.

Though cases occasionally present themselves in which the deafness passes away, under appropriate treatment, in spite of the enlarged tonsil, there always remains great liability to recurrence of the evil, unless excision is resorted to.

The Dwellings of the Poor. The Earl of Shaftesbury's Bill for the prevention of over-crowding in the dwellings of the poor has been brought down from the House of Lords for the assent of the Lower House of Parliament. The Bill enacts that no house or part of a house shall be exempted from the provisions of the Common Lodging House Acts by reason only that the lodgers in such house are members of the same family, unless such family consists solely of persons in the relationship of grandfather, grandmother, father, mother, child or children, grandchild or grandchildren; and the *onus probandi* as regards relationship will lie on the persons prosecuted at the instance of the police. The Commissioners of Police are empowered to enforce the 29th section of the Nuisances Removal Act. The Act will only apply to such parts of the metropolis as are situate within the metropolitan police district.

British Medical Journal.

SATURDAY, AUGUST 8th, 1857.

THE ANNUAL MEETING OF THE ASSOCIATION.

The Twenty-fifth Anniversary of the Association, which has just been celebrated at Nottingham, was a notable gathering, for many reasons. It was the first meeting since the inauguration of the new system of self-government. The old self-appointed Council gave up their power, at the Birmingham meeting last year, to the new one elected by the Branches,—the close vestry, if we may so term it, which was perhaps necessary to keep the Association right in its youthful days, gave place, on that occasion, to the free parliament elected by universal suffrage. The new system has thus had one year of trial; and the second representative Council of the Association came into office, at Nottingham, with the new President. On comparing the names of the representatives for the two years, as well as those of the two Committees of Council, it will be seen that a fair amount of new blood has been introduced; while anything like an entire change has been judiciously avoided. Thus our parliament and our ministry are sufficiently new, and (what is most important) they are responsible for their acts to the general body of the Associates. We have no doubt whatever that the infusion of new blood, and the adoption of more liberal principles, will act well for the Association during the ensuing year; and that our "great and glorious" meeting at Edinburgh in 1858, (for so by anticipation we venture to term it) will serve to prove that the Association, as it has grown in strength and stability, has also advanced in the art of self-government.

As regards the Meeting, the proceedings of which will be found fully reported in another column, we can speak with satisfaction. The numbers were respectable, and the tone which animated the meeting was admirable. Many of our kind friends who delight to see the Association in hot water, predicted a stormy discussion at the General Meeting with respect to the manner in which the Medical Reform Committee had discharged their extremely delicate and arduous duty during the past year, the most momentous one within the recollection of the Associates with respect to Medical Reform. But they were doomed to disappointment. The fresh breeze which prevailed during the discussion was a healthy one; and, although some hostile criticisms were heard, yet the vast majority of the meeting fully approved of the manner in which the Committee acted under most trying circumstances.

Mr. Headlam's Bill was as clearly the Bill of the Association in the Assembly Room at Nottingham, as it was at the various Branch meetings where petitions in its favour were so unanimously drawn up. But we suppose we must speak of Mr. Headlam's Bill no longer, since the Government have determined to build upon its ruins, not by the appointment of a royal commission, but by the more direct method of putting the matter into the hands of Mr. Cowper, whose letter inviting Sir Charles Hastings to a conference upon the matter must be taken, we trust, as a proof that the Government, in the ma-

jority of one hundred and forty-seven against them on the second reading of Mr. Headlam's Bill, had recognised the power of the Association to force a measure which meets their approval through Parliament. We have never ceased to advocate a stern resistance to any bill that shall propose to place the medical council entirely in the hands of the Government. In expressing this view, we have, we know, spoken the voice of the vast majority of the Association; nevertheless, we do not think it would have been a graceful thing to have gone before the government, as it was suggested we should do by Dr. Stewart, with a defiance in our hands, in the shape of a resolution to the effect that a Government Council must not even be mentioned. Such a proceeding would have been purely gratuitous, and, we think, very unwise. We take for granted that the action of this Association had led Mr. Cowper to alter his views, as to the possibility of putting medicine into a back office of the Privy Council, and of keeping it there a passive slave to government dictation. We do not pay Mr. Cowper so bad a compliment as to suppose that he has learned nothing during the present session; and we are glad, therefore, to find that the Association were unwilling to send Sir Charles to him with his hands tied in a manner calculated to give offence, when perhaps that gentleman is not unwilling to treat with us on our own terms. Watchful the Association must undoubtedly be, but not prematurely distrustful. We shall have ample time to know the intentions of the Government early next session with regard to Medical Reform; until then we must hope and wait.

THE WEEK.

Who is the Vampire of the War-office? This is the question which immediately suggests itself upon reading the accounts in the *Times* relative to the manner in which our soldiers, fresh from this country, are dressed in India. The writer says:—

"My room is rather a cool one. It is a very airy one, and I keep the hot air shut out after the sun has risen; or rather, I close the doors directly it begins to get warm, but the thermometer will stand at 90 and 92. I see the men of the 64th and 84th, *and, in fact, all regiments just arrived*, are clothed in the tunic, the same as they wear at home. Fancy what the heat must be; fancy the discomfort, and then the drill and sixty rounds of ammunition."

We can easily believe that the men have suffered frightfully under this cruel treatment, which is an apt pendant to that which they received in the Crimea, when they were allowed to starve in the bitter winter for want of great coats. We thought all these things were altered; but here we are entering upon another great war, and committing exactly the same mistakes that have earned the execration of the country. Not a man should leave the shores of Great Britain for India without a double suit; his cloth tunic for the colder months, and a white linen blouse and cap for the hot weather; even black boots should be repudiated in a climate where the heat is so terrible, and untanned leather used in their place. Who, we ask, is responsible for such frightful blunders as these, which bid fair to decimate our army before it sees the mutineers? We shall be told, of course, the Commander-in-Chief; but what is the Medical Department doing? Has Dr. Andrew Smith entered his protest against this deliberate murder of our troops in the present awful crisis? If the Medical Department has not protested in the most energetic terms, it has entirely neglected its first duty; and if it has without effect, it must be convicted of being the powerless, effete thing many believe it to be.

There seems to be a want of Assistant-Surgeons in the Army if we may judge from the following advertisement which appeared in the *Times* of Thursday, August 6th.

"A number of Assistant-Surgeons being at present required for service in the Army, any gentleman desiring such appointment, who is a British born subject, and under 25 years of age, must make known his wish immediately to this department, in order that he may be supplied with the necessary information and the printed form required to be filled up by all candidates. A. Smith, *Director General Army Medical Department.* 6, Whitehall Yard. August 5th, 1857."

No doubt there will be a number of applicants; and we trust that those who have the direction of medical affairs in the army will bear in mind that the appointments they make are to posts no less of danger than of honour. Our obituary to-day records the death of a regimental assistant-surgeon, Mr. Stewart Moore, who was killed by a shell while in the performance of his professional duties before Delhi.

Some months ago we called attention to the shameful style of some of the advertisements which appeared in the public papers relative to the Insane. The last advertisement of this kind, it will be remembered, quoted by us, publicly announced that thirty per cent. of the profits would be given by the writer to any medical man sending him patients. That delicate announcement has not been repeated; but from time to time others meet the eye which excite our ridicule, if not our indignation. Thus for several days past the following announcement has appeared:

"A Married Clergyman, residing five miles out of town, desires to receive into his family a Nervous Invalid. His wife has had much and successful experience in the management of such cases, and would devote to her patient conscientious and enlightened care. The house is spacious and cheerful, and the grounds extensive. Very superior references will be offered, and only liberal terms can be accepted. Letters will be forwarded, addressed H. Z., 44, Gerrard Street, Islington, N."

Now, we should not have been surprised if the clergyman had put himself forward as the priest-physician, as we know but too well that gentlemen of the cloth imagine they can medicine poor lunatics merely by spiritual instruction; but our amazement is indeed great at his audacity in thus trading upon his wife's qualifications as a psychologist! Imagine, good reader, some surgeon advertising for a cure of souls on the plea that he has an amiable intelligent wife, and you will get the exact parallel of this curious advertisement. This clergyman who thus trades upon his partner's virtues, sets, as he should do, a very high price upon them, and determines to accept a liberal offer only! Why, the Rev. Dr. Moseley is modest compared to this man; for he does prescribe his St. Ignatius's Bean gratis, without puffing his partner at home, if he happen to have one. Absurd as this advertisement is, however, it is matched by another that has appeared during the last week.

"To Gentlewomen Nervously Affected, not requiring Medical Supervision.—A lady, a professor, intimately acquainted with the treatment of nervous persons, and having the command of

great musical resources, would be happy to receive a lady as Boarder. Address, Professor, 21, Maddox Street, Regent Street."

The advertiser might as well have made a startling heading at once—"Insanity Curable by Music!" or some such catch line; for this is the bare hard meaning of the announcement. There can be no objection to the simple announcement of a private asylum; but we must protest against these highly absurd advertisements, which are calculated to defraud the public; and we are glad to find that Dr. Forbes Winslow, in his late presidential address to the Association of Asylum Proprietors, denounced them in the strongest possible terms.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, July 6th, 1857.

John Snow, M.D., in the Chair.

HISTORY OF GAOL FEVER IN ENGLAND. BY FRANCIS C. WEBB, M.D.

The paper was introduced by some remarks on the impossibility of any class of society being subjected for a length of time to the causes of disease, without final participation by the rest of the community in the results. The testimony of Lord Bacon was adduced, to the frequent occurrence of disease, taking its origin among prisoners "long and close and nastily kept"; that such occurrences were not limited to his age, is abundantly proved by extracts from the writings of Howard and Neild, illustrative of the state of prisons in the eighteenth and early part of the nineteenth centuries, and of the etiology of gaol fever. The appreciable causes which produced the disease were, the crowding of human beings in small dungeons, the withdrawal of a proper supply of water, the want of nourishment and exercise, the operation of a sanguinary and ill regulated penal code, and consequent mental depression. Reference was then made to various acts of legislation on the subject of gaol fever.

The first outbreak of gaol disease of which we have an account, took place in 1414, when the prisons of Newgate and Ludgate were severely visited. In 1522, an outbreak took place at the sessions held in the castle of Cambridge. This was followed in 1577, by the celebrated "Black Assize" at Oxford, when 510 persons were infected and died from July 6th to August 10th. A description of the symptoms of the disease was given from the accounts of Cogan and Stowe, and also the testimony of the former as to the exemption of women and children. Until a late period, the gaol distemper was popularly believed to affect men alone. That this in the eighteenth century was not founded on fact, is proved by the testimony of Pringle and Lettsom. The "sickness of the house" in the Queen's Bench Prison in 1579, was made the occasion of a petition to Queen Elizabeth. A similar outbreak to that at Oxford took place at Exeter in 1585. A scantiness of detail as to the disease in prisons in the seventeenth century was accounted for, by the difficulty of separating the prison element from the general sum of causes producing the pestilential fever so frequently rife during the civil wars; by the succession of epidemics of plague, and the frequency with which petechial fever was confounded with that disease; and by the political excitement of the period, which probably interfered with the correct chronicling of such events. Gaol fever was found to prevail in the eighteenth century, whenever from any cause the gaols became crowded: as in 1730, from the unparalleled amount of crime; in 1749, on the conclusion of the peace of Aix-la-Chapelle; and under similar circumstances in 1783.

Allusions were made to the outbreak at Taunton and Exeter in 1730; to the state of the Irish prisons in 1740-41; and to the disease in the gaols of Limerick and Tralee. The distemper was conveyed by some deserters, who had been confined in prison, to the Duke of Cumberland's army at Inverness in 1746. The author then gave Pringle's account of that epidemic. An outbreak occurred at the Old Bailey sessions in 1750, when, curiously enough, those to the right of the Lord Mayor generally escaped; the reason assigned being that a stream of air from the window directed the *materies morbi* to the other side of the court. A great benefit resulted from a ventilator constructed at Newgate, and worked by a machine in the manner of a windwill, in 1752. Seven of eleven workmen employed in erecting the ventilator contracted the fever; and by one of them, a whole family was infected. Notice was then made of its conveyance from Exeter gaol to the town of Axminster in 1755. It prevailed in 1761 amongst the prisoners of war at Porchester and Winchester; at Warwick and Bedford in 1772, spreading in the latter instance to the town. Dr. Lettsom describes an outbreak in 1773, in Long Lane, Aldersgate Street, the fever being brought there by a person who had contracted it in Newgate. Outbreaks occurred in Aylesbury Gaol in 1773-74; at Dublin in 1775; at Hertford in 1776. It subsided in the borough and county gaols until 1783; when, part of the forces being disbanded, the prisons were again crowded, and fever reappeared. At Worcester, it appeared in a malignant form, and was thence conveyed to Droitwich.

The author proceeded to give Pringle's and Lind's testimony as to the influence of prisons as sources of infection to the navy and army. The disease was also carried by transported felons to the penal settlements in America.

The fever which broke out amongst the Spanish prisoners in 1780, appeared to be distinguished from the English gaol distemper by the general absence of eruption and of head symptoms.

Dr. Webb stated his opinion of the nature of the true gaol distemper. It was typhus fever in its most characteristic form, identical with hospital and ship fever, and the pestilential fever of Sydenham. When suddenly fatal, which it frequently was, it corresponded with the *typhus siderans* of authors. Great light has been thrown by the subject on the etiology of typhus fever; it has entirely disappeared as a gaol disorder.

The author concluded his paper by a few remarks on the encouragement afforded by such a retrospect to philanthropists and promoters of sanitary reform.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, South Kensington, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, July 1857.

TWENTY-FIFTH ANNUAL MEETING OF THE British Medical Association.

Held at Nottingham, 28th, 29th, and 30th July, 1857.

TUESDAY.

The members of the British Medical Association met in the Assembly Room, Low Pavement, Nottingham, at 8 P.M., on Tuesday, July 28th. Nearly one hundred members were present. The following entered their names in the book provided for that purpose:—

Baker, J. W., Esq., Derby
Boisragon, Theodore, M.D., Birmingham
Brace, W. H., Esq., Bath
Brown, E. A., Esq., Eastwood
Brown, B. W., Esq., Wymeswold
Budd, William, M.D., Bristol
Cooper, Sir Henry, M.D., Hull
Crang, James, Esq., Timsbury
Daniell, A. H., Esq., Kegworth
Daniell, Edward, Esq., Newport Pagnell
Darby, Augustus, Esq., Nottingham
Eddison, Booth, Esq., Nottingham (*President*)
Eddowes, J. H., M.D., Loughborough
Flint, Richard, Esq., Stockport
Flower, Farnham, Esq., Chilcompton
Forbes, Sir John, M.D., London
Garlick, J. P., Esq., Leeds
Goode, Henry, M.B., Derby
Hare, Samuel, Esq., London
Harwood, J., Esq., Eckington
Hastings, Sir Charles, M.D., Worcester
Hatton, John, Esq., Manchester
Henry, Alexander, M.D., London
Heygate, James, M.D., Derby
Higginbottom, M. H., Esq., Nottingham
Hitchman, John, M.D., Derby
Hollis, William, Esq., Alvaston
Hornby, George, Esq., York
Hornby, Thomas, Esq., Pocklington
Husband, W. D., Esq., York
Hutchinson, R. S., M.D., Nottingham
Joberns, William A., Esq., Nottingham
Johnstone, James, M.D., Birmingham
Jones, Ellis, Esq., Liverpool
Kemp, C. G., Esq., Leicester
Lankester, Edwin, M.D., London
Lankester, Henry, Esq., Leicester
Lees, S. D., M.D., Ashton-under-Lyne
Lyon, Edmund, M.D., Manchester
Macintyre, Peter, M.D., Liverpool
Martin, Peter, Esq., Reigate
May, George, jun., Esq., Reading
Newnham, William, Esq., Tunbridge Wells
Norman, George, Esq., Bath
Norman, G. B., Esq., Ilkeston
Nunneley, Thomas, Esq., Leeds
Paget, Thomas, Esq., Leicester
Popham, B. F., M.D., Nottingham
Porter, W. G., Esq., Peterborough
Roberts, Owen, M.D., St. Asaph
Robertson, W. Tindal, M.D., Nottingham
Seaton, Joseph, M.D., Sunbury
Shipman, Robert, Esq., Grantham
Sibson, Francis, M.D., London
Sloane, John, M.D., Leicester
Smith, Edward, M.D., London
Smyth, Luke D., M.D., Bingham
Soden, John S., Esq., Bath
Solomon, J. V., Esq., Birmingham
Southam, George, Esq., Manchester
Stanger, G. E., Esq., Nottingham
Stedman, James, Esq., Guildford
Stewart, A. P., M.D., London
Stiff, W. P., M.D., Nottingham
Stookes, Alexander, M.D., Liverpool
Street, William, Esq., Reigate
Taylor, Henry, Esq., Nottingham
Terry, Henry, jun., Esq., Northampton
Thompson, Henry, Esq., London
Thompson, J. N., Esq., Nottingham
Thompson, Joseph, Esq., Nottingham
Thorpe, G. B., Esq., Staveley
Tidmas, William, Esq., Nottingham
Tuke, Harrington, M.D., Chiswick
Turner, George, M.D., Stockport
Vose, James, M.D., Liverpool
Waters, A. T. H., Esq., Liverpool
Westall, Edward, Esq., Croydon
White, Joseph, Esq., Nottingham
Williams, Edward, M.D., Wrexham
Williams, Philip H., M.D., Worcester
Williams, T. Watkin, Esq., Birmingham
Woollam, George, M.D., Ashton-under-Lyne
Wright, Thomas, M.D., Nottingham
Wynter, Andrew, M.D., London

Dr. James Johnstone (Birmingham), the retiring President, having taken the chair, said his term of office as President had nearly expired, and little remained for him to do but to give way to his successor. He could not, however, quit the position he had had the honour to hold, without referring to some events which had occurred during the past year. The Association had been remarkable for the cordiality which appeared to have existed among all its members and throughout its various Branches. There was one matter which he thought must have occasioned disappointment to many of their friends. At the last meeting there appeared to be the prospect of a satisfactory termination of the struggle which had so long been going on for medical reform. He had hoped that the present session of Parliament would have terminated the question; and, as there appeared to be so much more agreement between the large medical bodies than had previously existed, that an arrangement would have been made satisfactory to them and to the medical profession generally. In that expectation, however, they had been disappointed. But, certain principles having been agreed upon by the most influential bodies of the medical profession, they could only hope that better fortune would attend the movement in future, and that when the Association met next year, they would see their long cherished hopes realised. [*Hear.*] He returned very sincere thanks for the courtesy and kindness he had received. He had much pleasure in introducing his successor in the office of president.

PRESIDENT'S ADDRESS.

Mr. Booth Eddison, having taken the chair as President, commenced his address by offering his congratulations on the holding of the present meeting in Nottingham. This was an object they had long sought to accomplish; and he only hoped the Association would not be disappointed with their visit. He would at once proceed to direct their attention to the objects which he thought worthy of attention. First, he would mention the General Hospital, which had arrived by degrees at considerable distinction, and was regarded as one of the best conducted institutions of the kind in the kingdom. He should have been glad to speak as highly of their Lunatic Asylum; but it was built at a time when it was conceived, by the public as well as by the profession, that the insane ought to be imprisoned, when acts of Parliament gave the magistrates power to send such persons to asylums in order to be chained up. They could not, therefore, be surprised to find the institution at Nottingham arranged in a manner quite unfit for the purposes of an asylum. Taking these facts into consideration, however, he thought it was at present remarkably well conducted. It was much to be regretted that the governors of the Asylum should not have thought fit to remove it to a more eligible locality. It was too near the town, and altogether unfitted for the objects aimed at. Up to a recent period, Nottingham had suffered greatly from not having space sufficient to accommodate the manufactures and other wants of the town. These wants became so very pressing, that about twelve years ago an Act of Parliament was obtained for inclosing the commonable lands surrounding the old hide-bound town; and Nottingham, which then covered only two hundred and fifty acres, is now being spread over nearly one thousand six hundred acres. The great portion of land which was thus inclosed had enabled the town to extend in a manner which was not at all anticipated, even by the warmest advocates of the measure. The President

then referred to the Arboretum, the extensive cemeteries, the places of recreation for the people, the cricket ground, the baths and washhouses, and the extensive walks; all affording ample opportunity for the people to walk out and enjoy themselves whenever their occupations would permit. Having mentioned the Midland Institution for the Blind, he observed that the town enjoyed the advantage of an abundant supply of excellent water. He thought there was scarcely a town in the kingdom that had not benefited by following the example of their able engineer, Mr. Hawksley, who about twenty-five years ago had the water conveyed from the Trent through a filter of gravel to a reservoir in a high position; by means of which they had an uninterrupted and abundant supply of water of first rate quality, available in case of fire as well as for the immediate wants of the community. There were likewise the gas-works, manufactories, and other objects of interest, which however he need not specify, as they were mentioned on the cards which were in the hands of the members. There were many subjects upon which he might discourse, but having been an invalid, he must be allowed to be very brief. As regarded medical reform, he fully concurred with and could confirm what Dr. Johnstone had said. On the subject of Poor-law medical arrangements, he could only refer to the system which was pursued at the Nottingham Union, which he really thought, when properly carried out, a model of what such institutions should be in large towns. The poor were attended by medical men, who were appointed solely for that service, and were excluded from private practice. The drugs were supplied at the expense of the Union, by their own dispenser, and on their own premises. The salaries were fixed—he would admit at too low a figure; but thus that competition was prevented, which was so detrimental to the interests both of the poor and of the medical profession. Referring to the sanitary arrangements of the town, he said the members would observe that, after the rains which had occurred prior to their arrival, the streets had been well washed. Nature had done much topographically for Nottingham; and were it not for the obstructions which had from time to time arisen in the natural sewerage, the town might be a model of sanitary perfection. But unfortunately man had himself to serve, and was not always wise enough to see that in serving the public he was promoting his own good. He believed they would approve of the excellent sanitary arrangements which prevailed in the town. They had been carried out on the persuasive instead of the compulsory system. He might refer to various individuals who had been born in the locality; but nothing appeared to be more prominent than disappointment at not having the company of his friend, Dr. Marshall Hall. He regretted very sincerely the cause of Dr. Hall's absence; as he understood from his relatives residing in Nottingham that there was much reason to fear that his end was approaching. He was labouring, in fact, under such serious disease, that little or no hope was entertained of his recovery. If it were consistent with the views of the meeting, he thought it would be congenial to the feelings of Dr. Hall, if some sentiment or resolution expressing condolence with him, were adopted. He did not know any individual to whom as a practical man the profession was more indebted than to Dr. Marshall Hall. His enlarged and independent views, especially in reference to the nervous system, would be a perpetual memorial of his ingenuity. [*Cheers.*] He would now call upon the Secretary to read the report.

REPORT OF COUNCIL.

The Secretary read the following Report:—

"Your Council have much pleasure in meeting their professional brethren in Nottingham, to celebrate the Twenty-fifth Anniversary of the British Medical Association.

"During the past year, the management of the Society has been harmoniously conducted on the principles that were adopted at the last annual meeting.

"The Committee of Council have met in Birmingham at regular intervals of three months, and have published in the British Medical Journal all resolutions and information likely to be interesting to the members.

"Your Council feel that the cordial thanks of the Society are due to the Committee for the efficient services they have rendered, under the able Presidency of Sir Charles Hastings.

"Intimation has been given by the Secretary that an addition to Law 8 will be proposed, for the purpose of making the President of the Association an *ex-officio* member of the Committee of Council.

"During the present year, 150 new members have been added to the list: 150 members have resigned, and 60 have been erased on account of non-payment of arrears and for other causes. Last year there were 2125 members; the total number of members at the present date is therefore 2065.

"*District Branches.* Since the last meeting, two new Branches have been established; viz., the South Midland (or Bedford and Northampton), and the East York and North Lincoln Branch. The laws of each have been submitted to the Committee of Council, and approved. It is a subject for regret that the number of new Branches is so small, and, especially, that a Branch has not yet been organised in Scotland: but there are still good reasons for hoping that an extension of the Society will ere long be effected in the north. The working of the District Branches generally has been most efficiently carried on by the exertions of the Honorary Secretaries.

"*British Medical Journal: Finances.* The able and courteous management of the Journal by Dr. Wynter has afforded special satisfaction to your Council. The funds have not yet allowed of any permanent increase in its size. The Council would again urge upon the attention of members who are connected with hospitals, the great service they might render by a regular supply of reports of cases and operations.

"The following is a statement of the sums received and paid on account of the debt due December 31st, 1855:

Debt.	£.	s.	d.
Due to Treasurer	692	11	8
Paid to Richards (Printer); to Deighton; and Commission	623	17	11
	1316	9	7

Receipts by Treasurer.	£.	s.	d.
For arrears due December 31st, 1855	195	12	6
Produce of Call Fund	492	0	9
Advertisements	625	4	3
	1312	17	6
Thus leaving a balance due to Treasurer	£3	12	1

"Receipts by the Treasurer from the 1st of January, 1856, to the 31st of December in the same year; also, payments by the Treasurer for claims arising during the year 1856; and the liabilities of the Association on the 31st of December last.

"The amount received by the Treasurer for subscriptions due in 1856, is £1565:1:6.

"The payments are as follows:—	£.	s.	d.
To Richards (Printer)	1292	18	0
Salaries.—Dr. Wynter £250			
„ Dr. Williams 155			
„ Dr. Henry 85	502	0	0
„ Clerk 12			
Reform Committee	50	0	0
Davidson (for Commission)	96	0	0
Petty expenses (of Dr. Williams and Mr. Richards)	56	9	11
Sending Circulars for Special Meeting	12	0	0
Reporters, Auditors, Stamped Envelopes, Branch Expenses, and Sundries	31	5	2
	2040	13	1
Receipts	1565	1	6
Due to Treasurer	475	11	7

"The other liabilities (December 31st, 1856) are:—

Richards (Publishing)	66	16	0
Richards (Printing)	416	19	6
Dr. Thudichum	8	5	2
Petty Cash	35	19	2
	527	19	10
Due to Treasurer	475	11	7
Total owing by the Association at the commencement of 1857	1003	11	5

"To meet these liabilities, there are the arrears of subscriptions due on December 31st, 1856, and the amount due for advertisements. They may be stated as follows:—

Subscriptions, about	650	0	0
Advertisements, about	350	0	0
Total Assets	1000	0	0

"The Association, therefore, at the end of the year 1856, may be considered to be clear of debt, and to have the income for 1857 to meet the expenditure.

"The following is a summary of the entire receipts and payments for the year 1856.

Income.	£.	s.	d.
Subscriptions for 1856	1565	1	6
Previous arrears	195	12	6
Call Fund of 10*s.*	492	0	9
Advertisements	625	4	3
	2877	19	0

Expenditure.	£.	s.	d.
Old debt	1312	17	6
Payments in 1856	2040	13	1
	3353	10	7
	2877	19	0
	475	11	7

"Thus it will be seen that the debt due on the 31st December 1855, has been reduced from £1312 : 17 : 6 to £475 : 11 : 7, which is the actual deficiency on the 31st December 1856.

Receipts from January 1st to June 30th, 1857.

Subscriptions	1086	2	9
Arrears and Calls.....	146	12	6
Advertisements	383	12	0
	1618	7	3

Expenditure from January 1st to June 30th, 1857.

Richards (Printer)	835	5	0
Richards, Sundries	50	0	0
Salaries	227	10	0
Davidson, Commission	51	9	1
Smith, Wood Engravings	10	8	0
Medical Reform Committee, Petty Cash, Post-Office Orders	74	6	9½
	1248	18	10½

"It is felt by the Council that the state of the finances, as above exhibited, will be highly satisfactory to the members of the Association.

"*Medical Reform.* The uncertainty that still surrounds this very important subject is productive of much disappointment to those who have taken an active part in its promotion. Two Bills have been brought forward—one by Mr. Headlam, which has been supported by many of the corporations, and (with the introduction of amendments) by the Association; it also had extensive support from members of the profession generally. The other Bill, by Lord Elcho, very nearly resembled the Bill recommended by the Select Committee of the House of Commons last year, which received the support of a minority of the members of the profession. Both these Bills contained much that would prove beneficial to the profession, while neither embodied all those great principles for which the Association has so long contended; and as both have been withdrawn, it is earnestly hoped, now the question has gained a standing in the House of Commons, that before another Session a Bill may be framed which shall be in accordance with the reasonable desires of our Association, and receive such an amount of support as will induce the Government to take it up, when it would without difficulty become a part of the law of the land. A full report of the proceedings of the Reform Committee will be presented to the meeting to-morrow morning.

"*Poor Laws.* Notwithstanding the unceasing and laudable energy with which Mr. Griffin and others have laboured on behalf of those who are engaged in union practice, it is to be lamented that no decided improvements have yet been made; but it is to be hoped that such a general combination of the members of the profession will be secured as may lead to a more satisfactory settlement of the whole question.

"*Benevolent Fund.* This charitable institution has continued to supply the needy with most valuable help under the superintendence of its benevolent Vice-President, Mr. Newnham, and the Committee. A report of its operations will be presented.

"*Army Medical Reform.* The Council view with approval and gratification the fact, that a commission is now sitting for the purpose of considering what measures can be adopted for improving the organisation of the Medical Department of the Army; and that the attention of the Colleges of Physicians and Surgeons, and the members of the profession generally, is being directed to the same object. The members of the Association shewed their sympathy towards their brethren in the public services, by considering their claims to honorary distinction at the annual meeting held in Hull in 1850. The Metropolitan Counties Branch and the Yorkshire Branch have considered the subject, and have advocated the necessity for a general reform in the medical department of the army, since the close of the Crimean war, and have sent memorials to the Government. The Council trust that steps will be taken for the improvement of the medical department in the navy also; and they recommend that, in furtherance of this result, a memorial be presented to the Government by the members of the Association who may attend this meeting.

"*Address in Medicine.* The Address in Medicine will be delivered by Dr. Tindal Robertson.

"*Address in Surgery.* The Address in Surgery will be delivered by Mr. George Southam.

"*Address in Physiology.* The Address in Physiology will be delivered by Dr. Edwin Lankester.

"*Dr. Horner.* The Council regret that Dr. Fewster Robert Horner, of Hull, one of the Vice-Presidents of the Association, has not yet fulfilled his expressed intention of resigning his position in relation to the Association, in consequence of his change of views with regard to the practice of his profession; and they recommend that steps be taken to secure his withdrawal from a position to which they feel he has now no claim.

"*The late Joseph Wickenden, Esq.* It is with deep regret that the Council announce the sudden death of Mr. Wickenden, of Birmingham, who was one of the earliest and most constant friends of the Association; and who, as a member of the Committee of Council, aided in drawing up the present annual report.

"*Conclusion.* In conclusion, the Council would express their gratification that they are enabled to report the maintenance of the number of their ranks, whilst they cannot but regret that it has not been augmented. The Financial Report, however, displays most satisfactorily the vitality of the Association, shewing, as it does, that the large deficiency which at one time existed is in progress of rapid extinction.

"It is to be desired that personal exertions were systematically made by members generally, so that each might seek to introduce at least one additional friend to the Association. The present system of machinery is equal to very extensive operation, and it is earnestly hoped that the benefits of the Association will become universally appreciated.

"Philip H. Williams, M.D. *Secretary.*"

Sir John Forbes (London) moved—

"That the Report now read be received and adopted."

Now that he had ceased being a member of the Council, he could very properly move the adoption of their Report. He thought it a most excellent one; and that it showed the Association to be in a very prosperous and wholesome state. The funds were in a healthy condition, and there seemed every probability that the debt, which had so long weighed against them, would be extinguished.

Mr. Newnham (Tunbridge Wells) seconded the motion.

Mr. Husband (York) thought that the motion should only go to the receiving of the Report. It could then be discussed paragraph by paragraph, and then adopted.

Sir Charles Hastings said, that as it was the Report of the Council, the meeting had no alternative but to accept or refuse it.

Dr. Hutchinson (Nottingham) liked the Report very well so far as it went, but he did not approve of the manner in which it alluded to one of the grossest violations of professional conduct he had ever seen. Considering the high position which Dr. Horner had obtained in this Association, such a proceeding ought not to be merely glanced at. He thought steps ought to be taken immediately to expel the offending member from the Association. Having gone into the ranks of the homœopathic quacks, he had violated the rules of the Association; and he thought that there was no gentleman in the meeting that would meet Dr. Horner.

The President said he would call upon the Secretary to

explain the circumstances on which the conclusion of the Council was based.

Dr. Williams (General Secretary) said he had read Dr. Horner's pamphlet, in which he stated explicitly that the line of conduct he had adopted would necessarily involve his resignation, not merely of the office of Vice-President to this Association, but of his membership. This being stated so definitely, the Council thought they would be saved the unpleasant necessity of taking the more compulsory step.

The President: In further justification of the steps taken in reference to Dr. Horner's delinquency, I must remind you that, to take the extreme course suggested, a special meeting would have to be called. It would not only be very inconvenient to attend such a meeting, but it would be very disagreeable to be called together for such a purpose.

Sir Charles Hastings said that Dr. Horner could not be expelled at this meeting, as two months notice was required by the laws.

The Secretary: I received Dr. Horner's pamphlet just four days too late to enable me to give the notice in time for this meeting.

Dr. Budd (Bristol) thought the Association could at once remove Dr. Horner's name from the list of Vice-Presidents. If others felt that it would be personally unpleasant or invidious to move in such a matter, he should have the greatest pleasure in proposing, at the earliest opportunity, that Dr. Horner's name be erased from the list of Vice-Presidents.

Mr. Nunneley (Leeds) said that Dr. Horner was still advertising himself in his pamphlets as one of the permanent Vice-Presidents of the Association.

Mr. Husband (York) moved, as an amendment—

"That the Report be received, and entered upon the minutes of the Association."

Dr. Macintyre (Liverpool) seconded the amendment.

The mover and seconder of the original motion having agreed to adopt the amendment, it was put and carried unanimously.

THE CASE OF DR. F. R. HORNER.

Dr. Budd (Bristol) moved—

"That the name of Dr. Horner, of Hull, be erased from the list of Vice-Presidents of this Association."

Of all forms of quackery, none was so insidious, so miserable, and wretched as that form of it called homœopathy.

Dr. Hutchinson seconded the motion, which was carried unanimously.

ARMY AND NAVY MEDICAL REFORM.

Mr. Nunneley (Leeds) said that this meeting ought not to separate without expressing a very strong opinion that there ought to be some modifications introduced into the medical department of the Army and Navy. It was obvious, from what had occurred during the Crimean campaign, that if the medical officers of the service had occupied a proper position, a vast amount of the privations and calamities to which our gallant fellows were exposed would have been avoided. It ought to be distinctly stated to the government that scientific men of the medical profession were placed in a position so degrading, that scarcely any man of spirit would enter the service. At present they occupied an inferior social position to the fighting men; and it was the duty of the Association to urge upon the authorities the justice and expediency of placing their brethren on a full equality with the other officers in both branches of the service. There were some glaring instances in which commanding officers had set at nought the opinions of the surgeons of the army, and great suffering to the poor soldiers and expense to the nation had been the consequence. He hoped that a resolution would be passed, calling the attention of the Minister of War to the position of the medical men in both branches of the service. He would suggest that two or three gentlemen be appointed to draw up a memorial to be submitted to the meeting on Wednesday.

Sir Charles Hastings alluded to the fact that a commission was now sitting for the express purpose of taking into consideration the very important subject just introduced by Mr. Nunneley. That commission being composed of good men and true, thoroughly up in the subject, he looked forward to their report as being likely to put the matter on a very different footing to what it had been before. All that could be done on the present occasion would be to adopt a memorial, embodying the recommendation of the Council.

After some further discussion, in which Mr. Husband, Dr. Budd, and Mr. Nunneley took part,

Mr. Soden (Bath) said he had great confidence that much good would result from the appointment of the commission. It was composed of very able and scientific men unconnected with the service, who would doubtless suggest many highly useful and practical measures. They had already suggested there should be an officer of health, a sort of field inspector, whose duty it would be to take into consideration the sanitary state of localities that were intended for the quartering of troops. After forty years of peace they could hardly expect that any department would be found in the same state as at the close of a long war. He felt great personal interest in this question, from the fact that half a century ago he served in the army, and accompanied the expedition to Egypt as assistant surgeon. [*Hear, hear.*] He spent two or three very happy years of his life in the army, and he had very often regretted since that he had changed his duties to enter on private practice. He would take this opportunity of correcting an error which appeared in the report of one of his former addresses, in which he was represented as stating he had served under Sir Charles Napier. He had never had that honour. Sir Charles Napier was a very great friend of his, and he had merely known him in private practice. He bore tribute to the skill and humanity of his brethren in the performance of their arduous duties, especially during the late war; and though he thought great improvements were necessary, he did not agree with Mr. Nunneley in representing that medical men in the army were destitute of social respectability. That was not so. It was the fault of the medical man himself if he did not associate on equal terms with the other officers of his own rank, and was not treated in every way as a gentleman. Great improvements were necessary, both as to the pay of those in actual service, and as to making a proper provision for their retirement, so as to retain them in the army until they were incapacitated for practice. While a lieutenant or ensign in entering the army received a good interest for the purchase of his commission, the medical man on going into the army, in order to acquire the necessary qualification, must undergo considerable expense; and that circumstance ought to be taken into consideration when determining the amount of his pay.

Mr. Nunneley moved, Dr. Macintyre seconded, and it was resolved—

"That a committee be appointed to draw up such a resolution or memorial as they may think proper to carry out the recommendation of the Council on the subject of Army and Navy Medical Reform; and that such committee consist of Mr. Flint, Mr. Soden, Dr. Budd, Dr. Wynter, Mr. Tidmas, and Mr. Nunneley."

VOTE OF THANKS TO THE LATE PRESIDENT.

Dr. Heygate (Derby) said it gave him peculiar pleasure, remembering, as he did, the splendid manner in which the Association was received last year at Birmingham, to move—

"That the cordial thanks of this meeting be given to Dr. Johnstone, the retiring President; and that he be appointed a Vice-President of the Association."

Mr. Soden seconded the resolution; remarking that when he commenced his career, Dr. Johnstone's father was at the head of his profession, and no one was ever more highly respected.

Sir Charles Hastings said that to the family of Dr. Johnstone the gratitude of the Association was most justly due. At the time when this Association was founded at Worcester, the originators of it looked round to find some gentleman who was qualified to give impetus to its formation. The venerable Dr. Johnstone then resided at Birmingham; and such was the respect in which he was held, that the members deviated from what was to be regarded as the regular course, and requested him to come to Worcester to preside at their meeting. He was kind enough to come forward; and he acquitted himself with that zeal, energy, and generous kindness of disposition which were his characteristics. He (Sir Charles) maintained that the early progress of this Association was mainly due to the fact of that estimable gentleman having taken the chair on that interesting occasion. [*Applause.*] The debt due from the Association to that family did not end there. After the third year, at the end of which the Association visited Birmingham, who then presided at their meeting? It was the uncle of the gentleman who had this year retired from the presidency; and at that time they were chiefly indebted to him for the increased impetus which he gave to the Association, which was then placed on an eminence from which it had never since fallen. And, last year, the way in which Dr. James Johnstone presided over them was such as to increase the

esteem in which that family would ever be held by all those who had the happiness of being acquainted with the services they had rendered. On this occasion he came before them rich in the esteem of every member of the Association, and he did say that their thanks were most justly due to him. He trusted that he might long live to enjoy the esteem in which he was held by them. [*Cheers.*]

Dr. Lyon (Manchester) regretted that they should confer upon Dr. Johnstone a dignity that was not worth anything. It was little better than an insult to confer the office of Vice-President, unaccompanied with any single privilege.

The motion was carried by acclamation.

Dr. Johnstone said he felt very deeply the great kindness which his family had received from the members of the Association. He felt under considerable obligations to them collectively, as well as individually, for the honour they had conferred upon him two years ago in appointing him President, and for that which they had now done him in adding his name to the list of Vice Presidents. There was one sentiment which had been uttered, with which he could not quite agree. He could not think with Dr. Lyon that the office of Vice-President of the Association was less honourable now, than it had been at any other period since it had been established. He was inclined to think that when such an office was to be held for life, it had better be purely honorary; as the time would arrive, in the course of nature, when a man felt he could no longer discharge the duties of an arduous office. Therefore it was better that such an honorary office should not involve the performance of active duties. He should always esteem it a honour to be appointed to any office of consideration and dignity by men of his own profession. He therefore most cordially thanked them for the additional kindness they had rendered to him in appointing him one of the permanent Vice-Presidents of this Association. [*Cheers.*]

APPOINTMENT OF AUDITORS.

It was moved by Mr. Watkin Williams (Birmingham), seconded by Dr. Johnstone (Birmingham), and carried—

"That Dr. Melson and Mr. Hadley (of Birmingham) be requested to audit the accounts of the Association for the present year."

A vote of thanks to the late auditors (Messrs. W. Williams and Bartleet) was agreed to on the proposition of Mr. Stanger (Nottingham), seconded by Mr. Flint (Stockport).

VOTE OF THANKS TO THE COUNCIL.

Mr. Waters (Liverpool) proposed, Dr. Wynter (London) seconded, and it was resolved—

"That the thanks of this meeting be given to the Councils of the Association for their valuable services during the past year."

ELECTION OF SECRETARY.

Sir Charles Hastings said it had fallen to his lot to observe the manner in which their late Secretary, Dr. Williams, had performed the duties of his office. He felt much indebted to him for the very arduous manner in which he had laboured to forward the interests of the Association. His own opinion was they could not do better than re-elect Dr. Williams. He felt perfectly confident that, if chosen again, he would not only continue to do as he had done to advance the welfare of their Society, but would even do more if possible. He had great pleasure in proposing—

"That Dr. Williams be re-elected Secretary to the Association."

Dr. Robertson (Nottingham) seconded the motion, which was carried.

ALTERATION IN LAW 8.

The Secretary (Dr. Williams) proposed, in pursuance of notice given—

"That the President of the Association for the year be *ex officio* a member of the Committee of Council."

Mr. Soden (Bath) seconded the motion, which was carried unanimously.

[Members are recommended to insert with the pen the words "the President for the year", after "together with" in section 3 of the duties of the Council, as given in Law 8 of the code published in the Journal of August 9, 1856, p. 687.]

WEDNESDAY.

The members reassembled at 11 o'clock.

REPORT OF THE MEDICAL REFORM COMMITTEE.

Dr. Henry (London) one of the Secretaries to the Committee, read the following Report:—

"In presenting their annual Report, your Committee desire to briefly recal the attention of the Association to the circumstances under which they were re-appointed at the last annual meeting.

"It will be remembered that, in their last Report, your Committee stated that a Bill framed by them had been introduced into the House of Commons by Mr. Headlam; that this Bill, though opposed in some degree by the medical corporations, had received the support of the great bulk of the medical profession; that it had been referred to a Select Committee of the House of Commons, and had been reported to the House in a greatly altered form; that, notwithstanding the alterations, your Committee advised the general support of the Bill, because it recognised the principles of uniformity of qualification, reciprocity of practice, and registration; and that, in concluding their report, your Committee desired to be reappointed, 'in order to bring to bear those new and augmented powers which the Association has acquired in being constituted on a strictly representative principle, so as again with renewed vigour to press on the government and the legislature the essential importance, both to the profession and the public, that some such measure as the one recently introduced into Parliament, or some other measure embodying the principles advocated by the Association, should become law during the next session.'

"The first step in medical reform, since the last annual meeting of the Association, was taken by the medical corporations of the United Kingdom, who, towards the end of last year, conferences of their several representatives having been held, agreed on the heads of a Bill embodying many of the principles contained in the measure formerly brought forward by this Association and Mr. Headlam. Your Committee took an early opportunity of consulting together as to the course they should adopt; and it appeared advisable to them to seek an interview with the framers of the Bill, in order to procure the amendment of some objectionable details, and, if such amendments were conceded, to co-operate with the corporate bodies. In taking this step your Committee were mindful of the objection which had been frequently stated by members of Her Majesty's government when urged to take up the question of medical reform—'that it was a subject on which the profession had not agreed.' They considered that they would best promote the cause of medical reform, and induce government to support a Bill, if by making concessions, without compromising their principles, they could act in concert with the medical corporations in preparing a measure which should bear a stronger impress of unanimity than had hitherto been possible.

"Your Committee therefore sought and obtained an interview with the Conference Committee of the English Medical Corporations; the result of which and of subsequent deliberations was, that the Conference Committee agreed to the proposal made by your Committee, that a certain proportion of the members of the proposed Medical Council should be nominated by Government, from among registered members of the profession not officially connected with the corporations.

"On the assembling of Parliament in February, leave was obtained by Mr. Headlam, who had taken charge of the Bill, to bring it in. In consequence, however, of the dissolution of Parliament, it then proceeded no further. On the meeting of the new Parliament, it was introduced by Mr. Headlam; and at the same time, the Bill which the Select Committee of the House of Commons had brought in last year, the main distinctive features of which were to place the nomination of the council entirely in the power of the Crown, and to perpetuate a grade of practitioners other than physicians and surgeons, was brought in by Lord Elcho. Your Committee determined to give their support to Mr. Headlam's Bill, both on account of their being in a measure pledged to it, and also because they considered it the preferable measure of the two. They therefore carefully examined the Bill, and suggested such alterations as seemed necessary to adapt it better to the wants and expectations of the profession. At the same time, your Committee issued an address to the members of the Association, in which those alterations were stated, and which was published in the Journal, calling on them to support Mr. Headlam's

Bill. They have good reason to believe that it is mainly to the aid given by this Association in the form of petitions, etc., that was due the large majority of 147, by which the second reading of the Bill was carried. And, although the further progress of medical reform has been deferred for the present, they see encouragement to persevere, in the spirit of concession manifested by the corporate bodies, in the general support given by the profession to Mr. Headlam's Bill, and in the evident favour with which the Bill is regarded by a majority of the House of Commons.

"Your Committee believe that the influence of the Association will continue to be felt as powerfully as ever; and, should they be reappointed for the ensuing year, they will use every effort to bring about a settlement of the question of medical reform in consonance with the opinions of this Association, on a basis as equitable and lasting as possible.

(Signed) "Charles Hastings, *Chairman.*
"John Forbes.
"Edwin Lankester.
"James Stedman.
"George Norman.
"Alexander Henry."

Mr. Flint (Stockport) said he had a resolution to propose to which he thought every member of the Association could give his assent. Although there might be a difference of opinion on the question which they were about to discuss, he thought the Reform Committee were entitled to gratitude for their persevering services in the cause of medical reform. The difficulties and discouragements which beset them had been of no ordinary character—almost insurmountable, in fact; but the perseverance and courage of the Committee had kept pace with those circumstances. The Association could not expect that any measure of human contriving could be entirely perfect; but, he said, let them accept what they could get, and be content to wait until they could get more. If the Association had adopted this course in its past dealings, they would have been now in a better position than that which they occupied as a body. Without challenging any discussion upon particular parts of Mr. Headlam's Bill, he ventured to hope the members of the Association would give their most cordial and grateful thanks to the Medical Reform Committee for the labours they had gone through, and for obtaining that which, in his mind—and he had had a pretty large experience of the medical profession of this country—would be of the first importance to the respectability and proper working of the medical profession. He had therefore great pleasure in moving—

"That the proceedings of the Reform Committee be approved; that the Report now presented by them be adopted; and that they be requested to continue their services for the ensuing year."

Dr. Stewart (London), in seconding the motion, said that, since this question was first agitated, there had been no year so pregnant with important results to medical reform as the past twelve months. Within a few days of the meeting last year at Birmingham, it was learned that the medical corporations would probably come to some understanding on the subject. As they knew too well, great obstacles had been thrown in the way by those bodies. He was not one of those, however, who felt inclined to indulge in indiscriminate abuse of the medical corporations. They had their faults, like all other human institutions; but, in the main, he believed, they had rendered great service to the profession. He thought it of the utmost importance, if possible, to carry them along with us. Instead of having to fight against them, it was thought better to make a compromise, so as to unite them to our interest. It was this which had brought the subject so forward during the year. He thought it was conceded that the principle—first propounded, he believed, by their much esteemed member, Sir John Forbes—upon which they should go, was that of being a little in keeping with the present institutions, instead of starting entirely on a new platform. It was agreed by all that Mr. Headlam's Bill was not so perfect a measure as could have been wished; but he thought they must be content with what they could get; and he felt sure, if they rejected the Bill in its present shape, they would have to postpone the subject of medical reform for the next ten years. [*Hear, hear.*] He thought it would be wisdom to give their utmost efforts to strengthen the hands of Mr. Headlam, and of those who acted with him in the House of Commons. He was of opinion last year, and he was still more confirmed in the opinion, that, by all means in their power, they ought to oppose the measure of Lord Elcho. He had had conversations with distinguished members of the House of Commons; and he found there was a very strong feeling in their minds in favour of his Bill, especially among official men, who had very little regard to our profession, and only looked to it as a means of aggrandising themselves by the patronage it would place in their hands. He (Dr. Stewart) was very decidedly opposed to putting the nomination of the Council into the hands of the Government. [*Applause.*] At the same time, he thought it of the utmost importance that a certain proportion of the Council should be appointed by Government, in order to secure a proper recognition of the profession by the public. Although he had urged some objections to its details, he was inclined to accept Mr. Headlam's Bill as one of the most satisfactory they could obtain. But he did think that, in a measure emanating from the great medical corporations of the country, and from this Association, there ought not to be a clause inserted giving not only a tacit, but an express encouragement, to the systems of quackery which so extensively prevailed in this country. [*Hear, hear.*] This clause was not introduced into the first draft of the Bill, as agreed to by the medical corporations, but had been inserted since it went out of their hands. The clause was as follows:—"Provided always that the name of no person shall be erased from the register on the ground of his adoption of any theory in medicine or surgery." The most outrageous forms of quackery might be called a theory in medicine or surgery.

Dr. Budd (Bristol) was one amongst the many who felt very much dissatisfied with the course taken by the Association within the last two years. It would probably be in the remembrance of many of them that, when the last Annual Report was read at Birmingham, the purport of it was that the Reform Committee of this Association supported the amended Bill as it came from the Select Committee of the House of Commons. In fact, the Medical Reform Committee not only committed the Association to the support of that Bill, but actually memorialised the Minister for the Home Department; and, not content with this, they went so far as to memorialise the then President of the Board of Health, who was to have been President of the Council into whose hands the government of the profession was to be committed. He at that time felt, in common with many others, that to submit the destinies of a profession like this to the government of the country, or to the minister of the day, would be one of the most suicidal steps which the medical profession could adopt. He ventured, in concert with his friend Mr. Michael of Swansea, to draw up a resolution expressive of that sentiment; and he well remembered that the President of the Council, Sir Charles Hastings, opposed their resolution with all his might. He (Sir Charles) carried the meeting with him; and Dr. Budd's motion was defeated by a large majority. Well, what happened? Why, in the course of events, another session of Parliament came. This selfsame Bill, the Bill to which the Committee pledged the Association at the last meeting, and to which they now stood committed (for this annual meeting had not rescinded that vote)—this selfsame Bill was again brought into Parliament; and their excellent editor, with a degree of insubordination that was frightful to contemplate, wrote leaders week after week, denouncing in the most vehement terms (almost equal in vehemence to those used last year by their President in its support), and with a refinement of cruelty probably without parallel, destroying all the arguments of his chief with the weapons drawn from the armoury of his opponents. Now, what a position was this for the Association to be placed in! How could they expect to exert any influence in the settlement of this great question, if they were to vacillate like this—taking up a measure and advocating it in the strongest possible way at one annual meeting, and denouncing it in the strongest manner possible in the interval between that meeting and the next? What a handle it gave to their opponents! He held in his hand a document which illustrated this in a very striking way. [Dr. Budd read several passages from a leading article printed in the *Morning Post* of July 1st, 1857.] Such a course, he again insisted, was fatal to the influence of the Association in the settlement of the great question of medical reform. He now came to Mr. Headlam's Bill. Last year he thought the Committee misled the Association in committing the whole destinies of the profession to the Government of the country. This year he thought they were placed in a false position by advocating in an unflinching manner a Bill which, although it embodied many excellent and great principles which must form part in any satisfactory settlement of the question of medical reform, yet was so surcharged with corporation interests as to render it impossible of acceptance by any liberal

ministers of this country. He would say a word first as to the constitution of the Council as proposed in Mr. Headlam's Bill. Two principles were embodied, of paramount importance. One was, that it maintained the government of the profession in the hands of the profession itself [*hear, hear*]; and the other was, that it sought to engraft a new polity upon the old organisation. He hoped that the Association, in its support of any measure for medical reform, would never lose sight of these principles. In spite of the strictures he had thought it his duty to make with regard to the course of the Medical Reform Committee, he for one would give his most strenuous support to that or any other Committee in the carrying out of those two great principles. The principle of engrafting the new polity on the old organisation he heartily approved; it was the English method of effecting reforms, as distinct from and contrasted with the revolutionary mode. To the carrying out of this principle he attributed the stability of the institutions of this country; while in the institutions abroad, which were subject to violent disruptions, and attempts to divorce the past from the present, there was a want of that vitality which came down in a continuous stream from one generation to another. This principle, therefore, he thought of paramount importance in the constitution of the proposed Council. It required something more, however, to make the Bill complete. One addition was wanted to complement the rest. They ought to see that those corporations which were to nominate a large proportion of the members of the Council, which was to govern the education and destinies of the profession, should really and absolutely, not nominally, represent the feelings of the great body of the profession. [*Cheers.*] In fact, in any particular Bill which was to be carried to the House of Commons, the minister should insist upon it as a *sine quâ non* of its acceptance, that the constitutions of those corporations be remodelled on the principle of absolute representation. There was another subject about which he was not quite so sure, but which he thought of almost equal importance: it was this, that connexion with those corporations should not be of a compulsory kind on the part of those persons who sought to join their ranks. If these corporations were to subsist as parts of the new polity, and exert an influence in it, it would not be by means of any system of exclusion, or by any vested or prescriptive rights, but by their own exertions, by virtue of the inherent moral influence which they would bring to bear upon the profession at large. He thought their Colleges and corporations would not be shortsighted, but that each would go to the Government and say, "We impose no compulsory education; we do not want to subsist by any power enforced by the law of this country; we seek to enrol new members voluntarily on their part; and we desire that every member of our institution shall have a voice in the government of it." He believed that every man of respectability in the profession in the three countries would immediately join the ranks. He thought there was an inherent desire in every man to belong to some great body politic. He could scarcely feel any doubt that this course would be adopted by the Colleges, as he felt fully persuaded that, without it, all medical reform would become little more than a shadow. If a medical Bill were brought up embodying these principles, he thought that no Government or Parliament could possibly refuse their assent to it; and he could not conceive that any member would cavil at it, unless perchance it might be some disappointed understrapper of an expiring Board of Health, or some disappointed man who, having no power to rise by the force of his own ability, hoped to fill a place at a Government board. They would thus erect a new polity out of the ancient organisation, equal to the requirements of the day, in consonance with the spirit of the times, and calculated not only to meet all the future exigencies of medical science, but also to maintain in the highest possible manner everything relating to the public interests. One word as to the share proposed to be given to the Government in the appointment of these nominees. He had no objection whatever to that proposition. He thought the profession must not regard themselves only; they must have some regard likewise to the public [*hear, hear*]; and this would be a guarantee for the public rights. He did hope that, if the measure were passed into law, it would be borne in mind they were not legislating merely for these islands, but for a vast empire, for dominions lying over every clime of the earth. He thought that a Council appointed to carry on the affairs of medicine in this country should embody a large and various experience, such as could not by any possibility be obtained out of mere committees of corporations, which, from the very nature of the case, consisted of men who never quitted the country. The Government nominees should include one great army medical officer; and if his experience had ranged over a great variety of climes, and brought him into the great emergencies of tropical disease, so much the better. It would be well also if the Government nominees included some country practitioners; for it was known that all truths were not concentrated in town, and that many important truths had emerged from country practice. The Medical Reform Committee had gone very far to forfeit his own confidence, as he did not think it had conducted this great question with that consummate skill which he had expected it would, from the authority, great talent, and eminence, of the gentlemen who composed it. He was not prepared, however, to propose to supersede it. He knew he should be defeated if he were to do that, as he was at Birmingham last year. But he thought it wanted a little new blood; and he would therefore propose, as a rider to the motion—

"That the Reform Committee be reappointed, with the addition of the following names:—William Davies, M.D. (Bath); Augustin Prichard, Esq. (Clifton); B. W. Richardson, M.D. (London); and J. Vose, M.D. (Liverpool)."

Sir John Forbes, as a member of the Committee, had no objection to the addition of the names just proposed. He had entertained so many doubts with regard to the details of the measure, and so much yet remained to be done, that the addition of Dr. Budd and his friends would be advantageous to the object they had in view.

Mr. Watkin Williams (Birmingham) would not pretend to follow the able and eloquent speech of Dr. Budd, whom he always listened to with considerable pleasure, because he had quite a peculiar style of his own. Perhaps, not having been on the Medical Reform Committee, Dr. Budd was not quite aware of the difficulties that had to be contended with in the promotion of Parliamentary Bills, particularly private Bills. He happened to be in conversation with a member of the House of Commons two or three weeks ago, who declared that the chief fault of the measure not being carried, rested not so much with the Reform Committee, as with the medical constituency of the country. The member to whom he referred said his own constituents had never communicated with him on the subject, and that Lord Elcho had persuaded him to vote for his Bill; otherwise he did not care which he supported. Being a liberal, he rather objected to the large powers wielded by the corporations. If the members of the Association would only perform their duties as well as the Medical Reform Committee, there would be no difficulty in carrying the question to a satisfactory issue.

Dr. Lankester (London) would have been very glad if the President of the Council had undertaken to answer Dr. Budd; but as he preferred to hear the debate before he made his remarks he (Dr. Lankester) would just say, he quite admitted the truth of Dr. Budd's statements, but at the same time he was still prepared to defend the course taken by the Reform Committee. After the meeting last year, or rather at the commencement of the Parliamentary session, they found themselves pledged to the Bill of the Select Committee. But what was their position with regard to all the Medical Bills which had been brought before Parliament. They had the Government to contend against them, who had always said to them, "Until the profession—until all you gentlemen have agreed as to what shall be the principles and details of a Medical Reform Bill, you cannot expect the Government to assist you." They had heard this from the lips of Lord Palmerston, Sir George Grey, and the members of two or three different governments; consequently, they felt no confidence that the Bill of the Select Committee would pass through Parliament, with the corporations opposed to them. If the College of Physicians did not actually oppose them, they were very cool, and gave them no support; while the College of Surgeons decidedly opposed them. Few persons, unless they lived in London, could form any idea of the power of the ruling body of these Colleges, not so much in their corporate capacity, as in that of individuals. They were the medical attendants of nearly every member of both Houses of Parliament, and they were frequently consulted by those members with regard to particular Bills which come before them. The Committee had therefore, from time to time, felt it was quite impossible to pass a Bill against the corporations, especially when the Government took up this position: "Unless you and the corporations agree, we will have nothing to do with you." This was their position when the Colleges had drawn out the draft of a Bill for the reform of the medical profession. It was then that they (the Reform Committee) sought an interview with the Committee of the Colleges;

and this was accordingly attended by some members of their Committee. It was at that interview determined to abandon certain principles for which they had contended previously, especially that which concerned the power of the Colleges, and they consented to a sort of compromise, for the purpose of procuring a bill. They did, he believed, verily sell their consciences on that occasion in order that they might get a bill. Well, that was a very humiliating position to take, he owned, but they did it with this view, that they had better have that Bill than no bill at all. Anything would be better than the state of chaos in which the profession now was; such a state of chaos, he believed, as the world had never seen before. There never were such a set of inconsistencies on the statute books as there were at the present time with regard to the medical profession. They were fighting, not so much for influence, as for the better order and arrangement of their profession. It was on the principle of expediency, and on no other, that the Committee asked the House to pass Mr. Headlam's Bill. They did not attempt to reconcile their conduct at the last meeting at Birmingham with their conduct during the recess; and they now asked the members to confirm the decision come to by the Committee. But if the Association elected to say, "We wish you to fight to the death against the Colleges," they would take that into consideration, and he was sure some of them would be ready to draw the sword, and never put it back into the scabbard until the object was accomplished. The Government of this country had from time to time inveigled them, at one period saying, "If you will all agree, then we will pass your Bill," and then, when they had agreed, turning round, "No; we will have no professional Bill; we are for the country." But something must be done, and the Committee wanted to know what alternative to adopt. Either they must take Mr. Headlam's Bill as it stood, or agree to some compromise between that and Lord Elcho's Bill, which would satisfy the Government. He thought Dr. Budd was prepared to make such a compromise, from the remarks he had made. He would call his attention to the proceedings of the Metropolitan Counties Branch, which, although it adopted Mr. Headlam's Bill, made such modifications in it as even Dr. Budd would approve of. But the Universities of Scotland and Ireland were opposed to Mr. Headlam's Bill; and he did not wonder that they were so. The appointment of a royal commission to report upon the present state of the question and to decide upon some plan, seemed to him the only alternative that could be chosen. The Association had either to go for Mr. Headlam's Bill, with all its objectionable passages, or to get the assistance of the Universities in order to induce the Government to appoint a royal commission. He believed the Government were entirely in favour of appointing such a commission, and that that was the only way to solve the present difficulties. He had no heart to go for Mr. Headlam's Bill in its integrity; and, speaking for himself, he did hope for great good to come out of the appointment of a royal commission. Three days before the introduction of Lord Elcho's Bill, Sir George Grey gave notice that the functions of the Board of Health would be transferred to the Privy Council; and the Reform Committee had no desire to see the destinies of the profession committed to a snug corner of the Privy Council.

Mr. Nunneley (Leeds) said he was a member of the Reform Committee, but he had been in a minority. So far as his own opinion was concerned, he thought the charge which had been made by Dr. Budd was unanswerable. As an individual, however, he did not plead guilty. He maintained, last year, that the Bill of the Select Committee was the best that could be obtained; and he ventured to think so yet, and that it would confer a very great benefit upon the profession. He was not so wedded to the clause that was objectionable to many gentlemen, as to think it could not be modified so as to render it acceptable to the profession. On a comparison of the two Bills, however, the clause in question was not more objectionable than those in Mr. Headlam's Bill. Almost every clause of the latter displayed the cloven foot, as if it were intended to maintain the profession in its present position. When Dr. Lankester said the Committee had sold their consciences, or that they were willing to do so, at any rate, for the sake of expediency; he (Mr. Nunneley) entirely differed from those opinions, and was ready to fight to the death before he would give up a principle. He would adopt any course to carry out his principles amicably, so as to unite parties in doing it; but he would never abandon his principles. It was not by abandoning principles that the beneficial changes of the last twenty-five years had been carried out in this country. There might be modification in the details, or as to the particular mode of carrying out those principles; but if there had been any abandoning of them they would never have been so beneficially carried out. To carry Mr. Headlam's Bill, they would be acting in opposition to the principles of this Association for twenty years, as it would not secure uniformity of qualification, reciprocity of practice, or equal rights of registration. Mr. Headlam's Bill would only render the present confusion worse confounded, and establish the greatest possible diversity of education, not for the public good, but for the purpose of maintaining the coffers of the corporations. If they agreed to this Bill, everything for which they had contended for twenty-five years must be given up. [*Cries of "No!"*]. If they would refer to the clauses they would see it was so. There would be no uniformity in any single respect with regard to medical education. It was just as reasonable for a lot of butchers, or any other set of men, to meet together and decide what enactments were best for their particular craft, as that medical men should be entrusted entirely with medical education, and say who should and who should not be medical men. Could they expect the Government to pass such a measure, unless it were allowed to retain an influence upon them? With reference to the constitution of the central council, it would be perfectly satisfactory if it were formed of the representatives of the Colleges and a certain proportion appointed by the Government. Mr. Nunneley then pointed out certain diversities as to the mode of conducting the examinations, and other defects of organisation, which would be established by the Bill. He could not see what objection could be raised to the appointment of a royal commission, if it were composed of laymen who had not expressed an opinion on the subject. It rested with them to say whether they would continue opposed to the Colleges. He did not think it reasonable that the Universities should be ignored, as they were in this Bill; and he thought the alleged majority in its favour among the profession was more apparent than real. There was nothing like the unanimity that had been stated. The Irish and Scotch Universities were opposed to it, and even their own Association had been very much misled as to the feelings of the Reform Committee on this question. The support given to Mr. Headlam's Bill was by no means unanimous in the Committee. It was only carried after considerable debate, and after material amendments had been inserted to modify certain clauses, and no means were taken to ascertain whether they would have been accepted. It might have been supposed, however, from the energetic articles that appeared in the Journal, week after week, that the Association was pledged to support the whole Bill, and nothing but the Bill. The opinion of the Reform Committee was unanimous against the Bill in its present shape. He should not swerve in his opposition to anything like Mr. Headlam's Bill. He did not care much as to the particular manner in which the council was appointed, provided it would secure uniformity of education, protect the public, and advance the interests of the profession. He thought that the Government of the country would be much more likely to be impartial than the Colleges, as the latter were at present constituted. It was said that if the Government had the chairmanship of the council, what a serious matter it would be, as a person might be appointed who did not pursue legitimate medicine. That might be the case; but he did not think it probable. If any such measure, opposed to the feelings of the general body, were adopted, there was inserted in Mr. Headlam's Bill a clause quite as objectionable. He believed the best way of solving the difficulty would be to memorialise the Government to appoint a royal commission for the purpose of considering the whole matter. That would lead to a more satisfactory measure than anything which could be devised at present.

Mr. Flint said he had hoped that Mr. Nunneley would have read clause by clause of Mr. Headlam's Bill, to show the contradictions to what was printed in the Journal.

Mr. Norman (Bath) said that Mr. Nunneley had rendered the difficulties greater than they were. To a certain extent, they must bow to the public voice, but there were certain principles fixed with which the public would not interfere, and they must live or die by those principles. In the progress of this important question, they were bound to make alterations as might be required. He thought the Reform Committee was exceedingly useful, but that it would cease to be so if its members were not armed with power to act according to circumstances. If they were to be bound by any particular resolution, their services would be of little use to the Association. He must protest against Mr. Nunneley's proposal to bind the meeting to sending a memorial to Government for a royal commission. [*Hear, hear.*] It would be in fact to bind them legs and arms

to the feet of the Government. The Committee ought to be at liberty to take any line of conduct which might be found most advisable as circumstances occurred.

Dr. Sibson (London) had had great pleasure last year in supporting Dr. Budd in his amendment upon the resolutions of the Medical Reform Committee. He would never give his support to a measure which would place the whole profession in the hands of the Government. With regard to the representation in the corporations, he did not think this ought to be waited for. Let a good bill be obtained, and the corporations would have a good lever for effecting reform. The College of Physicians had already prepared a charter which would make that body entirely representative, and which was only waiting the passing of a medical bill that it might take effect; and if the College of Surgeons could not or would not reform themselves, the British spirit was gone—but he did not believe that it was. There was no fear but that the corporations would become representative. With regard to Dr. Lankester's remarks, he was surprised to find that the Committee had been acting upon a plan of deliberately throwing away its principles. For himself, he must say, he never heard, in that Committee, any such expression; he never felt that any of his colleagues were throwing away their principles. They fought the battle honestly in the Committee; and one party fairly overcame the other, and went in for not putting the profession into the hands of Government. Mr. Nunneley proposed to go to the Government and ask them to appoint a royal commission. What was a royal commission? It must be composed of two classes—of ignorant and of biassed men. The biassed men would move the ignorant. It would take a few years to educate the ignorant to a knowledge of the requirements of the profession. He hoped sincerely that no royal commission would ever be appointed, as it was plain to see that it would only result in a decision based upon the foregone conclusion of some one individual. Let the profession not place their destinies in the hands of such a Government as the present, or of any government. Time after time attempts had been made to crush their profession by governments, who never failed to put them down when the opportunity arose. Could the meeting forget the conduct of Lord Palmerston to those noble minded men in the Crimea? and did they not remember how poor Trotter was kept down by the government of the day, when he tried to save our fleets? What could they expect of a ministry who only made tools of those who were honourably engaged in their profession? He would now say a few words as to the constitution of the proposed council. It was composed of three classes. It was as a result of conference with the Reform Committee that the clause was introduced, providing that six Government members were to form part of the council, with a view to protect the body of the profession against any overriding of the corporations. A little more than a third were to be chosen by the corporations, exactly a third were University members, and a little less than a third were Government members. As each institution could only send one representative, which was the twentieth part of the whole body, he could not see how the representative of any one corporation could override the rest. The Universities and the Government would have their representatives. They would counterpoise and stimulate one another to the bringing out of great and important results, such as would tend to elevate the education of the medical profession. There was one important point which he trusted would be introduced into the Bill; viz., that no person be allowed to become a medical student until he had passed a severe examination to test his previous education. As no man was put into training for holy orders till his mind had been disciplined by an ennobling education, let the same principle be applied in the admission of medical students. Before any person was allowed to enter upon their medical studies, let them have acquired a degree in arts, or passed a matriculation examination. Replying to Mr. Nunneley, he said that in the Bill, there were three examinations required for physicians—that of the university from which the candidate had obtained his degree, an examination in arts, and another by the College of Physicians. The physicians were in fact more burdened—if he might use such a term—with examinations than any other class. He had hoped that the profession would at length present an appearance of something like unanimity, and that a strong pressure would be brought to bear upon Government and upon individual members of Parliament. Twelve of the Branch associations had declared for Mr. Headlam's Bill. Let the Association stand to this Bill, and wage war to the knife against the proposal to issue a royal commission.

Dr. Wynter (London) hoped the meeting would allow the "insubordinate editor" to say a few words. He was accused of advocating Mr. Headlam's Bill. Seeing that twelve Branches had petitioned in its favour, he certainly did not think he was far wrong in his estimate of what the Association intended. He was accused of fighting Mr. Headlam's Bill against Lord Elcho's, and not representing what was said by the Reform Committee, which he took to be the mouthpiece of the Association.

The President. I understood Dr. Budd to be speaking in irony.

Dr. Wynter. But Mr. Nunneley was not. He maintained that he was justified in his support of Mr. Headlam's Bill, by what was stated in the Committee. It was true that the Committee had previously determined upon adopting another course; but after considerable debate, they came to a decision to adopt Mr. Headlam's Bill. What possible course could he (Dr. Wynter) adopt than that which he took to be the opinion of the majority on that Committee? Was he to follow that of the minority? [*A voice: The Bill was adopted with alterations.*] That was true, but they had simply two bills before Parliament running side by side. While they were so running, if he had stopped to talk about amendments and modifications, the other Bill would have passed him. There were two distinct lines to take; and the Association having declared for Mr. Headlam's Bill in the most unmistakeable manner, he was quite right in supporting that Bill; and he should continue to do so until the Reform Committee saw fit to take another course.

Dr. Budd. It was scarcely necessary to say he did not intend to bring any charge against Dr. Wynter. With regard to Lord Elcho's Bill, the chairman had properly appreciated the tenour of his remarks. He, for one, was delighted to hear his former opponents now speak of Lord Elcho's Bill in the terms they used. Dr. Wynter had come to his senses at last, and now saw the frightful peril which they had escaped. He was delighted, too, to see his friend Dr. Sibson in such a repentant mood.

Dr. Sibson. I have not changed in the least.

Dr. Budd. Well, he was glad to find the Medical Reform Committee in such a repentant mood; but he hoped there would be no more vacillation in future. He agreed with everything which had fallen from Dr. Sibson.

Sir Charles Hastings. I cannot appear as a delinquent without having a few words to say. It appears that the delinquents are the members of the Reform Committee. At your bar here I stand to answer for myself, and I trust in a way that will be satisfactory to the whole of this great Association. I will venture firmly and boldly to declare to you, that of no portion of the proceedings in which I have taken part during the whole of the time I have been connected with this Association, am I more proud, than of the part I have taken, along with the Reform Committee, since we met at Birmingham. That is my position; and that I am prepared to justify. Allow me, first, to read a letter which I have received this morning from my son, who fully intended to be here as the joint secretary of the Reform Committee.

"3, Waterloo Place, Pall Mall, July 28th, 1857.

"My dear Father,—My engagements in town at the present moment make it impossible for me to be present at Nottingham during the meeting of the British Medical Association, a circumstance which I much regret. Had I been present, I should have ventured to call the attention of the Association to two points connected with the medical reform question.

"In the first place, I should have certainly made an energetic protest against the statements recently put forward in more than one quarter, and, I regret to say, by a member of the Reform Committee, to the effect that the Committee which I have had the honour of sitting on for some years, and for whose prudence, zeal, and fidelity to the Association I feel the greatest respect, have during the last twelvemonth deliberately violated their trust, and run counter to the directions given to them by the Association at the last annual meeting at Birmingham. It is asserted that the Committee had express instructions to support the Bill of Mr. Cowper's Select Committee, and none other; and that in opposition to that plain direction, they supported Mr. Headlam's. The fact, on the contrary, is that the report of the Committee last year distinctly recommended that the Association should support any bill calculated to carry out the objects which they have in view; and therefore the adoption of that report (which was the only resolution passed) left the Committee free to lend their aid to the bill they most approved of. I dwell more on this, because you will see in the Journal which reported the Birmingham meeting, that I stated in a few observations I made to the meeting, that the report by

no means pledged the Association to support the Bill of the Select Committee *in toto*.

"In the second place, I am anxious to state my conviction (let it go for what it is worth) that the appointment of an able and impartial royal commission to consider and report on the best means of settling the question of medical reform, would be productive of benefit. Indeed, I can hardly see any way out of the present difficulties by other means. The Government are not likely to take up Mr. Headlam's Bill; the corporations are certainly opposed to Lord Elcho's; the two measures will assuredly not fuse of their own accord when again brought into the House. Nothing then remains but the influence of an extraneous and impartial authority to produce, at least that approach to unanimity of opinion which seems to me a necessary condition precedent to legislation.

"These hurried lines express my views but imperfectly; and I should regret even more than I do my inability to be with you to-morrow, were I not convinced that the sound sense which has always characterised the deliberations of the Association on this subject, will guide them to a right conclusion (whatever it may be) to-morrow.

"Believe me, your affectionate Son,

"G. W. Hastings."

I will now say a few words by way of justification. The plain truth is, we had instructions to get a Bill in accordance with the principles of the Association. Mr. Headlam's Bill is distinctly in accordance with those principles. What are the principles of the Association? "Uniformity of qualification, equal rights of practice, registration of practitioners, and the adoption of the representative principle by the governing bodies." These have been, I may say, the foundation on which every Bill to which I have given my assent has been built. I have not given my assent to any Bill that was not based on this foundation. So far from considering, with my friend, Dr. Lankester, that we did violence to our consciences in going to the corporations on this occasion, I maintain that we carried out to the letter the directions ever given to us by the Association. If you will look at the history of the transactions of the Reform Committee from the time of its formation up to the present moment, we have had two specific directions given to us. One was to negotiate with the corporations; and the other was to endeavour to get the Government to take up a Bill. These have been at all times our instructions. A Bill had been framed, which it would have been fully to the interest of the corporations to get passed; a measure which, I consider, would have been entirely in consonance with the views of the Association. Would it not have been madness to say we would have no intercourse with the corporations? We have been again and again told not to destroy the corporations, but on all occasions to try to get them to go hand in hand with us. I trust we shall hear no more of backsliding on the part of the Reform Committee. I hope that the gentleman who made those unjust aspersions will think fit to withdraw them. I trust, Sir, we shall continue as we have begun. What was the cause of the immense number of petitions that were presented to the House of Commons in support of Mr. Headlam's Bill? Was it not the influence of the members of the Association, scattered about in all parts of this great kingdom? Was not that the cause that the Bill passed a second reading? We have by our judicious proceedings on this occasion achieved the greatest triumph for medical reform that has ever been gained since we commenced the agitation. We have got a majority of a hundred and forty-seven in the House of Commons, positively in the face of the Government. The Government spared no pains, but tried in every way to defeat the Bill. Mr. Hayter put on the whip with more than ordinary vigour. He went over and over again to the habitual supporters, to induce them to support Lord Elcho's Bill. But all this was of no avail. In my own locality, to show what a little agitation will do, eight out of the eleven members for Worcestershire voted in favour of Mr. Headlam's Bill, although two or three of them were regular supporters of the Government, and were urged by the Government to vote the other way. I consider this a great triumph that we have achieved this year. We have got the House of Commons with us; the House of Commons has declared certain principles. First, that the medical profession shall govern itself. I think that is the great feature—the great triumph of the late division of the House. [*Hear, hear.*] When the Association consented to adopt Lord Elcho's Bill as the best that could be had at the time, we laid it down that that was an instalment, to use the well known axiom of O'Connell, which would enable us at a future time to get all the rest. When the corporations came forward and offered us much more than Lord Elcho's Bill would have given us, were we to turn our backs and say, "No, we won't have more"? Was the Reform Committee, when they were offered two loaves, to say they would only have one? The Committee have determined to take all they could possibly get; and the consequence is, we have got the ire of Dr. Budd and the approval of the Association. We shall be delighted with the addition of the names that have been proposed.

Dr. Budd must be allowed to say a few words, as he had been personally alluded to. The Reform Committee had not got his ire; for he entirely approved of the change which had come over the spirit of their dreams since the meeting at Birmingham last year. But he had convicted the Committee—and there had been no answer to the charge—of the grossest inconsistency. The charge had been admitted by every member of the Committee who had spoken, except by Sir Charles Hastings. As for himself, he should be prepared now to support the Reform Committee with all his might and power, in any way they thought proper, in carrying out Mr. Headlam's Bill.

After a few remarks from Mr. Norman and Mr. Flint, the latter regretting that the literal Bill, instead of an abstract, had not appeared in the Journal, the motion, with the addition proposed by Dr. Budd, was carried *nem. dis.*

The meeting adjourned for an hour; and reassembled at 2 P.M.

ARMY AND NAVY MEDICAL REFORM.

The following memorial, drawn up by the Committee appointed on the previous evening, was read:—

"That for long past the medical departments of the army and navy have been in an unsatisfactory condition, whereby their efficiency has been much impaired. That the fearful mortality and disease whereby so many thousands of our gallant men were destroyed and rendered incapable of active service in the late Crimean campaign, has lamentably proved this, even to the public at large; for your memorialists believe had medical science and experience been duly regarded, most of that fearful misery and loss would have been avoided, as it depended on causes not necessarily connected with the circumstances of the war. It is therefore with much pleasure that this meeting of the British Medical Association has heard of the appointment of a Royal Commission to inquire into the organisation and relation of the medical to other departments of the army, and would beg respectfully to impress upon the authorities that a similar inquiry should be extended to the navy as well. They confidently hope the inquiries may result in such alterations in the regulations of both services as will place the medical officer in a condition of full equality as regards position, rewards, honorary distinction, whether of titles or decoration, and retiring pensions, with other officers of the service, and secure due authority to their recommendations for the welfare of the men. By so doing, your memorialists would urge upon your consideration that many of the most promising of the younger medical men would be attracted to the services, and thus the best interests of the country would be most effectually secured. It would appear to your memorialists that the responsibility, labour, hardship, and danger to which the medical officer is exposed, though, perhaps, different in kind, is quite equal, and often much greater in degree, to those which any other officer undergoes, and that therefore the rewards and distinctions should be equal."

Mr. Nunneley (Leeds) proposed:—

"That the memorial be adopted: and that a copy be sent to Lord Panmure, Sir Charles Wood, and the Royal Commissioners for inquiring into the Medical Department of the Army."

Mr. Hatton (Manchester) seconded the motion, which was carried unanimously.

VOTE OF THANKS TO MR. HEADLAM, M.P.

Sir Charles Hastings moved:—

"That the thanks of this meeting be given to Mr. Headlam for his ability and zeal in promoting the passing of a Medical Bill, and also to the 225 members of the House of Commons, who formed the majority by which the second reading of the Medical Bill (No. 1) was passed."

The Association must now look only to the House of Commons. They had looked to the Government, and had sent deputations to them over and over again. It was greatly to the discredit of our Governments that they had paid little or no attention to the subject of medical reform,

Mr. Eddison seconded the motion; which was carried *nem. dis.*

REPORT OF THE MEDICAL BENEVOLENT FUND.

The Report of the Medical Benevolent Fund was read by William Newnham, Esq.

"The Committee, in presenting to the subscribers, donors, and others, the Report of the Medical Benevolent Fund, are gratified in being able to add their testimony to its generally prosperous condition. During the past year, the Fund has been subject to the usual fluctuations observable in most charitable institutions; death has been rife among its members; and while some few have left, others have joined it. There has been a steady augmentation of the funds, and an increase in the number of applicants for relief. Is this from an increase of poverty and misery in the profession, or from the circumstance that the resources of the Fund have been more fully developed and generally known? The fact, however, seems verified that the more you can effect the more comes before you to effect.

"The Committee, in presenting the Treasurer's Report, find that in the past year £634:10:9 has been received in subscriptions, and in donations no less a sum than £889:1. The number of cases relieved are seventy-four, the number of annuitants permanently on the Fund, fourteen, receiving jointly £191:10 from the interest of £5,493:12:3 invested in Bank Stock. Five of these aged people are residing in the cottages built and founded by Charles Bailey, Esq., at Chippenham, Wilts. Altogether about 300 persons have been benefited by the Fund in the past year.

"The Committee would direct attention to the large amount of donations, and in so doing would pay briefly a just tribute to the memory of one who has been removed by death, and who for many years of his life was a zealous friend and supporter of the Fund. The late Mr. Camps, of Fenny Stratford, a surgeon of great talents, possessing a large and benevolent spirit, beloved and lamented by a large circle of sorrowing friends, by his will bequeathed to the Medical Benevolent Fund £750, free of legacy duty, thus enhancing the value of the gift one-tenth. He has further left the Trustees of the Fund his residuary legatees, which the Committee have reason to believe will bring in a sum equivalent to that already received, the only stipulation accompanying this munificent gift is that it should not be spent in building, but be enjoyed by the poor man at his own fireside; this sum therefore will pass intact to the funded estate of the Medical Benevolent Fund for the sole use and benefit of annuitants.

"The Committee cannot pass over this part of their Report without expressing their thankfulness that the scheme for granting annuities has prospered so well, indeed beyond their most sanguine expectations. In the year 1850 the first annuity was granted, when the amount of Bank Stock, which had been accumulating for this especial purpose, was only £1,200, representing £2,568, from the interest of which four small annuities were then granted. This favourite branch of the Fund has been progressively advancing; so much so, that in the present year the amount of Bank Stock is £2,600, representing £5,493:12:3, while the number of annuitants is fourteen; thus, in seven years, this Fund has doubled itself. Here surely is cause for great thankfulness of heart, and much encouragement to persevere in a work fraught with so much benefit to our poor and less fortunate brethren. It is indeed a noble work that has been reared; a work no doubt of labour, but of love; a work that every member should consider it a privilege to have aided in, and from which should emanate a spirit of generous rivalship, each endeavouring to advance by every possible means this most useful charity.

"It is a matter of regret that the Medical Benevolent Fund has not been more extensely and prominently brought under the notice of the profession; but advertisements and printing are costly; and it has ever been the desire of the Committee to confine the expenses of the management of the Fund within the narrowest bounds possible, so that nearly the whole of the subscriptions should be really given in grants to the poor and necessitous. Much might be done by the members of the British Medical Association, regarding the Fund as an integral part of it. It is not affirming too much in stating that the Relief Fund of the British Medical Association is one of the most useful elements of that Society; but it must be confessed with pain nearly akin to shame, that the majority of its members neglect this Fund, and never add one penny to its coffers. This ought not to be. And why is it?

"The Committee would suggest to the members of the British Medical Association that they might, with but little trouble and much benefit to the Relief Fund, at their numerous and influential branch meetings throughout the country, make known to their friends what an inestimable boon the Medical Benevolent Fund has proved in mitigating and relieving the distress and wretchedness in the profession. Local secretaries might be enrolled, and to those gentlemen might be left the distribution of printed appeals, setting forth the history and constitution of the Fund, and embodying also a few of the worst cases from the last Report.

"The Committee, as in former Reports, feel it their duty to urge upon those members of the profession who are now in the zenith of their professional career, the duty and necessity of laying in store to meet the exigencies and contingencies of professional life. The man of vigour of to-day may be the helpless paralytic of to-morrow; an accident, or sickness of uncertain duration, at once deprives him of his income, and the whole family is overwhelmed in distress, Or, if life is spared, old age creeps on with its weakness and sorrows, and how often with attendant penury. This is no ideal sketch, but drawn from the life; many such cases coming before the Committee at their monthly meetings for relief.

"The Committee regret to notice the resignation of their Honorary Secretary, Dr. James Bright, who for the last four years has devoted much energy and valuable time to the interests of the Fund. Though deprived of his active services, they are assured he will ever continue to do all in his power to promote and further the interests and welfare of the Fund.

"The Committee, before concluding their Report, beg to offer their very best thanks to the non-professional supporters of the Fund, especially to the ladies, who are ever foremost to tender their services and gentle sympathies wherever poverty and distress are known, rendering the cup of sorrow less bitter. To the local secretaries a large debt of gratitude is due; it would be invidious to particularise, but to some of those gentlemen the Committee feel much indebted. To their friend, Mr. Churchill, their best thanks are due for placing at the service of the Committee a handsome and commodious room for their meetings; neither must the gentlemen of the medical press be forgotten, who, on all occasions, have proved themselves warm advocates of all medical charities.

"In taking leave of their friends, the Committee feel anxious to pay a tribute of esteem and respect to their time-honoured Treasurer, Mr. Newnham; and believe that they cannot more effectually do this, and at the same time aid the cause of benevolence, than in the following quotation from an old appeal from his pen:—

"'Oh! if there be one motive of pure charity in your bosom, if your heart throb with sympathy at the recital of another's woe; if you are desirous of doing all the good you can in the world, and of living in the memory of the wretched to bless you; if you would live here in expectation of a joyful hereafter; if you would humbly imitate the Saviour of mankind, and spend your days in his service, and ascribe the glory of all to Him who has given you the power and the will to go about doing good, oh! forget not the claims of the Medical Benevolent Fund.'"

Sir John Forbes moved the adoption of the Report. He was not quite sure that, as he was a member of the Committee, such a motion came properly from him; but he could speak as to Mr. Newnham. That gentleman, long the promoter of the Fund, had, feeling the advances of age, resigned the office of Treasurer, and been appointed Vice-President. It had been stated that many members of the Association do not subscribe to the Fund. He was quite sure, that many would be induced to subscribe to it, if they only knew the overwhelming number of cases which came monthly before the Fund for relief. Sir John referred specially to one case, in which the Committee of the Fund has assisted in his medical studies the son of one of their annuitants. The young gentleman in question had proved himself worthy of what had been done; and had highly distinguished himself in the medical school to which he had entered.

Dr. Lankester (London) seconded the motion; which was carried unanimously.

Mr. Newnham said that hitherto his services had been rendered with comfort and gratification to himself. Last year he scarcely expected to be able to attend the present meeting; but it had pleased God to lengthen his days, and, so long as he could, he would give his aid to the Fund. He referred to the distinction between the Medical Benevolent Fund and the Royal Medical Benevolent College.

Sir John Forbes explained that there was no rivalry between the two institutions; but the College could not give temporary

pecuniary relief. It is not allowed by the bye-laws; nor are the means sufficient. He trusted that both institutions would go on in the path of benevolence.

THE RECENT PROGRESS OF OUR KNOWLEDGE OF THE FORMS, STRUCTURE, DEVELOPMENT, AND TREATMENT OF HUMAN ENTOZOA. BY EDWIN LANKESTER, M.D., F.R.S.

In commencing his address, Dr. Lankester stated that he believed he owed his position on the present occasion to a suggestion of his own, that individuals who were known to be working at particular branches of inquiry, should be called upon to report on these subjects at the annual meetings of the Association. In accordance with this view he should not attempt to embrace the wide field of general physiology, but confine himself to one subject; and that was, the recent progress of our knowledge of the forms, structure, development, and treatment of the entozoa.

The most recent researches on this subject were to be found in the following works and papers:—

Von Siebold, *On Cestoid and Cystic Entozoa;* Leuckart, *On Cystic Tape-worms and their Development;* Huxley, *On the Structure of Echinococcus;* Walther, *On the Anatomy of Oxyuris;* Küchenmeister, *On Animal and Vegetable Parasites attacking the Human Body;* Rainey, *On the Development of Cysticercus Cellulosæ in the Pig.*

In reference to the classification, he preferred regarding these worms as a part of a natural family, to which the term *Scolecida* had been applied, to using the term entozoa, which applied to other creatures besides those which were known commonly as inhabiting the human body under the names of cystic and tape-worms. The following diagram of forms of Scolecida known to inhabit the human body was exhibited.

Division Annulosa.
Sub-division Annuloida.
Order Scolecidæ.
Section Platyelmia—Flat worms.
Family Tæniadæ=Cestodæ.
A. Mature States:
Bothriocephalus latus—Broad Tape-worm.
Tænia solium—Common Tape-worm.
**Tænia mediocanellata.*
**Tænia nana.*
**Tænia ?* (Cape of Good Hope).
B. Immature States:
Cysticercus cellulosæ.
Cysticercus tenuicollis.
**Echinococcus scoliciparіens* (*E. veterinorum*).
**Echinococcus altriciparіens* (*E. hominis*).
Acephalocysts.
Family Trematoda.
Distoma hepaticum—Fluke.
Distoma lanceolatum.
**Distoma Buskii*—Busk's Fluke.
**Distoma heterophyes.*
**Distoma hæmatobium.*
**Distoma ophthalmobium.*
Monostoma lentis.
Polystoma pinguicola.
Section Nematelmia—Round Worms.
Family Gordiaceæ.
Filaria Medinensis—Guinea-worm.
Filaria oculi humani.
Family Nematoidea.
Ascaris lumbricoides—Round Worm.
Oxyuris vermicularis—Thread Worm.
Trichocephalus dispar (Mature Stage). }
**Trichina spiralis* (Immature Stage). }
Strongylus gigas.
Strongylus longivaginatus (*Filaria bronchialis*).
Spiroptera hominis.
**Ancylostomum duodenale.*
**Dactylius aculeatus.*

The forms marked with a star were regarded as new, or presenting new points in their history. The most important point in their recent anatomical history was the demonstration of the existence of nervous ganglia in the tape-worms, and of ganglia and cords in the thread worms.

The history of the development of those forms of worms which inhabited the human intestines was then entered into. As an illustration of this part of the subject, the author referred to the history of the development of the *Gordius aquaticus*, and of the various forms of Trematode worms. These animals, during their growth to maturity, pass from one animal body to another, at certain stages giving rise to the growth of other animal bodies similar to themselves. It is the same in the human Tæniadæ, or tape-worm. Before they perfect themselves in the human intestines, they pass through the body of lower animals. The history of the common tape-worm (*Tænia solium*) was then traced. Its eggs are contained in the old segments of the worm (proglottides), which, in order to develope further, must be swallowed and *digested* by some other animal. The animal most frequently swallowing these eggs was the pig. In the bowels of the pig an embryo was hatched having six hooks. This embryo finds its way to the liver, the heart, the muscles of the pig. When it comes to rest it is developed into a cystic worm, called *Cysticercus cellulosæ*:—the pork is "measled." Here it remains and dies, unless the pig is eaten by man or some other animal. In this way the *Cysticercus*, passing through a second process of digestion, becomes further developed, loses its vesicular condition, and becomes a true tape-worm—the *Tænia solium* of the human body. In its previous stages of existence, although it had multiplied, it had never become sexual. In the human bowels it becomes sexual. The proglottides are little more than envelopes containing the reproductive tissues, both male and female. In these bodies the eggs are developed. Besides the sexual forms of Tænia, the human body is subject to the invasion of several immature forms of the Tæniadæ.

The mature and immature forms found in man and some of the lower animals were exhibited in the following diagram.

List of Mature and Immature Worms and their Habitats.

Immature state.	Habitat.	Mature state.	Habitat.
TENIADÆ.			
Cysticercus cellulosæ	Pig.....	Tænia solium.....	Man
C. fasciolaris	Rat, mouse	T. crassicollis	Cat
C. pisiformis	Rabbit	T. serrata vera.....	Dog
C. tenuicollis	Sheep, horse, monkey, man	T. ex cysticerco tenuicolli ..	Dog
C. innominatus Hyperdæi ..	Mole, field-mouse	T. tenuicollis	Marten, weasel
C. longicollis Hyperdæi	——	T. crassiceps	Dog
Cœnurus cerebralis	Sheep, ox	T. cœnurus	Dog
Echinococcus veterinorum (E. scoliciparіens Küch.)	Man, ruminantia..	T. echinococcus sc.....	Dog
E. hominis (E. altriciparіens Küch.)	Man, domestic an.	T. echinococcus alt.....	?
TREMATODA.			
Cercaria	Fresh water mussel	Distoma hepaticum	Sheep, man
NEMATOIDEA.			
Trichina spiralis	Man	Trichocephalus dispar	Man

The habit of producing new individuals at certain stages of their growth had been regarded by Steenstrup as an alternation of generation; and the forms producing these, had been called by him "nurses". Dr. Lankester pointed out that the new individuals thus produced were in their origin identical with the "gemmæ" of the *Hydra*, and the buds of plants. The following explanation was given. All the parts of plants and animals are produced under the influence of two vital tendencies, one of which may be called *Homogenesis*, a term equivalent to reproduction; and the other, *Heterogenesis*, a term equivalent to ge-

neration. Homogenesis produces the same tissues from the same parts, but heterogenesis produces a new individual from different parts—two cells, a germ-cell and a sperm-cell, being necessary. In plants, the homogenetic force produced buds (*Phytoids*), which were either like their parent branch buds (*Isophytoids*), or differed from it as bulbs, bulbilli, sporules, etc. (*Allophytoids*). In animals, the homogenetic force produces "gemmæ" (*Zooids*). These are like the stock from whence they proceed (*Isozooids*), as in the nutritive individuals of the *Hydra* and the Sertularian zoophytes; or unlike (*Allozooids*), as in the case of the products of the embryo of tænia in its cystic condition, or the sexless generations of the aphides. The production of a separate, asexual bud, gemmæ (*Zooids*) by a stock, is what Steenstrup calls "nursing", and the stock or zooid from which it proceeds is a "nurse". The Parthenogenesis of both Owen and Siebold is the production of sexless gemmæ (*Allozooids*), resembling the sexual forms of the same animal.

Heterogenesis in plants results in the production of sexual phytoids, which either produce female flowers (*Gynophytoids*), or male flowers (*Androphytoids*), or hermaphrodite flowers (*Androgynophytoids*). In animals, heterogenesis results in the production of sexual zooids, as female animals (*Gynozooids*), male animals (*Androzooids*), or hermaphrodite animals, as the proglottides of the tapeworm. In the vertebrate animals, the sexless zooid is united to the sexual zooid, and we have an example of a true zoon. These views are given in the following diagram.

Homogenesis produces
- A. In Plants.
  - Phytoids.
    1. Isophytoids; Buds.
    2. Allophytoids; Bulbilli; Bulbs; Sporules.
- B. In Animals:
  - Zooids.
    1. Isozooids; Gems, or buds.
    2. Allozooids; "Nurses" (Steenstrup); "Agamazooids" (Lubbock and Huxley); "Virgin Aphides" (Owen); "Drone Bees" (Von Siebold); Unfecundated Eggs; "Winter Eggs"; Sporula (Siebold).

Heterogenesis produces
- A. In Plants:
  1. Gynophytoids.
  2. Androphytoids.
  3. Androgynophytoids.
- B. In Animals:
  1. Gynozooids.
  2. Androzooids.
  3. Androgynozooids.

The treatment of both mature and immature forms divides itself into two heads: 1. Preventive; 2. Curative. The preventive treatment of the mature states of the tape-worm consists in avoiding the uncooked flesh of animals, especially pork, which contains the *cysticercus cellulosæ*. The curative treatment of tape-worm consists of: 1. Destroying the worm; 2. Expelling the worm. The remedies capable of effecting these two objects are various. The most useful are, oil of turpentine, kousso, pomegranate bark, and the root of male fern. With regard to the immature forms, they can only be prevented by avoiding the introduction of the ova or six-hooked embryos into the stomach. These ova may be introduced in water, on salads, and in various ways by uncleanly persons. The endemic hydatid disease of Iceland was given as an instance. The cure of the cystic worms can be sometimes performed by operation, but was not easily effected.

Dr. Hutchinson (Nottingham) moved, Dr. Heygate (Derby) seconded, and it was resolved unanimously:

"That the cordial thanks of this meeting be given to Dr. Lankester for his valuable address."

THE ADDRESS IN SURGERY

was read by George Southam, Esq. (Manchester). The subject was "Cancer and its Treatment".

Mr. Hatton (Manchester) moved, Mr. Ellis Jones (Liverpool) seconded—

"That the thanks of the meeting be given to Mr. Southam for his address."

Dr. Stewart (London), alluding to some strictures made by Mr. Southam on the surgical staff of the Middlesex Hospital for allowing Dr. Fell to carry on his secret plan of treatment in that institution, defended the steps taken by those gentlemen.

Mr. Solomon (Birmingham) also defended the course pursued by the officers of the hospital.

The President explained that the opinions expressed by the readers of the addresses were to be regarded as their own, and not as the voice of the Association.

THURSDAY.

The members assembled at half-past eleven A.M.

PLACE OF MEETING IN 1858: ELECTION OF PRESIDENT.

Sir Charles Hastings said that the Committee of Council had been in communication with several localities as to the place in which the Association should hold its meeting next year. There were two or three large places nearly ready to receive the Association for two or three years to come. There was a prospect of a very satisfactory meeting in Liverpool at an early period. The South Western Branch had also invited the Association to meet at Exeter in 1858; but, previously to that the Committee had received, from some of the distinguished members of the profession in Edinburgh, letters stating the high gratification they would feel at the meeting being held there in 1858. The meeting would thus see that the Association had received a most cordial invitation from the ancient University of Edinburgh to spend our anniversary in that celebrated seat of learning in 1858. He doubted not that all present would most cordially join with him in sanctioning the holding of the meeting in that city, and that all the members of the British Medical Association will feel delighted that such an appointment has been made. He therefore moved, in accordance with the recommendation of the Council:—

"That the next Annual Meeting of the Association be held in Edinburgh; and that W. P. Alison, M.D., be nominated as President elect."

The following are copies of the letters mentioned above, so far as they relate to the proposed visit to Edinburgh.

1. *Professor Alison to Sir Charles Hastings.*

"Colinton, Edinburgh, July 1, 1857.

"Dear Sir Charles,—I am very happy to find that you propose holding next year's meeting of your Association in Edinburgh, and sincerely hope that you will be able to carry your scheme into effect. My own health is so much broken for some years past, that I cannot look forward to taking any part in your social enjoyments; but I can promise you that you will not only find Edinburgh standing where she did, but extending considerably and in different directions from where she was. And I trust, also, that you will find the places vacated by your old friends and contemporaries, occupied by new friends, and holding out the prospect of at least equal instruction and interest as in your day . . . . .

"You will find the University, the Hospital, the Colleges of Physicians and Surgeons, as well as many of the streets and environs of Edinburgh, as far as buildings go, much improved from what you remember them; and I trust that you may not be disappointed in your intercourse with heads of the profession.

"I am, with much respect, dear Sir Charles,

"Very faithfully yours, W. P. Alison."

2. *Professor Christison to Sir Charles Hastings.*

"Edinburgh, June 20, 1857.

"My dear Sir Charles,—So far as I am concerned, the British Medical Association will receive a hearty welcome in Edinburgh . . . . . I have thought it better to say at once what I can for myself, than to wait till I could learn the sentiments of some of my friends. . . . . The only one I have seen, Dr. Begbie, our last College of Physicians' president, expresses his hearty concurrence, though he is not now a member of the Association.

"I have no doubt that the Association will receive authority to use whatever accommodation they may require for the meetings in the University; and probably the Royal Society apartments, on the Mound, and therefore in the heart of the city, may be obtained also. In short, I presume all parties will be anxious to do honour to such an assemblage as is likely to arrive on the occasion. I am, yours most truly,

"R. Christison."

3. *Professor Christison to Dr. Tindal Robertson.*

"Edinburgh, July 21, 1857.

"My dear Sir,—. . . . Allow me to express the great gratification I shall have, should the Society eventually come to a determination to meet next year in Edinburgh. I am sure it will be a great delight to many English members to attend on

such an occasion; especially if we can secure such a summer as this has been. But their enjoyment will be nothing to that of one, who must now call himself an old professor, and who in that capacity will meet at one time with so many old associates in college days, and so many old pupils also, whose names are familiar to me as the most distinguished of the time in British medicine. Those who have not been in Edinburgh for the last twenty years, will scarcely form any idea of the improvements that have taken place in it, and in the surrounding country, since that time. I hope there will be at least no diminution in the hospitable qualities of its inhabitants. For, when the Society comes, much will be required on our part to maintain its old character in that respect.

"I am yours most truly, "R. Christison."

4. *Professor Simpson to Sir Charles Hastings.*

"Edinburgh, July 23, 1857.

"My dear Sir Charles,—. . . . . All the profession here will be delighted to welcome the Association to Edinburgh. Such is the result of every inquiry that I have made. We have abundant halls to meet in, which will be granted most willingly to the Association. And I think you will find us all delighted to entertain our English brethren at our own houses.

"One word as to the *time* of meeting. We make our graduates on the 1st of August every year. It is our *great* ceremony at the University, and would interest, I think, the members of the Association. It takes place from ten to twelve A.M. on the 1st August each year. Professor Goodsir will address publicly in 1858 the newly made graduates. The meeting should, I would suggest, begin on the 1st August, or end on that day, if such an arrangement were found suitable in other respects for the Association. Our townspeople leave on August 1st for the country; some of them a few days before that. Pray tell me, when you decide, what accommodation you will require, etc., and I shall be delighted to do everything in my power to aid your views, and to promote the objects of the Association. Yours very faithfully,

"J. Y. Simpson."

5. *Professor Miller to Sir Charles Hastings.*

"My dear Sir,—. . . . . I shall be most happy to do what I can to further the proposed meeting of the Association here in 1858. Faithfully yours,

"James Miller."

Dr. Stewart (London) seconded the motion. The medical profession in Edinburgh would have the greatest possible pleasure in receiving the Association, if they might judge by the correspondence which had been read by Sir Charles Hastings. He was perfectly sure they would not be true to their national character if they did not exercise hospitality. He believed the meeting would be a great success.

Dr. Lankester (London) could not allow the resolution to pass without expressing his feelings. The meeting knew that for some little time a little controversy had been going on in the Association as to its name. As he had taken an active part in getting the name changed, he would just say, this resolution was the first fruits of that change. [*Hear, hear.*] They could never have thought of going to Edinburgh as the "Provincial Medical Association". Their friends in Edinburgh, who had a strong objection to being called "provincial", would not have liked to receive them in that character. But the first thing the profession in Edinburgh had done was to express their willingness to receive the British Medical Association there; and he really believed the meeting at Edinburgh would lay the foundation of a great Scotch Branch. [*Hear, hear.*] He hoped likewise it would introduce them to some of the larger cities of Scotland, such as Glasgow, for instance; and that at some future time they would cross over the water and visit their friends in Ireland. [*Applause.*] He augured great things from the meeting at Edinburgh.

The motion was carried unanimously, and with applause.

The President said, that under the peculiar circumstances of the case, it had been resolved by the Council to recommend that the Committee of Council be empowered to appoint such members as they thought desirable to deliver the addresses at the next annual meeting.

MEDICAL REFORM: IMPORTANT COMMUNICATION FROM GOVERNMENT.

Sir Charles Hastings announced that he had received a communication from the Right Hon. W. Cowper, implying his intention to introduce a Medical Reform Bill next session, and requesting a personal interview with him before deciding on a plan.

Dr. Sibson. After the gratifying communication you have just heard, I need do no more than read the resolution which is in my hands, which was decided upon in the meeting of the Reform Committee, composed of such members as we could get together this morning, on the receipt of that important letter. It is very clear that the Government is impressed with the necessity of following up the late majority of the House of Commons; the unmistakable voice of that body having, as it were, been elicited from it in consequence of the representations of this Association. That noble majority has been of incalculable value to us. We cannot but feel sure that the Government have judiciously yielded to the pressure from without that has been exerted upon them in this matter. The resolution is this:—

"That it gives this meeting the highest gratification that the President of the Council, Sir Charles Hastings, has received a letter from the Right Hon. W. Cowper, on the part of the Government, stating that he will introduce a Medical Reform Bill early next session, and inviting Sir Charles Hastings to a personal interview, with a view to consulting him before deciding on a plan.

"That this meeting earnestly and with confidence press on the Government to adopt in their Bill the sound principles of medical legislation which have always been advocated by this Association, which have been, in the main, embodied in Mr. Headlam's Bills of 1856 and 1857, and which have been triumphantly recognised by the House of Commons by a very large majority."

This resolution will, with the rider which is, I believe, to be proposed shortly, fairly place before the Government the feelings of this Association with regard to the measure about to be prepared, and will at once prevent them, if they had any such intention, from attempting to bring in a measure not containing all the most important principles laid down in the two Bills spoken of, fully recognising the importance of the profession in the nomination of the men who are to form the medical council; also recognising the important principle that, in the future education of the profession, education should be as nearly uniform as possible, and should enlist the direct cooperation of the great medical corporations and the various universities, and several other points, which I need not now allude to.

Dr. Lankester seconded the motion. It seemed that they were passing through another phase of this medical reform question. He thought the members of the Association should thoroughly understand the position in which they were placed by this letter of Mr. Cowper. Mr. Cowper referred to the fact that Sir Charles Hastings had taken an interest in Mr. Headlam's Bill, not of 1857, but of 1856. Not one word was said of the Bill of 1857, therefore it was evident the Government intended to proceed on the basis of the Bill of 1856. It would be well, therefore, for this meeting to give some definite directions to the Committee with regard to this great question which had been introduced, and which must still raise considerable discussion, in Mr. Headlam's Bill. They must receive Mr. Headlam's Bill as the Bill of the medical corporations, rather than as the Bill of the Reform Committee, and that opened another way for the solution of the question. He should be very sorry if they were allowed to go away from this meeting without hearing something like an expression of their opinion with regard to these two measures of 1856 and 1857. His own opinion was that they should separate the question of corporation reform from the question of medical reform. But they said they had no confidence in the Colleges till they were thoroughly representative. As far as the College of Physicians was concerned, they had ready for adoption a new charter, which would make it thoroughly representative. But the College of Surgeons was not likely to have a new charter, therefore it could not be said to represent the members, and they embraced by far the greater number of the profession at large. That being the case, he had more confidence in the Government than in the College of Surgeons. He would say this, that if the College of Surgeons would not yield upon this point, he was for going in to claim for themselves the position which otherwise the College of Surgeons would occupy on the proposed council. He thought that its functions might be discharged by representatives chosen by the British Medical Association. This suggestion, however, might very well form the subject of a separate resolution.

Dr. E. Smith (London) was for leaving the subject entirely

in the hands of Sir Charles Hastings and the Medical Reform Committee.

The resolution was put and agreed to *nem. con.*

Dr. Stewart wished to propose what he considered a very important resolution on this subject. The Reform Committee were able to judge what were the feelings of the majority of this Association, and they were called upon now, he thought, to speak to the Government with no indistinct voice, to let them know in unmistakable terms that there was at least one proposition that they would not even admit for discussion, and that was as to an exclusive or predominant Government nomination of the Council. This they could on no account permit. They must consider it as a *sine quâ non* in any measure to be proposed for the reform of the medical profession, that the profession at large should have a fair and proper voice in the management of its own affairs. He would also refer to another subject which he thought was set at rest in Mr. Cowper's letter, namely, that there was not to be a royal commission. This gave him great satisfaction; as the appointment of such a commission would only give the Government time to have their own views carried out. The resolution he had to move was as follows:—

"That this meeting learn with great satisfaction that Her Majesty's Government does not contemplate the appointment of a royal commission on the question of medical reform, and hereby instructs the Reform Committee to entertain no measure that gives the exclusive or predominant voice in the nomination of the council to Her Majesty's Government; and that this resolution be communicated to the Right Hon. W. Cowper."

Dr. Macintyre (Liverpool) seconded the motion.

Sir Charles Hastings. It is better not to refer to the royal commission at all. It would raise a discussion, and I do not think we need enter into that matter at all. Knowing, as I do, the sentiments of so many parties about the issuing of a royal commission, I think we had better not mention it.

Dr. Sibson. That renders it the more important that this meeting should declare its decision.

Sir Charles Hastings. I cannot stand here as the Chairman of the Committee, and allow that resolution to stand without amendment. The question came before us at a very full meeting, and was left in abeyance: I think we should leave it in abeyance now.

Dr. Macintyre, as the seconder of the resolution, suggested that the advice of the President of the Council should be followed. When Dr. Stewart began to speak, he said it was quite clear that the idea of a royal commission was done away with. If that were taken for granted, why mention the subject at all? Let the Association take Mr. Cowper's letter as an evidence of that fact. As it was not the universal feeling of the Association that there should be no royal commission, they had no right to take it for granted. This question was not laid down in such a way as to strengthen the remaining part of the resolution.

Dr. Stewart. I have a great objection to leave it out.

Dr. Sibson. Make it the subject of a separate resolution.

Dr. Lankester hoped that Dr. Stewart would not propose this resolution at all, as the best way of settling their difficulties might be the appointment of a royal commission. And then, why need they go and tell the Government they would not have a predominance of Government nominees on the Medical Council? As far as the history of the profession went, they had much more reason to fear the corporations than the Government. The former were far more likely to interfere with their interests; they had always stood in the way of progress and reform.

The President suggested that they should leave the matter as it stood in the hands of the Reform Committee, as it contained among its members a representation of the various sentiments of the Association.

Sir Charles Hastings hoped they would leave the question where it was. They had been unanimous up to that point, but he was sure they would be unanimous in nothing else.

Dr. Tuke (Chiswick) expressed his unlimited confidence in the Reform Committee.

Sir Charles Hastings hoped the motion would be withdrawn, as it would be so ungracious to go to Mr. Cowper with a sort of defiance in his hand. The Reform Committee knew perfectly what their sentiments were; and why not trust the Committee to do that which was right?

Dr. Lankester proposed an amendment, to the effect that the words "medical corporations" be inserted, in lieu of "Her Majesty's Government", in Dr. Stewart's resolution.

Dr. Macintyre begged to withdraw from seconding the resolution.

Dr. Stewart said that, after hearing the extracts which Dr. Budd read from Lord Palmerston's paper, he was not in the least satisfied to leave this question in the hands of the Reform Committee; and, if his motion were not carried, he should request leave to enter his protest on the minutes. He was sure that a majority of the Committee would wish to carry out the resolution in accordance with the wishes of the Association, and that they would wish to have their hands strengthened by such an expression of feeling, instead of deprecating it; so that they might say to Mr. Cowper, "Here is one point that is considered a closed question." Upon that very question the Government were defeated by an immense majority in the House of Commons; and were they now to give up the point which had been gained, simply because of a little sentimentalism? It was nothing more nor less.

Dr. Edward Smith moved, as an amendment—

"That the meeting proceed to the next business."

Sir Charles Hastings seconded the amendment.

Dr. Sibson said, the first resolution really contained the gist of that which was only stated in a more formal manner in the second. It was a particular understanding, on the part of those who drew up the first resolution, that the Government were not to have a predominant portion of the nomination. It seemed to him that question was virtually decided by the first resolution; therefore it would be judicious not to put the second, for fear it might weaken that position, which now stood in such predominant strength. [*Hear, hear.*] It was impossible, after what had passed, that the Medical Reform Committee would permit an exclusive or predominant nomination of the Council by the Government.

The amendment was then put, and carried by a very large majority.

THE ADDRESS IN MEDICINE

was read by W. Tindal Robertson, M.D., of Nottingham. The subject was "The History of Sanitary Science".

Sir Henry Cooper (Hull), in proposing a vote of thanks, said that at the present time the subject was most happily chosen, and was treated in a manner that showed great classical research as well as sound practical knowledge. He begged to move—

"That the thanks of the meeting be presented to Dr. Robertson for his erudite, elegant, and important address."

Dr. Edward Smith, in seconding the motion, said he hoped the paper would be printed with the sanction of the Association.

A similar wish was expressed by Dr. Stewart, who supported the motion.

The resolution was carried.

CASES AND COMMUNICATIONS.

Practical Observations on the best Methods of Introducing the Catheter in cases of very Narrow and Irritable Stricture. By Henry Thompson, Esq.

Case of Complete Occlusion of the Os Uteri. By John Hatton, Esq. [We have received Mr. Hatton's paper for publication.]

Results of Experiments on the Influence of various kinds of Exertion upon Respiration and Pulsation. By Edward Smith, M.D., LL.B.

In a brief discussion which followed the reading of Dr. Smith's paper,

Dr. Lankester said that it was important to know the quality as well as the quantity of the air expired. He trusted that Dr. Smith would continue his researches.

Sir Charles Hastings had been struck with the original character of the investigations made by Dr. Smith, and believed that, if they were carried out, some great results might be derived from them.

Dr. Smith said, that having carried his inquiries so far, he had been brought to a stand for want of a means of rapidly absorbing the carbonic acid in a limited time. He had consulted several chemists, who had not as yet been able to aid him.

Sequel of a Case of Intestinal Obstruction, reported in the Journal for February 21st. By Sir Henry Cooper, M.D. [This case is published at p. 662.]

Aneurisms of the Aorta. By F. Sibson, M.D., F.R.S.

It was unanimously resolved, on the motion of Dr. Hitchman—

"That the cordial thanks of the Association be given to those

gentlemen who have contributed papers and cases at this meeting."

VOTES OF THANKS.

Mr. Paget (Leicester) moved, Dr. Hitchman seconded, and it was unanimously resolved:

"That the cordial thanks of this meeting be given to the Mayor for the use of the Exchange Room, and to the Committee of the Mechanics' Institute for the use of the Mechanics' Hall."

Sir Charles Hastings proposed:

"That the thanks of the Association be given to the President for the very able manner in which he conducted the business of the meeting."

The resolution was carried by acclamation.

A vote of thanks was also unanimously given to Sir Charles Hastings, for the manner in which he had performed his duties as President of the Council.

THE SOIRÉE

was held on Wednesday evening at the Mechanics' Hall, and afforded to the members of the Association and their friends a most interesting spectacle. The walls were studded with a magnificent array of oil paintings, water colour drawings, and photographs, from the collections of Mr. Thackeray, Mr. Ball, Mr. Bradbury, Mr. Orrock, Mr. Hepburn, Mr. J. M. Pott, and other gentleman. Mrs. Enfield contributed several of her own exquisite drawings from nature; Messrs. Shaw and Sons had a profuse assortment of prints, photographs, and drawings; Mr. James Shepperley exhibited stereoscopes; and Mr. T. C. Hine, of Nottingham, had a suggestion, illustrated by a diagram, with a view to produce the effect of figures in motion. Messrs. Lee and Gee showed a circular hose frame in operation; another gentleman, a model of a tape making machine. Surgeons' instruments of every kind were in ample profusion—Mr. Thompson, of Nottingham, and Mr. Coxeter, of London, being the exhibitors. Mr. Lowe, of Highfield, lent some of his magnificent ferns to adorn the room; and Mr. Wheeler enriched the collection with several splendid aquariums and other objects of interest. The pupils of the Institution for the Blind contributed some specimens of their handiwork, and likewise attended in person to gratify the company with a display of their vocal powers, in which they were accompanied on the organ by Mr. Shelmerdine. The most interesting feature of the exhibition was the museum, comprising the collection of the Natural History Society, and of that of the working men. To the artisans, who have devoted a vast share of enthusiasm, as well as ability and industry to their work, belongs great credit. There is now in Nottingham a collection, rich in curiosities of every kind, and in specimens of conchology, ornithology, and geology, all arranged in the most commendable taste. Refreshments were supplied by Mr. E. Farrands. The company, which was very numerous, did not disperse till nearly eleven.

THE DINNER.

The Dinner took place on Thursday, at half-past 5, p.m., in the Exchange Hall, and was attended by about forty guests. In the absence of Mr. Eddison, the President, the chair was filled by R. S. Hutchinson, M.D.; Dr. Lankester and Mr. Joseph White acted as Vice-Chairmen. Among the non-professional guests were John Bradley, Esq., the Mayor of Nottingham; W. H. Barrow, Esq., M.P. for the southern division of the county; the Rev. J. N. Brooks, M.A., Vicar of St. Mary's; the Rev. H. Bell, Chaplain to the General Hospital; W. Enfield, Esq., Town-clerk; etc. A brass band (that of the Juvenile Temperance League) and an efficient glee party were in attendance. The dinner was supplied by Mr. W. H. Malpas, of the Flying Horse Hotel, in a style that left nothing to be desired.

After disposing of the usual loyal toasts, the chairman proposed, "The Bishop of Lincoln, the Clergy, and Christian Ministers of all denominations." He believed that their excellent and respected diocesan was possessed of such a truly catholic spirit that, had he been present, he would have entirely approved, along with every one who had the religion of Christ in his heart, of the addition which he had made to the toast. He thought that, as medical men, they must all more or less appreciate the services of a pious clergyman in a sick room.

The Rev. J. N. Brooks expressed his cordial thanks for the compliment that had been paid to the clergy, and said, that the Bishop of Lincoln, he was sure, would have responded most heartily to the sentiments which had just been uttered, if he had had the opportunity. He (Mr. Brooks) hailed with great satisfaction what had been said as to the co-operation of the clergy in the sick room. He remembered the time when a prejudice existed amongst the medical profession, and obstacles were not unfrequently placed in the way of clergymen visiting their sick parishioners. There was a certain analogy between the two professions. He recollected some years ago a medical gentlemen in this town changing his mind and presenting himself before the late Archbishop of York for ordination as a clergyman. His Grace, however, required a three years abstinence from secular associations; and the candidate then pleaded, that the medical profession ought to be an exception to the rule, as there was some analogy between the two pursuits, and as he had hitherto been attending to the bodies of men, he was desirous now of having to do with their souls. That was a new idea to the Archbishop; he thought better of his determination, and ordained the applicant. He (Mr. Brooks) thought the nervous system had a great influence upon the pathological states of the body; that the mind had no inconsiderable effect upon the nerve; and that if they could soothe the mind, a soothing influence would be produced upon the nervous system. The reverend gentlemen referred to the great advance which had been made in the medical profession, particularly in the treatment of the insane. He anticipated the happiest results in both professions from those improvements to which he had referred, and said that, in proportion as religion was better understood, and the genuine article void of quackery [*Applause*] presented to the people, they would find each mutually conducive to the welfare both of body and soul.

The Chairman now gave "The Army and Navy," joining with that toast the name of Mr. Soden of Bath. [*Cheers.*] The chairman expressed his gratification at the high and improved position which was occupied by the medical profession in the army, and mentioned the names of Sandwith and Thompson, and spoke of the devotion with which their medical brethren had discharged their difficult and often dangerous duties in the Crimean campaign. [*Cheers.*]

Mr. Soden, in responding to the toast, referred to the fact of his having spent the first year or two of his professional career as a surgeon in the army, he having served through the whole of the memorable expedition to Egypt. He had always advocated the claims of the army surgeons to honorary distinctions; and at length, owing to the noble energy and perseverance of the Duke of Richmond, their claims had received a tardy recognition. Forty-nine years after the campaign in Egypt he had received a medal, and he must apologise to the Association for not having brought it with him. There was a reasonable prospect of great improvements being effected in the medical departments of the army and navy, and he had great confidence that the labours of the royal commission would result in great good. He was glad to notice that one of the medals of the new Order of Valour was lately bestowed upon an assistant-surgeon in a regiment.

The Chairman proposed "The Mayor and Corporation of Nottingham."

The Mayor, in responding to the toast, expressed his high sense of the services rendered by the medical profession; and said he fully concurred in the sentiment that they might very legitimately be associated with the highest of all professions,—that of the ministers of religion. Speaking for his townsmen he could say, they felt honoured that the British Medical Association had made Nottingham the scene of their congress. He regretted that a greater number of the corporation were not able to attend. The Mayor then enumerated the favourable features which had presented themselves within the past few years in the progress of this town; especially instancing the beneficial labours of the Sanitary Committee.

The Chairman proposed the health of "The County Members," coupling with the toast the name of Mr. Barrow.

Mr. Barrow offered his acknowledgments. No individuals in the country had more reason to be anxious for the kind services of the medical profession than members of Parliament, particularly at this season of the year. The sacrifices that most of them submitted to, merely for the gratification of a little personal ambition, necessitated on their behalf the best possible services of the medical man. He was most happy to be so kindly received by so distinguished a body as he saw around him on the present occasion. [*Cheers.*] He could truly say, that the great bulk of his brethren felt with him the greatest possible anxiety to carry out the wishes of the medical profession, so far as they could understand what they were, and what would best promote their interests. He was quite

convinced that any measure which would promote the interests of the medical profession, would further the interests of society at large. [*Hear, hear.*] He was not surprised that Mr. Headlam's Bill, which, he presumed, met the wishes of the great bulk of the profession, was not likely to be carried through this session. He was sorry to see the practice of Parliament throw so many difficulties in the way of private members carrying through any Bills. He was one of those who thought that greater facilities ought to be afforded to members who took charge of such Bills, than was the case at present. He regretted that Mr. Headlam had failed in his endeavour this year; he hoped, however, that on some future occasion there would be better success. [*Cheers.*] He greatly preferred local to centralised government; therefore he desired that the medical profession should be under the government of a council chosen by and out of their own body: any other system of government he should endeavour to thwart by every means in his power.

The Chairman then proposed "Prosperity to the British Medical Association," coupling with the toast the name of Sir Charles Hastings. [*Cheers.*]

Sir Charles Hastings: I will not attempt to express my gratitude to you for the repeated acts of kindness which I have received during the last twenty-five years, during which time I have been connected with this noble Association. I feel grateful to Providence that he has enabled me, during a quarter of a century, to be connected with an Association which I think destined to produce the greatest possible benefit to our profession, and, by doing so, to the community at large. It is now twenty-five years since we first assembled at Worcester, the place of my nativity. We assembled together then in very small force, but there we laid the foundation of a large superstructure; and during the interval we have visited almost every important town in the kingdom. Wherever we have gone, we have excited an interest in behalf of the profession, in behalf of the public health, and in behalf of those great principles of benevolence which it is one of the great objects of our Association to cultivate. [*Cheers.*] We have visited all the great seats of manufacture in this increasing country; we have visited the Universities; and in all those places we have received (as we have on this occasion from the Mayor of your town) from persons high in distinction a hearty welcome. They have held out the right hand of fellowship, and promised to do what they could to forward the objects which we have at heart. Our objects are not only scientific, but they are also social. [*Hear, hear.*] We endeavour to cultivate kindly feelings, and to do away with those which are of a hostile tendency, so that we may have none of those narrow bigoted feelings for which formerly, I am sorry to say, the medical profession were supposed to be distinguished. [*Hear, hear.*] Looking at these objects only, I conceive we have accomplished great good; but independently of that, during the last twenty-five years, there are no subjects which have engaged the minds of the medical profession in which we have not taken an active part. Should any one in after times go into the history of our Association, he will pronounce that we have not existed in vain. We have always forwarded the progress of scientific research. [*Hear, hear.*] I am happy that on this occasion our meeting is graced by the presence of one of the members of your county. One of the great objects which we have had in view, has been the improvement of the organisation of the medical profession. I can call to mind the time when our organisation was much more imperfect than it is now. We have done all, as a profession, that we can do to improve that organisation; and now we are obliged to call in the assistance of Parliament to enable us to carry out those great principles of medical legislation which, in my opinion, are destined in future to place our profession on a much higher pedestal than it has yet stood upon. [*Cheers.*] On every occasion when we have met together, it has been our happiness that our festive board has been attended by some one of the members of the House of Commons for the locality in which we have assembled. I believe this has been one of the circumstances that has increased the interest the public mind has taken with regard to the medical profession. You are all well aware that, during the last twelve months especially, medical legislation has made a very onward progress. I believe this to have been mainly owing to the manner in which the members of the House of Commons, in their own localities, have been acted upon by the members of the medical profession. The sentiment which Mr. Barrow has uttered on the present occasion, has, I believe, been present on the minds of all the members of the House of Commons; and it is, that in forwarding the interests of the medical profession, Parliament were forwarding the interests of the public at large. This is the view in which medical legislation must be looked upon. We must not regard medical legislation as a means to give an onward impetus to the profession alone. The great object of our hearts is, to alleviate the sufferings of mankind. It is not for personal aggrandisement, it is not for the aggrandisement of our profession, that we are over and over again going to the House of Commons to beg them to improve the organisation of the profession. No; that is not the feeling that animates the mind of the profession. Our object has been to exercise our high and holy calling from a feeling of benevolence, which is paramount to our duty. We are called upon to exert ourselves so as to make our profession more influential for the public good,—more capable of alleviating the sufferings of mankind. These are the high and holy aspirations of our profession; and I am happy to find, during the last year, we have made a further advance than on any former occasion. We have achieved a vast triumph in the House of Commons in the present session. [*Applause.*] It is quite true that we have not accomplished the great object which we have been attempting. But we can say, the end of our exertions begins to dawn upon us. We can look forward to the time when we shall accomplish that great object: then, I say, this Association will have reared a more enduring monument than any medical Association that ever existed. And look at the efforts which have been made on the present occasion in the House of Commons. You know very well that we have agreed upon certain great principles which are to guide us in medical legislation. You are also aware that we have laid those principles, over and over again, before the Government of the day, and that they have turned a deaf ear to our representations: you know that we have gone to the Home Secretary and the Prime Minister; that they have met us with fair words, but they have as good as told us, that medical matters are not such as should engage the attention of the Ministry. We have gone to the House of Commons, and again and again placed petitions upon the table; and what has been the result? Why, during the present year, we have accomplished this triumph against every power which the Government could bring to pass Lord Elcho's Bill. Two hundred and thirty independent members came forward, and told the Government, "That is not the way in which the medical legislation shall be carried on." [*Cheers.*] Sir Charles then alluded to the communication he had received that morning from the Government. He further remarked, that if this Association had done nothing else than bring this question prominently before the public, they would have accomplished the object for which it was formed. But that was only a small part of what they had effected. He considered the manner in which they united together in good fellowship, brotherly feeling, and social harmony amongst each other, as a gratifying feature of their proceedings. He believed that the destinies of the profession were far higher than those which had been hitherto accomplished; and he trusted they would go on still further in their noble efforts to mitigate disease and suffering, so as to render them ministering angels to the miseries and misfortunes of man. He begged leave to thank the meeting most cordially for their kindness, and for the terms in which his health had been proposed.

Mr. G. E. Stanger proposed the health of "the Visitors, coupling with the toast the name of Mr. Enfield, the town-clerk.

Mr. Enfield, in acknowledging the toast, said that the Association had been the means of conferring upon his townsmen a very great amount of pleasure, especially the meeting in the Mechanics' Hall on the previous evening.

Mr. Barrow proposed the health of the Chairman. [*Cheers.*]

The Chairman returned thanks, reciprocating the compliments which had been paid to him by his friend who had proposed the toast, and expressing his deep gratitude to the members of his own profession for the numerous acts of kindness and forbearance which they had shown to him on a variety of occasions, and of which he hoped he should ever entertain the most lively recollection.

Dr. Sibson said he had the greatest possible pleasure in proposing the health of their truly respected President, Mr. Booth Eddison. [*Cheers.*] He felt a peculiar personal pleasure in proposing this toast. For more than thirteen years he had the satisfaction and honour of being a resident in the hospital of this town. [*Hear, hear.*] They were years filled with unmeasureable recollections which would be always treasured up as among the happiest of his life. He knew no part of the world so endeared to him as this same Nottingham, and no part of it so

dear as that place which was still called, as he understood, the General Hospital near Nottingham. For something more than twelve years, Mr. Booth Eddison, as apprentice and house-surgeon, resided in the hospital. He laid the foundation of its future greatness; for he (Dr. Sibson) had no hesitation in affirming that it was regarded as one of the best hospitals in the kingdom. He wished he could do justice to their worthy President and speak of him as he deserved. His natural goodness as a man, the singular truth and accuracy of his character, and the manner in which he sustained all the relations of life, were well known, and they all had had an opportunity of judging how he had discharged his duties as President of this Association. Dr. Sibson then expressed his opinion as to the evil effects of centralisation, and spoke of the excellent results that had followed the migrations of the British Medical Association.

Dr. Lankester proposed "The gentlemen who had delivered the Addresses in Medicine and Surgery." He had seldom heard two addresses which seemed to him so well to point out what such addresses should be as those which they had heard in Nottingham. He thought it had been judiciously resolved upon by each of the readers of those papers, to take up one point, than to go over a large number of points. [*Applause.*] He knew of no subjects of more interest to them just now, than the two which had been chosen for the addresses at this meeting. Mr. Southam took up the subject of incurable diseases, in relation to those who proposed to cure them by secret remedies. He thought with Mr. Southam, that they should have nothing to do with men who came forward with such an assumption. [*Cheers.*] Their noble profession had never risen upon such a basis as that. In ancient times, when men had some secret remedies in their hands, they did not require some private wards of a hospital in order that they might be applied. When such men made a discovery, they were only too anxious to make it known, that the world at large might be benefited by it, and that its blessings might be diffused as widely as possible. [*Cheers.*] He did hope that this Association would have nothing to do with men who brought discredit upon their profession by holding back any sovereign remedy for their own exclusive advantage. He had listened with great pleasure to the address of Dr. Robertson. He had given them one of the best examples that could have been produced of the earnestness of the profession in relieving the sufferings of the human race rather than to obtain any exclusive advantage for themselves. The sanitary movement of the present day had been initiated and carried on amidst persecution and opposition. Medical men had been the foremost in going forth, imploring the people to put themselves in a way of preventing disease, by pointing out that they had the remedy in their own hands. He felt peculiarly indebted to Dr. Robertson for the admirable manner in which he had traced those professional exertions from the times of our forefathers in medicine down to the present time—from the time of Hippocrates down to the present men, the Southwood Smiths, Marshall Halls, and others in the profession who were labouring to prevent disease. Such addresses as these he felt were especially appropriate, and were calculated to bring to bear a beneficial influence upon councils and corporations, on whom, rather than on the profession, devolved the duty of carrying out sanitary measures.

Dr. Robertson returned thanks.

Sir Charles Hastings proposed "Mr. Newnham, and prosperity to the Benevolent Fund."

Mr. Newnham returned thanks, saying that he trusted their good wishes for the Benevolent Fund would manifest themselves in a practical manner.

Mr. Henry Thompson proposed "Prosperity to the British Medical Journal," coupled with the name of Dr. Wynter. He pronounced the British Medical Journal the best medical journal that was published, and an invaluable medium of communication for the members of their Society.

Mr. Darby seconded the motion.

Dr. Wynter said that "the insubordinate editor" returned his most cordial thanks for the manner in which they had drunk his health, and for the flattering manner in which the British Medical Journal had been spoken of. It might be made far more useful, if members in the provinces would communicate to him cases of interest for publication. Upwards of three hundred medical men connected with hospitals were members of the Association; and if they would only supply him with information, the Journal might be rendered superior to any other in the kingdom.

Dr. Stewart proposed the health of "Dr. Lankester, the Lecturer on Physiology."

Dr. Lankester acknowledged the compliment.

Mr. Norman briefly proposed the health of the gentlemen who had taken on themselves the entire management of the present meeting, coupled with the name of Mr. White.

Mr. White acknowledged the toast in suitable terms; shortly after which the meeting broke up.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, July 30th.

STATE OF THE THAMES.

Mr. Adderley asked the First Commissioner of Works whether he had any plan for the prevention of the pestilential stench which came every evening into every window on the river front of the Houses of Parliament; and whether there was any power to enforce better trapping of the drains, or a removal of the deposits of bones and other refuse on the opposite bank; or whether legislation for the purpose was necessary; or, if there was no redress, whether any plan had been suggested by which the stench might be shut out of the Houses by closing up all the windows on the river side, and admitting air from another direction.

Sir B. Hall replied that the drainage of the metropolis was not under the control of his department, but under that of the Metropolitan Board of Works. Since representations had been made to him as to the annoyance caused to members and officers of the House by the stench from the river, he had been in communication with Mr. Goldsworthy Gurney, and he had this morning been informed by that gentleman that the stench came from the open mouths of the sewers, and that the whole neighbourhood was infected with it. There was, however, another cause of the nuisance. Mr. Gurney said in his report of to-day:—

"I am informed that the great Victoria sewer going up Parliament Street has lately broken in somewhere about Whitehall Yard, and that all the sewage which used to go through this large sewer was forced down the Bridge Street sewer: that lately, in order to empty Grosvenor basin, they passed the whole of the water and mud down this small sewer. The result was the 'blowing up', as it is called, of the trapping at the mouth of the sewer. This fact has considerably augmented the pestilential state of the atmosphere of the river and the whole of the neighbourhood."

He (Sir B. Hall) had communicated these facts to the Metropolitan Board of Works, and he had every reason to believe that they would take steps to abate the nuisance. There was, however, another great source of annoyance in the offensive trades which were carried on upon the opposite bank of the river, and he wished to call the attention of the House to what took place in 1855, when a Bill was introduced with the object of suppressing nuisances in large towns. Under the provisions of the Bill for the Removal of Nuisances, which was referred to a Select Committee, and which was reported to that House on the 9th of May, 1855, ample power was given to local authorities to suppress nuisances arising from trades emitting effluvia offensive or injurious to the health of the inhabitants of the neighbourhood. By section 28, local authorities might proceed against parties on complaint of any medical officer or two legally qualified medical practitioners; and by section 29, in case the parties proceeded against should object to the jurisdiction of justices in petty sessions, they might enter into recognisances and go to quarter sessions. There was also another clause, section 31, imposing a penalty on the local authorities if they did not proceed within fourteen days to abate the nuisance. The bone-boilers and others opposed; and in committee of the whole House the clause relating to offensive trades was altered. The clause with reference to quarter sessions was struck out, and parties were compelled to take proceedings in the superior courts; the course of proceeding was rendered much more difficult, and the clause imposing a penalty on local authorities was rejected. The consequence was that the public were now completely in the hands of the local authorities. Now, that was how the case stood at present; and on looking at *Hansard* that morning he found that his hon. friend who had put this question had been one of those most instrumental in bringing about this state of things. [*Laughter.*]

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Baker. On August 1st, at 18, Brompton Row, the wife of John Baker, M.D., of a daughter.

Cleveland. On July 26th, at 23, Beaufoy Terrace, Maida Vale, the wife of *W. F. Cleveland, Esq., Surgeon, of a daughter.

Daniell. On July 15th, at Kegworth, Leicestershire, the wife of A. H. Daniell, Esq., Surgeon, of a son.

Fletcher. On July 26th, at Upton-on-Severn, the wife of John Wells Fletcher, Esq., Surgeon, of a son.

Leigh. On July 25th, at Turnham Green, the wife of H. T. Leigh, Esq., Surgeon, of a son.

Randall. On July 30th, at 14, Portman Street, Portman Square, the wife of John Randall, M.D., of a daughter.

Rowdon. On August 2nd, at 29, Nottingham Place, the wife of *Henry Mortimer Rowdon, Esq., Surgeon, of twin sons.

Smith. On July 25th, at 4, Manor Place, East India Road, the wife of Rowland Smith, Esq., Surgeon, of a son.

Woodforde. On August 4th, at Bow, the wife of W. T. G. Woodforde, M.D., of a son.

MARRIAGES.

Elliott—Richards. Elliott, Charles Sandys, Esq., War Department, Tower of London, to Ann Elizabeth, eldest daughter of Samuel Richards, M.D., of Bedford Square, at St. Pancras Church, on July 28th.

Ellis—Du Pasquier. Ellis, H., Esq., Surgeon, of Botesdale, Suffolk, to Mary Maria, second daughter of W. H. Du Pasquier, Esq., at Kensworth, Herts, on July 30th.

Greenacre—Sutton. Greenacre, William, Esq., of Cannon Street, to Eliza, widow of the late John Maule Sutton, Esq., Surgeon, of Greenwich, at Runcton, Norfolk, on Aug. 3.

Larkins—Southey. Larkins, Major William Henry, 2nd Bengal Grenadiers N.I., to Louisa, third daughter of Henry Herbert Southey, M.D., of Harley Street, at All Souls Church, Marylebone, on July 30th.

Moor—Pears. Moor, W. H., Esq., Surgeon, of Ferneux Pelham Lodge, Herts, to Sarah, youngest daughter of J. Pears, Esq., late of Thorney, near Peterborough, at Christ Church, Cambridge, on July 25th.

Pattison—Spittal. Pattison, George Handasyde, Esq., Advocate, of Edinburgh, to Marianne, widow of the late Robert Spittal, M.D., of Edinburgh, at St. Saviour's, Southwark, on July 29th.

Ratcliffe—Hooper. Ratcliffe, Richard, Esq., Royal Navy, H.M.S. *Dasher*, to Ellen Henrietta, only daughter of George Symes Hooper, M.D., of Glenville, Jersey, at Glenville, on July 29th.

Tarral—Davidson. Tarral, N., M.D., of Havre, to Agnes Miller, daughter of the late W. Davidson, Esq., of the same place, at the church of the British Embassy, Paris, on July 20th.

DEATHS.

Bannister. On July 27th, at 63, Coleshill Street, Eaton Square, Sydney, the infant son of H. P. Bannister, Esq., Surgeon.

Barker. On June 1st, at Hongkong, from wounds received during the boat engagement against the Chinese fleet, at Fatshan, in the Canton river, Henry Lardner Barker, Esq., midshipman H.M.S. *Tribune*, aged 19, second son of Edgar Barker, Esq., Surgeon, of Oxford Square, Hyde Park.

Bellot, Thomas, Esq., Surgeon R.N., late of H.M.S. *Britannia*, on July 25th.

Dwyer, Joseph Hamilton, Esq., Surgeon 14th Regiment, on board the steamship *Colombo*, in his passage to Malta, on July 16th.

Lancaster. On July 22nd, at Clifton, Bristol, after a short illness, Louisa, wife of *Joseph Lancaster, Esq., Surgeon.

Laver, Henry Wills, Esq., Surgeon, of Thornbury, suddenly, at Hythe, aged 52, on July 23rd.

Moore, Stewart, Esq., Assistant-Surgeon 6th Dragoon Guards, killed in action with the insurgent Sepoys near Delhi, aged 26, on May 31st. Mr. Moore served in the Crimea during the whole of the late war, and was present at the actions of Alma, Balaklava, and Tchernaya, and the siege of Sebastopol. He was killed by a grape shot, which fractured his skull, while attending the wounded.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Monday, July 27th, 1857:—

Clarkson, Frederick, Whitby
Fahie, James, Cork
Field, Poole, Thame, Oxon
Haynes, James Carmichael, Mallow, co. Cork
Larmuth, John Hamilton, Sale Moor, Cheshire
Macvey, John, Maralin, Lurgan, Ireland
Ross, William Henry, Cape Town, Cape of Good Hope
Siccama, Rinso Robert, Doughty Street, Mecklenburgh Square
Stevenson, James, Plymouth

Friday, July 31st:—

Armstrong, David James, Brecon, S. Wales
Belcher, Paul, Burton-on-Trent
Broadbent, William Henry, Longwood, Huddersfield
Chambers, Charles, Denbigh, N. Wales
Foster, Michael, Huntingdon
Goldsmith, John, Westend, Hambledon
Heelis, Edward, Limehouse
Hogg, Francis Roberts, Gower Street
Lambert, Henry Stone, Croydon Common, Surrey
Lee, Percy, Ramsgate
Leeson, Robert Henry, London
Roberts, Charles, Gloucester Terrace, Hyde Park
Scott, Thomas Alexander Fraser, Aberdeen
Skaife, Henry, Easingwold, Yorkshire
Wise, Thomas, Kent

Monday, August 3rd:—

Davison, George William, Tynemouth
Farrant, Mark, Collumpton, Devon
Grattan, John Smith, Belfast
Griffin, Richard William Wandby, Weymouth
McFall, David Chambers, Belfast
Sharp, Christopher, Oldham

Apothecaries' Hall. Members admitted on Thursday, July 23rd, 1857:—

Comely, George, Winchester
Davie, John Chapman, Theale, near Reading
Lys, Francis Daniell, Lymington
Macaulay, Thomas, jun., Leicester
Perkins, Thomas, Snaith, Yorkshire
Valentine, Edward William, Somerton, Somerset
Winstanley, Robert, Wigan

Thursday, July 30th:—

Broadbent, Henry, Longwood, Huddersfield
Carey, Francis Edward, Guernsey
Hazard, Joseph, Litcham, Norfolk
Lowe, John, Sleaford, Lincoln
Roberts, Robert, Festiniog
Rose, George Cowper, Melbourne

HEALTH OF LONDON:—WEEK ENDING AUGUST 1st, 1857.

[From the Registrar-General's Report.]

In the first three weeks of July the deaths registered in London were consecutively 988, 1,061, and 1,209; in the week that ended on Saturday (August 1st) they exhibit a further increase, the number being 1,238, of which 632 are deaths of males, and 606 those of females. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1,138. But as the deaths of last week occurred in an increased population, it is necessary, for the purpose of comparison, to raise the average in proportion to the increase, in which case it will become 1,252, which differs but little from the number actually returned. The average is derived, in part, from two seasons, viz., those of 1849 and 1854, when epidemic cholera had made progress; and hence it may be inferred that the mortality that now prevails is high for a time when the population is only subject to the ordinary sickness of summer.

The increase on previous weeks, above shown, arises from the mortality from diarrhœa, which has constantly advanced during the last five weeks. In the week that ended June 27th, this complaint was fatal in 33 cases; thereafter the weekly numbers were 65, 133, 150, 259, and (last week) 302. Of these 302 cases no less than 262 occurred to children during the first two years of life, 11 at 2 years of age and under 3, 5 at the age of 5 years and under 15, 5 between the ages of 20-60; they then begin to increase, and at the age of 60 years and upwards, 19 cases were fatal. Besides the deaths from diarrhœa, 24 are referred in the tables to cholera, having been returned as "choleraic diarrhœa", "cholera infantum", etc. By combining the numbers under the two heads (diarrhœa and cholera), it will be seen that 6 occurred in the sub-district of Kensington Town, 6 in Chelsea north-west, 6 in the Hanover-square sub-district, 6 in St. John Marylebone, 8 in Islington West, 12 in Islington East, 6 in St. Giles South, 7 in St. Botolph, 7 in Bethnal-green Town, and smaller numbers in most of the other sub-districts.

One death from small-pox was registered; it occurred to an infant in the Amwell sub-district. From measles 21 children died, from scarlatina 20, from hooping-cough 40, and from typhus 31 persons. Of seven principal diseases in the epidemic class, hooping-cough is rather more fatal than is usual in summer, but diarrhœa alone prevails to a degree which requires to be noticed as excessive.

The deaths of three nonagenarians, all widows, are returned; the two oldest died at the respective ages of 96 and 98 years, the former in Kentish Town, the latter in Compton-street, Gray's-inn-lane. A well-sinker was found dead in a well at Islington on July 27th. It appears that he was suffocated in consequence of neglecting the usual precautions before making the descent.

Last week the births of 843 boys and 830 girls, in all 1,673 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,482.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·870 in. The highest reading was 30·03 in. on Wednesday. The mean temperature of the week was 65·6°, which is nearly 3° below that of the two previous weeks, but is 3·2° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was above the average on every day except Sunday July 26th; on Friday it was 70·8°, which exceeds the average by 8·3°. The *highest* readings in the shade and the sun occurred on that day, the former being 83·4°, the latter 109·4°. The *lowest* temperature was 49·5° on Wednesday; and the range of the week was 33·9°. The mean dew-point temperature was 56·1°, and the difference between this and the mean temperature of the air was 9·5°. The temperature of the water of the Thames rose to 71·4° on Wednesday; its mean temperature in the week was 68·3°. The usual direction of the wind was south-west. Rain to the amount of 0·60 in. fell on Tuesday. It fell in heavy showers, and was followed by a thunderstorm between 7 and 8 o'clock A.M.

TO CORRESPONDENTS.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Diseases OF SPECIAL OCCUPATIONS.

No. V.

THE LEAD-MINERS OF DERBYSHIRE: AND THEIR DISEASES.

By WILLIAM WEBB, M.D., M.R.C.S.Eng., Fellow of the Royal Medical and Chirurgical Society of London, Wirksworth, Derbyshire.

THE Derbyshire miner is indeed subjected to many hardships and numberless privations, unknown to persons engaged in work above ground; he is exposed to a great variety of accidents, and obliged oftentimes to labour for hours in a constrained and stooping posture, in an atmosphere very deficient in oxygen, and highly charged with carbonic acid and other unwholesome gases—his *groove clothes*, at the same time, frequently sticking to the skin from wet, and his whole body drenched in moisture. Yet he is not the fragile, puny, and delicate creature, which a consideration of his daily circumstances, occupation, and habits, might suggest; but a moderately hale, robust, and vigorous individual. This is probably owing in part to the custom observed, I believe, throughout the mineral field of this county, of employing the men only six or eight hours at a *shift*, and to their taking, except under certain circumstances, only one *shift* in the twenty-four hours. Much is likewise due to the men in this matter; for when unoccupied in mineral concerns, which they must generally be for six or eight hours *per diem*, they for the most part engage themselves in out-door labour and employment. Many miners have small plots of ground, where they keep a cow or cows, the attention to which affords them most wholesome occupation, and, I feel sure, is considered by them as a sort of recreation after their severe underground exertion. At Middleton, a village one mile from Wirksworth, the land is all divided into small plots, each one being about enough to keep a cow. The men in this place are principally miners, and most of them owners of property. Notwithstanding these advantages, which the Derbyshire miner undoubtedly possesses, over all other men of the same class and occupation that I know of, he can generally be pointed out by his pallid face, which strikingly contrasts with the florid and healthy visage of the agricultural labourer; this pallor being due to the deprivation during a fourth part of his existence of the necessary supply of oxygen to thoroughly decarbonise the blood.

In this neighbourhood there are two or three classes of working miners, viz.:

1. Those who work at the mines of proprietors.
2. Those who work at their own mines.
3. Those who work at both. (Some miners, after working six hours in a proprietors' mine, will likewise take a *shift* at their own.)

With all the apparent insalubrity of the occupation in which he is engaged, statistics are opposed to the assertion that the life of the miner is shortened and his health impaired by it; indeed, my own experience, and the opinions of other medical men with whom I have conversed on this subject, justify me in stating that these persons are rather remarkable for their health and longevity. In support of this, I may mention that the registrar of this district (who has held his office since the Registration Act came into operation) informs me, that he rarely registers the death of a miner who has died under the age of sixty.

There must be something peculiar to account for all this in the habits of the men. One great means of preserving health I have mentioned, viz., out-door occupation; a second, I am convinced, may be found in the cleanly habits of the miner, and in the care and attention he receives at the hands of his wife and friends, who constantly turn night into day to suit his periods of work; and we may recognise a third in the dwelling-places, which are oftentimes exceedingly neat cottages in lofty and exposed situations. Once a year, most of the miners' wives have a round at whitewashing, etc., till they make the abode to which their husbands return after their weary toil a pattern of everything that can promote and preserve health.

The occupation of the miner is at best very speculative, and most uncertain in its returns. He is sometimes paid by the amount of work, and sometimes by the *shift;* but much more frequently by the proportion of lead-ore which he is enabled to get. Hence, in some instances, a miner can scarcely realise a subsistence; whilst in others, with ordinary care, he may speedily amass a tolerable competency.

I am told that, as a body, the miners were formerly much addicted to intemperance; but now, as far as I know, they are a very steady, industrious, and provident race of men. I say provident, because, besides being moderately prudent, sick clubs (many supported entirely by working men) abound in this district; and few miners there are who do not belong to one or other of these societies, which not only afford them a good weekly allowance in the event of sickness or accident disabling them from work, but provide them, at a reasonable cost, with a qualified medical attendant. Hence the application by these persons for parochial relief is a most infrequent occurrence.

The mineral district of South Derbyshire is remarkably picturesque and highly salubrious; it consists principally of hill and dale, and of natural scenery which, for grandeur and beauty, it would be difficult if not impossible to surpass. Of this latter, the beautiful drive leading from Cromford to Grange Mill, called *Via Gellia*, with which many of our associates must be familiar, affords a good and striking example.

The lead mines in this neighbourhood have been worked from a period of great antiquity. Three pigs of lead, found seventy or eighty years since in old mine-hillocks, upon which are some Roman inscriptions, have been deposited in the British Museum; and there can be no reasonable doubt that these mines continued to be worked during the Saxon period.

The ventilation of the mines is such as to permit the miner to pursue his calling with comparative comfort. I believe, however, that there is room for improvement in this respect, which, if effected, would contribute to the advantage of all parties concerned in working these stores of wealth. Explosions from fire-damp (light carburetted hydrogen) are very rare in the Derbyshire lead mines. I have, however, heard of two explosions from this inflammable gas happening within the last three years, but, happily, neither was attended with loss of life or personal injury. The "Whites' Founder"—a mine on the north side of Wirksworth—was the scene of both these occurrences. My esteemed friend and partner, Mr. Cantrell, who has paid great attention to the working of mines, and is a large mineral proprietor, has informed me that explosions from fire-damp have likewise taken place at the "Bullace Tree Mine", near Cromford; and that such explosions occur when the men are working in the *shale*, and not in the *lime-stone*.

DISEASES OF THE LEAD-MINERS.

I shall not attempt a classification of the maladies under which miners suffer, but shall refer in a brief manner to those diseases most observed by myself, and to the treatment which I have found most effectual.

Perhaps the most common affection which the medical attendant is required to treat is due to the deficient oxygenation of the blood, and may be called general prostration of the system, or debility. A man will present himself at the surgery, fresh from the mine, looking as pale as death, complaining of difficulty and oppression in breathing, want of

proper action of the bowels, cephalalgia, aches and pains across the loins, with a pulse slow and feeble; and giving, as a part of his history, that he has been working in a *windless* place (*i. e.*, in an ill ventilated part of the mine, and one loaded with noxious vapours). The treatment for such persons is abstinence from work for a week or two, and iron in some form. I generally prefer the tincture of the sesquichloride in infusion of quassia, or the ammonio-citrate in water or the same vehicle. The miner should at the same time take a liberal diet; should be cautioned against working in those parts of the mine in which his candle will not burn; and recommended to take some quick lime with him in future, and in this way to absorb and render inert the carbonic acid which everywhere abounds as a product of respiration and combustion.

In some cases, besides the general prostration and other symptoms of lead-poisoning, I have observed the characteristic deposit of sulphuret of lead on the edges of the gums. Under such circumstances, sulphuric acid in full doses, with the black draught of ordinary use, are the best remedies, and, with their employment, the patient is soon restored to his accustomed health. Cases of this kind have been observed, in which the subjects were working only amongst *galena* or the ordinary sulphide of lead, clearly proving that lead in this form may be so absorbed as to poison the system; and, although I have never seen a case of paralysis or dropped hand in miners that I could trace to poisoning by *galena*, I have repeatedly observed the characteristic blue line, witnessed the concomitant symptoms, and even had occasion to treat several cases of colic in men who were getting no other form of lead besides *galena*.*

There is a notion prevailing among the miners and smelters of this district, that persons engaged in their occupations who take plenty of fat bacon, butter, or indeed fatty matter of any kind, enjoy a remarkable immunity from lead-poisoning. I am unable to bring any very strong or conclusive testimony in support of this point, or to advance any satisfactory opinion as to the *modus operandi* of these substances. I nevertheless think that some credence may be given to the general report, as, at a large smelting establishment in this district, whilst the men, I am told, suffer periodically from the milder forms of lead-poisoning, they are considered to save themselves, by taking plenty of fatty material, from the more severe and less tractable maladies. I may mention that some smelters have continued to follow their employment, with periodical intermission, for upwards of forty years, by observing this simple precaution, which, as far as I know, is the only one observed in this neighbourhood. Dr. Watson mentions that "a physician near Breda informed Sir George Baker that the village in which he lived contained a great number of potters, among whom he did not notice a single case of lead colic in the course of fifteen years; and he attributed their immunity to their having lived very much on butter and bacon, and other fat kinds of food." (*Principles and Practice of Physic*, vol. ii, p. 478.)

Another disease common among smelters, but from which miners suffer occasionally, is the *belland* or *bellain*, which is synonymous here with "painters' colic", and is usually treated in the same way. After repeated attacks of this troublesome affection (which, when it has once appeared, usually assails the smelter for the rest of his life, unless he give up his work, and resort to some other more congenial and healthy employment), paralysis of the extensor muscles of the hand and arm sometimes takes place, and we have what is called *dropped wrist*. I have seen one case of paralysis of the lower half of the body in a smelter aged 36, which has hitherto resisted all treatment. As it took place while pursuing his occupation, and after many other affections of a less severe character, and as other conclusive signs were present, there can be no doubt that this case is an aggravated one of lead-poisoning and paralysis.

Miners suffer a good deal from irritation of the bronchi (bronchitis), caused by the introduction during their work of small particles of dust into the larger air-tubes. Sinapisms to the thorax, and stimulating expectorants, as the decoction of senega, with carbonate of ammonia and tincture of squills, are found most beneficial and satisfactory in the treatment of this malady; the miner at the same time observing perfect rest from his occupation, and thus avoiding the exciting cause of it.

Rheumatism, rheumatic fever, and heart-disease, are common diseases here, as might be expected from the damp to which the men are sometimes exposed. Colchicum is the sheet-anchor in rheumatism, and is generally given in combination with alkalies.

Besides rheumatic affections, the nature of the country, and the distance which some miners walk to their work, may have something to do with the production of heart-disease.

Fatal accidents, considering the large number of men employed, are rather rare in the Derbyshire mines. They generally are occasioned by a fall of stone or by blasting, and happen mostly to old miners, who have grown careless by long continued work. Of the less serious accidents, concussions of the brain, fractures of the ribs and extremities, injuries to the eyes from the impaction of foreign bodies, as small particles of rock, pieces of steel from the pick, etc., scalp and face wounds, are the cases I have generally met with.

In conclusion, I am induced to believe that the longevity and comparative comfort enjoyed by the miners of this neighbourhood are in a great measure due to—

1. The regular out-door occupation and exercise.
2. The small number of hours employed.
3. Personal cleanliness, and moderately steady and prudential habits.
4. Good and nutritious food, with plenty of fatty material.
5. The general situation of the dwellings, and the neatness and cleanliness observed therein.
6. The salubrity of the district.

* Some medical men are of opinion that this blue line is not characteristic of the absorption of lead.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. WOUND OF THE RECTUM, ULCERATING INTO THE BLADDER: DEATH FROM PYÆMIA.

Under the care of R. Partridge, Esq.

[*From Notes supplied by* C. Heath, Esq., *House-Surgeon.*]

H. B., aged 30, was admitted June 27th, under the care of Mr. Partridge. It appeared he had sat down rather suddenly, while undressed at night, on the sharp broken end of the upright part of an arm-chair. This caused a good deal of pain, and shortly afterwards he passed some blood in his motion. When admitted, there was great tenderness in the abdomen, especially the left iliac region. The pain was increased by pressure. He had made water directly after the accident, but had since been unable to do so. There was no sickness. A catheter was passed, to draw off the water. This was done easily, and no obstruction was then noticed. During the day, his urine was passed naturally, but mixed with blood. He was ordered to take a grain of opium every four hours.

Next day, Mr. Partridge passed a catheter, and noticed a hitch near the posterior portion of the urethra, probably depending on laceration of the mucous membrane. No further symptoms, however, presented themselves; the urine and fæces were natural; and he wished to leave the hospital, feeling quite well. He accordingly did so on July 2nd.

He was readmitted on July 22nd, stating that he had been suffering from almost incessant diarrhœa since leaving the hospital, and had at that time twenty or thirty evacuations daily. This was not attended with much pain. He also stated that wind passed from the urethra. The urine and fæces usually passed at the same time. An examination *per rectum* failed to detect any communication. He was ordered tinct. catechu ʒ ss, tinct. opii ɱx, decoct. hæmatoxyli ʒiss, 6tis horis. Next day he had slept pretty well, but was much exhausted. The urine contained a dirty brownish yellow substance, which was thought to be mucus tinged with the logwood he was taking. The diarrhœa persisted. There was also dulness at the back of both lungs, and crepitus on the left side, with expectoration of rust-coloured sputa. He was much troubled with retching, but there was no vomiting. A liberal allowance of brandy was given, and ammonia was added to the draught.

On July 24th, a number of little whitish bodies were found floating in the urine, which was examined microscopically, but no clear proof was obtained of the presence of fæces. The

patient continued to sink; the cough and expectoration increased; and pain and tenderness over the abdomen recurred. The front part of the lungs became choked with fluid, and he died at 3 A.M. on the 28th. The diarrhœa had much abated before his death.

On *post mortem* examination, thirty-four hours after death, the body was found decomposing rapidly, and the scrotum distended with gas. There was secondary abscess in the lower lobe of each lung. The apex of the upper lobe of the right lung contained a few tubercles, some of them calcified. Immediately behind the trigone of the bladder was an aperture large enough to admit the finger, opening by a small orifice into the rectum, on its anterior wall, about two inches from the anus, and just behind the part which is in relation with the prostate. There was suppuration in the subperitoneal cellular tissue, and in the lumbar glands on the right side. The common iliac and internal iliac veins on the left side contained blood, mixed with a good deal of pus.

Remarks. The above case is interesting, from the rarity of the injury, and the singular course of the symptoms, which caused the real nature of the lesion to remain matter of conjecture till after death. The injury would appear to have been originally a wound, probably not penetrating, of that portion of the rectum which adjoins the bladder, inflicted by the sharp piece of wood which had accidentally been introduced into the rectum. The man himself, however, was apparently unaware of the wood having run up the bowel; so that one of the chief requisites for the determination of an obscure case, viz., a clear history, was wanting. This wound produced no symptoms till the period of ulceration, when the usual phenomena of irritation of the bowels occurred. These symptoms were subsiding under the treatment adopted; and, as the injury was in no vital part (being, in fact, much in the situation where the bladder is usually punctured), the patient would in all probability have recovered perfectly, but for the accidental occurrence of pyæmia. As far as the symptoms of irritation of the bowels went, they of course strengthened the suspicion of injury to the gut; but, as they might be a mere coincidence, and dependent on some remote cause, they could not of themselves establish the diagnosis. Nor could the peculiar matter found in the urine; as it might, as far as the appearance to the eye went, be merely mucus tinged with the logwood; and the microscope failed to settle the point. Together, however, these symptoms indicated what was found after death; viz., a communication between the bladder and rectum. The wound, although doubtless inflicted on the rectum, appeared larger on the side of the bladder, in consequence of the spread of ulceration in the latter cavity; while, in the spot originally lacerated, it was so small as to elude digital examination.

II. STONE IN THE KIDNEYS: SYMPTOMS OF IRRITATION OF THE BLADDER.

Under the care of R. Partridge, Esq.

[*From Notes by* C. Heath, Esq., *House-Surgeon.*]

James G., aged 18, was admitted May 30th, under the care of Mr. Partridge, with some symptoms of stone in the bladder. He gave a history of having passed a stone from the kidney four years before; and, sixteen months before admission, the same pain recurred at intervals in the situation of the left kidney, shooting down to the groin, and making him feel very sick. In the course of a few months (the exact date is not known), the stone appeared to pass down the ureter into the bladder, causing him acute pain; and, shortly afterwards, a small stone was discharged from the urethra. Another stone, however, remained lodged at the upper orifice of the urethral canal. When the stone was impacted thus, he made water in a small stream, sometimes twisted or forked; at other times, the stone having slipped into the bladder, the stream was normal. During this time, he passed a good deal of mucus with his urine. The stone was soon after this extracted, and the pain diminished; but the mucous discharge persisted. Four days before admission, the pain became much more severe; he had scalding in making water, and the first portion of the urine contained a good deal of mucus and blood. After this had flowed out, the urine was discharged in a full stream. He was sounded, but no stone was detected. He was ordered tincture of sesquichloride of iron, and the following enema to be used every night:

℞ Extracti belladonnæ gr. 1-6, extracti papaveris gr. v, decocti amyli ʒi.

This relieved the pain for an hour or two. He now began to complain of pain also in the right renal region.

On June 7th, he was ordered buchu, with nitric acid and hyoscyamus.

On June 10th, as the symptoms were not relieved, and it was thought possible that there might still be a stone in the bladder, which had escaped detection at the previous examination, the bladder was injected, and carefully examined. Nothing, however, was felt.

Next day, he was worse; the tongue was brown; there was much thirst; pulse 92. He had vomited several times, and slept badly. During the next few days he continued to sink, being troubled principally with incessant vomiting, which resisted the action of creasote and morphia. The typhoid symptoms became more urgent; the urine was loaded with mucus, and contained also pus and blood. He complained much of pain in the abdomen, and was evidently sinking. He died in the afternoon of the 16th, rather suddenly, having previously had some slight tendency to coma.

On *post mortem* examination, the mucous membrane was found slightly congested near the neck of the bladder, but this viscus was not thickened, nor its inner surface ulcerated. The mucous membrane of the ureters was thickened. The left kidney was larger than natural; it contained a calculus about the size of a walnut, completely blocking up the pelvis. Two other calculi were seen in the infundibula and tubular portion. The kidney was enlarged, and its pelvis distended. The right kidney also contained a large calculus in its pelvis, which however did not produce complete obstruction. There was no trace of peritonitis.

Remarks. This case is presented as a good example of the class of cases of stone in the kidney pointed out by Morgagni, in which the symptoms are referred principally to the bladder, and in which the state of the urine is such as is consistent with the hypothesis of the bladder being inflamed. (*Vide* Sir B. Brodie, *Diseases of the Urinary Organs*, p. 133.) In the patient whose case is before us, there could be no doubt, from the previous history, of the kidney being the original seat of the disorder; still the sudden accession of pain a few days before his admission, and the advent at that time of symptoms referrible to irritation of the bladder, rendered it highly probable that a stone might have passed down a ureter, previously dilated by the former passage of calculi, which was of too great size to pass off by the urethra; and thus it might have been necessary for the relief of the patient to have interfered surgically, even with the certainty of the kidneys being found in a diseased condition. This, however, which is always a most painful dilemma for the surgeon, was happily unnecessary; and the case followed the usual course, the patient dying from typhoid fever, and with symptoms of incipient poisoning of the blood from urea. Had he had a little more vital power, he would probably have survived till the increase in size of the stone (which seems to have been rapid) had produced total obstruction, and thence suppression of urine and complete coma.

ST. GEORGE'S HOSPITAL.

I. CASE OF CANCER OF THE BREAST WHICH HAD BEEN TREATED BY ESCHAROTICS (DR. FELL'S METHOD), RECURRING IN THE LIVER AND OTHER INTERNAL ORGANS.

Sarah M., aged 33, a widow, with two children, was admitted July 15th, under the care of Dr. B. Jones. She had been extremely fat, and had always enjoyed good health, as far as is known, until the appearance of the cancer of the breast. She could not remember the duration of the complaint, previous to her application to Dr. Fell. This was in June, 1856. The tumour was at that time the seat of acute and increasing pain, but was not, according to her account, ulcerated. The skin was removed by means of nitric acid, and then Dr. Fell's caustic was applied four times. She remained under this treatment for about six weeks. The tumour had sloughed away in large masses; some suspicious hardness remained; but as the wound seemed to be healthy, she was allowed to go into the country. The wound, however, never quite closed, and the tumour appears to have been fungating out of the wound when she came again under Dr. Fell's care in April of this year. The caustic was applied again (how often is not stated), and she was discharged as cured in the end of May, the wound having healed perfectly.

Three weeks since she perceived an enlargement in the right hypochondrium, and began to suffer from constant vomiting after food. She also lost flesh very rapidly, but still remained very stout. On admission, the signs of the malignant diathesis were well marked; she was much troubled with constant vomiting; complained of pain shooting up to the

right shoulder, and in the region of the liver. A tumour could be felt in the situation of the left lobe of that organ, but indistinctly, on account of her obesity. It is not necessary to to go into the details of the case. Suffice it to say that all the symptoms continued, and grew worse in spite of treatment. Jaundice came on, and ascites, and she died on August 7th. The proximate cause of death seemed to be exhaustion, the result of the constant vomiting, which resisted all the remedies employed.

On *post mortem* examination, the body was found extremely obese. The scar on the left pectoral region was quite firm, and the new skin there well formed, and freely movable on the deeper parts. There were several detached tubercles, of suspicious hardness, in the subcutaneous cellular tissue; but these, on microscopic examination, appeared to consist merely of condensed fibrous tissue, and were, in all probability, the result of irritation produced by the caustic. The glands in the axilla were extensively diseased, being infiltrated throughout with scirrhous deposit. The liver was very much enlarged, weighing more than 5 lbs. This enlargement was due to the extensive deposition of malignant matter, of the usual hard encephaloid form, in every part of the organ. The portions of hepatic substance not invaded by the disease showed traces of fatty degeneration extremely well marked. The peritoneum was distended with serum, and there were signs of recent peritonitis in the shape of soft bands of adhesion, uniting together the various viscera. None of the other viscera of the abdomen or chest were affected by the disease, but the pyloric end of the stomach and the duodenum appeared pressed upon by the malignant mass. The lumbar glands were enlarged with deposit similar in outward appearance to that in the glands of the axilla. In the brain were two small masses of morbid deposit. They lay in the substance of the right hemisphere, and presented to the eye somewhat the appearance of strumous tubercle, but on microscopic examination were seen to contain various forms of compound nucleated cells, together with a large amount of oil and granular matter. The right ovary contained two large cysts filled with blood.

Remarks. Although this is the first case which has fallen under our notice in Hospital practice which gives any opportunity of forming a judgment as to the probable results of Dr. Fell's method of treating cancer, we believe that it is only a type of many which have occurred in private, and which tend to raise the suspicion (to use the mildest term) that it affords no guarantee against the recurrence of the disease. It should, indeed, be remembered, in justice to Dr. Fell, that he has not claimed for the patients submitted to his method any perfect immunity from such recurrence, and also that a small number of isolated cases do not form data for an absolute determination of the point. The details, however, are of interest in reference to the comparison between this method and that by operation. In the case before, us the cancer appears to have been quite accessible to entire removal by the knife in a few minutes, if the axillary glands were not (as they probably were not at that time) infiltrated with the disease. A course of treatment, therefore, which spent some months in effecting this object, labours, at first sight, under the gravest objections, as exposing the patient, during the whole time, to the danger of the cancer spreading to other organs. Then again as to the painfulness of the escharotic method. The patient, on being questioned on this point, replied vaguely that the pain was not more, she supposed, than she should have had to endure if the tumour had been left alone. This, however, presents an unfavourable contrast to the painlessness of an operation under chloroform, followed only by the inconvenience of a healthy wound. It is but fair, however, to remark that the caustic had really destroyed every part of the original tumour, and of the mamma. We may perhaps be permitted here to regret that the trial of this treatment instituted at the Middlesex Hospital should have been made to extend over so short a time as not to allow of any facts being collected tending to elucidate the question of the liability to the recurrence of the disease.

II. CROUP: TRACHEOTOMY: RECOVERY.

Under the care of A. W. Barclay, M.D., and T. Tatum, Esq.

[*From Notes by* G. G. Rogers, M.D., *Medical Registrar.*]

Frederick S., aged 6, was admitted on July 26th, under the care of Dr. Pitman, in whose absence Dr. Barclay took charge of the case. He was a healthy child. On the 17th, his mother noticed a little cough. Towards night this got worse, and was accompanied by hoarseness. At 10 A.M. on the 18th, he began to have difficulty of breathing and symptoms of croup, and had since been under medical care; blisters and the other usual remedies had been employed, but without success, and tracheotomy had been proposed some days before admission, but had been deferred. At the time of admission, the child's condition was such as to preclude hope from any other treatment.

Accordingly, tracheotomy was performed by Mr. Tatum as soon as possible. The soft parts appeared to have become much congested from the blistering, and bled most profusely. On the incision being made into the trachea, a large quantity of blood flowed into this tube, the child ceased to breathe, and no pulse could be felt. The tracheotomy tube (a simple one) was rapidly passed in, and artificial respiration was kept up for full two hours. During this process the child fell asleep, but if the artificial respiration was suspended, the breathing instantly failed, and he became pulseless. After this, he became pretty tranquil, and passed a good night. He was ordered to have a grain of calomel night and morning.

℞ Haustûs calcis ʒij; vini ipecac. ℥x. Fiat haustus 4tis horis sumendus.

July 27th. He passed a pretty comfortable day, except that once, while the tube was out for cleansing, he became blue in the face, and the vessels of the neck were much congested. This was relieved by the passage of nearly a table-spoonful of muco-purulent fluid from the wound.

July 28th. Pulse 108; skin moist. He slept well; his expression was natural.

July 29th. He had a fit of dyspnœa last evening, and passed through the tube a large plug of false membrane; after this, the respiration was tranquil, and the face not at all congested. The tongue was much cleaner, and he seemed to be improving rapidly.

July 30th. He passed a very tranquil night; a good deal of thickish mucus, mixed with shreds of lymph, came through the wound from time to time.

July 31st. It was noticed yesterday evening that he had a little difficulty in swallowing, and that fluids came through the tube. The latter was therefore removed, since which time he has been easier.

August 7th. There has been nothing calling for observation since the last note. The child is now in good general health, takes food well, and looks lively. The wound is nearly healed, and the communication with the trachea appears closed.

August 11th. He has nearly lost his cough, is perfectly well as to his general health, and will be discharged in a few days.

Remarks. It is unnecessary to say more than a very few words on this most gratifying case, which affords the strongest possible encouragement for a resort to the operation, even in cases in which it has been so far delayed as to afford only faint hopes of success. Everything in this case seemed against the operation, and the child might in fact be said to be actually dead after its performance, and was only recalled to life by the persevering exertions of his attendants after all signs of animation had disappeared. Such cases, although they can occur but rarely, should not be forgotten, affording as they do the most striking examples possible of the triumph of medical skill over disease in its most terrible and fatal aspect.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

EMPLOYMENT OF SUTURES IN THE OPERATION FOR SQUINT: EXEMPLIFICATION OF THE ADVANTAGES.

From Cases under the care of Haynes Walton, Esq.

[*Reported by* Maurice Davis, M.D.]

We do not know how long sutures have been applied to the conjunctiva, nor by whom they were introduced; and this information matters little. It is more important to be able to testify to their advantage in wounds accidentally inflicted, as well as from surgical operation. We learn from Mr. Walton that he had long believed in the value of accurately adjusting incisions in this membrane, but had been deterred from applying the thread, lest he should cause irritation, and perhaps induce purulent ophthalmia; that his fears were not lessened by those with whomhe had conversed on the matter; but that a credible witness assuring him that his dread was unfounded, induced him to adopt the practice. The first essay was in an instance of laceration from a wound, and the results were quite satisfactory. But we must pass this over to notice that of which we have had personal knowledge, namely, the use of the suture in the operation for squint.

In order to obviate the more or less dropping of the caruncle

that is inseparable from a free division of the conjunctiva, Mr. Walton has long advocated the importance of making as small an incision as possible; and for several years he has, by accurately operating, cut through no more than actually covers the insertion of the muscle. But although this fulfilled the desired intention as far as the circumstances could admit, the entire desideratum was not obtained, a greater or lesser degree of vacancy at the inner corner of the eye yet remained, and the objectionable fungous granulations would still sprout from one or other edges of the wound, but almost always the inner. To overcome these imperfections, he has tried different plans and methods. The suggestion of severing the muscle with a very narrow knife, either curved or bent at an angle, and introduced through an aperture in the conjunctiva large enough only to admit the blade, has been fully tested and rejected by him, because of the great uncertainty of completing the operation, especially where the commissure of the lids is small, or the eye sunken, or the conjunctiva very loose. But there is no greater objection to it than when the subjunctival tissue is thickened, no uncommon occurrence, and one that cannot be foretold. It is hardly necessary to remark that the first and main object in treating strabismus, by practical surgery, is to set the eye straight. Although Mr. Walton is an ardent admirer of subcutaneous myotomy and tenotomy, wherever they can be employed, he has not seen any adaptation of either to squint that can be so well relied on, or is so generally applicable, as the plan he usually adopts.

He is aware that some surgeons operate by making an horizontal incision, and after securing the muscle, introduce the scissors and use them beneath the membrane. His objections to this, from what he has seen and his personal knowledge, are the uncertainty of taking up all of the rectus; less uncertainty, it is true, than when the knife is used subconjunctively, but an uncertainty still exists, and besides this, the likelihood of the ineffectual application of the scissors. But the horizontal slit does not prevent the fungous growth alluded to; it is required to be larger than is generally supposed, in order to admit the scissors, and hardly therefore comes under the spirit of the term subconjunctival; added to which, it does not entirely prevent dropping of the caruncle. With no slight experience, he adheres to his old method modified or improved by the suture system; for he holds that, in consequence of the anatomical disposition of the parts, he can be certain always of having effectually operated, only when it can be ascertained by sight, that no portion of the rectus is undivided; till in fact the hook is seen to traverse a certain space free.

The preliminary steps of the operation, to which it is necessary to allude, may be disposed of in a few words. Mr. Walton makes a small vertical cut through the conjunctiva, just over the tendon of the rectus, and at about a line from the margin of the cornea. After the muscle is divided, there is always a considerable separation of the superficial wound, the retraction being chiefly on the inner side; in other words, the conjunctiva gapes in a remarkable manner. It is immaterial through which lip the suture is first placed, and the choice of side may be made a matter of convenience. A small, but not very diminutive needle, not sharp at the edges, because it should pass with as small a hole as practicable, and armed with an ordinary ligature, is what he uses. Let us suppose that the parts are to be stitched from without inwards. He lays hold of the lip of the conjunctiva with a pair of forceps, and passes the suture as near the edges as possible. Having drawn the thread through, the other lip is taken up (and it requires often to be sought for, because it retracts much and folds on itself,) and treated in the same manner. If the needle is passed at some distance from the edge, there would not only be inaccurate adaptation of the surfaces, but the conjunctiva would be rendered tighter than natural, a condition that might influence the position of the eye. Two sutures are generally employed, one at the upper, the other at the lower part of the wound. As in other parts of the body, Mr. Walton does not cut the threads short off, but leaves a certain length of end, that they might be the more readily found when required for removal. As a rule, the sutures are taken away on the third day. Often, at this time, they have partially or entirely ulcerated through.

Not only does no irritation proceed from this method, but the traces of the operation are very much sooner lost. A patient is not aware that sutures are present. Union is rapid and certain. Fungous granulations do not sprout. The natural disposition of the tissues at the corner of the eye are interfered with less than under any known plan of operating. Eversion and prominence of the eyeball must, we are sure, be in some degree prevented by it.

Original Communications.

CASE OF LABOUR ATTENDED WITH COMPLETE OCCLUSION OF THE OS UTERI.

By John Hatton, Esq., Consulting Surgeon to the Chorlton-upon-Medlock Dispensary, Manchester.

[*Read before the British Medical Association, July 30th*, 1857.]

About seven o'clock on the evening of June 19th, 1857, I was sent for by Mrs. Morris, midwife, to see Ellen Faulkner, residing under 9, York Street, Chorlton-upon-Medlock; who, the messenger informed me, was in labour. I was told, moreover, that the midwife could not make out the presentation.

On reaching the house, I ascertained that the woman's age was 40; that she had been married three years; that this was her first pregnancy; and that she had been in labour since the preceding evening. The midwife, who was first called to her at eleven o'clock in the forenoon of to-day, informed me that since that hour, the pains had been regular and severe; but that there had been no discharge of any kind, and that she could not satisfy herself as to the presentation of the child. On introducing the finger, I came upon the smooth ample surface of a globular body, pretty low down in the vagina, behind which, on pressing upwards in the absence of a pain, I detected what I imagined to be either the head or the breech of the fœtus. I now sought for the os uteri, but in vain. The vagina being amply dilated, I larded my left hand, and carried it up the hollow of the sacrum to the promontory, when its progress was arrested by the reflection of the mucous membrane on the before mentioned smooth expanded body, the fingers everywhere passing over an unbroken surface; no os uteri could be found. I must confess that I was puzzled, having never before met with anything in a labour involving so much obscurity; and when I repeated my examination, it was with the same unsatisfactory result.

Under these circumstances, I sought the aid of my friend Mr. Roberton (whose experience is so well known, and whose matured judgment is at all times so readily given to his professional brethren). He came to the same conclusion as myself; viz., that no os uteri could be detected, observing that "you might almost as well feel for one in a smooth iron plate." We repeated our examination very carefully, and now imagined that we detected a slight degree of puckering or rather roughness on the surface of this body, not in the centre of it, but rather towards the left side of the pelvis, which roughness we concluded might possibly prove to be the site of the imperforate os uteri.

The poor woman had now been twenty-four hours in labour; and as the pains were strong and regular, accompanied with occasional attacks of vomiting, and as the smooth tumour presenting in the vagina was evidently nothing else than the lower portion of the womb largely dilated and expanded by the pains, we determined to puncture in the supposed situation of the os; and this we effected by means of a pair of sharp pointed curved scissors, when out gushed a quantity of liquor amnii. This opening we extended with a blunt pointed bistoury. We could now feel the head presenting naturally, and we also discovered that we had punctured so exactly through the os uteri, that its smooth, thin, rounded anterior lip formed a portion of the margin of the opening which we had made. The aperture was speedily enlarged by cutting it in four directions, in the form of a cross, to about the size of the mouth of a tea-cup; and on the instant it became occupied by the fœtal head.

Chloroform was given in the hope of promoting dilatation, but without much effect; and as the woman was shewing signs of exhaustion, by almost incessant vomiting, a clammy skin, and a feeble pulse, and moreover, as the pressure of the child's head, from the pains having become stronger and more expulsive, must soon lacerate the opening, we decided still further to enlarge it with the bistoury, and to effect delivery. The woman had not felt the movements of the child for a considerable time; and as we could not detect by means of the stethoscope any sign of fœtal life, a sense of duty compelled us to open the head, which was easily effected with Mr. Roberton's one-bladed perforator—more than two hours having been allowed to elapse from the time of perforating the uterus with the curved scissors. After the contents of the cranium had been freely evacuated, the craniotomy forceps

were applied—one of us guarding the edges of the os uteri and the perinæum, whilst the other made traction very slowly with the forceps. Thus cautiously proceeding, our efforts ere long were crowned with success; and the child passed into the world without causing the smallest injury to the soft parts of the mother. The placenta soon followed, the uterus contracted, and there was no hæmorrhage. The vomiting immediately ceased; a drachm of laudanum was administered; and we left her comfortable.

June 20th. This morning the poor woman is perfectly easy; she has had no vomiting; she has passed a tolerable night; the pulse is only 64; and she has thrice voided urine.

7 P.M. The patient is perfectly comfortable, with a nice moisture on the skin; there has been no vomiting.

June 21st. She is rather feverish this morning; pulse 88, and slightly intermittent. The lochial discharge is pretty free. No inconvenience has arisen from the secretion of milk. I ordered half an ounce of castor oil.

June 22nd. The castor oil has operated freely. She is now free from feverishness. The lochial discharge is scanty and rather offensive. The weather is very hot. She was ordered to be well washed, and the bed clothes and linen to be changed.

June 23rd. She expresses herself as being so well that she wants to get out of bed and sit up. From this period she rapidly recovered, and took no medicine, except an additional dose of castor oil.

July 25th. To-day we endeavoured to take a photographic view of the os uteri, but were unable to procure a distinct impression upon the glass, in consequence of the light being insufficient. The parts are perfectly healed; the os uteri appears to be almost as though it were a natural one, with the exception of the cicatrices of the crucial incision.

Remarks. In the course of an extensive midwifery practice, I have never met with any case at all resembling the present. Judging by a digital examination, there might never have been an os uteri. The case is enveloped in mystery, in so far as the woman has never, from what I can ascertain, had any symptoms which would lead to the conclusion, that there had been disease of the womb. She states that she has menstruated regularly from the age of sixteen; that she occasionally suffered some degree of pain previous to the discharge; and at times that she has had slight leucorrhœa.

At the time I attended this case, I could not call to mind ever having heard of a similar one, nor could I gain any information on the subject from my English works on midwifery; but on referring to the article "Dystocie" in the *Dictionnaire de Médecine*, by MM. Desormeaux and P. Dubois, I met with the following observations.

"Imperforation of the neck of the womb becomes an obstacle to parturition, only so far as it is accidental, and the result of disease which has occurred since conception. The existence of this complication was for a long time denied. It is true that accoucheurs have allowed themselves to be deceived by an obliquity of the uterus; and that the uterine orifice has sometimes escaped the most minute examination, even in cases where the cervix has been placed under the eye of the physician. But it is also demonstrated by facts of anatomical pathology, that the orifice becomes completely obliterated, in consequence of inflammation of the mucous membrane which invests it. Such a state of the uterus renders the vaginal Cæsarean operation necessary, as described in the observations of Flammant and Lobstein, those of Caffe and others, in order to give birth to the infant; for it is the only resource which art possesses against this complication."

Chomel again, in the same work, observes: "Sometimes the uterus is imperforate, and the obliteration is due to a membrane which appears to be a continuation of the vaginal mucous membrane, that is to say, that beyond this membrane, the uterine cavity exists as in ordinary; such was the anomaly spoken of by Benevoli, cited by Boyer in his *Maladies Chirurgicales*."

On referring to the *Lancet* for 1851, I find the particulars of two cases recorded; one by the late Dr. Sheppard of Stonehouse, and the other by Dr. Roe of Plymouth.

In the case of the former, however, he could detect a puckered *fossa* which admitted the tip of his finger; and Mr. Whipple, who assisted him, was able during his examination to break down the intervening false membrane between the sides of the neck and os uteri; in the instance before us, we had nothing of the kind to guide us. In Dr. Sheppard's case, moreover, the os uteri was of a semi-cartilaginous character, indicating previous disease, whilst, in ours, there was no manifestation whatever of this.

The circumstances which justified our opening the fœtal head, appear to have been somewhat analogous to those in Dr. Roe's case; for I am fully persuaded that, if we had longer delayed the operation, the poor woman must have succumbed.

LARGE TUMOUR OF THE BACK, OF FORTY-SEVEN YEARS DURATION.

By William Collyns, Esq., Surgeon, Alphington.

Mary Wills, aged 77, at the age of 30 first felt a soreness and pain in her back, high up between the scapulæ. She then ascertained that there was a small swelling in that situation, of about the size of a chestnut; but, as the pain ceased, she took no further notice of it for about ten years. At that time, finding it had increased to the size of a large orange, she showed it to me. I found it to be an indolent tumour, rather soft, as if containing medullary matter, not at all adherent to the skin or fascia. It caused no pain, and very little inconvenience. I proposed to remove it, and frequently urged an operation; but she would not consent, and for a long time avoided me.

I did not see her after this for twenty years, when the tumour had grown to an immense size. I prevailed on her to let me take her to Exeter in the year 1848, to show it to the South Western Branch of the Association, then about to assemble there. It was then estimated at the weight of 25 lbs.; and one of the members offered to remove it at once, but she would not consent.

On recently returning to this neighbourhood, after a long absence, I was astonished to find that the woman was still alive. She had been confined to her bed for two years, and was wasted to a mere skeleton. The tumour, which had increased in 1853 to the supposed weight of 40 lbs., had also been gradually wasting, but was still of an enormous size, hanging half-way down her back, with very large veins passing under its flaccid skin. It gave no particular pain, though tender on being examined, and raised up. The length of the tumour now is 2 feet 9 inches; the breadth, 16 inches; the circumference, just below its upper part, is 12 inches; round the lower part is 24 inches. She is a pauper, and her means of subsistence on 3*s*. a-week, allowed by the Board of Guardians, are very limited; and she has not received any allowance for a nurse, because she has a husband, who is allowed by his late employer 5*s*. a-week, being a cripple, and unable to do any labour. Being unable to pay for a nurse, she has employed a widowed daughter, and has maintained her for two years; whose great care and attention to cleanliness have no doubt prevented sloughing and consequent suffering.

British Medical Journal.

SATURDAY, AUGUST 15th, 1857.

DEATH OF DR. MARSHALL HALL.

It is with deep regret that we announce the death of Dr. Marshall Hall, one of the most distinguished physiologists that has graced the present century. For a long time past this eminent physician had been suffering from an affection of the throat, supposed to be cancerous; and on Tuesday last, he succumbed to the disease. Like a true man, he continued his valuable exertions almost to the last. We trust to be able, at an early period, to give a sketch of the life of this eminent labourer in the field of physiological inquiry.

METROPOLITAN DRAINAGE.

It has been observed sarcastically by one of the most prominent members of the Metropolitan Board of Works, that the main drainage scheme of London is beginning to assume the magnitude of an institution. We rejoice that such is the case; for business men nowadays seem incapable of elevating their ideas to the requirements of any magnificent work. They advance timidly, step by step, like a little boy taking his first dip in the sea. It is quite ludicrous, for instance, to look back at the ideas of the Commissioners first appointed to deliberate upon the best means of purifying the metropolis. At the outset of their labours, they could not bring themselves to entertain the notion that the Thames ought no longer to be made the main sewer of the capital. Accordingly, they agreed upon an absurd scheme to pump all the sewage into the stream, almost within sight of the bridges. This plan having been summarily disposed of by the *Times*, the Board of Works tried their hands at a plan, and, with the cunning of a low attorney, managed, as they thought, to keep within the meaning of the Act of Parliament, by fixing the outlet of their great culverts within a very short distance of the metropolitan boundary, as though they had only a geographical difficulty instead of a sanitary necessity to cope with. Thanks to Sir Benjamin Hall, this scheme was objected to, on the intelligible grounds that the Thames should be kept entirely unpolluted. Next comes the proposal of that gentleman's referees to carry the sewage right out to sea by means of two ditches, respectively 35 and 38 feet wide by 16 feet deep, running on each side of the river, on the north side from Barking to Mucking Lighthouse, and on the south side from Woolwich to Higham Creek—a distance on each side of nearly 30 miles. As the fall of those mighty drains is planned not to exceed six inches in a mile, we may imagine how pleasant would be the effluvia given off, or how charming would be a villa within smelling distance of such pellucid streams! The referees, indeed, attempt to excuse so monstrous a plan in one brief paragraph of their otherwise long report:—

"The great extent to which the sewage will be diluted after the outfall channels have been fed with the tidal waters at Barking and Plumstead will render it a comparatively innoxious stream; for this reason we are of opinion that it would be inexpedient to incur the expense of covering the channels, except in the neighbourhood of towns, buildings, and crossings of public roads."

This is just the sort of plan we should have anticipated from referees composed of engineers without the admixture of one medical man. Professional men of the former class seem to deal with the most death-dealing fluids as though it were a simple question of hydrostatics. They never for one moment seem to imagine that the malaria produced by twenty miles of open sewer will travel with the wind; and that their expedients of covering the fetid channel over *in the neighbourhood* of towns and roads would be about as effective as the walling round of a town to keep out the cholera! The idea that the admission of the tidal water at Barking and Plumstead would render the excreta of three millions of inhabitants innoxious is equally absurd: it would supply the requisite amount of fluid to render the passing off of the deadly vapour more certain. We have been proposing all sorts of plans for years to purify the Thames from the filth, which, diluted as it is by the natural drainage of an enormous area, is found to be intolerably noxious; and the last and most scientific effort on the part of the engineers is to create a nuisance fifty fold as great, on each bank of the Thames!

Have Sir B. Hall's referees for one moment considered that by their plan they are creating a positive marsh at our very doors—a positive marsh, which at once would render the banks of the first British river a desert, and the river itself as noxious as the Niger in the dry season, or as the coaling station at St. Thomas's? Medical men well know that travellers are peculiarly liable to atmospheric influences; and there can be little doubt that voyagers entering the metropolis by the "silent highway", flanked *by its splendid avenues of filth*, would be very liable to contract fever and cholera. We must indeed have a whole fleet of *Dreadnought* Hospitals moored off Greenwich, if these open sewers are carried into effect. But the thing is clearly impossible; the metropolis will not submit to be taxed to the tune of £5,500,000 for the simple pleasure of having one of their great outlets poisoned. Let us have these sewers by all means, but let them be covered at any cost. The public have long since come to the conclusion that the drainage of London and the purification of the Thames shall be an *Institution*—a Sanitary Institution, calculated to save tens of thousands of lives annually, and to add a beauty, in the shape of clear water, to the metropolis, without which the efforts of all our architectural plans will be worthless, Surely twenty miles of covered channels should not frighten engineers, who see works undertaken around them every day of doubtful use, which cost as much as, or more, than would this necessary work. Let Sir B. Hall by all means make up his mind to receive no scheme which does not provide for the conveyance to the sea of the whole sewage of the metropolis, as inodorously as the sewage of his own house is conveyed to the public drain. Let him but publicly declare that he will receive no scheme short of this, and the thing will be accomplished at once. The very fact of the presence of a great covered drain running through the marsh lands of Essex and Kent would be of incalculable valuable to agriculture. Permission should be given to tap these channels; and by this means the value of irrigating the land with sewage manure would be clearly ascertained, and the folly we have been guilty of in sending to the other end of the globe for guano, whilst the finest guano in the world is allowed to run to waste, will be estimated. We are clearly at the end of our long search after a pure Thames and a wholesome metropolis; and the question of expense must not be allowed to interfere in the slightest degree with that consummation so devoutly to be wished.

THE WEEK.

Within the last ten days a marked change has taken place in the weather. The thermometer, which marked some weeks since as high as 94° in the shade, has since gone down to 45°. In all probability the great heat of this remarkable summer is now over; and it is well that it is so, as cases of diarrhœa, many of which were of a choleraic nature, increased, during its continuance, from 33 to 302 weekly. The continuance of such a high temperature was beginning to tell powerfully upon animal as well as on vegetable life, and the Thames itself had

ecome so putrescent that many feared a frightful outbreak of holera. Happily, the return of a comparatively cool atmosphere has dispelled those fears. The heat appears to have been even greater on the Continent than on this island; in Paris, on the 4th of August, the thermometer in the shade marked as high as 95¾° Fahrenheit, and in Brussels it even reached the fearful height of 98° in the shade. It is remarkable that, notwithstanding the existence of this tremendous heat, the weather has been singularly free from thunder-storms. Inland situations appear to have suffered more than those situated on the sea-shore, even on the south coast; for it appears that while the thermometer in London was at 92° in June last, it only marked 75° at Torquay and Sidmouth. This act seems to contradict the generally received notion, that the south coast is unbearably hot in the summer months.

We were scarcely prepared to see the mouth-piece of the War Department obliged to admit in the House of Commons that he had deceived members (unintentionally, of course) as to the issue of proper clothing for the troops proceeding to the East. It now turns out that they are to receive their summer clothing *in India*, and that it is not even pretended that the covers are even ready *there* for the black shakos of the troops. The 97th, the 20th, and a part of the 42nd Highlanders have embarked in the same clothing in which they left Aldershot and Shorncliff. This is the old story of the green coffee over again. Whom shall we hang? We ask this question almost in earnest; for there cannot be any doubt whatever, that those authorities who have charge of the soldier's clothing are deliberately murdering far greater numbers of those poor fellows than the revolted Sepoys ever will dispatch. We repeat what we have often before said, that the nature of the clothing and the food of the troops should, in some measure, be under the control of the Medical Department of the Army. The Director General or the Medical Board should settle the kind of clothing necessary for every climate in which British soldiers are called upon to serve; and that department should direct the necessary kind of dress to be served out as occasion required. As it is, the Medical Department says it has nothing to do with those matters; or if it has, it neglects its duty in a very reprehensible manner. We trust that we shall find in the Report of the Royal Commission on the Army Medical Department about to be published, some recommendation for giving to the Medical Department real power and responsibility; for at present it is so miserably inefficient, that our science is disgraced in the eyes of the public.

We have before called attention to the fact, that it was in contemplation to further increase the monstrously overgrown Lunatic Asylum at Colney Hatch. It is now settled to erect a new wing, capable of holding 140 patients, at a cost of £40,000. When this is completed, there will be a lunatic population within those walls of nearly 1,400 persons, all of whom are under the care of two medical men! We cannot without shame chronicle this disgraceful state of things. To talk of treatment with such a paucity of medical aid, is simply absurd. Colney Hatch *is a house of detention of the most dismal kind*, and Mr. Gardner Hill need not talk any more about the authorship of the non-restraint system, as long as this huge bastile is appropriated to the incarceration of such a little army of helpless beings. The day will come—we say it advisedly—when we shall look upon our present treatment of the insane poor with feelings of disgust, differing only slightly in degree from those with which we read of the treatment of madmen in old Bedlam. The artificial system of caging these poor people in dismal airing courts and in monotonous wards has now, we believe, reached its height; and we trust that, with this new addition to Colney Hatch, we shall see the last of county asylums built and conducted on the selfsame plan as the neighbouring workhouse and jail. The day is assuredly at hand when we shall be constrained to follow the light held out to us so long by the interesting colony at Gheel, in Belgium, where bars, bolts, high walls, and deep ditches are unknown, but where, nevertheless, the percentage of cures is far higher than the metropolitan asylums can show, notwithstanding the fearful expense they annually cause to the ratepayer. As long as Pauper Lunatic Asylums on the model of Colney Hatch—the last triumph of the art of asylum building—are in full work, we need make no boast about our non-restraint system—for there restraint exists, as wounding to the spirit and as depressing to the mind, as when hobbles, strait waistcoats, and chains were the favoured instruments of repression.

It is with very great regret that we find some failure has taken place in laying the Atlantic electric cable. On Friday, August 7th, the squadron sailed with the line along which the electric spark would leap from the Old to the New World. The undertaking was, however, doomed to misfortune from the very commencement, for the cable broke when not more than four miles from the shore. It was, however, repaired, and the squadron steamed again westward. On Monday upwards of two hundred miles had been "paid out", and the vessels telegraphed through the submerged portion that they had reached the deep water, soundings of 1,500 fathoms having been obtained. Up to four o'clock on the morning of Tuesday the wires acted perfectly, and signals were constantly passed from the ships to the shore; but at that time the signals suddenly ceased, and none have since been received. It is supposed that some accident has happened to the cable at about 350 miles distance from Valentia; but this is only a matter of conjecture, as the delicate clue which before gave exact information of all that was going on in the ships has now been lost. There is still a hope that the loss of insulation has been caused by some damage to the cable whilst in the act of being paid out—a damage, however, which has not dissevered it. If this be the case, those on board will, perhaps, be able to haul in the required portion, and repair it in the same manner as they did the end near the shore.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

MONMOUTHSHIRE AND SOUTH WALES BRANCH: ANNUAL MEETING.

The sixth annual meeting of this Branch was held at Llandilo, on Thursday, July 23rd; David Prothero, M.D., President, in the chair. There were also present: D. Davies, Esq. (Aberdare); T. Essery, Esq. (Swansea); J. G. Hall, Esq. (Swansea); J. Jenkins, Esq. (Ty Gwyn); J. Jones, Esq. (Bryn Amman); W. H. Michael, Esq. (Swansea); J. Paddon, M.B. (Swansea); J. Rogers, Esq. (Ystalyfera); W. Rowland, M.D. (Swansea); W. Samuel, Esq. (Llandilo); B. Thomas, Esq. (Llanelly); D. Thomas, Esq. (Llandovery); J. Thomas, Esq. (Llaneigwad); and C. Vachell, M.D. (Cardiff), retiring President.

After a few words from Dr. Vachell, the retiring President, Dr. Prothero took the chair, and delivered the following

President's Address.

Gentlemen,—Allow me in the first place to thank you for the distinguished honour you have conferred upon me, in having elected me to the position I now occupy—an honour which I should most unquestionably have declined, from a consciousness of my inability, and from a feeling that there are other members of our Association in this county far more qualified to have succeeded our retiring worthy President. A few days, however, before our last annual meeting at Cardiff, I received a letter from our active and honoured Secretary, in which he stated that it was the wish of several members that a meeting should be held in this town; and that I should accept the presidency. On consideration, I felt I had no right to consult my own inclinations; and as our great object is to meet for the purpose of imparting to one another the results of our own experience and researches, and more particularly to cultivate a friendly and social feeling among members of a truly enlightened and honourable, but unfortunately a proverbially divided profession, I accepted the post. I throw myself with confidence on your kind consideration, and feel assured that you will overlook any deficiencies that may occur in the discharge of the duties that may devolve upon me.

In the name of my professional brethren in this neighbourhood, I beg to offer those who have honoured us with their presence a hearty welcome; and I trust that, as we are now more accessible than in former years, many of you who may have seen this beautiful district for the first time may be induced again to visit it. Within an easy walk you may arrive at the summit of the neighbouring hills, whence you will not only derive an invigorating and bracing air, but also some of the finest scenery that South Wales can boast of. To the geologist this district offers the means of prosecuting his studies with more advantage than any other with which I am acquainted. Nor is it deficient in what would interest the archæologist; and I need only refer to the ancient British encampment at Gorngoch, which was an object of great interest to the members of the Cambrian Archæological Society, who visited this place two years ago.

It is with no little pride that I have watched the increased interest taken in the advancement of our Association, and have seen that it has enrolled amongst its members many of the most eminent and distinguished of our profession—men who from their learning and position must give it such a standing that, without incurring the risk of being considered visionary or utopian, I may safely prognosticate a bright future looming in the distance, when we shall see added to its list the names of every man who would wish to cultivate the friendship of his brethren, and who practises his profession with those feelings of honour and rectitude which ought to characterise a liberal profession. In what way, I would ask, can these feelings be better cultivated than in frequently meeting together; in forming real friendships among the learned of our own profession; and by these means extending our information; and learning that, unless we are true to ourselves, unless we treat the faults of a brother with generosity, unless we be careful of his character as well as of our own, we are not worthy the profession which we have entered? If we look back to the lives of the great and illustrious individuals who exist no longer among us, but who, while they did exist, contributed to adorn the character of the medical profession, we shall find that, while they were revered for their attainments, they were universally beloved and respected for the uprightness of their conduct to their less favoured brethren. I could refer to the conduct of many who are now living amongst us; but it cannot be doubted that it is more useful for us to follow the example of those whose reputation has stood the test of a long series of years, than of those by whom we are actually surrounded, who are actors in the drama with ourselves. For those of the past, there is no private friendship to raise them above their proper level; no jealousy of competitors to detract from their real merits; they stand forth as the subject of history, in an atmosphere free from the mist of human passions. The same light shines upon their excellences and upon their defects; and the stamp of time has fixed the real value of their characters. The only way to attain this character for our profession is, in the words of Dr. Ranking, by the examining bodies requiring such a standard of general education as shall ensure that every aspirant to medical practice has had the education, and therefore the chances of acquiring the feelings, or I might say, the instincts of a gentleman; by every one when once enrolled in our ranks remembering that he has entered an honourable and dignified profession, and not in a trade; by each offering to the other a highminded and fraternal regard, and avoiding every unworthy artifice to elevate himself at the expense of his neighbour.

Next to the moral conduct and honourable principles of its members, is there anything which so eminently tends to raise our profession in the estimation of the public as its connexion with philosophical pursuits? Is it not an advantage in any profession to have some object which may engage the attention beyond the drudgery of professional practice; to which the mind may turn with delight as a relaxation from severer duties, to which it may retreat as a refuge in the hour of anxiety and disappointment? The wards of the hospital and the dissecting-room will enable the diligent student to obtain an adequate knowledge of what has been already done in surgery and medicine, and to become a good practical medical man; but those who would earn for themselves preeminence, by adding to our stores of knowledge and improving the science of their profession, must carry their views further, contemplating the phenomena and laws of life generally; not as they are exhibited in our own species only, but as they exist in the whole animal creation. If John Hunter had confined himself to a knowledge of human anatomy, however minute, and to mere clinical studies, his treatise on the blood and inflammation could never have existed. This indisputable fact alone is sufficient to convict those of ignorance and error, who hold that medicine and surgery are but empirical arts, and that physiological researches and scientific views of disease are of little importance to the practical physician and surgeon. I would ask, moreover, if there be any department of human knowledge more worthy the attention of the philosopher? Are there any sciences which offer to us a greater number and diversity of facts calculated at once to awaken and to gratify curiosity, or to excite in the reflecting mind feelings of a sublimer nature? Everywhere around us, in the air, in the waters, on the surface, and even in the deep dark caves in the recesses of the earth, we recognise the operation of that mighty principle which animates the universe; we trace it by means of the microscope, where the effects which it produces are imperceptible to our unassisted vision; we lose sight of it only at that point at which the power of lenses will carry us no further: and geology exhibits it to us in the various forms which life assumed in those remote and mysterious ages which were antecedent to all human history. A boundless field is open to our observation; and whatever part of it we explore, we discover objects of admiration not inferior to those which are presented to the astronomer when he looks to the starry heavens. It is in this part of the creation, more than in any other, that we discover the manifestations of the Creator. In the history and structure of individual animals, we find marks of intelligence, power, and benevolence, beyond what our minds can measure; while the uniformity of the design which pervades the whole system affords an unanswerable argument in favour of the unity of the cause in which it has had its origin.

With regard to medical reform, I shall make no remark; the subject is one which has engrossed the attention of men of the greatest talent; and even among them there appears to be such a diversity of opinion, that I fear we are as far off as ever from having a Bill which will give satisfaction to the profession.

As to the advances made in medical and surgical literature and practice during the past year, I have not the vanity to suppose that I can add to your knowledge or information; and shall therefore not further trespass on your time.

Dr. Vachell proposed, Mr. Rogers seconded, and it was resolved:—

"That the best thanks of this meeting be given to Dr. Prothero for his able address, and that he be requested to allow it to be published in the British Medical Journal."

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Dr. Rowland proposed, Mr. Rogers seconded, and it was resolved:—

"That the best thanks of this meeting be given to Dr. Vachell for his valuable services as President during the past year."

REPORT OF COUNCIL.

Mr. Michael read the following Report:—

"The Council of the Monmouthshire and South Wales Branch of the British Medical Association, in making their sixth annual report, regret that they cannot point to any increase in the number of members during their year of office. Owing to deaths, resignations, and removals, the present number of members amounts to only eighty-three, which is less than 50 per cent. of the qualified members of the profession living in the districts included in the Branch. Your Council have always believed that it would tend to promote the usefulness and improve the position of the practitioners of medicine, were all the medical men living in any portion of the United Kingdom brought together by being united in the Branch of their district; for, while your Council accept with gratitude the efforts made to procure medical reform by legislative enactments which would tend to ensure uniformity of qualification and reciprocity of practice, they cannot but believe that true and radical improvement in the status and condition of the profession must arise from their own efforts and influence; and they know of no means so likely to accomplish this end as a feeling of community of interest and a firm bond of union existing between those already within the pale of the profession. Whether their attention be directed to the army or navy medical staff, to the care of the public health by those devoted to sanitary science, or to that useful and hardworking, but ill paid branch of our profession, the Poor-law medical officers, your Council are led to believe that many of the evils which press upon their various branches have arisen, to a great extent, from the absence of that mutual support which members of our profession have been slow to afford to each other, and to that eager competition for posts of public employment which has induced in boards and governments the belief that, as a profession, we are so disunited as with impunity to have our just claims disregarded and disallowed; and that any amount of burden might be placed upon practitioners of medicine, with the certainty that, if one member refused to perform the duties demanded, another would be found to fill the vacant place. It is upon this principle that boards of guardians, assurance offices, and the successive governments of the day, have uniformly acted; and it is to the fact that we have not been true to our profession and ourselves that the evils of which we have so long and so loudly complained have been allowed to remain so long neglected and unredressed. Acts of Parliament may indeed provide the body of improvement; but the moving, living spirit, must be found in the extended idea of members of the profession of their duties, responsibility, and powers. Legislative enactments are but the *Deus ex machinâ*. Improvement, with or without legislation, is ever lying within our grasp, waiting but our own will for its full and due development and action.

"The recent discussions in Parliament on the question of the duties and remuneration of Poor-law medical officers—a subject which has been prominently brought forward by the labours of Mr. Griffin and his coadjutors—prove how little we may as a profession hope, under present circumstances, to obtain from even a liberal government; and they conclusively show the truth of the remarks urged upon your attention by the Council at the last anniversary meeting, as to the serious evils which would be inflicted on the scientific and social status of the medical profession, were its future destinies entrusted to a Council exclusively selected by Government. Yet such was the proposition in the Bill for Medical Reform introduced by the Select Committee into the House of Commons. Your Council see much matter for gratulation in the fact that so large a majority of members of Parliament voted in favour of the principle of representation as embodied in Mr. Headlam's Bill; but they cannot disguise the fact that the provisions of that Bill were in this respect faulty, inadequate, and much below that standard which every practitioner of medicine has a right to demand, as it merely transferred the powers of the Council from the Government to those various corporate bodies against the constitution of which so much complaint has justly been made. And your Council believe that no Bill for Medical Reform will be thoroughly acceptable to the profession, and therefore thoroughly successful, which does not carry the representative principle to its fullest limits, and allow to each member of a liberal and highly cultivated profession a voice in the election of members of a Council to which is to be confided the regulation of the future of the profession. Your Council believe that, had the British Medical Association, and the Reform Committee of that body, started with this as a general principle from which there was to be no departure, and with which there was to be no compromise, the position of medical reform in Parliament would, if not at this time actually obtained, have stood upon a much firmer and sounder basis than it can now be said to occupy.

"Your Council have during the past year been called upon to decide upon two charges of unprofessional conduct brought by Mr. Edgar Batt, of Abergavenny, against Mr. R. Smythe, of the same town. After very careful inquiry into the facts, your Council passed the two following resolutions:—

"'1. That this Committee, having heard the evidence now adduced by Mr. E. Batt, and the statement made by Mr. R. Smythe, that he regretted not having exercised due caution in visiting Mr. Price, and would not so act in any future case,—resolved, that the apology now made by Mr. R. Smythe be considered satisfactory.

"'2. That this Committee, having carefully considered the case of Mrs. Turner, are of opinion that, acting strictly in accordance with the rules of the Association, Mr. Smythe should have caused Mr. Batt to have been informed of his proposed attendance on the case previously to undertaking its charge, on or about the 19th of April; but they acquit Mr. Smythe of any intention to act hostilely or in an offensive manner to Mr. Batt.'

"Since these resolutions were passed, Mr. Batt has signified to the Honorary Secretary his intention to withdraw from the Association at the close of the current year.

"In accordance with the rules, voting papers have been sent to every member of the Branch. Twenty-one have been returned; and the following gentlemen have been elected as members of Council:—*President*—David Prothero, M.D. (Llandilo). *President Elect*—J. Essex, Esq. (Pontypool). *Council of Branch*—G. G. Bird, M.D. (Swansea); J. Brewer, Esq. (Newport); E. Evans, Esq. (Cardiff); J. French, Esq. (Neath); T. C. Jones, Esq. (Pembroke); T. King, Esq. (Chepstow); H. Lawrence, M.D. (Carmarthen); W. Rowland, M.D. (Swansea); E. Y. Steel, Esq. (Abergavenny); B. Thomas, Esq. (Llanelly); C. Vachell, M.D. (Cardiff); J. L. White, Esq. (Dowlais); J. Williams, Esq. (Brecon). *Representatives in the General Council*—G. G. Bird, M.D. (Swansea); E. Y. Steele, Esq. (Abergavenny); J. L. White, Esq. (Dowlais).

"Your Council, anxious to see the benefits of the British Medical Association extended in the principality, and believing that many of the members of our profession have not joined its ranks because unaware of its peculiar claims to their support, venture to recommend that three social meetings be held during the next year, to which all qualified members of the profession living in the immediate neighbourhood should be invited; that these meetings should be held in Swansea, Cardiff, and Merthyr; and that gentlemen should be selected to read papers at these meetings, on subjects of interest, to be followed by discussions. Your Council believe that, by adopting means for making members of the profession better known to each other in the districts in which they live, a higher tone of feeling and mutual esteem will pervade the body; that science, by mutual intercourse and the comparison of experiences, will be aided, extended, and furthered; and that, by so doing, the public, to whom we render our services, will derive increased benefit; for whatever ensures a better understanding between individual members of the profession—whatever tends to enlarge our views of disease, or provide us with improved or new methods of cure—whatever elevates our status or increases our power in the general community,—is not to be sought for solely with a view to our own selfish ends of profit, aggrandisement, or honour, but, by every well regulated mind, will chiefly be valued as an additional and more valued means of relieving suffering and misery, and warding off disease and death."

Mr. Rogers proposed, Dr. Rowland seconded, and it was resolved:—

"That the Report of the Council now read be received and adopted."

ELECTION OF OFFICERS AND COUNCIL.

It was proposed by Mr. B. Thomas, seconded by Mr. Davies, and resolved:—

"That the gentlemen whose names have been read be the

representatives of the Branch to the General Council, also the Branch Council for the ensuing year."

It was proposed by Mr. T. A. Essery, seconded by Dr. Vachell, and resolved:—

"That the next annual meeting of the Branch be held at Pontypool; and that J. Essex, Esq., be the President-elect."

Mr. J. Thomas (Llaneigwad) proposed, Dr. Rowland seconded, and it was resolved:—

"That Mr. W. H. Michael be the Honorary Secretary for the ensuing year; and that the thanks of this meeting be given to Mr. Michael for his services during the past year."

POOR-LAW MEDICAL REFORM.

A petition in favour of Poor-Law Medical Officers having been brought forward,

It was proposed by Mr. T. A. Essery, seconded by Mr. J. Jenkins, and resolved:—

"That the petition now read, in favour of Poor-Law Medical Officers, be signed by the members of the Branch, and forwarded to L. L. Dillwyn, Esq., M.P., for presentation to the House of Commons."

SOCIAL MEETINGS OF THE BRANCH.

It was proposed by Dr. Paddon, seconded by Mr. Hall, and resolved:—

"That, in order to make the advantages of the Association more generally known, three conversaziones be held during the next year; and that they be held in Swansea, Cardiff, and Merthyr, in the months of November, February, and May, respectively."

COMMUNICATION.

Mr. Michael read the history of two cases of poisoning.

NEW MEMBER.

W. Davies, Esq. (Hirwain), was elected a member of the Branch.

At 5 o'clock, about thirty-five gentlemen sat down to dinner at the Cawdor Arms, under the presidency of Dr. Prothero.

Reports of Societies.

ANNUAL REPORT OF THE READING PATHOLOGICAL SOCIETY.

By John McIntyre, M.D.

[*Read before the Reading Branch, July 8th*, 1857.]

[*Continued from page* 651.]

Surgical Diseases and Injuries.

LAMINATED FATTY TUMOUR. BY G. MAY, JUN., ESQ.

Mr. George May presented a tumour, excised from the buttock of a patient, which appeared to be encysted; but which Dr. Beale of London pronounced to be a very rare form of tumour called cholesteatoma, or laminated fatty tumour. It was filled with plates of cholestearine, mixed with fat, the plates appearing like exfoliations of the lining membrane. Mr. Paget describes it as a rare disease, and says, the most frequent seats of well marked specimens are in ovarian cysts and in connexion with the membranes of the brain. He believes the contents of such tumours to be a combination of layers of epidermal scales, with crystals of cholestearine.

OSTEOID CANCER OF THE KNEE-JOINT. BY W. W. MOXHAY, ESQ.

Mr. Moxhay presented a specimen of disease of the knee-joint, amputated in the Royal Berkshire hospital, which proved to be osteosarcoma, or, as called by Müller, "osteoid cancer." Mr. May diagnosed the disease to be malignant, from the swelling being confined to the condyles, especially the inner; from the absence of signs of general disease of the joint, beginning in the synovial membrane; from the absence of struma in the boy's family; and from the small amount of pain endured. The history in this case bears out, in some points, the history of the disease as far as it has been ascertained. It occurred in a male, in youth, and in the lower extremity of the femur—its most favourite site; but it differed in this, that there was very little pain, and that of short duration. In such cases it is usually severe in and around the part implicated.

FRACTURE OF SCAPULA. BY G. MAY, JUN., ESQ.

Mr. G. May presented a fractured scapula taken from a man who had been run over by a waggon, and who died in the hospital from inflammation of the lungs. The scapula was crushed into several pieces: the lower jaw was fractured, and the upper jaw was pressed in.

TREATMENT OF INJURIES OF CHEST BY OPIUM: CASE OF AVULSION OF A RIB. BY T. W. JESTON, ESQ.

The treatment of chest-injuries by opium was remarked upon by the Society as being now the recognised method of cure; and I cannot give you a more graphic illustration of its beneficial influences in such cases, its power of tranquillising the nervous system, relieving pain, diminishing the frequency of the heart's action and the respiration, than by giving you a summary of a case of avulsion of a rib, reported by Mr. Jeston.

A boy, aged 15, on Dec. 3, 1854, whilst at plough, by the horses running away, was knocked down, and the ploughshare entered his right side, making a large transverse wound in a line with the ninth and tenth ribs: the tenth was fractured, torn out, and left attached to the body by its cartilaginous extremity only. The upper half of the liver was exposed to view; also the diaphragm, and a part of the right lung. At the lower part of the wound a portion of liver about the size of a shilling, with its peritoneal covering, was scooped out. There was also a second wound, in a line with the umbilicus, but not penetrating the abdomen. His head and face were severely contused, the body having been dragged several hundred yards whilst transfixed by the plough. When seen, his pulse was scarcely perceptible, his tongue was covered with dry fur, and his thirst was urgent. He was sensible when roused, and answered questions put to him. He moaned much, but did not complain of great pain. There was little hæmorrhage. The rib was removed at its sternal extremity; the edges of the wound brought together by numerous sutures and adhesive plaster; a compress was applied, and a bandage round the body. He was kept under the full influence of opium for ten days, and beef tea, and brandy in thin arrow-root, given as food. The pulse never assumed an inflammatory character. The wound only partly healed by the first dressing, but the opening in the chest was closed. As the sutures separated, a large suppurating surface was exposed, which was dressed with long strips of adhesive plaster and nitric acid lotion. In six weeks he was discharged cured. The quantity of opium given was one grain of solid opium every hour, for the first four or five hours, to get him, and afterwards sufficiently often to keep him, under its full influence. The quantity of brandy was at least four ounces a day, besides wine in his arrow-root.

EXCISION OF THE KNEE-JOINT. BY A. FERNIE, ESQ.

Mr. Fernie presented a knee-joint where excision had been performed. Extensive suppuration followed, the constitutional powers failed, and amputation, forty-one days after excision, was had recourse to. It was found that union was going on, which, had the secondary amputation not been required, would probably have become bone.

FRACTURE OF THE ACETABULUM AND OF THE CONDYLES OF THE HUMERUS: DISLOCATION OF THE HIP AND ELBOW-JOINTS. BY W. W. MOXHAY, ESQ.

A man, aged 64, was at work with a pickaxe, stooping forwards, when a mass of coal fell on the back of the pelvis, and a lump, striking his hip, threw him down. His elbow was dislocated (and reduced before admission to the hospital), and his hip-joint was rendered useless. The back of the hip, when examined by Mr. Moxhay, was severely bruised, and a large tumour, full of fluid blood, occupied the same position. The limb was shortened about half an inch; the knee and foot were inverted,—the foot, however, could be brought to an upright position. The axis of the thigh was directed slightly inwards. There was great mobility of the limb: it could be flexed, extended, and rotated inwards. To outward rotation there was a bony check. The rotation caused great pain, and now and then an indistinct feeling of crepitus. The want of resistance, when pressure was made in front of the joint,—an important symptom,—was well marked. The trochanter was not so prominent as that of the other side, but the difference between it and the anterior spine of the ilium was scarcely, if at all, diminished. The head of the bone, in the very bruised and swollen state of the parts, could not be felt posteriorly. The general opinion formed of the nature of the injury, was dislocation into the sciatic notch. The man was chloroformed, and Reid's method of reduction—the manipulating—tried. When the thigh was brought to a right angle with the body, on rotating it, distinct crepitation could be felt, and a gliding sensation was communicated to the hand, as if the bone were

moved somewhere and again returned to its abnormal position. The conclusion was then come to, that the lip of the acetabulum was broken, particularly at its upper and back part, and no further efforts at reduction were attempted. The man died from the irritation and exhaustion caused by a large slough on the sacrum and bruised part. The condyle of the humerus was thought to be fractured during life, and found to be so after death.

On examining the hip-joint, the posterior half of the acetabulum was found destroyed, a portion being attached to the head of the femur at its upper and back part; another pushed up under the gluteus minimus posteriorly; and another larger portion pushed almost directly upwards; while the head of the bone rested on the ilium between the sciatic notch and the acetabulum, where, with the help of the detached portions, a very efficient cup for its reception would have been formed.

Mr. Moxhay remarked on the age of the patient, that he was two years beyond that of any he had found reported as the subjects of hip dislocation, and considered the age a favouring the occurrence of fracture. He remarked also on the shortening and a capability in the limb of being brought down to the length of the other; its inversion; that the foot has no tendency to fall out; more free mobility at the joint, and deep crepitus. He instanced a case, however, in which, after death, the head of the femur was found projected into the pelvic cavity, and in which the limb was *everted*. The all-important signs, he inferred, are crepitus, and the apparent reduction and redisplacement of the luxation. Mr. Moxhay concluded with a just tribute of praise to chloroform, and the new method.

In conjunction with this case I may instance one of my own. I was requested last year by a professional friend to see a boy, who, in playing with his fellows, sustained an injury to the hip. He was seen by his medical attendant and by two others, and the diagnosis arrived at was, dislocation into the sciatic notch. Pulleys and chloroform were assiduously tried for some time; and, greater mobility in the joint having been obtained, the dislocation was supposed to be reduced. It was found a day or two afterwards, however, that the former condition had returned, and I was asked to see the case. There could be no doubt as to the correctness of the diagnosis arrived at, and I was kindly permitted to try the new method of reduction. Although I had not seen it applied, I proceeded, *modo dicto*, and on bringing the thigh to nearly a right angle with the body, in the sweep of abduction, the head of the bone moved and went—somewhere. I thought I had reduced the dislocation, but a moment's examination informed me that I had only altered its kind; that I had made it a dislocation into the foramen ovale. The operation was again repeated, and in less time than I have taken to narrate it, the dislocation was reduced. No chloroform was used; scarcely any pain was caused —I was surprised how little; and no inconvenience followed. I find that many consider the dislocation to be more easily reduced without chloroform than with it; as, so soon as the bone is moved from its abnormal position, the muscles, not being paralysed as by chloroform, assist greatly in the reduction.

CONSTITUTIONAL ORIGIN AND TREATMENT OF CANCER.
BY F. A. BULLEY, ESQ.

Mr. Bulley commenced by stating that he considered the cachectic diathesis—which invariably accompanies the formation of cancerous disease, and which, according to some eminent authorities equally invariably precedes its external manifestation—to depend upon a peculiar broken down condition of the blood-corpuscles, by which they are rendered, through a disturbed nutrition of parts, capable of passing out of the limits of the circulation through the efferent nutrient vessels not naturally destined for their passage, and that they thus formed the morbid products characteristic of scirrhus; that thus having passed out of the limits of the circulation, the particles so deposited became decolorated, and, being out of the reach of the absorbent system, could not be removed by any means, except by caustic and the knife; that it was of no use to attempt a cure of the disease by either of these means, unless at the same time treatment was adopted to alter the condition of the broken down diffluent blood by restoring its globularity and firmness; by which only, according to the theory he maintains, the continuance or reproduction of the disease could be prevented. He stated, that he had made numerous microscopical observations of the blood of cancerous patients, and had invariably found the changes described. He had also observed microscopically the effects of recent vegetable infusions in restoring the globularity and firmness of the blood; observing daily the changes produced by their use in improving the local disease, as evidenced by the production of healthy granulations on heretofore unhealthy ulcerating cancerous surfaces. He stated also, that the use of such remedies was not new, but that heretofore they had been given with uncertain purpose; and that he had no doubt that the beneficial effects (which he says are undoubted) of cicuta, the galium aparine, and a variety of other remedies of that class, owed their power to the influence they exerted in thus altering the condition of the blood. He stated, that the dyscratic condition of the blood was in some measure owing to the interrupted respiratory functions of the skin, occasioning a defective oxygenisation of the blood, the lungs being alone insufficient for that purpose; that this was seen in most of the cases of cancer he had witnessed; but most so in chimney-sweepers' cancer, where the excretory orifices were invariably found to be blocked up by little particles of highly carbonised soot: in the other cases, the material blocking up the orifices being the dried natural secretions. He proposed to remedy this condition by the use of regular and methodical frictions and ablutions. He mentioned a caustic application which he had frequently used successfully for the destruction of small morbid growths, viz. savine powder, and the anhydrous sulphate of zinc, to which he would now add a little chloroform, or a small quantity of morphine. He thus stated, as suggested by Dr. Simpson of Edinburgh, that he considered a scirrhous formation to be an actual hæmorrhage, and endeavoured to found upon such hypothesis a pathological distinction betwixt malignant and non-malignant growths; that in the former case the blood had passed out of the vessels: and in the latter, they were simply impacted by some of the elements of the blood; thus in scrofulous tumours by its white particles, which were usually in excess in such cases; in fibrous deposits by its fibrous elements; the same of fatty tumours, etc.; and that each and all of these latter were capable of removal through the influence of stimulating local applications, the effects of pressure or improved heart's action,—none of which were or could be beneficial in cancerous cases, because the blood had passed out of the circulatory channels. He drew a comparison betwixt the action of the knife and caustics in the removal for a time of cancerous disease, each acting by causing the vessels on the proximal side of the disease to be plugged up until new vessels, through which the dyscratic element could be poured, had again been formed, and thereby showed the uselessness of local treatment, unless the existing dyscrasia could be removed. He stated, that it was difficult to say from what this dyscrasia originated, but he believed it to be from a deficiency of albumen in the blood; and this might arise from deficiency of food, defective formation, or waste through the secreting organs—as the kidney. This last he has often found, and believes it to be one of the most frequent causes of the pre-existent and concomitant cachexia that, he says, invariably attends upon cancerous formations. In conclusion he stated, that all authors agree that vegetable substances increase the albumen of the blood; in other words, according to Mr. Bulley's views, its globularity and firmness; and thus prevent its escape from the vessels in the shape of cancerous tumours; and when these have already formed, that such remedies are capable of suspending the action of the disease, and where they have done so, that operations, either by the knife or caustics, may be performed with the fairest chance of success, provided the vegetable remedies are continued for some time after the apparent cure of the disease.

Perhaps no subject connected with our branch of science has engaged greater attention of late years than that of cancer; and if any proof, more substantial than another, were needed that we in reality know nothing of the matter, it would, I think, readily be found in the discrepancy of opinion that exists both as to its nature, its mode of origin, and its treatment. The cell theory of Müller seems now by many to be discarded; whilst by others it is retained in its pristine favour; and so far as I can find, no satisfactory solution of the difficulties that surround the subject has in any measure been obtained. The views Mr. Bulley has propounded will not, I fear, share better than their predecessors, although their soundness is devoutly to be wished; as we should then, if I understand them aright, be relieved from much of the perplexity that now attaches to us in their management. If correct, operations for the removal of the malignant masses would, unless as inconveniences, be entirely dispensed with; seeing that, as soon as the vegetable substances had begun to exert their benign influence on the economy, further effusion, through the increased globu-

larity and firmness imparted to the blood-corpuscles, would be diminished; and when the system had been fully brought and kept under their power for a time, no hæmorrhage—no cancerous deposit—could take place.

The question of operation in cancerous affections is one of momentous interest, both as regards the frequency of the disease and the issues it involves. There can be no doubt that two very distinct classes of cases present themselves in practice: one, in which the cachexia (so far as its external expression at least) does not occur; and another, in which it is clearly marked in varying degrees of intensity; that in the one class operations have been much more successful than in the other, both as to the cure of the disease, and, where it *has* returned, as to the prolongation of life. In the former class, the local disease *seems* to precede the cachexia, which its advanced stages introduce; and in the latter, the cachexia appears to precede the local disease. The works of Professor Walshe and the statistics of Mr. Paget shed terror into the minds of surgeons as to the propriety of operation at all; and certainly, had the statements of these high authorities been substantiated by their enlarged experience, it would have been well for humanity had operations been abandoned. But Mr. Paget has, with enlarged observation, materially altered his conclusions; and instead of the former announcement,—that operations shortened the lives of their subjects by many (by thirteen) months,—he now intimates the cheering intelligence that, in well selected cases, the operation will prolong life; and that the proportions of deaths within the first two years, in those operated upon, has been less than in those left alone, amounting in the former to less than 11 per cent., and in the latter to 30 per cent. The propriety of operation must then be, as heretofore, decided by individual conditions. If the cachexia is slight, or not apparent, and there is no family proclivity to malignant disease,—when the local ailment can be freely removed, and no other contra-indicating reasons in the way of existing disease in other organs can be found,—we ought undoubtedly to operate. In cases of worse aspect than this, with the advantages we now possess in chloroform, we are justified in operating; but when the cachexia is strongly marked, the local disease extensive,—although it can be encircled by the knife, where disease of a like or other kind is found involving other organs,—we shall best consult, I believe, our patients' welfare by declining operations, and trusting to the relief afforded by soothing applications.

I need say nothing as to the curability of cancer otherwise than by caustics or the knife, as—although Velpeau, Cloquet, and some others, still insist that it is so curable—the general opinion, I believe is, that when diagnosed by the microscope and the usual signs and symptoms, it is beyond the reach of cure. And I am sure I need not detain you with a history of the influences of *puccoon* in the hands of Dr. Fell. No individual, in his searchings after truth, who even dips into his treatise, can be otherwise than satisfied that Dr. Fell's performances have come far short of his professions; that indeed he has no real remedy for cancer; and that, apart from the chloride of zinc, *puccoon* "is a mockery, a delusion, and a snare."

TREATMENT OF ECZEMA RUBRUM AND LEPRA VULGARIS BY THE EXTERNAL APPLICATION OF TAR. BY E. WELLS, M.D.

The cases of eczema rubrum, in which Dr. Wells has used tar, have been those in a chronic stage; and he considers that it would be equally advantageous in cases of psoriasis discreta as in lepra. Dr. Wells's previous use of tar, like that of most others, had been very much confined to foul, scaly eruptions; and his adoption of it now, in the classes of affections just named, was owing to its signal efficacy in a case reported to him by the patient himself, under his care for a renewed attack of eczema rubrum in both legs. Dr. Wells had formerly used the soothing plan so much recommended and followed in those affections; but ever since the marked benefit he saw derived from its use in this case, he has applied no other external application; and he has always found a gradual improvement commence under its use, and a restoration of the healthy cuticle ensue. He states, that if the tar be allowed to remain on constantly, it becomes too irritating; and the plan he follows so successfully is, to apply the tar dressing during the day, and the warm water dressing, with oiled silk, during the night. In the treatment of psoriasis and lepra, little attention is paid to external applications, as the local inconveniences are usually trifling, and internal remedies are generally adopted for their cure; but in some cases affecting the whole body, and of long standing, he has found the tar effect a cure, rapid in proportion to most remedies. The mode in which he has applied it in these last cases, has been to spread it freely over the cutaneous surface, and wrap the patient up in a tarred sheet. During the application, he says, it is necessary to give frequent ablutions in warm baths, as the tar, on evaporating, leaves behind it a fine pulverulent substance, which blocks up the pores of the skin.

Under the use of tar the scales soon fall off; and, if the application be continued long enough, alternating it with warm baths, the squamæ do not, as might have been expected, reappear, but those portions of skin which were the seat of them become softened, and gradually assume a healthy appearance.

[*To be continued.*]

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 23rd, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

CONCRETIONS OF THE PROSTATE: THEIR MODE OF PRODUCTION, AND THEIR RELATION TO THE FORMATION OF PROSTATIC CALCULI. BY HENRY THOMPSON, ESQ., M.B., F.R.C.S.

The paper was the result of observations made upon upwards of fifty dissections of the prostate. The existence of "concretions" of microscopic size had been established in every one of the fifty specimens of the prostate exhibited. In many their size was that of a poppy-seed. They had been found also in the organ at fourteen years of age. Their physical and chemical characters (the latter by rigid analysis) were given at considerable length. Their existence was concluded to be a necessary result of the performance of natural functions on the part of the prostate. After numerous observations, it appeared that the formation of a concretion frequently originated in the aggregation of a yellowish matter often seen within the secreting nuclei lining the gland ducts and pouches, often found free in yellowish granules, sometimes stuffing small ducts and follicles, and seen floating in the form of small prostatic fluid as well as in the contents of the vesiculæ seminales. In the larger masses of this yellow matter, entirely occupying the interior of crypts or follicles, the small granules may be seen cohering, or as if fusing together, and presenting an appearance identical with that which is often seen existing in the centre of fully-formed concretions. It was concluded that the coalescence of these yellow granules, or of the nuclei charged with them, their partial fusion into a mass more or less homogeneous, the stratification in part of this mass itself, or more probably the deposit upon its surface of fresh layers of fluid matter similar to that which originally constituted the interior; and finally, some addition of opaque earthy matter to it, either by infiltration or accretion (through irritation of the secreting membrane around, from the pressure of the newly-formed body, as observed in numerous other instances referred to), were the steps by which the production of a "prostatic concretion" was very frequently accomplished, and its connexion with "prostatic calculus" illustrated. The views of other observers were quoted and discussed at considerable length. Numerous drawings of these bodies in various stages of formation, as well as the original objects themselves under microscopes, illustrated the communication.

ON THE USE OF THE SPECULUM IN THE DIAGNOSIS AND TREATMENT OF UTERINE DISEASES. BY ROBERT LEE, M.D., F.R.S.

The author referred to the tabular statement of 220 cases of real and imaginary disease of the uterus, published in the 38th volume of the *Medico-Chirurgical Transactions*, and presented in a similar tabular form the details of 80 additional cases which had since come under his observation. Of the 300 patients, 47 were unmarried; one had barely completed her 18th year, several were under 20, and the majority under 30 years of age, and were suffering from hysteria, leucorrhœa, dysmenorrhœa, or some nervous affection of the uterus, without inflammation, ulceration, or any structural disease or displacement of the organ. In case 256 the patient had been told that the womb was prolapsed and much ulcerated, and an instrument had been introduced for six weeks, with an aggravation of all the symptoms. The hymen was found so perfect on examination, that it was impossible to reach the os uteri without using an unjustifiable degree of violence. On the ground of morality, and on every other ground, he could see no defence for the employment of the speculum in these 47 cases. Of the 300 patients 70 were barren, and the sterility was not removed nor the other symptoms relieved in a single instance. Several of these individuals spoke with horror and

shame of the treatment to which they had been submitted. A considerable number of the cases were suffering from cancerous disease, in all of which the symptoms seemed to have been aggravated by the treatment. In case 236 the character of the disease was unmistakable, but after an examination with the speculum a favourable prognosis had been given, and the actual cautery employed for months, and hopes of recovery held out to the last. The author expressed his conviction, that neither in the living nor in the dead body had he ever seen a case of simple ulceration from chronic inflammation of the os or cervix uteri; and to apply the term to states of the os uteri in which the mucous membrane, or, as it was termed by some, the basement membrane, was not destroyed by ulceration, was an abuse of terms calculated only to deceive and mislead the members of the medical profession, from whom the truth had been carefully concealed. The speculum emanated from the syphilitic wards of the hospitals at Paris, and it would have been better for the women of England had its use been confined to those institutions.

ON THE CLOSURE OF THE THROAT WITH THE LARYNX AT ITS UPPER ORIFICE. BY EDWARD SMITH, M.D., LL.B.

In this paper, Dr. Smith reported his observation, that the closure of the larynx at its upper orifice is accompanied by a simultaneous closure of the œsophagus at that part, and the conversion of the pharynx into a *cul-de-sac*. It may be seen more or less perfectly in all cases in which the epiglottis can be freely exposed. It is produced by the elevation (ordinarily) of the larynx with the epiglottis erect, to the extent of about half an inch, and a carrying backwards of the whole of the posterior wall of the pharynx. At the same time, the posterior wall of the pharynx is drawn forwards; its lateral walls with the tonsils are drawn inwards, near to the central line, and partially everted; and the whole pharynx at the root of the tongue and epiglottis is pursed up so as to be drawn inwards and upwards towards the central line. When the action is extreme, the epiglottis is placed in contact with the posterior wall of the pharynx, and the pillars of the posterior arches apply themselves laterally to the same fibro-cartilage. All these actions are consentaneous and co-ordinate, and can be produced, withdrawn, and repeated at will, and by them the cavities of the lung and stomach are cut off from communication with the mouth. The author considered it to be of the nature of a sphincter action, and to be due mainly to the middle and perhaps the superior construction of the pharynx, by which the posterior wall of the pharynx is brought forwards, the cavity of the pharynx contracted, and the larynx made to ascend. It is produced in expulsatory efforts, and may be felt by inquirers in the act of "hawking," when, after the preliminary closure of the larynx, the air is forcibly expelled, and conveys to them the sensation indicative of the closure of the partial reopening. It is perfect in the first part of the act of vomiting, when the œsophagus is then closed, and is found more or less perfectly in coughing, in the expulsatory efforts of dejection, and in the act of raising weights. The epiglottis is not carried back to the pharynx in all attempts of this kind—attempts which necessarily vary much in intensity; so that it is open to inquiry, how far the presence of the epiglottis is necessary to the closure described? The author thus considered this to be a normal and a protective power, but that it is also capable of assuming a spasmodic or continuous action, and thus to render this closure a diseased action. He referred to the dyspnœa resulting from inspiration of air of different degrees of temperature, of irritating vapours, as chloroform; as also the deglutition of fluids or solids which are mechanically or chemically irritating; to the dyspnœa attending bronchitis, hooping-cough, laryngismus stridulus, epilepsy, globus hystericus, and to the gurgling in the throat in the act of dying, as subjects for inquiry in reference to this mode of closure. He did not form any opinion as to whether true closure of the larynx can occur at the vocal chords without deposit.

Mr. Henry Lee said he had seen a case at the Lock Hospital in which the patient had lost the whole of the upper maxillary bone, and the back of the fauces could be brought into view, enabling him (Mr. Lee) to observe that at each act of deglutition the sides of the pharynx were approximated, almost meeting in the centre, in the way described by Dr. Smith.

Dr. Richard Quain thought that the author had been describing the ordinary phenomena of deglutition, which he had confounded with the closure supposed to take place at the upper part of the larynx.

Mr. Wood considered that the bony attachments of the pharynx were such as to prevent any lateral action which could influence the glottis, and that the action which had been described had reference only to deglutition.

Dr. Smith maintained that the action was independent of swallowing; and regretted that his patient was not present, that the members might see the movements in question.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—Your readers will remember that a short time since I forwarded to you the copy of a letter which I addressed to the Poor-Law Board. In it was a passage from a leading article of the *Justice of the Peace*, and the following question:—"As one of your medical officers, I shall feel obliged by your informing me if the lame, impotent, old, blind, and such other among them being poor and not able to work, are the only persons I am by virtue of my office bound to attend; and what course I am to pursue when the relieving officer sends me orders to attend persons not coming under the class above named?"

To this, I received the annexed unsatisfactory reply.

Pending further inquiries on the subject which are being made, it may be interesting to your readers to peruse an answer to a union medical officer in the *Justice of the Peace* for July 25th, which is appended. Allow me to remark, this is not a question of the propriety or impropriety of the labouring classes having medical orders for their families, but simply the state of the law on the subject, and the legal right of the Poor-Law Board to impose upon their medical officers the duty of attending all whom the relieving officers may choose to consider as "poor"—a term which is very indefinite, even in the interpretation clause of the 4 and 5 Will. IV, c. 76, s. 109, which says:—"The word 'poor' shall be construed to include any pauper or poor or indigent person applying for, or receiving, relief from the poor-rate in England and Wales or chargeable thereto."

Let the union medical officers continue their aid; and it is more than probable that before another session shall have passed, the Poor-Law Board will see the desirableness of rendering us that justice which we have a right to expect at their hands, considering the oath they have taken, "that they will faithfully, impartially, and honestly, according to the best of their skill and judgment, execute and fulfil all the powers and duties of commissioners." This oath sounds somewhat strange, when we find that nearly four hundred petitions have been presented to Parliament this session, praying for redress of grievances which ought to have been "impartially" considered by the Poor-Law Board, and if they had any foundation, "faithfully and honestly" redressed.

I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, August 1st, 1857.

The Secretary of the Poor-Law Board to Mr. Griffin.

"Poor-Law Board, Whitehall, 14th July, 1857.

"Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 30th ultimo; and in reply to the inquiry which it contains, to inform you that under the regulations of this Board it is the duty of a district medical officer to attend duly and punctually upon all poor persons requiring medical attendance within the district assigned to him, whenever he may be lawfully required to furnish such attendance by an order in conformity with those regulations.

"I am, Sir, your obedient servant.

"Courtenay, *Secretary.*

"Richard Griffin, Esq."

Answer to a Union Medical Officer in the "Justice of the Peace" for July 25th.

"If in any case the person whom the medical officer is called upon to attend is not a 'poor person', he would not, as we conceive, be bound to attend the case under the regulation (art. 206, No. 1, Gen. Consolidated Order); but in the event of his refusing to attend the case upon a regular order of the relieving officer, he must be prepared to prove that the person named in it is not 'poor' within the meaning of the 43 Eliz., c. 2. If he is not so prepared, then the most prudent course will be to attend the case until the next meeting of the guardians of the union, when he should report the circumstances of

it to them, and take their directions for his future guidance. If, on the other hand, he attends the case in pursuance of a lawful order, he cannot afterwards say that he did not attend by virtue of his office, and sue the relieving officer or the guardians for the value of his services. As regards the right of a relieving officer to give medical orders in cases such as those mentioned, it is stated in a note to Mr. Glen's edition of the *Consolidated Orders* (p. 155), that if the ailment be such as to afford reasonable ground for the attendance of a medical man, and the applicant be unable to procure medical aid for himself and family, the relieving officer should give the order, but not otherwise; and this we think is the correct view of the scope of a relieving officer's authority in cases of medical relief."

SUGGESTIONS FOR IMPROVING THE ANNUAL MEETINGS OF THE ASSOCIATION.

Letter from Edward Smith, M.D., LL.B.

Sir,—Whilst the subject of the annual gathering of the members of our Association is fresh upon the memory, this appears a fitting time to ask the Council to reconsider the arrangement of those meetings, with a view to their improvement. It cannot have failed to have occurred to you that, with upwards of 2,000 associates residing in all parts of the kingdom, more than 80 or 100 ought to attend the meetings, and especially when they are held in a midland district. To say that 500 members ought to be collected on such an occasion, should not be extravagant; seeing that, of all classes of the community, none are more social and none more inquiring than our profession; and, although our daily duties are a hindrance to pleasure, we do sacrifice them or transfer them to others for a time when we can gain an equivalent good. What a change would come over our meetings if, instead of twenty persons to listen to an oration, we had five hundred; and how much would such gatherings stir up a spirit of industry and generous emulation! Moreover, in how great a degree would such a state of things tend to prevent that bickering, jealousy, and backbiting, which we acknowledge to be the disgrace of our profession, and, by social and intellectual intercourse, induce each to acknowledge the merits of others, and to cultivate sentiments of true friendship and affection. Surely, sir, a consideration of the little good which is effected, and the great good which might be effected, by such gatherings, must be recognised by the Council, and is worthy of their most serious attention. I am one of those who regard these annual meetings as the essence of the good which our Association can effect. We can read papers elsewhere, and we could leave to private enterprise the publication of a journal; and for these two purposes alone I believe that we do not need such an Association; but we cannot bring together, hand to hand and heart to heart, the members of our profession throughout these kingdoms, known and unknown to each other, in so happy a manner as, when they have left the cares of practice behind them, they meet together under one roof, to listen to each other's labours, or to join in common the festive board of this Association, or in small parties to enjoy the hospitality of their resident brethren. In my opinion, we need now more love than learning; and our Association ought to be made very largely conducive to both.

Then why is it that so little interest is evinced in an object fitted to do so much good? Do not imagine that the fault lies altogether with the associates, with their circumstances, or with human nature. None of these considerations are sufficient to hinder our seeking either pleasure or profit; but it lies with the arrangements of these meetings, which do not render to those who attend them an equivalent in pleasure and profit for the sacrifices which must be made to enjoy them. Render the meetings more joyous, interesting, and instructive; and you will attract a greater number of those who meet. But you ask, How will you do it? And, although it is much easier to find fault than to mend, I think I should be safe in replying that any alteration must be an improvmeent. First, I think the business arrangements are capable of great improvement, so that time may be given for everything that has to be done; that every associate may know all that is to be done, and when and where it is to be done; and so that as much may be done as the time allowed can permit to be done. Now this is far opposed to a plan which shall do little, at no particular time, leaving everybody ignorant of what is and when it is to be done. Of course the few associates who are the leaders in the Association will feel the necessity for these things far less than those who, knowing no one, are also unknown.

I suggest, with all due deference, the following:—

1. That the Association Secretary shall be responsible, and shall have paramount control over local Secretaries; and that he be required to give sufficient time, attention, and business talent, for this purpose.

2. That *all* associates intending to *attend the meetings* be invited to send their names to the General or a Local Secretary; and that those names be posted up in a known building, or be published in the Journal; so that the resident members of the profession may be able to read them, and invite to their houses such as they may please.

3. That the folly of requiring two sets of representatives from the Branches—viz., the past and the newly elected ones—be abolished; that the Committee of Council prepare and present the various reports of the proceedings of the Council and of the different Committees; that the real representatives meet before the meetings, and prepare the scheme for the whole of the meetings then to take place.

4. That a time be allotted to every subject, and that it shall be the duty of the President to see that it be not exceeded, and, if needful, to adjourn the discussion to a vacant hour. This would limit the nuisance of the reform discussions.

5. That the Association addresses do not each occupy more than one hour; and that the general subject be the improvements in each branch of knowledge during the past year or years. This would hinder the exclusive selection of a single subject which might interest and instruct but few of the associates, and which should properly constitute an ordinary paper to be read before the Association. The old limits of medicine and surgery should be respected, except by the interpolation of one subject, as midwifery, physiology, animal chemistry, anatomy, etc., to be varied from year to year. So long as we do not publish a volume of *Transactions*, such of the orators as produce approved essays should be permitted to use the sanction and request of the Association in publishing them separately. I do not think that long essays of that kind are very suitable for a weekly journal.

6. If it be desirable that other papers should be read, encouragement should be afforded to their writers by setting apart a suitable and convenient period for the reading of the papers. This might occupy a part of two days, and the interest of the associates maintained by the interposition of other duties. They should never exceed half an hour, and fifteen minutes might be allowed for discussion after each paper, provided no delay arose from the absence of speakers. A large number of most valuable and interesting papers might be obtained yearly; and, if too many to be read *seriatim*, they might be read in sections. The present arrangement is most ungenerous to the authors and unjust to the hearers.

7. A day, or a part of two days, might be appropriated to the inspection of objects of great interest in the locality; the inspection to be by the body of associates then met, and to be regarded as a meeting of the associates.

8. A detailed and accurate programme of everything to be done should be given to every associate present, and be also published in the Journal immediately before the meeting.

9. It would add not a little to our pleasure if the nobility and leading clergy and gentry of the neighbourhood were invited to take part in some of our proceedings.

I trust, sir, that, whether the associates and Council think these suggestions of value or not, they will give such attention to the subject as shall conduce to the further advantage of our body.

I am, etc., Edward Smith.

63, Grosvenor Street, London, Aug. 3rd, 1857.

THE ROYAL FREE HOSPITAL.

Letter from J. S. Gamgee, Esq.

Sir,—As my retirement from the surgical staff of the Royal Free Hospital, last autumn, has been attributed to motives which have no foundation in fact, I pray you to give me opportunity of publishing through your columns, that in taking that step I was simply actuated by a sense of public duty. Firmly believing that the management of that hospital was not in accordance with the only principles consistent with due regard for the interests of mankind and of science, I felt bound to tender my resignation. I have simply to add, that if the authorities of the hospital desire any explanation with reference to this letter, I am prepared to furnish it.

I am, etc., Joseph Sampson Gamgee.

Upper Woburn Place, 3rd August, 1857.

FRACTURES OF THE SKULL.

Letter from W. F. Morgan, Esq.

Sir,—The number of the Journal for August 1st, contains a valuable paper on Fracture of the Skull, by Mr. Humphreys, of Shrewsbury. I fully agree with Mr. Humphreys as to the general principle of not interfering with depressed bone, when unaccompanied by symptoms of pressure on the brain; but there is one important exception to which he has not sufficiently alluded, though his first case is a very good illustration of it.

It not unfrequently happens that the skull is beaten in by circumscribed local violence, such as the kick of a horse, or the blow of a pointed instrument, without the occurrence of immediate symptoms of any moment. In such fractures, sharp and projecting bone is apt to be driven against or through the dura mater, even to some depth in the substance of the brain. If this be allowed to remain, it will almost certainly excite fatal inflammation, often accompanied by convulsions. Loose pieces of bone thus situated would of course be taken away at once; and depressed attached bone similarly circumstanced should likewise be immediately elevated or removed.

A case strikingly illustrative came under my care at the Bristol Royal Infirmary a few years ago. A lad, some days before admission, received a small wound on the forehead from part of the barrel of a pistol which burst in his hand as he was firing. At first, no unfavourable symptoms appeared; but, when brought to the Infirmary, he had phrenitis in an intense form. There was a small punctured wound at the seat of injury, through which a fracture could be felt; and on enlarging it, a sharp spiculum of bone, attached to the skull, was found penetrating the dura mater. The trephine was applied, including the fractured part within its circle, and immediate amendment took place, followed by perfect recovery. The result in this patient was fortunate, and by no means forms a precedent for waiting for symptoms in similar cases.

I am, etc., W. F. Morgan.

Bristol, August 1st, 1857.

FATTY TUMOURS: ACTION OF LIQUOR POTASSÆ.

Letter from J. L. W. Thudichum, M.D.

Sir,—In the number of this Journal for July 25th, there is published a case headed "Resolution of Adipose Tumours", by J. H. Webster, M.D., Physician to the Northampton Infirmary. This case and its corollary has suggested to me the following remarks, in making which I put myself in the position of a member of the meeting before which the article may be assumed to have just been read.

It is natural that the appearance of tumours, and their rapid increase on a man's body, should cause him to seek for the advice of a doctor. The latter, having arrived at a diagnosis, would then make an estimate of the practical evil, the inconvenience actually caused, or the trouble and danger likely to be caused by the growths; and, giving to himself or the patient a prognosis drawn from the experience of the profession, he would look out for a proceeding by which the patient may be restored to health, or his life prolonged to the farthest limit.

In the case before us, the diagnosis of adipose tumours seems clear enough. Whether they were wholly or partly caused by excess in oxtail soup and beer, might have been ascertained to a certain degree by the temporary removal of the cause, which, in the affirmative case, must have been followed by a cessation of the effect; but, as we have not the benefit of such an experiment, the case shares the fate of all other cases of adipose tumours—perfect obscurity as to the causes.

What, then, was the inconvenience caused to the patient? The tumours on the neck do not appear to have caused any great disfigurement. The substantial double chin, also, could only be objectionable to his vanity. The bolsters on the abdomen were not excessive, as the circumference of the abdomen was only thirty-nine inches. The only inconvenience, at all events, of which the author informs us, was, that the patient could not button a pair of trousers which he was trying on; and, lower down, that his trousers had not met in front by three to four inches. This excess in the circumference of the abdomen over that of the trousers cannot have been due to the fatty tumours only, as the decrease in the circumference of the abdomen, allowing the buttoning of the trousers, had (Nov. 8th) taken place within two days: so, allowing one-half for the decrease of the tumours, the other half of the decrease was perhaps due to the assimilation of an allowance of oxtail and beer, which had swelled the stomach to the circumference mentioned.

The ordinary observer, who knows that these external lipomata never cause death (except perhaps by one cause—ulceration in consequence of deficient nutrition, and this only in large pendulous tumours); that they are perfectly goodnatured; that they may exist about the body for twenty, thirty, forty years, without leading to anything, except perhaps a slight increase in size, the size being their only inconvenience,—would naturally agree with Dr. Webster that all these circumstances "dissuade from early and active operative interference". The observer would perhaps go so far as to believe that these circumstances also dissuade from expecting any effect (relief we cannot call it, there being no suffering) "from the most problematical and uncertain influence of internal constitutional alterative remedies". I would not have dared to pay this compliment to the mercurial treatment, with iodine inunction and moderate purgation, or to the liquor potassæ treatment; but, as Dr. Webster has applied it himself, I may accept it in full without offending him. I would not have hazarded the reputation of these remedies, and my own, on so ungrateful an errand as the attempt must be to resolve adipose tumours which cause no inconvenience to the individual. To such cases I think the rule still applies which Mr. Prichard, at page 632 of the Journal, quotes from an ancient English book: "Ye shall for no golde nor sylver take in hande yt thynge that ye thynke is incurable."

But there is the case related by Sir Benjamin Brodie, of the footman who was cured by the liquor potassæ. This case seems to weigh more than a hundred in which the same remedy ruined the health of the patients, without resolving the tumours. I dare say we shall have the liquor potassæ given in yet a thousand cases; and, if misfortune wills it that one of them should get well, nine thousand nine hundred and ninety-nine wretches will hereafter have to swallow the liquor potassæ, for the "saponification" of adipose tumours, and the glorification of medicine.

Let us for a moment look at that same liquor potassæ. It has served many purposes since Brandish's time: hydrophobia, secondary syphilis, scrofula, have alternately had the benefit of it. These were empirical times. Since rationalism reigns in medicine, we do things much better. We saponify fat in lipomata, as if it were in a pot; and do not even require the aid of boiling heat. I think we should not withhold that secret from the soapboilers; it would save them much cost and trouble. But, in truth, there is so much grease left unsaponified, that, for want of soap, we cannot wash this black spot from our records.

That liquor potassæ is a caustic, everybody knows; it destroys animal matter in every dilution, dissolves the epidermis and internal epithelia, absorbs carbonic acid very rapidly, and combines with acids. The caustic effect is reduced to a minimum by great dilution, by means of infusions or baths. I dare say that carbonic acid has the greatest effect in reducing the caustic property; for I am quite sure that, of all the liquor potassæ kept and dispensed in the chemists' and apothecaries' shops in this kingdom, none is quite free from carbonate, and the greater part of much of it is transformed into carbonate of potash. More carbonate will be formed in the act of dispensing, more during the time of the patient's having his bottle and taking the daily doses; so that a certain minimum only of the intended caustic happily reaches the patient's stomach. The walls of this latter are now subjected to its tender mercies; or, if acid be happily present, it is neutralised. It is doubtful whether much free alkali reaches the blood; and, if so, it must at once be transformed into the carbonate, and all the subsequent effects must be due to the carbonate of potash. All this by the laws of matter!

From the many therapeutical virtues of liquor potassæ enumerated by Dr. Neligan (*Medicines: their Uses and Modes of Administration*, 4th edit., p. 13), I select the following for illustration:—"It not only neutralises the free acid, but also counteracts the morbid tendency of the stomach to acid secretion. It must, however, be remembered that its action is only temporary, and that its continuous use deranges digestion, and produces a tendency to acid secretion." It appears to me that such talk has a tremendous tendency to bring therapeutics into discredit. The stomach is naturally filled with acid secretion almost all day long; and what a morbid tendency to acid secretion is to signify, nobody knows, much less how an alkali is to counteract that tendency. But the wonder is, how the same alkali comes

to have its action reversed, and to produce the same tendency which at first it counteracted. When Dr. Neligan shall have explained this discrepancy and freak of nature, we will enter a little more fully on his "*fatty* diseases" in which this wonderful bissectile alkali produces the satisfactory results. May they not cut the other way, with action reversed! This I wish sincerely.

Dr. Webster says, that "the most satisfactorily recognised function of the liver is the resolution of the saline constituents of the blood into their acids and alkaline bases; the first, to play their part in the digestive function; the latter, in the function of absorption." The rest of the world has been hitherto believing the reverse; namely, that the liver unites free alkali with some organic acids of its own formation, and does some other services, not so easily recognised, regarding sugar, cholesterine, and colouring matter. But, it seems, we must reform that notion. If any room for astonishment be left us after such announcements, we are startled by another; namely, that it is an adopted modern opinion that the soluble proteine compounds of fibrine, albumen, and caseine, are chiefly absorbed into the circulatory system at once from the stomach. Now, let anybody say that the stomach is not a goodnatured fellow; it digests and secretes an abundance of acid and pepsine. Covered as it is all over on its active surface by secretory glands, it nevertheless absorbs all meat, eggs, milk, and broth; and in that respect is like the liquor potassæ; and at the proper time has its action reversed—secretion into absorption. The chemistry of the hydrocarbons, and their alkaline solutions or saponifications, is also peculiar to Dr. Webster, whose accumulative tendency for new and startling ideas thus becomes almost as great as that of his patient for adipose depositions.

I hope this letter may not appear to him too caustic a ley, as I am very willing to dilute it with and envelope it in the linseed vehicle of professional friendship. One thing I hope, that it may do him better service than the liquor potassæ does to lipomata and to people's stomachs: then I shall be gratified by the attainment of my object.

I am, etc., J. L. W. Thudichum.

9, Woburn Place, Russell Square, August 1st, 1857.

THE LONDON PHARMACOPŒIA.

Sir,—It appears, from Dr. Garstang's letter in the Journal of August 1st, that my reply to your Barnsley correspondent, *anent* the trochees, has been misunderstood.

"A Member" having written what I thought a very funny letter, I attempted to show that, in trying to damage the reputation of the London *Pharmacopœia* and its formula for "brandy caudle", he was using a queer argument against it in saying it did not also contain one for something similar to sugar-plums! I had no objection to the homœopathic-like plan of giving sweets to the sweet; but, when the trochees he ordered were not to be had at the druggist's, I could not see why he should tell us all that he knew of no substitute for them.

The formula for trochisci morphiæ et ipecacuanhæ being to be found in Neligan's work on *Medicines*, in Thomson's *Conspectus*, and in any translation of the three Pharmacopœias, I did not think it necessary to send a substitute for them. Besides, "A Member" did not tell us what the "tickling cough" arose from. Among the most common causes of such a symptom are relaxation of the *uvula* and enlargement of the *tonsils;* and in such circumstances I should *not* use the trochees in preference to other remedies.

As to the tinctura opii ammoniata, I think a substitute might easily be found for it; but perhaps the best way to remove all "A Member's" difficulties would be for us to have a National *Pharmacopœia*, instead of three different ones.

If anything I have written in my former letter has given pain to "A Member", I am heartily sorry for it. It was merely a jest, and but a poor one; still I cannot altogether regret having penned it, inasmuch as it has drawn from Dr. Garstang that valuable bit of information "on anatomy and the *rationale* of therapeutics", which I hope will prove of as much use to the other elderly members of the Association as to

Yours, etc., A Member.

August 5th, 1857.

Parliamentary Intelligence.

HOUSE OF LORDS.—Tuesday, August 11th.

SALE OF POISONS.

Lord Campbell asked the Lord President of the Council what the Government intended to do in reference to the Bill relative to the improper sale of poisons? The Bill had been referred to a select committee, who had laboriously investigated the subject, and obtained important information, founded on which certain amendments had been introduced into the Bill. He wished to know whether the noble earl intended to proceed with the Bill during the present session, or whether it would stand over for consideration until the next session?

Earl Granville said, that the select committee had given most patient attention to the Bill, and had amended it in several particulars. It would, however, be useless to attempt to proceed with it at that period of the session, and he thought some advantage would be gained by the Bill being printed and circulated in the country during the recess.

HOUSE OF COMMONS.—Thursday, August 6th.

CLOTHING FOR THE TROOPS IN INDIA.

Sir H. Willoughby asked the Under-Secretary for War whether the troops that had been sent to India had been provided with clothing suitable to the heat of the climate to which they would be exposed; and, if so, if he had any objection to state what provision had been made on that subject.

Sir J. Ramsden said the most satisfactory way in which he could answer the question would be by reading, with the permission of the House, the list of articles issued to the troops on their arrival in India, in addition to the ordinary supply of necessaries which they had in this country. They were as follows.—For the cavalry, four white jackets each, six pairs of white overalls, two pairs of Settringee overalls, six shirts, four pairs of cotton socks, and one pair of white braces. For foot soldiers, four white jackets, one pair of English summer trousers, five pairs of white trousers, five white shirts, two check shirts, and one pair of white braces. Those articles were not supplied in this country, but formed a part of the soldiers' necessaries on his arrival in India, and were made of material made on the spot and best suited to the climate. During his stay in India, China, Ceylon, and at other hot stations, he was provided with a tunic and shell jacket in alternate years, and in the year in which the tunic was not issued the difference in the value of the two articles was paid to the soldier, to be expended, under the authority of the officer commanding, for his benefit in any articles suited to the climate of the station. In addition to these, the troops now going out to China and India had been provided with white cotton helmet and forage cap covers. In fact, the Government had taken every precaution to maintain the health and comfort of the troops.

Colonel North asked whether the army in the field before Delhi were wearing the tunic, and also whether all those extra articles referred to by the hon. baronet were to be carried by the troops.

Mr. Stafford likewise asked whether the white head-dress was a substitute for or to be worn in addition to the ordinary one, for that made all the difference.

Sir J. Ramsden said, in reply to the gallant gentleman (Colonel North), he apprehended that the troops now in the field were in possession of the articles he had enumerated, because, under a general order of the late General Anson, which had been in force for some years, every soldier on his arrival in India, was provided with those articles of clothing, in addition to those which composed his kit in this country. He had to state, in reply to the hon. member for Northamptonshire (Mr. Stafford), that the white linen covers for the forage caps and helmets were to be in addition to what the troops already wore, otherwise they would be of no use.

Lord Ebrington wished to know whether the soldiers would be expected to carry this large additional weight themselves, or whether any arrangement would be made to carry it for them.

Sir J. Ramsden apprehended that such arrangements were left entirely to the discretion of the officer commanding on the station.

Monday, August 10th.

CLOTHING FOR THE TROOPS IN INDIA.

Mr. Roebuck wished to ask the Under-Secretary for War a question. It would be in the recollection of everybody that the hon. baronet the other night made a statement as to the manner in which our soldiers were prepared, when they got to India, to meet the exigencies of the climate. Among other things, he stated that our troops were provided with cotton covers for their helmets and foraging caps. Now, in that day's *Times* they were told that the information given by the hon. baronet was not correct; that no such cotton covers had been issued to our troops; and that they were going to India in heavy marching order. [*Hear, hear.*] Now, he wished to know whether it was true that the men had not received, as the hon. baronet had stated they had, coverings for their helmets and foraging caps; and, if not true, on whose authority the statement was made to the House. Of course he could not for a moment suppose that the hon. baronet made a statement which he did not believe, and he (Mr. Roebuck) put the question now in order that, if not correct, it should be brought home to the man who communicated it to the hon. baronet.

Sir J. Ramsden had observed the paragraph to which the hon. gentleman alluded. He found, on inquiry, that the state of the case was this:—The troops sent out to China had received cap covers, or materials for making them. The cavalry, artillery, and engineers sent to India took with them cap and helmet covers made up; but the infantry now proceeding to India did not take with them cap covers. The material, however, would be provided for them in India; and he was informed there would be no difficulty in getting any amount of material in the shortest possible period. Orders had been sent out by overland that no time should be lost in preparing the cap covers, so that they might be ready for the troops when they arrived. [*Hear, hear.*]

Tuesday, August 11th.

CROWDED DWELLINGS PREVENTION BILL.

Upon the question of the second reading of this Bill,

Mr. Ayrton opposed it, denouncing it as the most extravagant measure ever introduced into Parliament. Free access was to be given to the police at all times, and the house was to be cleaned at their instance, besides being registered and supplied with water. Who was to protect the people against the abuse of authority under this Bill? He moved that the Bill be read a second time that day three months.

Mr. Cowper stated that the object of the Bill was to amend the Lodginghouse Act. That measure had been attended with the most beneficial results, but there were certain abuses which it did not meet. Lodginghouses were overcrowded, and the Act was evaded on the pretence that the lodgers were members of the same family. It was chiefly to remedy this evil that the Bill had been introduced; and in committee he would take care to provide that it should apply only to common lodginghouses, and not to private houses. He hoped, therefore, the hon. gentleman would not press his amendment against the Bill.

Mr. J. Locke was not entirely satisfied with the alterations suggested by the right hon. gentleman who had introduced the Bill. He was not sure that, even after they had been made, the Bill would not interfere with the interests and liberties of poor persons who were not lodginghouse-keepers. He therefore trusted that some further alterations would be made in the clauses of the Bill.

Sir G. Grey said that his right hon. friend had intended to move the amendment which he had sketched, even although no opposition had been raised to the Bill. He suggested that the hon. and learned gentleman should allow the Bill to be read a second time, and that it should be committed *pro formâ*, in order that the amendments might be introduced.

Mr. Ayrton withdrew his opposition, and

The Bill was read a second time.

IRISH LUNATIC ASYLUMS.

Mr. Cogan asked the Chief Secretary for Ireland whether he could state when a report might be expected from the Lunatic Asylum Commissioners of Inquiry; and, further, whether it was intended to suspend or to prohibit all improvements or required alterations in the existing asylums until this expected report was published?

Mr. Herbert replied, that he had received a letter from the secretary of the commission, stating that there was no probability of the report being ready before the close of the year. It was not intended to stop any necessary alterations or repairs in existing asylums, but no costly works would be allowed to be proceeded with.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Barclay. On August 7th, at Leicester, the wife of *John Barclay, M.D., of a daughter.

Barnes. On August 8th, at Aylesford, Kent, the wife of J. Wickham Barnes, Esq., Surgeon, of a daughter.

Everest. On August 11th, at 15, Carlton Hill East, the wife of Henry Everest, Esq., Surgeon, of a daughter.

Hess. On August 9th, at 7, Artillery Place, the wife of Augustus Hess, M.D., of a daughter.

Leake. On August 8th, at Kent Cottage, Old Kent Road, the wife of J. Leake, M.D., of a son.

Marston. On July 26th, at Malta, the wife of J. A. Marston, M.D., of a son.

Ogle. On August 3rd, at 13, Upper Brook Street, the wife of John W. Ogle, M.D., of a daughter.

Page. On August 6th, at 11, Queen Street, May Fair, the wife of W. E. Page, M.D., of a daughter, which survived only a few hours.

MARRIAGES.

Brady—Crossing. Brady, Henry, Esq., of Her Majesty's Dockyard, Devonport, to Ellen, third daughter of Thomas Crossing, Esq., Surgeon, of Morice Square, in the same town, on August 11th.

Brushfield—Davis. Brushfield, T. N., Esq., Medical Superintendent of the County Asylum, Chester, to Hannah, only daughter of John Davis, Esq., of Princes Street, Spitalfields, at Christ Church, Spitalfields, on August 5th.

Cowan—Stokes. *Cowan, John B., M.D., of Glasgow, to Mary Ann, second daughter of Professor Stokes, M.D., at Dublin, on July 29th.

Harrison—Wood. Harrison, John Barton, M.D., Bengal Army, to Emilie Louise, youngest daughter of the late Rev. J. S. Wood, formerly Rector of Cranfield, Bedfordshire, and afterwards chaplain at Caen, at Walcot Church, Bath, on August 6th.

Hatchard—Bright. Hatchard, Lieutenant J. H., R.N., to Mary Elizabeth, eldest daughter of *James Bright, M.D., of Cambridge Square, at St. James's Church, Paddington, on August 6th.

Hewitt—Rees. Hewitt, John J., Esq., Surgeon, of Chalcot Villas, Haverstock Hill, to Caroline, third daughter of John Rees, Esq., Solicitor, High, at the Catholic Chapel, Somers Town, on August 5th.

Kendall—Burt. Kendall, the Rev. Walter, of Wool, Dorset, to Isabella Josephine, youngest daughter of T. M. Burt, M.D., H.E.I.C. Medical Service, at Wool, on August 5th.

Littlejohn—Harvey. Littlejohn, Henry Duncan, M.D., of Edinburgh, to Isabella Jane, eldest daughter of Henry Harvey, Esq., Canonbury Square, Islington, at St. Mary's, Islington, on August 6th.

Metcalfe—Lay. Metcalfe, Robert, Esq., Surgeon, of London, to Alice, daughter of Mark Lay, Esq., of Pond House, Boxted, Essex, on July 30th.

Rowland—Deacon. Rowland, John T., M.D., to Harriet, daughter of Henry Deacon, Esq., of Hans Place, London, at the Chapel of the British Embassy in Paris, on August 4th.

Struthers—Alexander. Struthers, John, M.D., of Edinburgh, to Christina, daughter of James Alexander, Esq., Surgeon, Wooler, Northumberland, at Wooler, on August 5th.

Thompson—Parnell. Thompson, W., L.R.C.P., of Newark, to Grace, youngest daughter of the late John Parnell, Esq., of Waltham Abbey, Essex, at St. Marylebone Church, on August 11th.

DEATHS.

Ayre, John, M.D., at the Grove, Hackney, aged 78, on August 8th.

Bruce. On August 6th, at Brighton, aged 77, Ann, widow of the late Ninean Bruce, Esq., Deputy Inspector-General of Hospitals.

*Budd, Robert, Esq., Surgeon, of Fawley, Hampshire, lately.

Gould. On August 4th, at Wateringbury, Kent, aged 55, Ann, wife of *Henry M. Gould, Esq., Surgeon.

Hall, Marshall, M.D., F.R.S., at 37, King's Road, Brighton, aged 67, on August 11th.

Leigh. On August 10th, at Turnham Green, the wife of H. T. Leigh, Esq., Surgeon.

Martland, Robert Thomas, M.D., of Blackburn, Lancashire, suddenly, aged 33, on August 4th.

Sheehy. On August 9th, at 4, Claremont Square, aged 16 months, from hooping-cough, Fanny Patmore, daughter of W. H. Sheehy, Esq., Surgeon.

Walkinshaw. On August 7th, in Gower Street, Bedford Square, Julia Isabella, youngest daughter of the late William Walkinshaw, M.D., of Trinidad.

White. On August 15th, aged 24, Charles, youngest son of Edward White, Esq., of Lamb's Conduit Street.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, August 7th, 1857:—

Asbury, Charles John, Enfield
Bodilly, James Broad, Penzance, Cornwall
Booth, Samuel, Huddersfield, Yorkshire
Buckmaster, William, Middleton, Cork
Cooper, Geoffrey Veel, Bristol
Culverwell, Charles, Arundel Street, Strand
Hinder, John, Calcutta
King, Richardson, Jersey
Nunan, James Casey, Croome, Limerick
Stacey, George, Hornsey
Webb, Henry James, Cheadle, Staffordshire

Monday, August 10th:—

Allen, William Christopher, South Shields
Curtis, Albert, Staines
Ellis, William James, Calcutta
Julott, Charles James, Manchester
Lee, Newton Bolle Colborne, London
McGrath, Henry Francis, Jamaica
Pater, William Thompson, Canterbury
Woods, John, Newry

University and King's College, Aberdeen. The degree of M.D. was lately conferred on the following gentlemen after examination:—

Betts, George Harvey, Watford
Cogan, Joseph, London
Davidson, Samuel, Aberdeenshire
Drage, Charles, Hatfield
Hatherly, Narcissus Collins, R.N., Plymouth
Hilton, William Richard, Whitehaven
Leys, Robert, Ellon
Norton, Algernon Charles Wodehouse, London
Reeve, John Foster, London
Stephens, Alexander, Aberdeenshire
Wilson, John, Whitby

HEALTH OF LONDON:—WEEK ENDING AUGUST 8TH, 1857.

[*From the Registrar-General's Report.*]

In the week that ended on Saturday (August 8th) the number of deaths registered in London was 1224. It differs little from those of the two previous weeks, which were 1209 and 1238. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1217; but as the deaths of last week occurred in an increased population, the average, with a view to comparison, should be raised proportionally to the increase, in which case it will become 1339. The number now returned is therefore less by 115 than the average rate of mortality would have produced; but as the period from which the latter is derived includes two weeks, viz., those in 1849 and 1854, when cholera was extensively fatal, it will be seen, if due allowance is made for the increase in the average arising from that cause, that the mortality of the present time is rather high for a season when the public health is not disturbed by any extraordinary epidemic.

The progress of diarrhœa appears to have received a check; for whereas during the six previous weeks the weekly number of deaths from that disease rose by degrees from 33 to 302, it fell last week to 258, which is almost the same as that of the week that ended July 25th. The air was considerably colder in the latter part of last week than it had been for a month, and was, in this respect, more favourable to the health of that part of the population which is peculiarly subject to fatal attacks of the disease. Of the 258 persons who died last week from diarrhœa, 222 were carried off in the first or second year of life, 12 were two years of age and less than 20, none died between the years 20 and 40, only 2 between 40 and 60; the next period exhibits an increase, 22 persons having died who were 60 years old and less than 80. The deaths referred to cholera, which were 24 in the preceding week, were 30 last week. Twenty out of the 30 occurred to infants. Adding together the numbers under diarrhœa and cholera, it appears that 8 deaths from these complaints occurred in the sub-district of St. Mary Paddington, 7 in that of Belgrave, 9 in St. Margaret Westminster, 8 in St. John Marylebone, 7 in Somers Town, 8 in Poplar, 7 in St. Paul Deptford, and smaller numbers in nearly all the other sub-districts.

The deaths from typhus and common fever were rather more than they had been for many previous weeks, having been 48. From small-pox there were 5, from measles 14, from scarlatina 32, and from hooping-cough 38. A man died of ulceration of the ilium from drinking chloride of zinc by mistake for gin. The deaths of five nonagenarians are returned, namely, of 3 men and 2 women. Two men were respectively 94 and 95 years of age; and a widow who died on August 6th, in the Workhouse, Wapping, is stated to have attained the great age of 106 years.

Last week the births of 736 boys and 753 girls, in all 1,489 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,455.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·704 in. The mean temperature was 65·2°, which is 3·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was nearly 73° on Monday and Tuesday, which is more than 10° above the average; on the last two days of the week it was below the average. The *highest* readings in the week occurred on Monday and Tuesday, and were 88° and 87·6°; the highest readings in the sun on the same days were 108° and 114°. The *lowest* reading of the thermometer occurred on Friday, and was 52·4°. The range of the week was 35·6°. The mean dew-point temperature was 56·3°, and the difference between this and the mean temperature of the air was 8·9°. The mean temperature of the water of the Thames was 69·4°. The wind blew from the south-west on every day except Wednesday. Rain fell to the amount of 0·85 in., the greater part of it on Thursday.

TO CORRESPONDENTS.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Communications have been received from:—Mr. Robert Metcalfe; Dr. W. A. Bryden; Mr. William Martland; Mr. T. Holmes; Another Member; Mr. W. Collyns; Mr. Haynes Walton; Dr. W. Webb; Mr. John Hatton; Dr. Edward Smith; Dr. Thudichum; Mr. Richard Griffin; Mr. J. S. Gamgee; Mrs. E. Budd; Mr. Michael; Dr. George Buchanan; Mr. C. Bader; Mr. Streatfeild; Mr. W. F. Morgan; Mr. Stone; Dr. C. Handfield Jones; Dr. Mackinder; Mr. H. Hancock (Exeter); and Dr. R. U. West.

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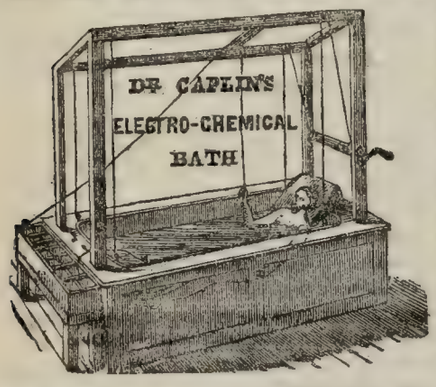
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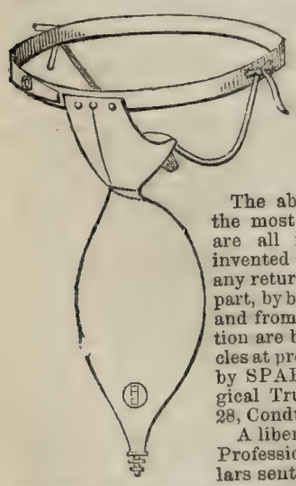
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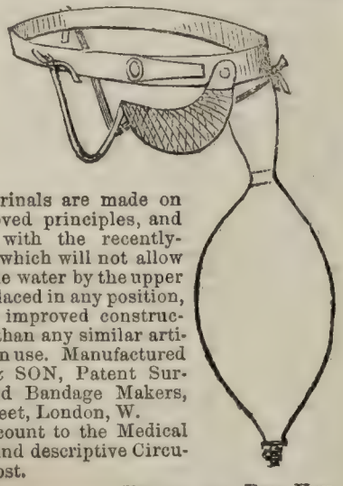
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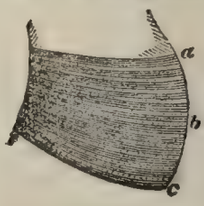
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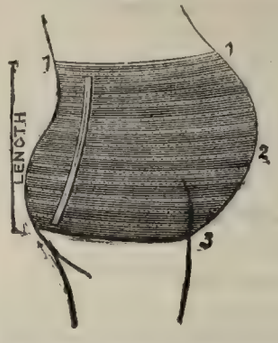
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXXIV.] LONDON: SATURDAY, AUGUST 22, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

PULSATING TUMOUR OF THE ILIUM: THE DIAGNOSIS BETWEEN THIS AND ANEURISM.

Under the care of P. G. HEWETT, Esq.

CHARLES W., aged 51, was admitted under the care of Mr. Hewett, Nov. 24, 1856, on account of a tumour in the left buttock, attributed to an accident two years before, in which he fell, and struck that part against the edge of a stair. A month after this accident he noticed a little swelling, apparently near the sacroiliac joint. His occupation was that of a gardener, and necessitated frequent strains upon that part, causing him pain. Notwithstanding this, he continued at work for some months, and then came under Mr. Hewett's care at this Hospital in Oct. 24, 1855. At this time pulsation was manifest in the tumour, which was situated below the posterior superior spine of the ilium. It was of small size, and rather hard. The pulsation had not the heaving character of aneurism, nor was any bruit to be heard. Pressure in the sciatic notch did not control the pulsation. He had been losing flesh, and his complexion, which had been ruddy, was becoming sallow. A consultation was held, at which it was decided not to interfere with the tumour, as it was, in all probability, of a cancerous nature, and not aneurism. He remained in the house for nine weeks, and then went away to look after his business, but was unable to do any hard work. The pulsation became gradually more violent, so that the left leg was visibly moved, and the clothes disturbed as he lay in bed; the pain, too, increased, and his health suffered considerably. Under these circumstances he was admitted into the hospital at the above date.

The tumour at this time was found to have increased very much in size; it had been growing rapidly, and then filled nearly the whole of the gluteal region, projecting very much backwards, especially near the sacrum, where it appeared to be somewhat softer, with slight discoloration of the skin. It was somewhat lobulated on its surface, and strong pulsation could be distinctly felt in every part, this pulsation being strongest in the part of the tumour which was the softest. No bruit could be detected. A close examination of the iliac fossa also showed fullness in this region; and an indistinct pulsation, not belonging to the large vessels, could be felt with the fingers pressed deep down. For some months he had been suffering from partial incontinence of urine, and this had latterly become complete, the urine flowing away involuntarily; the bowels also acted unconsciously. The left leg and thigh were very œdematous, and he complained of cold in the part.

From this time he continued to sink very gradually, and without exhibiting any symptoms which call for detailed repetition. The tumour increased steadily, but slowly. He complained of acute pain in it, as well as in the course of the nerves of the affected leg; there was not, however, any paralysis of either sensation or motion. The urine was found occasionally to contain blood; but no malignant cells were seen under the microscope: at other times it was alkaline and free from albumen. Paralysis of the rectum supervened, and gave him much trouble; and he suffered also towards the end of his life from dyspnœa in the horizontal position. For the last week of his life he was occasionally delirious; but became sensible, at intervals, before death. The cause of death seemed to be exhaustion,—the effect of loss of appetite, and the great drain on the system caused by the tumour.

The *post mortem* examination showed no visceral disease, except in the left kidney: here there was a mass of malignant deposit of about the size and shape of a sheep's kidney, similar in appearance (both to the eye and under the microscope) to the larger tumour of the pelvis. The deposit lay immediately beneath the capsule of the kidney, and had encroached considerably on the renal substance, which was otherwise healthy. Projecting from either side of the bones, on the left side of the pelvis, was a very large encephaloid tumour; it was of very soft consistence, almost fluid in some parts, lobulated on the surface, and presented, on section, a cavernous tissue, consisting of meshes of solid matter forming cells filled with grumous blood. The tumour had extensively corroded the ilium and sacrum, and had so destroyed the articulation between these bones that they were freely moveable on each other. Loose spiculæ of bone were found scattered through the substance of the tumour opposite this deficient part. The tumour was more prominent, and extended further in every direction on the buttock. It stretched across the middle line, where it rested on the sacral and lower lumbar spines, to the border of the acetabulum, and from the lower part of the vertebral gutter above to the sacrosciatic foramina below. It had filled up both these foramina, and was continuous above and below with the tumour which was occupying the iliac fossa. This was of the same character as the mass in the buttock: it filled almost the whole of the iliac fossa, and raised the vessels and iliacus muscle. In the pelvis it filled up the hollow of the sacrum, and touched the internal iliac vessels of the right side. The disease had infiltrated the coats of the veins, and many of the large venous trunks (left common, external and internal, and right internal, iliac) were plugged up by large pieces of malignant matter, which, on microscopic examination, proved to be of the same nature as the main disease. This deposit was most abundant in the left internal iliac, and seemed to follow, in some instances, the course of the circulation. The disease, on microscopic examination, was shown to contain cells of various shapes and sizes, many of them fibrillating and containing much oil.

REMARKS. Cancerous tumours of the ilium, pulsating in consequence of their containing in their substance large interspaces filled with blood, and communicating with arteries in the interior of the tumour of very considerable size, and thus simulating aneurism of some of the arteries of the pelvis and buttock, are occasionally (though rarely) observed in our hospitals, and are confessedly very difficult in their diagnosis. The reality of this difficulty is proved by the fact mentioned by Mr. Moore in his paper on the subject, in the *Medico-Chirurgical Transactions*, vol. xxxv, that, out of the five cases in which the common iliac has been tied in London, three were of this nature. These three cases were—one under Mr. Moore's own care, of which the history is given in the paper referred to; one which is reported by Mr. Stanley in the twenty-eighth volume of the same series; and the third referred to was in all probability Mr. Guthrie's case, in which a tumour of this description was mistaken for an aneurism of the gluteal. It cannot, therefore, be useless or uninstructive to put on record a case of the same description, in which the diagnosis was from the first correctly maintained, and to inquire what were the circumstances relied on for establishing it, and what is the value of each.

Now, the circumstances which may indicate a difference between these tumours and those of an aneurismal nature have reference to the following particulars:—1. The general state of the patient; 2. The history of the case; 3. The situation of the tumour; 4. The character of the pulsation, and its accompanying *bruit;* 5. The fact of the tumour making its appearance on both sides of the bone, or no; 6. The presence of disease of other organs; 7. The comparative frequency of the two diseases.

As to the first point, every one who has given any attention to the study of these diseases knows how difficult it is to come to a satisfactory opinion, from the state of the general health,

as to the malignancy or otherwise of a tumour of the medullary character, at a time when the disease is still recent, and the functions not interfered with. Such symptoms, then, will only be useful as distinguishing an aneurism which has advanced to a large size without any of the disturbance to the general health of the patient which might have been expected from a malignant tumour of the same extent. In Mr. Hewett's case, however, it is rather to the diagnosis of the disease in its early stage, than to its progress in the later, that we would call attention; and in this respect no assistance was obtained from the patient's general condition. Nor was the second point likely to facilitate the diagnosis. The history was more adapted to mislead, inasmuch as a fall such as the patient had suffered, was one of the most natural causes that could have been imagined for the production of an aneurism a few weeks later, especially when the nature of his employment was taken into account.

Thirdly, as to the situation of the tumour. This gave also negative evidence, inasmuch as the swelling was situated at the region of the sacro-sciatic foramen, just where aneurism of the gluteal or sciatic artery, if it existed, would most naturally be looked for. In the second volume of the *Lancet* for 1854, is the report of a case at King's College Hospital, under Mr. Fergusson's care, in which the diagnosis between aneurism and pulsating tumour of the ilium was successfully established, and in which assistance was derived from noting the fact that the tumour did not project exactly at the spot where aneurism of the gluteal artery might be looked for. This sign, however, failed in the case before us. Important information, however, was derived from the nature of the pulsation, and from the stethoscopic examination. The latter revealed an absence of the *bruit* which usually, but not always, accompanies the formation of a small aneurismal tumour. Not always, for small aneurisms are occasionally found, in which no sound is generated by the current of the blood in them, probably in consequence of the freedom of the communication with the arterial tube. Such a case will be found reported in this Journal for 1856, p. 515.

Again, the character of the pulsation differed somewhat from that usually observed in aneurism. This difference it is not easy to explain in words. The pulsation was of a heaving character, but rather as if every part of the tumour swelled at the same time, than resembling the transmission of a wave through a sac already filled with fluid, as is the case in small aneurisms not containing any appreciable quantity of coagulum. These facts, then—viz., the absence of *bruit* and the nature of the pulsation—were of much importance in forming the diagnosis.

The next point to which attention is to be drawn is the projection of the tumour in both the gluteal and iliac regions. This is a circumstance which was very strongly insisted on by Mr. Hewett in his remarks on this case, as rendering it, to say the least, highly probable that the tumour in which it may be observed is a malignant tumour of the bone, and not an aneurism. It is impossible, indeed, to deny that aneurism, arising either in the iliac or gluteal region, may corrode the bone, and may thus make its way into the opposite region; but how much more likely is it that a tumour which affects the adjoining parts only by the mechanical influence of its pressure, should make its way in the direction in which it finds least resistance, and thus should not affect the bone until after it has increased to so large a size in the soft parts as by its weight to produce considerable obstruction to its further increase in the same direction. The argument which seems to have induced Mr. Stanley, in the case above referred to, to lay less stress on this circumstance (for the symptom was present in that case also) than Mr. Hewett did—viz., that the bones are often corroded by aneurism, especially in the thorax, appears to have been pushed too far. The arrangement of parts in the thorax differs so totally from that in the buttock or abdomen, and the forces acting on the viscera in that closed cavity give them so much more power to resist pressure than is possessed either by the intestines or the soft parts of the buttock, that the cases are hardly sufficiently analogous to be safely compared together. It appears probable, then, that cases in which the tumour can be felt on both sides of the ilium before it has attained any extraordinary development on either, may safely be put down as having originated in the bone. This sign, however, was not present in Mr. Hewett's case till later in its progress; but it is one which is very frequently to be observed, if carefully sought for, and which, if this view is correct, would be of the greatest service in forming the diagnosis.

Next, as to the presence of disease in other organs. This is undoubtedly one of the strongest possible proofs of the cancerous nature of the tumour. It was, however, not very distinct in this case at any time; for although the urine was noticed occasionally to contain blood, the microscope failed to detect cancer-cells. This fact is of some interest in connexion with Mr. Moore's case above referred to, in which also malignant disease of the kidney existed, as well as a malignant tumour pressing upon but apparently not involving the bladder. Here the urine, examined after death, showed the presence of malignant matter. The case before us seems to prove that this test, valuable and conclusive as it is when present, must not be too confidently expected, and therefore that its absence must not be held to show the freedom of the urinary organs from malignant disease.

The last point refers to the comparative frequency of the two diseases. On this subject, we have not been successful in finding any positive information, but it may be asserted with confidence that while aneurism of the iliac arteries or their branches is a very rare complaint, malignant tumour of the ilium is a comparatively common one, and the occurrence of pulsation in such tumours not unusual. The careful consideration then of all these signs will, it is hoped, in the great majority of cases, enable the surgeon to come to a correct conclusion, and thus avoid an operation which is very frequently fatal, and which at the best can hardly do otherwise than hasten the inevitable termination of a malignant disease.

Before quitting this case, we would allude, as an interesting pathological appearance, to the fact of the malignant disease having penetrated into the interior of the veins. This exception to the immunity which the blood-vessels usually enjoy from contamination by cancer even when surrounded by the tumour, is occasionally met with in the medullary form of the disease when rapidly advancing. A case came under our observation a short time ago, in which a large medullary tumour of the kidney had thus affected, not only the external iliac vein, but also the ureter; down which it had passed, and was hanging into the bladder in the form of a long rope-like projection out of the dilated extremity of that tube.

KING'S COLLEGE HOSPITAL.

DEATH FROM THE ADMINISTRATION OF CHLOROFORM.

Ann M., aged 16, was admitted under the care of Mr. Partridge, on July 8th, on account of syphilitic tubercles about the vulva. It appeared, from the history which her friends afterwards furnished, that she had had rheumatism at intervals since her childhood, but she was not known to suffer from disease of the heart. Chloroform had been given twice before during her stay in the Hospital, in order to remove the pain of the application of nitric acid to the tubercles; one drachm was used on one occasion, and half a drachm on another. No uncomfortable symptoms showed themselves.

On the evening of August 7th, the nitric acid was ordered to be again applied under the influence of chloroform. This was accordingly done, under the superintendence of Mr. Heath, house-surgeon, by a gentleman who had frequently given chloroform before. One drachm of the fluid was put into the inhaler (Dr. Snow's). She soon became unconscious, without any unusual symptom having been observed. The inhaler was then removed, and the acid applied. This took two or three minutes, during which time she remained insensible. She then appeared to be recovering consciousness, as she moved her limbs and passed urine. She was left under the care of the nurse. In somewhat more than five minutes, the nurse (who had come to speak to the house-surgeon on some other matter) reported the patient as looking unusually pale. She was visited immediately, and found to be quite cold and pulseless. The usual remedies, cold affusion, artificial breathing (the "ready method"), and the galvanic battery were used, and persevered in for twenty minutes, but without eliciting any signs of animation.

Post mortem examination showed disease of the heart; the mitral valve being much thickened and very rigid. There was also old false membrane on the pericardium. All the other viscera were healthy.

Remarks. We have gathered these particulars of the first fatal accident from the administration of chloroform which has occurred at King's College partly from details supplied by Mr. Heath, who was present at the administration of the drug, partly from the evidence at the coroner's inquest. It is difficult to see what precaution could have been taken which was neglected. The quantity of chloroform was not greater, if so

great, as had been administered twice before with safety; it was in the hands of experienced persons, it was given for only a short time; and the patient was not left till symptoms of recovery had shown themselves. It is not, indeed, expressly stated what was the state of the pulse after the application of the acid; but the fact of movements of a semivoluntary nature having been made, seemed to show that she was recovering consciousness, while the action of the bladder proved that the involuntary muscles were not at that time (some minutes after the last inhalation of chloroform) paralysed.

The presence of valvular disease of the heart may have had some influence in producing the fatal result; but to what extent it was the real cause of that result remains doubtful. All that seems certain at present with respect to the relation between diseased heart and the administration of anæsthetics is, that the presence of such disease affords no formal contra-indication to their exhibition (an illustration of which fact is furnished by this case, where chloroform had already been used twice without injury); while, on the other hand, its absence does not prevent the occurrence of accidents. Thus it will be seen in the table recently published in this Journal, that the majority of fatal cases (in which *post mortem* examinations have been obtained) have been in patients free from such disease. The present case might, however, be used as a precedent for caution in administering chloroform to patients known to labour under valvular disease; while the fact of numerous lives having been lost through administering chloroform in minor operations like the present suggests very grave doubts as to the practice to be pursued in such cases for the future.

ST. BARTHOLOMEW'S HOSPITAL.

I. ILIAC ABSCESS: ESCAPE OF FÆCAL MATTER BY THE WOUND: RAPID RECOVERY.

Under the care of W. Lawrence, Esq.

[*Notes by* W. Chippendale, Esq., *House Surgeon.*]

Eliza H., aged 22, married, no family, a woman of pallid, weakly appearance, was admitted May 11th, under the care of Mr. Lawrence. She stated that she had had a rigor eight days previously, having before that had severe pain in the hypogastric and right iliac regions. On the 15th, fulness and marked tenderness were perceived in the right lumbar region, and on the following day the swelling became more manifest.

May 18th. The abscess was opened in the lumbar region, and seventy ounces of fœtid pus were evacuated, with a good deal of air of a very offensive nature. Quinine, wine, and brandy were ordered.

May 19th. She expressed much relief. The discharge continued, and was very offensive.

May 21st. The bowels had been confined for the last three days. To-day, on her being moved in bed, eighty ounces of fæces, mixed with some purulent matter, escaped. Ordered a pint of brandy and tinct. opii. ♏xl.

June 4th. Since the 21st the discharge of pus has been constant, but there has been no more fæcal discharge. The character of the discharge is good, and not offensive.

No further symptoms followed, and in a few days she was discharged quite well, the abscess having healed.

Remarks. We give the notes of this curious case as it occurred, but without being able to offer any very satisfactory hypothesis as to the real nature of the ailment. Cases, indeed, not very unfrequently occur in which abscesses of the pelvis communicate by ulceration with the intestines, and again (but we believe much less frequently) in which ulceration from within, the result either of morbid action or of mechanical irritation, establishes a passage for the fæces into the subperitoneal cellular tissue; but in these cases the fæces are usually evacuated immediately on the incision being made into the inflamed parts; and they always, in the previous cases which we have seen, have continued to flow from the wound for a comparatively long period—the opening in the gut contracting gradually. The above is the only instance we remember to have heard of in which, some days after the opening of an abscess in the loins, the whole contents of the intestine came through the wound suddenly, and then the opening in the gut closed completely and permanently, and the patient recovered entirely in three weeks.

We subjoin a very short notice of the *post mortem* examination of a patient who died of an injury not usually so suddenly fatal, and in fact in adults very commonly not fatal at all. It shows well the effect of shock in cases of injury to the viscera supplied from the great abdominal ganglia, especially in persons of tender years. There is mention of a slight bruise of the lung; but this was so very trifling that it would have had no effect in producing death.

II. LACERATION OF THE KIDNEY: DEATH.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

A female child, aged 4, was brought in a few days ago in a state of collapse, having been run over by a cart, the wheel of which was said to have passed over her back. There were no external marks of violence. She died in ten minutes after admission, and twenty after the accident. On *post mortem* examination, a very small quantity of blood was found extravasated in the right lung and in the pleura. The right kidney was lacerated to a considerable extent, but little blood was effused around it. All the other organs were healthy.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

REPORT OF THE OPERATIONS PERFORMED FROM JUNE 25TH TO JULY 25TH, 1857.

Communicated by Ch. Bader, Esq., Curator.

I. Lachrymal Sac. Four operations were performed on this organ. The four cases were treated with the actual cautery; three without, and one with, chloroform; beyond the section in the skin, hardly any pain was complained of. The cases were of several years duration, and had previously undergone other curative attempts. In two of them there was a cicatrix above the sac in the skin; the lower lachrymal punctum, as well as the passage in the nose, was closed; there was, on pressure, regurgitation of purulent matter through the upper punctum. One case (a patient of Mr. Poland) illustrates especially well the pathological changes which the sac undergoes after long duration of the disease. The swelling of the right lachrymal sac originated two years ago, and had since then continued discharging purulent matter through both lachrymal puncta. Since January he had been treated by introduction of the probe, but did not improve. On passing the probe, great resistance had at times to be overcome; at other times it passed very easily. Before opening the sac, the probe was passed down into the nose, to ascertain its relative position in the sac. On opening the sac, the mucous membrane was found thrown into thick folds, stretching especially across the lower part of the cavity, the bony walls of which had been dilated in every direction; many of the mucous folds were torn, parts of them were detached, hanging in shreds into the cavity; the opening towards the nose was free. The difficulties in passing the probe, the occasional bleeding from the nose, the impossibility of the matter escaping downwards, etc., are in this case easily explained by the changes in the sac itself. The probe was then withdrawn, and the actual cautery applied to the whole surface of the sac.

All the cases mentioned as treated in this manner are progressing favourably. The patients can leave the Hospital immediately after the operation.

II. Eyelids. There were nineteen operations.

Eight cases of *trichiasis* were treated by removal of the edge of the lid, as far as regards the eyelashes.

Of two *nævi*, both in children, one was treated with a ligature round the base; the other was touched with concentrated nitric acid.

Three cases of *entropium* came under treatment. The continued irritation of chronic ophthalmia had caused a narrowness of the palpebral aperture, and with it the entropium. In two cases it has been tried, by enlarging the outer angle of the palpebral aperture, to facilitate the movements of the lids, and to obviate the entropium, with the view of saving the eyelashes. In the third case, an oval piece of the skin of the lower lid has been removed.

One severe case of *ectropium* of the left upper lid, consequent on disease of the frontal bone, was met with in a girl, a patient of Mr. Critchett. The cicatrix everting the lid was divided parallel to the edge of the orbit; on this transverse a vertical incision was made; two skin-flaps were formed, and these, drawn down so as to protect the eye, were united with sutures. At present, the case looks much improved, and the eye remains protected.

One case of *ectropium* of the lower lid was treated by removing an oval piece of the conjunctiva at the part where it was most everted.

Two cases of *tumour of the upper lid* occurred, both in children. The one (a patient of Mr. Wordsworth) was a small round sebaceous tumour, attached to the periosteum of the upper orbital edge. The other (a patient of Mr. Crichett) consisted of a general enlargement of the upper lid, of which, in two succeeding operations, the greater part was removed, the necessary skin being preserved, so as to raise the upper lid, and prepare the orbit for the reception of a glass eye. The shrunken eyeball, together with the deformed upper lid, are congenital defects, and a rare instance of a general pathological (?) change of the subcutaneous tissues of the upper lid. A report of it will be given at some future time.

Two cases of *ptosis* were admitted. On one, the usual operation by removal of a piece of skin had been performed, but with unsatisfactory result. Mr. Bowman therefore applied a new plan. Instead of the common operation as above described, he everted the lid, and excised the posterior or upper edge of the palpebral cartilage, together with about half an inch of the tendon of the levator palpebræ inserted into it. Previous to the actual removal of the piece, very fine threads were passed, so as to bring together the edges, and thus secure a shortening of the tendon of the levator muscle to the extent of three quarters of an inch. The lid was then turned back into its natural position. It is expected that the levator palpebræ will be thus permanently shortened, and enabled to aid in raising the lid. The upper cul de sac of conjunctiva is exposed to little movement and readily heals.

III. Muscles of the Eyeball. There were thirteen operations for *internal strabismus*; for *external*, two. In all cases the tendon has been divided subconjunctivally. In one extreme case of internal strabismus, Mr. Hulke employed Mr. Bowman's method of holding the eye outwards during the first twenty-four hours, by drawing an exceedingly fine thread through the conjunctiva close to the outer edge of the cornea, then carrying the needle from within outwards through the skin at the outer canthus, and securing with plaster the thread on the skin. The conjunctival operation has been shown at this Hospital to be so successful, simple, and short, as to be preferable to any other.

IV. Cornea. There has been one case of removal of the superficial layers of the cornea opposite the pupil, with the broad needle and forceps. The layers were opaque from a deposit of lead. There was some bleeding from the cut surface of the cornea.

One case of transparent *conical cornea* in both eyes was admitted; in the left so much as to make vision extremely imperfect. Mr. Bowman operated in a new manner upon the left eye. First the broad needle was introduced from right to left about half way between the top of the cone and the outer corneal edge, making an oblique corneal wound; then the outer pupillary margin of the iris was drawn out with the canula forceps and left in the oblique wound, the latter being, by its peculiar shape, more fit to keep the iris incarcerated. By this the round pupil is transformed into a transverse one, which, when the same operation is performed opposite the inner pupillary margin, will form a transverse slit, and, it is hoped, will supersede the optical remedies (transverse slit) usually employed.

V. Sclerotica. Several small round *staphylomatous enlargements* of the sclerotica opposite the ciliary processes were met with in a man (a patient of Mr. Dixon). He had had iritis, etc., with adhesions in both eyes. Mr. Dixon punctured the largest of the staphylomata with the broad needle. Some clear fluid, afterwards some blood, escaped. The staphyloma appeared much reduced in size a few days afterwards.

VI. Iris. Nine operations for artificial pupil were performed. In all the cases, except two, the corneal opening was made with the broad needle, and the iris was drawn out, either with the canula forceps, common iris forceps, blunt hook, or needle hook. In two cases the drawn out piece of iris was left in the corneal wound; in the others it was snipped off with scissors. If not prevented by the morbid state of the cornea, the pupil was established down and outwards.

One case occurred of considerable *prolapse of the iris* after extraction. The eyelids were kept open with the speculum; and with a pair of small iris scissors an oval piece was removed, and so much of the vitreous humour as escaped was also snipped off. Such a prolapse keeps up chronic ophthalmia; and the sooner it is removed the better.

VII. Crystalline Lens. Sixteen operations for *extraction of the lens* through an upper corneal section were performed. In two cases the lens escaped enclosed in its capsule; in one case, on touching the capsule with the curette, it was found abnormally tough; and entering it the lens, resembling very soft wax, broke into a superior and inferior half, which had to be taken out separately. In one case the iris was wounded; and in one the corneal section had to be enlarged with the blunt pointed knife.

Two cases of *congenital cataract* (boys), and seven cases of cataract in elderly people, were operated upon with one needle; six of those had soft lenses, and the seventh was an old man, subject to rheumatism, on whom the needle operation had successfully been performed before.

In three cases where the previously broken up lens was let out by a small corneal opening.

In two cases of extraction, the pupil was entirely closed by the sequelæ of iritis. In the one an entire, in the other a small corneal section was made. In the one, the deposit in the pupil was divided with the iris scissors; and the lens with part of its capsule was drawn out with the curette. In the other, the pupil was first entered at its outer part, and the corneal wound enlarged on withdrawing the knife; then with the broad needle the pupillary incision was extended, and with the canula scissors continued so as to excise a disk-shaped piece of the pupillary deposit; this was drawn out with the canula forceps, and then the lens removed with a cataract needle; it should be remarked that in these operations each instrument has been used where it best answered the purpose, and also that the iris, changed in its mechanical properties by the previous inflammation, retains (as a fixed curtain) its position during the operation. The patient saw after the operation.

In ten cases, a film or *false membrane* behind the pupil was torn across: with one needle in seven cases, with two needles in two cases; and in one case where the grayish membrane was drawn out with the canula forceps.

VIII. Excision of the Eyeball. Three cases of this operation occurred. In one case, the eyeball had been damaged by purulent inflammation during childhood; on admission, there was an ulcerating opaque cornea, with three small staphylomatous enlargements of the sclerotica at its upper part. The sclerotica was squared by muscular pressure.

In the second case, opacity of the cornea had followed purulent ophthalmia during childhood; since then, during ill health, there had been several attacks of inflammation, of which the last, accompanied by severe pain, had continued six months. There was no perception of light.

In a third case, twenty years ago, a piece of a percussion-cap entered the eye. After the ensuing inflammation, the eye shrank to a small irregular mass. Periodical attacks of pain, the sympathetical affection of the other eye, and the condition of the patient, induced Mr. Streatfeild to remove the stump in the manner in which excisions are performed at the hospital. The foreign body could not be found. The eye affords a very good example of the formation of a bony shell at the place of the capillary layer of the choroid.

The facility with which excision is performed, its great innocence, and the perfect adaptability of an artificial eye, ought to make us consider almost every disorganised eye which is the seat of pain or annoyance as a foreign body, whose removal is to be accomplished the sooner the better. If not painful at the time, it is a deformity, liable at any time of ill health to become the seat of inflammation, and to affect sympathetically the opposite organ. Omitting the scientific advantages of excision, it is not only unwise, but incorrect, to bring before the patient's imagination the idea of "taking the eye out". Medical men must soon learn to value the simplicity of the operation.

Besides 94 operations, there have been in the out-patients' consulting room, during the last month, 110 minor operations. Among these were 49 for diseases of the lachrymal puncta; and the puncta have been slit up in the conjunctival aspect as far as the caruncle, with a view to facilitate discharges from the sac, and to allow of the use of larger probes than the ordinary punctum will admit. The canula lancet has been sometimes used to penetrate strictures at the entrance to the sac, if the full sized No. 6 probe has been then passed through the nasal duct. Mr. Bowman's method of treating lachrymal obstructions through the slit-up punctum, without making any opening in the skin, is being constantly practised in a number of cases, and its value tested. But this will require a more extended notice on a future occasion.

Original Communications.

ALARMING HEAD SYMPTOMS, AFTER VIOLENT EXERCISE IN HOT WEATHER, RELIEVED BY QUININE.

By Robert L. Bowles, Esq., Folkstone.

H. W. B., a medical man, stout, strong, and healthy, 28 years of age, and married, was attacked on the evening of July 6th, on his way home from the cricket-field, with most severe headache. He had walked, in the course of the day, about sixteen miles, besides having played for two hours at cricket. The day was hot and sultry. On arriving at home, he went to bed, but the severity of the pain in his head prevented his sleeping. He had also great intolerance of light. During the next two days he continued much in the same state, with the addition of occasional delirium. It was at this time that I was called in, and found my patient complaining of severe splitting pain in the forehead, which was much increased by talking or moving. He earnestly requested me to leech or bleed him, having a conviction that he was suffering from congestion of the brain. The pulse was from 46 to 48 in a minute, soft, and occasionally intermitting; the skin cool and moist; the tongue œdematous and pale, with a soft white fur on its surface; the face, which was occasionally flushed (though without a corresponding heat of skin), wore a singularly indifferent and solemn expression; the ocular conjunctiva was healthy in appearance. He had become restless and irritable, and was constantly throwing himself about in bed. His bowels had been acted upon by a seidlitz draught. A mixture of ammonia, sulphuric ether, and camphor julep, was now prescribed to be taken every four hours, and a full dose of liquor opii at bedtime.

July 9th, 8 A.M. The patient had passed a comfortable night, and appeared much relieved, his countenance wearing a more natural expression. In the afternoon, however, the symptoms returned in all their severity. The opiate was omitted at bedtime. A blister was applied to the neck.

July 10th. In the morning, I found that he had been delirious, and had passed a restless night; the pain and intolerance of light were quite as distressing; and he was unwilling to take nourishment of any kind. The bowels were confined, and the tongue had now a brownish coat on the back part. The blister had risen well. A physician, a friend of my patient, called to see him; and, believing the case to be of the nature of sun-stroke, advised eight leeches to the temples, which were accordingly applied, but with no relief to the symptoms. He was now a good deal depressed.

July 11th. He passed a restless night. The bowels were freely relieved by a pill of calomel and colocynth, but each action of the bowels appeared rather to aggravate the headache. The opiate was given at bedtime, and a mixture of sulphuric ether, valerian, and camphor; with beef-tea *ad libitum*. This treatment afforded considerable relief, and gave him a comfortable night.

July 13th. Severe symptoms again returned, which were partially relieved by repeated doses of the stimulating mixture. Mr. Roscow (who now saw the case with me) advised disulphate of quinine, in three-grain doses, to be taken at intervals of two or three hours; care being taken to give the first dose of quinine when the headache was at its minimum. The effect was magical. The first dose prevented the paroxysmal return of headache, and, with its continuance, a rapid general improvement took place.

July 16th. My patient was convalescent, the pulse having risen to its normal standard.

Remarks. Twelve months ago my patient was living in the island of Grenada, and for nearly two years he suffered severely from repeated attacks of intermittent fever, for which he had taken large doses of quinine with great advantage.

Some features of this case might lead one to entertain the idea of sun-stroke, or of some disturbance allied to that disorder; and the severe headache, intolerance of light, and delirium, would rather suggest an antiphlogistic plan of treatment; but all the other symptoms evidenced a depressed or exhausted state of the system, which for a time was relieved by sedatives and stimulants. It was not until the quinine was given that a real and permanent improvement took place. The severe attacks of intermittent fever from which my patient suffered twelve months before, the relief he then obtained from large doses of quinine, and the remittent character of his present indisposition, suggested the use of quinine in the present instance; and we have seen with what happy results.

CASE OF TELEANGIECTASIS, OR ANEURISM BY ANASTOMOSIS, SUCCESSFULLY TREATED.

By Draper Mackinder, M.D., F.R.C.S.Edin., etc., Gainsburgh.

[*Read before the Royal Medical Society of Edinburgh, Feb. 29th*, 1856.]

The accompanying drawing, made by a local artist, represents a very interesting case of aneurism by anastomosis, of which I have had the treatment. The first portrait was taken when the girl came under my care, Aug. 30th, 1852; and the other about two years afterwards, some eight months before she left the workhouse hospital to live with the family of a clergyman who had shown much interest in her welfare.



Fig. 1.

It will be perceived that the tumour involved nearly the whole of the left lower eyelid. It was circular in outline, extending from the inner canthus to the external fifth of the ciliary margin, and from the canine fossa and malar protuberance to the centre of the axis of vision, having a depth of five-eighths of an inch (which the delineation fails to convey). Its situation, its magnitude, the amount of hæmorrhage which was likely to follow any operative proceedings, the want of success which had attended the curative efforts of other practitioners ere the tumour had assumed so formidable an aspect, and the injury which the eye might probably sustain, rendered this a more than usually anxious case. Various plans of treatment were tried, with different degrees of success. It will perhaps be best to give a sort of commentary on them.

My patient, Emma Buttery, aged 12 years, stated that she had a seton in the tumour for three weeks, when she was but eight months old. In 1848, she was nine weeks in the Lincoln Hospital, without any perceptible improvement. Since that time, the tumour grew very considerably. My late partner, Mr. F. A. Lowe, having successfully treated a large tumour of this kind in the axilla of a boy by means of acupuncture, I tried the effect of the needles on my patient for a few times; without, however, any apparent benefit. I next introduced the needles made red hot, while the girl was in a state of anæsthesia: a perceptible diminution of the tumour was the result. After having introduced the hot and cold needles forty-one times (the tumour was pierced all over every time), in consequence of the slow progress made, the galvanic cautery was applied, the tumour being surrounded by platinum wire, which was passed under the integuments, and then brought to a white heat by means of a powerful battery. The pain caused by the incandescent wire was considerable, notwithstanding what has been asserted to the contrary.

From January 17th to March 18th, 1853, the galvanism was applied to the platinum wire, which was allowed to remain, about twice a week. Then ligatures and pressure were adopted for four months, with some improvement. In consequence, however, of the discontent manifested by the girl and her friends at the duration of the treatment, I was induced to change my plan; and consequently, on September 1st, I passed a very narrow double-edged knife under the skin, near to the external canthus, and cut up the whole of the blood-vessels; the hæmorrhage being in a great measure arrested by the immediate injection of a filtered saturated solution of the lactate of iron. The eyelid was a little swollen for a day or two.

On September 16th and 30th, I performed the same operation, but with so little benefit that I determined on varying my proceeding by using an unfiltered solution of the lactate of iron, which, I felt persuaded, would succeed, by its irritant as well as by its coagulating power, in stopping the circulation of the part. On November 13th, after having cut up the tumour as on each former occasion, I injected a drachm of as thick a solution as would pass through the small canula attached to the syringe. Though but little pain was experienced in former operations, after the anæsthesia had passed off, much was complained of this time; and consequently I was not surprised to find, on the following day, that considerable inflammatory action had been set up. The eye was much chemosed; the lids were swollen and very tense; and I feared that the sight would be lost. The chemosis gradually diminished; but the vitality of a portion of the lid ceased; and, on November 18th, five days after the injection, nearly the whole of the aneurism sloughed, leaving a large gap in the lid, which slowly granulated up, a few small blue vessels only remaining to be obliterated.

At the expiration of four months, I again injected the lactate of iron a few times, but without success, the remnant of the tumour being evidently too small to be affected by the fluid. Pressure and ligature seemed quite useless; and the only means left was the potassa fusa or hot needles. The latter I applied, and cured the case.

Chloroform was inhaled from twenty-five to thirty times, anæsthesia at first being induced in six minutes, at last in ninety. The dose on this occasion was seven drachms; and so great was the coma, which suddenly supervened to a state of vexatious talkativeness, that I feared a fatal result, and did not think it prudent to accede to the wish of my patient to administer it again.



Fig. 2.

It will be obseved in figure 2 that there is a little deficiency of the lower lid, which gives a stare, and allows the tears to trickle over in moments of excitement. This defect has improved since the drawing was taken.

Although this case was under observation and treatment about two years, its result (which has placed the poor girl in a position to obtain her own livelihood) amply repays the time and labour devoted to it. I have to thank my friends, Mr. John Lowe and Mr. Jacobson, for their able assistance.

OBSERVATIONS ON ELIMINATION IN FEVER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

The mode of determining the amount of urea in the following cases is a modification of that proposed by Dr. Davy (*Dublin Hospital Gazette*, June 1st, 1854, p. 134). One drachm of urine is poured into a tube graduated into cubic inches, tenths, and hundredths; and the tube is then filled up with liquor sodæ chlorinatæ, diluted with an equal volume of water, and immediately inverted in a solution of common salt. The urine, as it gradually mixes with the liquor sodæ chlorinatæ, becomes decomposed, and nitrogen is set free, which collects in the top of the tube. Much of the liquor sodæ chlorinatæ is wasted, being expelled by the nitrogen as it collects. Some loss of urea, no doubt, takes place; but not much, I think, as scarce any gas is evolved in the lower third of the tube. After standing some hours, the tube should be shaken, as Dr. Davy recommends, after which some further amount of nitrogen is extricated. In about six hours, the volume of gas may be read off, and the amount of urea can be easily calculated from it; 1,549 cubic inches of nitrogen=1 grain of urea. I do not suppose this method is so accurate as that of Liebig; but it can be very easily and readily performed, and affords, at any rate, results capable of being compared with each other. The main cause of error lies in the circumstance that so small a quantity of urine only can be operated on.

Case I. R. B., aged 24, was admitted September 30th, 1856. He had been ill seven days. He had severe fever, from which he was convalescent on November 11th. There was diarrhœa, and at one time high delirium. He was treated by salines and a little wine till October 9th, when he got two grains of quinine every three hours. The wine was increased to six ounces on October 10th. Improvement had begun by October 13th.

Urine. October 7th. The urine was of yellowish colour, clear; specific gravity 1014; slightly albuminous, depositing numerous granular and translucent casts. The quantity in twenty-four hours was above 20 oz.

October 10th, during depth of fever. The quantity passed in twenty-four hours was 66 oz., of specific gravity 1018. The total amount of urea was 534·864 grains; the total amount of uric acid, 23·76 grains. There were many casts deposited.

October 23rd. The patient was taking bottled porter and three ounces of wine; no meat. Convalescence had commenced. The quantity of urine in twenty-four hours was 60 oz., of specific gravity 1017. The total amount of urea was 468·00 grains; of uric acid, 4·20 grains. Much uric acid was deposited; there were also a trace of oxalate of lime, and a few casts with fungi filaments.

November 14th. He was quite well. He had had ordinary diet and porter since October 27th. The quantity of urine in twenty-four hours was 66 oz., of nearly normal colour, of specific gravity 1017. The acidity per ounce was represented by forty drops of saturated solution of bicarbonate of soda. The total amount of urea was 490·776 grains; of uric acid, a trace. There was, besides, a copious precipitate of uric acid, which fell down spontaneously, and could not be estimated. There were no casts.

It is clear that the greatest amount of tissue-metamorphosis, as indicated by the urine, took place during the depth of the fever; it was less at the period of commencing convalescence, and increased again somewhat when health was restored, but did not equal then that which went on when the vital powers were most prostrated by the fever-poison. The spontaneous separation of the uric acid during convalescence, as long as the patient was under observation, is worthy of remark. It did not result from superacidity of the urine, as this was notably less than the normal mean (sixty drops per ounce). I have now a patient, who has been under my observation for months, suffering from symptoms of renal degeneration; his urine constantly deposits much uric acid, although the acidity is below the usual mark. The spontaneous separation of uric acid is a very common occurrence in children recovering from scarlatinal dropsy. In all these cases, I do not think the phenomenon is to be explained by the existence of an excess of urates, or of over-acidity of the urine. I rather refer it to an impairment of the function of the kidney, and look upon it as a sign of a weakened organ. Is there any connexion between this state and that which gives rise to calculus?

Case II. J. H., aged 49, a woodman in Hyde Park, was admitted October 15th. He had been ill one week with typhoid fever, accompanied by some delirium and diarrhœa. He be-

came very low, and died October 25th. He was treated by beef-tea and six ounces of wine. On October 19th, he had half an ounce of spt. guacæ every four hours.

Urine. October 20th. The quantity in twenty-four hours was 34 oz.; specific gravity 1025; colour high. The acidity was below the normal mark. The total amount of urea was 263·296 grains; of uric acid, 10·2 grains. The urine deposited casts, mostly homogeneous.

Case III. S. B., aged 39, a nurse in St. Mary's Hospital, was admitted December 2nd, 1856. She had been ill some days before admission. She was attacked at first with diarrhœa and vomiting. She lapsed into a state of extreme depression, and died October 10th. She was treated with salines and nitric ether, and compound chalk powder with opium for diarrhœa. She had half a bottle of stout on December 6th; and, on December 9th, was ordered to have an ounce of mistura spiritûs vini gallici three times a day.

Urine. December 9th. The quantity of the last twenty-four hours was 42 oz.; it was high coloured, turbid, but clear after depositing a whity sediment; specific gravity 1020. The acidity per ounce was equal to thirty drops of saturated soda solution. The total amount of urea was 431·424 grains; of uric acid, 5·88 grains. The urine was doubtfully albuminous. In the deposit were masses of uric acid, granular and homogeneous casts, a good deal of renal epithelium, and some blood-corpuscles.

In both the preceding cases, the fatal event precluded a comparative analysis. It is apparent, however, that, in the last case, the amount of urea excreted was quite equal to that produced by a person in health (336 to 401 grains, according to other observations with this method). In Case II, the amount of urea was below the healthy mean; but the number of ounces passed, and the specific gravity, do not support the view that elimination was not going on freely. Moreover, the quantity of uric acid was above the mean.

Case IV. G. B., aged 20, male, was admitted November 4th, 1856. He had been ill five days before admission. He had typhoid fever, from which he was convalescent December 4th.

November 6th. He had six ounces of port wine daily.

November 12th. He was ordered a draught of decoction of cinchona, with a drachm of tincture of cinchona, every three hours.

November 19th. Broth diet and milk were ordered: the medicine and wine were omitted.

Urine. About November 5th. The quantity in twenty-four hours was 12 oz.; it was nearly clear, not high coloured; specific gravity 1016. The acidity per ounce was equal to sixty drops of saturated solution of bicarbonate of soda. The total amount of urea was 112·448 grains; of uric acid, 1·56 grains. The urine was slightly albuminous; it deposited a very few granulo-homogeneous casts.

November 27th. The quantity in twenty-four hours was 74 oz.; it was clear; specific gravity 1014. The acidity was represented by thirty-three drops of the soda solution. The total amount of urea was 374·144 grains; of uric acid, 1·11 grains.

December 19th. The quantity in twenty-four hours was 66 oz.; specific gravity 1014·5; quite clear. The acidity per ounce was equal to 65 drops of saturated soda solution. The total amount of urea was 361·152 grains; of uric acid, 3·96 grains. The urine deposited a good deal of uric acid spontaneously, and a little oxalate on standing two or three days.

The first analysis in this case does not refer to the depth of the fever, but to an earlier period. The amount of excreta was very greatly increased during the time when convalescence was fully established, as the two last analyses show. The result, on comparison, is notably different to that of Case I; but the date of the first analysis in Case IV has to be regarded. The two experiments are not quite parallel.

Case V. G. F. H., aged 14, male, was admitted November 24th, having then been ill one week. He had diarrhœa and low fever, began to convalesce about December 5th, and was discharged well about January 22nd. He was treated by hydrargyrum cum cretâ, night and morning, from November 26th to December 6th; and an ounce of decoction of cinchona thrice daily. Beef-tea and milk, and two ounces of port wine, were given.

December 10th. He had broth diet and milk.

December 13th. He had half ordinary diet; on December 30th, ordinary diet.

Urine. December 2nd. The quantity in twenty-four hours was 51 oz.; specific gravity 1007; natural colour. The acidity per ounce was equal to twenty-five drops of soda solution. The total amount of urea was 197·472 grains; of uric acid, 1·02 grains. There was a deposit of mucus-corpuscles.

January 8th, 1857. The quantity in twenty-four hours was 82 oz.; specific gravity 1012. The acidity per ounce was equal to twenty-five drops of soda solution. The total amount of urea was 249·854 grains; of uric acid, a trace.

In this instance, the amount of the excreta had increased considerably during the period of convalescence. This may in part, no doubt, be attributed to the improved diet which he had for several days before the second analysis. The urine of the full fever period was, however, in large quantity, though of low specific gravity.

Case VI. E. S., aged 20, female, was admitted December 12th. She had been ill about seven days before admission. She had typhoid fever, was convalescent about December 30th, and was discharged well about the middle of January. She was treated by three grains of hydrargyrum cum cretâ, night and morning, for some days, with an ounce of mixture of acetate of ammonia three times a day; milk, and beef-tea.

December 15th. Five ounces of port wine were given.

December 30th. She had half ordinary diet, and a pint of porter; also an ounce of decoction of cinchona three times a day.

Urine. December 18th. The quantity in twenty-four hours was 44 oz., of clear light colour; specific gravity 1008. The acidity per ounce was equal to sixty-five drops of the soda solution. The total amount of urea was 193·116 grains; of uric acid, 2·64 grains.

January 5th. The quantity in the last twenty-four hours was 79 oz.; it was clear; specific gravity 1012. The acidity per ounce was equal to sixty drops of soda solution. The total amount of urea was 302·017 grains; of uric acid, a trace.

This case is very similar to the preceding; the same remarks apply. In both cases, the uric acid in the period of convalescence amounted to but a mere trace.

Case VII. A. P., aged 22, a male, was admitted June 26th, 1857, having been ill seven days before admission. He had typhoid fever, with diarrhœa. He was in the depth of fever about July 9th, began to convalesce about July 14th, and was doing quite well on August 14th. He was treated with six-drachm doses of quinine mixture from July 6th to 8th; afterwards with mixture of acetate of ammonia, and two grains of bicarbonate of ammonia, every four hours. Four grains of hydrargyrum cum cretâ were also given on the night and morning of one day. He had broth, and five ounces of wine daily.

July 14th. He had half a pint of bottled porter, with half a drachm of yeast.

July 17th. Half ordinary diet was ordered, with a pint of milk, and the same quantity of beef-tea.

July 19th. The following was prescribed:—

℞ Decocti cinchonæ ℥i; ammoniæ bicarbonatis gr. ij. M. Fiat haustus ter die sumendus.

July 20th. He was ordered an egg daily.

August 3rd. He was ordered two ounces of port wine daily.

August 6th. He had a pint of bottled stout.

August 7th. He was ordered ordinary diet, with a pint of milk, and half a pint of beef-tea.

Urine. July 9th. The quantity in twenty-four hours was 38 oz.; specific gravity 1016. The acidity per ounce was equal to thirty-five drops of the soda solution. The urine was of pale red colour, nearly clear; it contained much albumen. The total amount of urea was 388·512 grains; of uric acid, 1·90 grains. The urine deposited some casts, granular and corpusculated; and some renal epithelium.

August 1st. The quantity in twenty-four hours was 29 oz.; specific gravity 1023. The acidity per ounce was equal to forty drops of the soda solution. The colour was high, clear; there was no albumen, nor were there casts. The total amount of urea was 296·496 grains; of uric acid, 8·245 grains.

In this case, elimination by the urine went on in much greater quantity during the depth of the fever than subsequently, when health was being re-established. The presence of albumen, casts, and renal epithelium, in the secreta during the fever period, testify to the existence of renal congestion at that time, which subsequently ceased.

Remarks. In cases IV, V, and VI, the amount of urinary *eliminata* was greater during convalescence; in I and VII, it was greater during fever. This no doubt depends partly on the circumstance that the analysis was made at an earlier period of the disease in the former than in the latter. The average date in the one is 18·5, in the other 11·33 days, from the commencement; as appears from the following table.

Dates of the Analyses (a) during the Fever Period; (b) during Convalescence.

Cases.	Fever period.	Convalescence.
I	17th day.	30th and 44th days.
II	13th „	„ „
III	12th „	„ „
IV	6th „	28th and 50th
V	15th „	52nd
VI	13th „	31st
VII	20th „	43rd

In the latter, also, there was decided renal congestion; in the former, it was absent, or but slight. Only in case IV was the amount of urine during the fever period below the normal amount; in all the others, including II and III, it was rather copious than the reverse. It is rather remarkable that the greatest elimination during the fever period should have occurred in those cases which presented renal congestion at the same time. The vital action of the glands was not overborne by the hyperæmic afflux, as is so often the case. It is to be remembered, of course, that the amount of elimination during the fever period took place at a time when the supply of food was very materially diminished, and when the amount of waste would naturally have been lessened. A lower figure at this time indicates a proportionally greater degree of elimination than it would during convalescence, when more food was consumed.

The general tendency of the result seems to me to point to the conclusion that, in these fevers, the eliminatory process was not so deficient as to indicate the necessity of directing therapeutic proceedings with the view of increasing it. It is clear that greater waste and elimination may go on during fever than during convalescence; so that diminished excretion cannot be the essence of fever. I once asked a physician, who had ordered grey powder for a fever patient twice a day, what was his reason for doing so; and his reply was, "To eliminate the morbid matter." This idea seems to be widely diffused, and is, in fact, the popular medical theory of the day. I do strongly suspect it is unsound; and that it might easily, but for the clear necessity of supporting the patient's strength, lead to wrong practice. The fever poison is surely gaseous, if it is a material thing. What prospect have we of getting rid of it, especially if it multiplies itself as we conceive, by any kind of evacuation, except it be by the pulmonary exhalations. Indeed, the breathing a free pure air I can believe to be of the greatest importance; but I question exceedingly whether, in any fever except rheumatic, eliminatory remedies are of the least avail, supposing them to act beneficially by ridding the system of the virus or miasm it has imbibed. That they may do good by subduing local inflammations or congestion, is very intelligible, as when renal congestion of scarlatinal origin is relieved by purging; but this is no more than effecting a determination of fluids elsewhere.

If in a malarious fever there comes a complication of dysentery, we do not give diuretics to carry off the poison by the urine, or put our trust in forcing copious sweats, but we treat the dysentery as a local inflammation, arrest its flux as soon as we can, and deal with the fever poison by fortifying the nervous system with quinine, and so enabling it to withstand the morbid influence. Who would dream, in a bad case of erysipelas, of trying to get rid of the poison? Our instinct and our experience tell us that our task is to maintain the system in its struggle against it. The same is true in the case of snake bite, and, indeed, of most poisons once received into the blood. Should we think of elimination in the case of poisoning by opium or strychnine? In fact, the attempt is simply impossible in any such instance; the virus is diffused everywhere throughout the blood and fluids of the system, and we might probably evacuate all before the end was attained. The rational treatment of fevers therefore resolves itself into this; (1) to quiet inflammatory movement if it run high, locally or generally; (2) to sustain the several vital actions when in danger of failing in asthenia. In tropical fevers large bloodlettings may be most essential with antimonials and refrigerants. Even in some forms of fever among ourselves the administration of tartar emetic and opium, as practised by Dr. Graves, is of the greatest benefit. Usually, however, at the present day, all our exertions are called forth to counteract asthenia; and if any part become seriously engorged, a cautious local bleeding is to be associated with stimulus. An eminent physician once described his practice to me in pneumonic complication occurring in fever thus: "For every ounce of blood I take by cupping from the chest, I give an ounce of wine."

In the above cases there is the same diversity as noted by Dr. Parkes in instances of pyrexia; viz., increased elimination in some, diminished in others. I have examined the histories of the latter, but do not find that any sudden special excretion took place during convalescence, as he considers is likely to occur from the semitransformed and retained matters being at last hurriedly evacuated.

The large flow of urine which took place in almost all the cases during convalescence deserves to be noted.

In Case I it amounted to 66 ounces on the thirtieth day, and in Case V to 82 ounces on the thirty-fourth day after improvement had commenced. This appears ascribable to remaining debility. A case of chronic phthisis under my care passed 50 to 67 ounces of urine daily, of specific gravity 1010. Few things are more apparent than the long continuance of the prostrating effect of fever. The system too often has received a *coup* from which it never fully recovers.

Periscope.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

ON THE SPOTS OBSERVED IN THE PROGRESS OF FEVER, AS A MEANS OF DIAGNOSIS.

Dr. Henry Kennedy of Dublin has published a paper on the diagnostic value of the spots observed in the progress of fever, in the *Dublin Hospital Gazette* for April 15th, 1857. He is of opinion that, with regard to these spots, views prevail which are not supported by facts. As example, he refers to the prevalent idea that the presence or absence of spots at once marks the kind of fever present. But he has often observed cases of fever to come from the same room—often from the same bed—and yet some of them only to present spots. Or a husband and wife are attacked with fever, and the one is spotted, the other not. Some time since, three brothers, adults, were admitted into Cork Street Hospital, under the care of Dr. George Kennedy. They lived together, and were admitted within two days of each other; they had all heavy fever, but one only was spotted. Will it be maintained that those men suffered from different kinds of fever, merely because one was spotted and the others not? Some time back, he saw, with Dr. Denham, five members of the same family labouring under scarlatina; not one of these had the same form of disease. Few would maintain that the disease was due to a different poison in each instance. Yet, when precisely a similar occurrence takes place in our ordinary fevers, it is considered by many to be caused by a variety in the poison; and the presence of spots, above all, makes many look on the disease as something very specific. Dr. Kennedy believes that all such differences as those alluded to are due, either to the intensity of the poison, or the state of the constitution at the time being; or any cause rather than a difference of the poison.

A second point to be noticed is, as to whether there is anything of a specific character in the fever of this country. In 1847-48, the expression "Irish fever" was to be found through all the English papers. Dr. Kennedy asserts that there is no fever peculiar to Ireland, as distinguished from what is seen in England and Scotland; and also that, before the epidemic fever in Ireland in 1847-48, the disease had increased much in England. There is a great law affecting all the more wide spread epidemics, and showing that their course across the globe is from east to west, or from south-east to north-west.

At a certain period of some cases of fever, spots make their appearance. This is usually from the sixth to the ninth day of the disease; but on this point there are great differences. They will be occasionally seen as early as the third day, reckoning from the period of the rigor. There are difficulties, however, in determining this; for it by no means follows that the patient is not ill before the rigor. Still, some of the cases seen by Dr. Kennedy were inquired into as minutely as was possible, and the spots did appear then on the third day. On the other hand, they are often much later than what is usual in making their appearance. Thus he has seen them as late as the twentieth day; and very critical cases all such in general were. In cases where the fever is made up of two parts, with an interval between, they may be absent in the first and present in the second, and *vice versâ*; though the last is not as common as the first. Dr. Kennedy has notes of more than one case where the individual passed through three distinct fevers before leaving the hospital; yet it was only in one of the series

that spots appeared. It is the last of the series which exhibits the spots in these instances. In one case of this kind, it was the fourth attack, and the spots then were of the character of measly eruption.

There is still one other point worthy of notice in connexion with cases where we would have every reason to suppose that they would appear at the same time. As an example, not long since, two sisters, both grown women, and remarkable for their great stature, were admitted into Cork Street Hospital, labouring under heavy fever. They each exhibited spots; yet one of them was spotted four clear days before the other. The fact is of interest, as showing how the constitution will modify the eruption; for there was no other explanation which, in this particular instance, would account for it. These two sisters had sickened at the same time. Precisely an analogous circumstance has come under Dr. Kennedy's notice in scarlatina; that is, the period at which the rash appears will vary by three or four days, though children of the same family have sickened together.

The spots of fever may exhibit themselves, as is well known, over the whole body; but in general they are more limited than this. Dr. Kennedy believes they will be as early seen about the pectoral muscles as anywhere else. There are some modifications of them, however, having relation to their site, which appear worthy of notice. Thus it is by no means uncommon to see them exclusively confined to the upper part of the body. Not one will be seen on the lower limbs. He has seen them, too, nearly exclusively confined to the abdomen, but not absolutely. Again, Dr. Kennedy has seen them confined, in the most marked manner, to the joints. Not long since a young man of 18 was admitted into Cork Street Hospital, under Dr. George Kennedy. He was very seriously ill, his fever being marked by prolonged vomiting. His pulse was rapid and very weak. In the course of this illness, his elbows and knees exhibited spots, each in number probably of from forty to fifty. Not a single spot could be detected anywhere else. Their character partook of a mixture of purpura and petechiæ, and they appeared to be slightly raised. The case recovered. He has seen many cases where the spots were first visible on the backs of the wrists; and usually they have here been of a bright red colour. He has seen also instances where they were located in patches, as it were, and these symmetrical, on each pectoral muscle. In one instance, well marked spots, of a bright hue, came out over the whole throat and neck, and the inside of either elbow; nor could any be detected elsewhere.

Lastly, he has seen spots on the forehead. He mentions this particularly, because some observers have asserted that they are never seen here. He has notes of some eight cases, which may now be increased to eleven, where there could be no question of the fact. Louis gives one instance where spots were visible on the face. The way, then, to speak of the fact is, as being very rare, in comparison with the number of cases which exhibit spots elsewhere; but to say it does not occur at all, is going farther than facts will justify. Dr. Kennedy thinks he has seen spots on the conjunctiva, or at least what might be described as a mottled state of this membrane; and instances are not uncommon where a rupture of a blood-vessel, or an exudation of blood, has caused a distinct ecchymosis in fever. Is it straining the fact too far to suppose that such a spot is but an ordinary petechia in an unusual place? He has never seen the occurrence in fever, except in conjunction with spots elsewhere.

The character of the spots in fever has long attracted notice, and some of them unquestionably deserve a special attention; but it appears to Dr. Kennedy that too much stress has been laid on this point. Thus the bright, well defined, lenticular spots are, he believes, constantly spoken of as being different from what are called genuine petechiæ. He thinks this is an erroneous way of considering the matter; for the simple reason, that they may be very often seen existing together, at the same time, and on the one patient. In this way, we may find the bright well defined spots on the arms, and the petechiæ on the body. Or, again, we may see one member of a family presenting the bright spots, and another the petechiæ; yet both have come from the same room. Some of the older authors on fever have described two crops as occurring in the one patient. This he has seen in the most marked form, not only in fever, but also in scarlatina. And, in truth, the analogies which the exanthemata hold, one with the other, do not appear to him to have received that consideration which they deserve. Who has not seen cases of scarlatina presenting on the surface different hues of eruption at the same time? Purpuric spots, great patches of redness of different hues, universal redness of the entire surface, and, above all, spots, not possible to distinguish from what are called genuine petechiæ, may be mixed up together in the one patient; to say nothing of the varieties which the disease so often presents when going through an entire family. Now, under such circumstances, no one ever dreams of saying there are different poisons, according to the varied hues of the rash; yet, when exactly analogous facts occur in common fever, some inexplicable necessity seems to arise for drawing distinctions where there are in reality none, and refining to a degree which, it appears, facts do not justify. That much valuable information—more especially as regards prognosis—may be derived from close observation of the eruption which common fever exhibits, is readily admitted; such as the brighter or darker hue which it presents, the greater or lesser size of the spots, their early or their late appearance, etc. But these points are quite beside the question whether the varieties which we see in the rash of common fever be due to separate and specific poisons, or only to one; and whether it be not more consistent with facts to attribute them rather to the temperament of the patient, the state of his general health at the time being, his age, etc., rather than to this or that poison.

This leads to a question in direct connexion with this part of the subject, about which more has been written than on any other; that is, the distinction which exists, or is said to exist, in the rash of typhus, as distinguished from the fever attended by local lesion in the small intestine, and known as typhoid fever. On this point, Dr. Kennedy believes authors have been too precise, and have not made allowance for the possibility of deviations, which here, as indeed in every other point connected with fever, are liable to arise. Thus, from the perusal of the most recent works on the subject, one would suppose that typhoid fever could not exist without the presence of bright lenticular spots, few in number, and disappearing long before the fever ends. He does not deny that this state generally obtains; but he says that it is by no means constant. He has observed cases from the very beginning to the death of the patient, and to a *post mortem* examination, disclosing ulceration of the small intestine; and yet from first to last no spots whatever were visible. And the opposite of this, again, is still more common. He has notes of a number of cases where the spots had all the characteristics, as to time, number, size, and disappearance, and yet the cases had no other symptom whatever of enteric fever, and in reality were not the disease at all. He has also witnessed cases where all the symptoms were those of enteric fever, except that the spots were dark on the chest; and in the inguinal regions, assumed the character of purpura; also a case where the spots were genuine petechiæ, and where ulceration of the bowels was found. With such facts in view, great caution should be used in pronouncing any spots as diagnostic of this or that kind of fever; or at least in giving them more weight than any other single symptom of the disease is entitled to.

It has been already stated that much valuable aid, in a prognostic point of view, may be derived from the spots which appear in fever; and it is generally admitted, that the darker and larger they are the more serious is the case. The worst cases Dr. Kennedy has ever seen have been attended with few spots of a large size, and confined very generally to the region of the clavicles and groins, sometimes running down the inner side of the thighs. These large and dark petechiæ, or by whatever name they are called, are not confined to typhus, but may be seen in puerperal fever, and in some cases of malignant scarlatina. He has also observed cases—rare ones—where the subcutaneous veins of both the upper and lower extremities have allowed a bloody serum to exude, which is quite visible through the skin. With this state he has found in the pleura, and also the pericardium, and on the surface of the brain, serum poured out which was likewise tinged deeply with blood. In one instance he found a large effusion of blood under the pleura covering the left lung.

Of the supervention of fever in persons afflicted at the time with chonic diseases, all have probably seen examples. He has met several examples of persons who were hemiplegic, and in this state were attacked with petechial fever; and again, others who laboured under chronic bronchitis and asthma. Cases of phthisis, too, have come under his notice in a similar way; but the fever in these instances has been rarely attended with spots. This latter, however, he has witnessed, the rash being most copious. Cases of chronic affections of the eyes, ulcers of the legs, and chronic diseases of the skin, are of very common occurrence in union with spotted fever. Lastly, he

has witnessed fever, and in its very worst forms, with both primary and secondary syphilis. It is worthy of notice how little any of these affections are altered by the fever. They are certainly not made worse; though such might be expected, at least of some of them. He has, however, seen cases of disease of the skin, where it was got rid of, after the fever. But usually they go on as they did before. It is only a state of derangement of the general health, and not any specific affection, which is likely to be bettered by spotted fever.

Dr. Kennedy concludes his paper by the following propositions.

1. There is no form of fever peculiar to Ireland.
2. In 1847-48, the epidemic which then prevailed in Ireland had existed in England for months previously.
3. This epidemic, like all other great ones, travelled from east to west.
4. The idea of different poisons, as a cause of the several varieties of rash, does not appear to be borne out by facts.
5. The analogies derived from the study of the exanthemata are opposed to the idea of there being more than one poison.
6. Red and dark petechiæ may co-exist in the same patient, at the same time.
7. Either may precede the other. That some members of a family may exhibit spots—others not; all being ill at the same time.
8. Petechiæ may be almost exclusively confined to the abdomen, or to the upper half of the body; or exhibited in groups on the pectoral muscles, the front of the larynx, or strictly confined to the knees or elbows.
9. They may be seen occasionally, but unequivocally, displayed on the face, and possibly on the conjunctivæ.
10. Bright lenticular spots, and few in number, are of frequent occurrence, without any other symptoms of enteric fever.
11. Fever without intestinal lesion may exist without any spots whatever.
12. The same lesion may exist with dark petechiæ.
13. Petechial fever may run its course in patients affected with such diseases as hemiplegia, phthisis, syphilis, etc.
14. Large, dark petechiæ are not confined to typhus, but may be seen in puerperal fever, and cases of malignant scarlatina.
15. In some very bad forms of fever, the veins allow the blood to exude in a very striking way; and together with this, serum, deeply tinged with blood, may be found poured out in the serous cavities.

British Medical Journal.

SATURDAY, AUGUST 22ND, 1857.

OUR PUBLIC LUNATIC ASYLUMS AND THE NON-RESTRAINT SYSTEM.

By referring to our Letter-box, our readers will perceive that Dr. Hitchman has written us a very angry letter. As that letter, however, appears to have been written under an entire misconception as to the meaning of certain words used by us last week, in relation to the Colney Hatch Asylum, we shall by no means reply to it in the same spirit. Dr. Hitchman evidently imagined that our object in writing that article was to depreciate "Mr. Gardiner Hill's non-restraint system". We can assure our correspondent that we had no such intention. On the contrary, we think the public gratitude is due to all the fellow-labourers in the noble cause of ameliorating the condition of the insane,—from the great Pinel, who initiated the present humane system when he struck off the chains of the English captive, to Gardiner Hill, Charlesworth, and Conolly, who applied his idea to large masses of patients in the public asylums. These gentlemen will all have their separate niches in the temple dedicated to mercy, and God forbid that one word should escape from us calculated to depreciate their noble efforts. The words made use of by us which appear to have given offence to Dr. Hitchman are these: "Colney Hatch is a house of detention of the most dismal kind, and Mr. Gardiner Hill need not talk any more about the authorship of the non-restraint system, as long as this large bastile is appropriated to the incarceration of such a little army of helpless beings." We have said what we believe to be the truth in this sentence, and therefore see no reason to shrink from reiterating it, notwithstanding Dr. Hitchman's lively indignation. That Colney Hatch is a dismal house of detention, we believe few unprejudiced persons will deny; that the non-restraint system, in as far as the disuse of all instruments to coerce and bind the patient, is there carried out, is also undeniable. Nevertheless, there is in that house, and in every public asylum as at present conducted, a vast amount of restraint exercised of a very injurious nature to the patient. The word non-restraint itself is a misnomer; there is no such thing in the treatment of the insane. Dr. Hitchman must admit that the term must be used relatively. The strait waistcoat is doubtless the most immediate form of restraint; but we earnestly protest against the assumption that in having abolished this instrument, we have a right to say that restraint is not. Beyond the strait waistcoat, we have the muscles of the attendants, the padded room, the locked gallery, the dismal airing court, the high surrounding wall—all means of personal restraint, fitting zone within zone as carefully as the balls are constructed within each other by the ingenious Chinaman. "Non-restraint" is then an improper term, unhappily chosen by Mr. Gardiner Hill, inasmuch as that system stops short at the mere abolition of confinement for the limbs. It is undoubtedly an enormous advance in the treatment of the insane to free their limbs, and all honour be to those who have succeeded in its accomplishment; but this is not the end of the task imposed upon us; it is, we verily believe, only the halfway house on the road, and the triumph of the non-restraint principle will not arrive until the *free air* system of Gheel is established as far as is practicable in this country.

Dr. Hitchman thinks any comparisons between our English public asylums and the pauper lunatic colony of Gheel illogical, inasmuch as the conditions of the two are not the same. "Suicidal, dangerous, and homicidal patients, are not admitted," says Dr. Webster; "therefore Gheel can be no model for us in England." Now, we never imagined that it would be possible to turn every public asylum into a miniature Gheel, or that we could mass all our pauper lunatics into one enormous colony such as that; but we do imagine and believe that we shall be constrained sooner or later "to follow the light held out to us by the Belgian colony". It is agreed upon by every person skilled in the treatment of lunatics, that the present workhouse system of treatment has culminated at Colney Hatch. We have no doubt whatever that no medical men could be more impressed with this fact than the medical gentlemen there resident. It must be clear to all that the present medical staff, consisting of two gentlemen, must be entirely inadequate to the careful medical and moral supervision of 1,200 lunatics. Irrespective of this great shortcoming, there is this one great fault at Colney Hatch, which applies more or less to all the asylums throughout the country—the establishment overrides the patient. In the inexorable daily routine of the house, the individual is lost; the man becomes a cog in the

ever-turning wheel; and all the little healthy spring and play of mind, which it is so necessary to foster in the lunatic, is hopelessly crushed out of him. The triumph of machinery is indeed great in such establishments. After having witnessed the steam-cooking, the steam-washings, and the scores of other plans calculated to lessen human labour, which are indeed indispensable in such vast establishments, we are inclined to ask, What is the result to the patient?—Vacuity!

It is impossible to go through the wards of any large asylum without feeling that scores of inmates who are seen lounging about and dropping into hopeless dementia for want of employment *which immediately interests themselves*, could be rendered useful and contented under the free air system. Dr. Bucknill has happily remarked, that it would be far better for the lunatics to cook and wash for themselves than that these offices should be performed for them; and the same enlightened physician has announced an approach to the Gheel cottage system by causing detached houses, of an inexpensive character, to be erected in the immediate neighbourhood of the Devon County Asylum. "These cottages", he states, in one of his late reports, "are much preferred to the wards by the patients themselves, and permission to reside in them is much coveted." Thus the first movement towards the free air system has been a success, and we trust speedily to see it followed in all cases where more room is required in extending asylums. The great stumblingblock in the way of any approach to the Gheel system in this country, however, is the want of cottagers trained like the Gheelois to undertake the care of the insane, under the rigid superintendence of a sufficient medical authority. The mere planting of lunatics in detached houses is not enough; what is wanted is to intersperse them among the sane population as at Gheel, where the lunatics stand to the sane, in the ratio of one to ten. The immense advantage of thus supporting the unstable mind, is, in our opinion, one of the great points of the free air system, and one that cannot be acquired until we have trained a peasant population. This difficulty will, however, begin to disappear as soon as the system of building or occupying satellite cottages near overgrown asylums shall have come into fashion, as we feel confident it will. At the present moment, however, the brick and mortar mania is so rampant, and the management of the pauper insane is so hopelessly in the hands of the visiting magistrates, whose only idea of pauper lunatics is that they must be kept under strict discipline, within walls and enclosures similar to those of the workhouse and the jail, whose affairs they have been so long accustomed to administer, that all we hope to do is to scatter the good seed of improvement, and to entreat those medical superintendents of public asylums, who see the errors of the present system, to do all in their power to establish satellite cottages, in order to initiate as much of the free air system as is consistent with existing institutions. As soon as we have made a more extended trial in this direction, we feel convinced that a judicious distribution will take the place of the present unwholesome and unscientific concentration of pauper lunatics, and that we shall have made another great stride in the direction of non-restraint.

As we intend to return to this subject, we shall be glad to elicit the opinions of associates engaged in the superintendence of public lunatic asylums.

THE WEEK.

A trial, in which compensation for damages received on the East Lancashire Railway was demanded, has just taken place at Manchester, in which, we fear, one of our associates was found guilty of a little sharp practice. It appears that one Lawrence Hargreaves, an overlooker at a cotton mill, received an injury whilst in the railway train at Heywood Bridge. This person's wife, having heard of her husband's misfortune, immediately went to the spot, and found that his thigh was broken, and that he was insensible. Whilst the patient was in this condition, Dr. Harrison, the surgeon to this among six railways, appeared—the rest of the story we shall give in the evidence of the various witnesses, beginning with that of Nancy Hargreaves.

"Saw Dr. Harrison come into the room and look at her husband's thigh, and told witness that he would see that her husband was made all right. The doctor took witness into a little room and shut the door, and said, 'They are going to give you £40 and pay the doctor.' She said she should prefer a weekly allowance, but he said that would be too much trouble. Dr. Harrison, after the witness declined his offer, took a piece of paper, or a book, and placed a pen between her husband's fingers, and then lifted his hand to make a mark on the paper, and when he had 'stroked it,' Dr. Harrison and Mr. Smithells left the room for a short time, and then returned with a paper, which Mr. Smithells told the witness to take to Bury, and she would get £40. She took it accordingly, and received the money.—Cross-examined: Her husband was not sensible any part of the day, excepting when he asked her where he was. She thought it a wrong thing for a doctor and another gentleman putting his hand to paper when he was insensible.—John Hargreaves, brother to the plaintiff, went to see him the night of the accident, and found him 'almost ready to die'; and he did nothing all the night but 'mean himself' (groan from his pain). Witness corroborated the statement of the previous witness as to the offer of £40 for compensation. Witness saw Dr. Harrison and Mr. Smithells hold the book and pen to his brother's hand, but he did not see any motion in the hand."

Even supposing that these two witnesses did not speak the truth respecting the insensibility of the husband, it cannot be denied that it was exceedingly indecent on the part of Dr. Harrison to attempt to drive a bargain with a man suffering from a severe accident. How was it possible for the poor fellow to have been able to estimate the damage he had received within an hour of the infliction of the injury? This red hot haste may be considered a sharp thing on 'Change; but it is anything but merciful on the part of an educated man; or anything but just on the part of a surgeon who must have been aware that a fracture of the upper part of the thigh was not unlikely to leave the sufferer a cripple for life. Such, in fact, has proved to be the case; and poor Hargreaves now limps about on an imperfect limb, and will do so for the remainder of his life. Yet the tariff for this severe injury, according to the clever manipulation of Dr. Harrison, was to be only £40! We are glad to find that the jury were more just than the medical man, in that they estimated his injury at £210, in addition to the £40 already received, together with 40*s*. costs. The most cunning part of this affair, however, is yet to be told. Dr. Harrison, whilst under cross-examination, admitted that he sometimes carried lithographed forms of receipts with him when he visited persons injured on the railroad! This gentleman evidently

does business upon system, and in accordance with the motto, "Strike while the iron is hot."

Since our last, we have received the news that the attempt to lay the Atlantic Electric Cable has proved a total failure. The engineer to the Company, who superintended the "paying out" himself, lays the blame upon a subordinate. After stating that all went well until the 11th, when at 3·45 the cable parted:

"I was," he says, "proceeding to the forepart of the ship when I heard the machine stop; I immediately called out to ease the break and reverse the engine of the ship, but when I reached the spot the cable was broken.

"On examining the machine, which was otherwise in perfect order, I found that the breaks had not been released, and to this or to the handwheel of the break being turned the wrong way may be attributed the stoppage, and the consequent fracture of the cable. When the rate of the wheels grew slower as the ship dropped her stern in the swell, the break should have been eased; this had been done regularly before whenever an unusually sudden descent of the ship temporarily withdrew the pressure from the cable in the sea; but, owing to our entering the deep water the previous morning, and having all hands ready for any emergency that might occur there, the chief part of my staff had been compelled to give in at night through sheer exhaustion, and hence, being shorthanded, I was obliged for the time to leave the machine without, as it proves, sufficient intelligence to control it."

It seems very strange that the cable should have been at any time left in the charge of unskilled labour. We hope, however, that the company will have a lesson by this mischief not to employ such expensive labour for the future as ignorant labour. We are glad to hear, however, that the disaster has happened through a pure accident, and not through any defect in the wire itself, or in the paying-out machinery. The directors have issued the following interesting statement respecting the undertaking, which is doubtless partly prompted by the fact that the shares of the company are at £250 discount:

"Sufficient information has already been obtained to show clearly that the present check to the progress of the work, however mortifying, has been purely the result of an accident, and is in no way due to any obstacle in the form of the cable, nor of any natural difficulty, nor of any experience that will in the future affect in the slightest degree the entire success of the enterprise. The only sudden declivity of any serious magnitude, from 410 fathoms to 1,700 fathoms, had been safely overcome, the beautiful flexibility of the cable having rendered it capable of adapting itself, without strain, to circumstances which would probably have been its ruin had it been more rigidly constructed. The combined influences of the low temperature of the water and the compression of the pores of the insulating medium had practically shown that the action of a telegraphic cable, so far from being impaired, is materially improved by being sunk in deep water. The only difficulty worthy of consideration which remained was to demonstrate the practicability of making the splice in mid-ocean. This was put to experimental test by the engineer in a heavy sea, subsequent to the accident, and before the return home of the ships. The two ends on board the Niagara and Agamemnon were joined together, and the splice let down to the bottom into soundings of 2,000 fathoms, and during a heavy sea. The experiment was perfectly successful, and these and all other circumstances which have been wrought out by the recent expedition have made more and more cheering and certain the prospect of complete success on the next occasion."

The Registrar-General of Births, Deaths, and Marriages, in his return for this week, alludes to the significant fact that diarrhœa has for the last twelve years been on the increase in the metropolis; "for, on referring to the returns for the second or third week of August in 1840-45, it will be seen that the number of cases in which it was fatal was as low as 20 or 11, and did not exceed 70. Besides the deaths from diarrhœa (244), there were 21 last week from 'cholera' and choleraic diarrhœa, 12 of which occurred in young children." This is indeed a noteworthy increase, and the more alarming as it appears to be so steadily going on. It may, we think, be readily accounted for by looking at and smelling the Thames. This stream has been for several summers past disgusting both in colour and odour; and we suppose, that the more we build, and the more perfect is the drainage into the Thames, the worse it will get, until the great intercepting drains are completed. We earnestly hope that great work will be accomplished before cholera springs upon us suddenly, as a tiger springs upon his victim from the jungle.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, July 1857.

Reports of Societies.

ANNUAL REPORT OF THE READING PATHOLOGICAL SOCIETY.

By John McIntyre, M.D.

[*Read before the Reading Branch, July 8th*, 1857.]

[*Concluded from page* 699.]

BENEFITS OF MEDICAL SOCIETIES: MEDICAL REFORM: THE BRITISH MEDICAL JOURNAL: POOR-LAW SURGEONS.

Such, Gentlemen, is the narrative of your year's proceedings. And a goodly one it is; it evidences no declension either in your ability or in your willingness to work. On perusing the reports that have been preserved to us at so much labour by our secretaries, I have more and more been struck with the advantages that accrue from the existence of such societies as this. We have only to cast our eyes over the few opportunities we individually possess of witnessing, in our own practices, specimens of diseased structure, and to contrast these with those we now enjoy as an assembled body; we have only to reflect how few the varieties as well as the numbers are that we necessarily meet with, and to rejoice that it is now ours to examine collectively so many; we have only to reflect that it is with structures such as those that are brought before us, and with the changes leading up to them, and it may be beyond them, that we are daily called upon to combat; that *in* them we behold many of the varied causes of all the turmoil and all the tumult that, under the names of signs and symptoms, have been anxiously engaging our attention; and that *with* them has been presented to us a faithful record of those witnesses of ills; we have only to reflect on the toilsome strugglings, after clearer views and brighter thoughts, which the darkness of our individual ignorance has necessitated, and to remember how easily, how pleasantly, the enveloping clouds have been dispelled, and how readily the light has broken in upon us—the light that has emanated from the countenances of our fellows;—we have only to reflect on these things, and shall we restrain the outgoings of approval of such associations? The increasing numbers of our body, and the continued zeal of its members, proclaim that we shall not,—that we are conscious of our privileges: and well assured may we be that, if the results of our present exertions in combating the ills of a suffering humanity were contrasted with those that were arrived at prior to our membership, well assured, I say, may we be, that the balance would be found largely on the side of combination,—that in virtue of its influence we had become, not only more intelligent, but more successful practitioners.

The influence of such societies, however, is not confined to the advancement of the science of the profession; they exert a moral and a social power upon us not to be overlooked. My own conviction is that, in this way, they become the most effectual promoters of our weal. They become the fields, so to speak, upon which the finer feelings of our nature can disport themselves; where "the charity that thinketh no evil, that suffereth long and is kind," can be nourished and sustained; where forbearance can be fostered and sympathy bred, and where "envy, and hatred, and malice, and all uncharitableness" must die. The equity of principle and the kindliness of feeling,—which, in social life, are our highest adornments, and conduce so largely to individual advancement and success,—are no less efficient means of securing the advancement—of elevating the status—of a profession. With its individual members it must necessarily rise, for it has no existence apart from them; and as these are undoubtedly means whereby its members are elevated in the community, so must the cultivation and exercise of them conduce to the elevation of the body corporate. True it is, that the world in its wisdom will ever seek to the skilful practitioner; but it ever will be found that it seeks to him more if, morally, he be the man it can trust. It is not science alone, therefore—it is not virtue alone—that is required to elevate the profession, but it is science and virtue together; and where, let me ask, can they be better cultivated than in such societies as this? Let us resolve, therefore, to avail ourselves more of our opportunities; and ever to be assured, if we would have the world learn aright as to the dignity and worth of the profession, by the benign influence it exerts on the community,—if we would desire to show that to heal the sick was a heaven-born injunction,—the readiest mode of reaching the demonstration will be, by displaying the heaven-born virtues amongst ourselves. And doing so, well may I ask, What has the profession to fear? Great in the power of its might, it walks along with giant strides, and, though hoary with age, displays nothing but the freshness, and the beauty, and the vigour of youth. At no former period of its history has its energy more actively displayed itself than in the now witnessed struggles on the fields of science. Mind with mind is warring for the mastery. The methods and the means of investigation are being extended and improved. The test-tube and the microscope are unfolding their wonders. A closer scrutiny of hitherto received facts and opinions is being instituted. The elements of disease are being searched for, as well as their results, and assuredly no "digging" in the colony promises a richer reward. With all this in action, again would I ask, What has the profession to fear? It requires not the ricketty crutches of a lame empiricism, or the dreamings of a drivelling philosophy, to support or to advance *its* cause. The darkness of ignorance that enshrouds its adversaries and hides *them* from the light of truth, is to it unknown. Lighted on in its path by the flame, and cherished by the heat of the lamp of true science, year after year, as it passes away, witnesses discoveries indelibly written upon its records,—discoveries that will cure the ills, or at least alleviate the sufferings of humanity, to the end of time.

But, let it not be supposed with all this, that we are about to eradicate the ills of our race. Flushed with the ardour of a heated imagination, the young practitioner is apt to think that he has a balm for every wound, and a salve for every sore; that disease at *his* approach, forsooth! must assume the features of an affrighted countenance, and, helter-skelter, hie itself away to a land beyond his ken. It requires, however, but a short-lived experience to dissipate the dream. The seeds of disease and of decay and dissolution were in our bosoms at our birth, alas! too thickly strewn for such hopes to be fulfilled. He must be contented to follow in the footprints of the curse, and to stay the restlessness of his ambition on the restraining of its ravages, and the postponement of the consummation of its power. For the majority of our ills, the means of cure, by a generous divinity, have been placed within our reach; but our temples, like human greatness, are doomed to totter to their fall. With the assaults of so many agencies without, and the proclivity to disintegration that is within, it is not to be wondered at that they crumble and decay,—that they reach a position beyond the efforts of repair; but, to drop the metaphor, when death with outstretched arms has claimed them as its own, and they are about to bid adieu to the scenes in which they have moved; surely it is a gift to be envied, and a power to be prized, that we can mitigate their sufferings, and introduce them with gentleness to the genius of the tomb.

These achievements of the profession, however, may reach their culminating point; the stars and the garters of a home-bred distinction may be given to its members as their rewards; but, unless the golden threads of those principles and feelings to which I have alluded have found a place in the professional fabric; unless they be intimately interwoven into its every part; unless individually we cherish their existence and rightly estimate their worth,—never, never shall our much loved art be robed in its richest drapery—in that which lends it grace, and dignity, and worth.

But, with such science and morality, are our interests as a profession secure? Do we stand in need of no extrinsic aid for their advancement and protection? A sturdy champion exclaims, "What of a Reform Bill—of that for which 'long days and nights we've strove as only lovers strive'—to which we have looked as the 'passport to the haven of our hopes'—a haven where the knell of our grievances shall be tolled, and the merry peals of liberty be rung?" Would, gentlemen, that I could see in a Reform Bill all that some others have descried! It is the teaching of history that the most thorough reformations have been those that were effected from within; where the legislative enactment has succeeded the intestine change; and if our long expected Bill, which at this moment probably is engaging the attention of the legislature, prove much that is of service to us, it will be greatly in virtue of a prevenient change amongst ourselves.

That it will benefit us in *some* measure through its own merits, few, I think; will doubt; but that it comes far short of our requirements, of much that has been striven for, will be equally readily acknowledged. It will give us somewhat of a political position, and a homœopathic *quantum* of political in-

fluence and power; it will give the profession a voice in the conduct of its own affairs, as stentorian at least as that uttered by institutions, some of them, as corrupt as they are old; and it necessitates a greatly enlarged preliminary education. Let us, therefore, accept it with thankfulness, as an instalment of our deserts. Let us remember it is much easier to amend than to get a Bill where conflicting interests are involved. Let us strive to get it, and to find out more clearly, in its workings, its deficiencies and our own wants. It will be time then to agitate for a Medical Amendment Act; to rouse the attention and the talents of all classes and of all crafts in our behalf; aye, from the declaimer in St. Stephen's down even to the village politician; to show them that *our* weal is the public good; that our profession is ahead of its legislation; and thus, by the powerful influence of a converging pressure from without, compel the executive to yield up to us our rights.

It has been objected to the Bill as proposed, that it has no penal clause for the quacks. No; and I doubt if any Government would dare to introduce one; if any House of Commons, any House of Lords, would pass one. It would be looked upon (and it appears to me, with truth) as an infringement of the subject's liberty—of that bright gem in our nation's diadem. All we can expect them to do is, to exclude quackery from the favour of the Government; to shut up to it the avenues to state influence and support; and with this let us be satisfied. Let us remember we have not so much to fear the quackery that is without, as that which is within,—that host of marauders who, not contented with infesting our borders, dwell securely in our territory, and eat the bread of our people. These are the miscreants *we* have to fear; to whom to enter the profession is to obtain a cloak for their iniquity, and a field for its exercise; to inundate their patients with their draughts and their mixtures, their pills, their powders, and their plasters; to cure all manner of deafnesses; to cut out all tonsils; to abuse all speculums. But for these and such as these, and the foibles of the fools and the frail ones of our race, the hydro- and the homœo-, and all the *othero-* and *bothero-*pathies, would never have been born; *they* are indeed the progeny of our own conception; and, until the jubilee day arrives when honour and integrity shall reign triumphantly amongst us, the elements of their existence shall never be destroyed. Let us hail, then, with heartiness the advent of that period! Meantime, let us ever bear in mind that our strongest bulwarks against them will be those that are thrown up from within—thrown up by the hands of the members of the profession themselves, constructed of the blocks of science and the mortar of integrity and truth.

But can we look to any other agencies for the promotion of our weal? Yes, gentlemen, we have the influences of association, and the influences of the press. I feel, however, that it would be unwise to enter at length on their consideration; your discussions this evening will doubtless encompass them. Suffice it to say that, in the British Medical Association, we have now a powerful machinery for good. Its enlarged and more liberal constitution; its representative character; its scientific objects; its disentanglement from much of the *cliqueism* that undoubtedly pervaded it; and the healthful influences it exerts in sinking the personal in the general good, enlist it in the number of our best and strongest weapons of defence.

I would draw no invidious comparisons between the British Medical Journal and those that are the fruits of a commercial speculation; but I can say with truth, that with it no temptations are held out to the practice of a moral obliquity; it can convey to the associates, in the hills and the valleys of our land, an undiluted current of high professional morality; it can announce to them the latest struggles in the fight of reducing our art into a science; the latest discoveries in the way of remedy for disease; and the latest intelligence as to the social and political aspects of our affairs. These surely are high purposes and powers. Let us estimate them aright, and proffer to our Journal all that support which it so justly deserves.

There is one subject, however, for its faithful advocacy of which the medical press, as a whole, deserves our highest commendation. I allude to the efforts now being made to ameliorate the condition of the Poor-law medical officers. As some of those now present are practically cognisant of the hardships they endure, and the injustice with which they are treated, under the law as now existing, I shall not occupy your time by detailing them. It is enough for me to say they are a disgrace to the nation, and a disgrace to ourselves. The dire necessities, alas! of some in the profession, compel them to accept any appointment, however poorly remunerated. They eagerly grasp at that which will yield them even an existence; and the fact of their being necessitous brings down on them the despisings of an ignorant but better-off community. Others there are who accept or retain such appointments to exclude a rivalry in the field of their labours; who know that, to accomplish their object, whilst enduring a pecuniary loss, they are subject to the contemptible interferences of the magnates of the sphere; those who try to weave for themselves a reputation for kindness and philanthropy by drawing largely on the doctor's energies for the materials of their web: and this, I regret to say, often applies to a class of individuals who *ought to* know better—to the ministers of a religion whose precepts breathe only of justice and of love. Your small farmer, too, and the caterers for the varied little wants of a village community, do their little possible in the way of increasing the annoyance. On a cold winter's night, while ensconced in the comforts of their warm chimney corners, a tale of woe in the form of human suffering breaks upon their ears. An upheaving of their generosity mayhap occurs; and at the acme of its ebullition—know it, ye ignorant ones!—a herald is despatched for him who can cure them. A former experience, however, teaches the wise one that his visit is in vain,—that the danger is vested, not in the disease, but in the apprehension of its witnesses. He does nothing, or perhaps sends something for the quieting of their fears; but if *fervidis rotis* he does not *immediately* transport himself to the scene of the sufferer, he is denounced as hard-hearted and neglectful, whilst, meantime, patience or peppermint have effected the cure! It is to release the practitioner from such contemptible interference, but chiefly to obtain for him a just remuneration for his exertions, that the present movement has been made; it is to release him from the supervision of Boards of Guardians, composed of such people, often, indeed, guardians, not of the poor, or of the rights of their medical officers, but of the pockets of themselves and those who have chosen them,—it is for these purposes that Mr. Griffin and his associates have expended their exertions. Let us thank them heartily, and help them with all our might. Let us look upon the question as one affecting, not a class, but a profession, and wish God speed to the energies exerted in its behalf.

To-day, gentlemen, another year in the life of this society has been born. Let the fathers and the children amongst us rejoice! Let us renew the expression of attachment to its objects,—of devotion to its weal. And month after month, as the year passes by, let us be found on our way to the scene of our hitherto assemblies: let us determine to observe more accurately; to record more fully and more faithfully; to bring all and everything of interest that presents itself in our individual spheres; and who can tell but that out of the rich treasure-house of our varied accumulations—by the touch of the magic wand of some generalising spirit—who can tell but that a theory of disease may spring up—as simple—as universal—as those that wreathed the chaplets of a Galileo or a Newton!

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, July 7th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

ILLUSTRATIONS OF AGUISH DISORDER PREVALENT IN LONDON DURING THE LAST TWO OR THREE YEARS.

BY C. HANDFIELD JONES, M.D.

[*Communicated by* Spencer Smith, Esq.]

The author, while expressing a doubt whether the cases selected presented any very striking points, was of opinion that the series was not without value as illustrating a frequent character of disease; and he hoped that their consideration might shed some light on various morbid phenomena of common occurrence, yet but imperfectly understood, and often misinterpreted, and so might render their treatment more rational and satisfactory. He wished the cases to be regarded as experiments in which the nature of the morbid action was to some extent inferred from the mode in which it was affected by remedial agents. He did not consider the evidence demonstrative; he only claimed for it that the inferences should be regarded as highly probable. Information of this kind, though very imperfect, may, after all, be of far more use than the most exact determinations of the balance and the microscope.

He premised the following statements:—

1. That local heat, congestion, and sometimes inflammation, may be produced by paralysis of the vaso-motor (sympathetic) nerves of a part.

2. That the phenomena of fever can be well accounted for on the view of paralysis of the sympathetic system.

3. That there is good reason to believe that neuralgia and dysentery may be the exponents of malarious influence as much as a true ague or remittent.

4. That there is much cause for believing that the vicinity of canals is unhealthy, and that they generate a poison producing effects like those of malaria.

5. That the evidence respecting the production of malaria is such as makes it impossible to affirm that it may not be generated by any moist surface in the process of drying.

6. That in cases of obscure and refractory character, the reaction of the system towards remedies, and the effect of change of air, may afford most material aid towards forming a correct idea of the cause and nature of the disease.

7. The term malarious disorder, as used by the author, is not intended to assert that the essential cause is always identical with marsh miasma, but to convey the idea of a disorder which, however produced, is exceedingly similar to intermittent and remittent fever in many respects, maintaining the same pathological affinities, operating on the same (nervous) system, and requiring the same treatment.

8. The primary action of fever poison, most notably of a malarious fever, in paralysing and depressing affections, especially the nervous system. The most deadly fevers are the algide, in which reaction never occurs; the phenomena usually called febrile are, if the excitement be not over great, a desirable indication that the system rallies, and resists the morbid influence. Hence, if, when there is no intense malaria, a patient suffers from continual, exceeding, causeless (apparently) depression and debility, occasional chills and flushes, or perspirations, with an interlude of neuralgia at times, or a dysenteric or rheumatic attack, and if benefited materially by quinine, iron, etc., and most of all by change to a healthy locality, the inference that he laboured under some aguish disorder seems legitimate. The system is habituated to the morbid action, and does not react strongly against it.

9. The tendency to relapse is most difficult to eradicate. Any cause of a debilitating kind will almost surely reproduce the morbid action in some form or other.

He then gave the details of the following 21 cases:—

1. Obscure aguish disorder.
2. Rheumatic nasal inflammation.
3. Cerebral attack; epistaxis. Benefit from quinine.
4. Cerebral attack; failure of cerebral power. Benefit from ferro-citrate of quinine.
5. Vomiting, febricitation, head-pain, exposure to ague poison. Cure by quinine and strychnia.
6. Cerebral attack; canal influence.
7. Scrofulous, epileptoid seizures. Cure by ferro-citrate of quinine and nux vomica.
8. Hemiplegia in a neuralgic subject. General tonic treatment; recovery.
9. Hemiplegia, first of right, afterwards of left side; canal influence.
10. Rheumatism of the œsophagus; canal influence.
11. Rheumatism, thoracic neuralgia; depression; canal influence.
12. Cardiac neuralgia paralytica; slight hæmatemesis. Cure by quinine and iron.
13. Rheumatoid intra-thoracic neuralgia.
14. Severe cardiac neuralgia; aguish attacks.
15. Periodic gastralgia. Cure by quinine and iron.
16. Rheumatic abdominal neuralgia.
17. Febrile affection; lingual neuralgia. Cure by quinine and iron.
18. Dysentery and aguish disorder. Cure by quinine and opium.
19. Dysentery. Rheumatism. Crimean origin.
20. Nervous prostration; hæmorrhage from stomach. Benefit from change of air, cinchonine, and strychnine.
21. Fugitive œdema, recurring frequently in various parts. Cure by sustained tonic treatment.

The author then proceeded to cite ten instances in which more decided ague was originated or developed by a residence in London. In conclusion, he drew the following deductions:—

1. There seems much reason to think that an obscure form of aguish disorder prevails in (at least) the western parts of London; the phenomena being great debility, hyperæsthesia, failure of cerebral power, neuralgia of external or internal parts, gastric disorders, rheumatic affections, and ill developed febrile paroxysms. Quasi-apoplectic seizures are not uncommon.

2. Quinine, iron, and strychnine, are found of decided benefit, with a generous diet.

3. Change to a pure air is the best remedy.

It must be apparent that, if there be any truth in the foregoing views, those who ignore them entirely must practise at great disadvantage, and meet with continual disappointment. The opinions advanced in the paper are mainly derived from Dr. Macculloch's writings, whose opinions are strongly corroborated by Dr. Copland.

A short discussion followed, in which Dr. Webster, Mr. Squibb, Dr. Stewart, Dr. Smith, Dr. Theophilus Thompson, Mr. Radcliffe, Mr. Spencer Smith, and Dr. O'Connor, took part.

ON A CASE OF HYSTERICAL TETANUS.

BY EDWARD FURLEY, ESQ., F.R.C.S.

[*Communicated by* Dr. Burrows.]

The subject of this communication was one in which symptoms of what appeared to be, in the first instance, aggravated hysteria, were ultimately associated with others more distinctly tetanic. As a child, she had, at two years of age, an attack which was supposed to be encephalitis. At seven she had severe scarlatina, followed by discharge from both ears. She grew up a delicate girl; menstruation appeared at twelve; and at this time nervous symptoms began to show themselves. At the age of sixteen her more serious illness began, after severe mental shock, with pains in the pelvic region of spasmodic character; in consequence of which she would jump out of bed, and run about the room screaming violently. There were various anomalous symptoms observed in succession, in which she seemed to undergo much suffering, and her screams were occasionally such as to alarm the neighbours. During the last few months she had fits, apparently of a cataleptic character, with insensibility, but unaccompanied by delirium or coma. It was at this period more particularly that the tetanic spasms were seen, commencing in the legs, and assuming more or less the characters both of emprosthotanus and opisthotanus. She died exhausted at the age of eighteen years.

Post mortem examination. Emaciation extreme. Cranium large and thin; arachnoid opaque; a good deal of subarachnoid fluid. Brain large; lateral ventricles each containing about half an ounce of serum; substance normal. Spinal cord was firm and natural in every portion; arachnoid opaque. The heart was small, but healthy: slight pleural adhesions at the upper part of the chest, and firm consolidation of one portion of the right lung. A pouch-like dilatation of the duodenum existed at its lower portion; in other respects all the abdominal viscera were healthy. The uterus was small, but showed no indication whatever of disease.

Editor's Letter Box.

THE COLNEY HATCH ASYLUM.

Letter from John Hitchman, M.D.

Sir,—I perceive that, in your leading article of to-day, on "The Colney Hatch Asylum", you have deemed it right to depreciate the "non-restraint" system in the treatment of the insane, and to contrast it unfavourably with the system pursued in the Lunatic Colony at Gheel.

I have never visited Gheel. Like the compiler of a paper on "Lunatic Asylums" in the *Quarterly Review* of April last, I have derived my knowledge of the system pursued there exclusively from an interesting paper by Dr. Webster in the *Psychological Journal*. Therefore I am not so presumptuous as to condemn the system, or so rash and reckless as to applaud it "as a light" which "we shall be constrained to follow". According to Dr. Webster, "all *suicidal, dangerous, homicidal,* or *mischievous* insane patients, are rarely if ever received as inmates at Gheel; while, on the other hand, should any resident subsequently come under these categories, *they are forthwith sent home, or to an asylum elsewhere.*" This fact renders all comparisons between it and the English lunatic asylums illogical, delusive, and mischievous.

My object in writing this note is to point out the fallacy of depreciating Mr. Gardiner Hill and the non-restraint system, simply because, in your opinion, Colney Hatch Asylum is "a huge bastile", or "a house of detention of the most dismal kind." What has this circumstance, Mr. Editor, to do with Mr. Gardiner Hill, or with the non-restraint system? Where is the logic, where is *the justice*, of such a sentence as the following?

"Colney Hatch is *a house of detention of the most dismal kind;* and Mr. Gardiner Hill need not talk any more about the authorship of the non-restraint system so long as this huge bastile is appropriated to the incarceration of such a little army of helpless beings?

Did Mr. Gardiner Hill plan, and recommend Colney Hatch Asylum as the model of what such institutions should be? Certainly not. Does the non-restraint system demand "a huge bastile" as a condition of its success? Certainly not. Has not Dr. Conolly, the eloquent advocate of the non-restraint system, formally condemned such large asylums, because "*every desirable quality*, both in the construction and government of an asylum, becomes more difficult to be obtained and preserved" under such circumstances? He has done so. Where then, I repeat, Mr. Editor, is the logic—where the justice of such insinuations?

I have not the honour of a personal acquaintance with Mr. Gardiner Hill, but on public grounds, I object to the wanton use of a gentleman's name in connection with a subject for which he is no more responsible than he is for the judicious conduct of the British Medical Journal.

Moreover, as one who has been associated with lunatic hospitals for more than twenty years, and who has practised the non-restraint system for upwards of fourteen years, I protest against the inference, that the non-restraint system of treating the insane is inseparable from "huge bastiles"; as also against your insinuation, that there is anything in that treatment upon which men will look "with feelings of *disgust*, differing only slightly in degree from those with which we read of the treatment of madmen in old Bedlam."

I am, etc., John Hitchman.

Mickleover, near Derby, August 15th, 1857.

[As the name of the Editor of this Journal has been associated with this article by nearly all the medical journals, and as Dr. Hitchman appears to have read it, we must confess our surprise at his idea that we should feel inclined to deprecate the non-restraint system. Why, the whole article is a laudation of this so-called system—and something more. Dr. Hitchman styles that article a "compilation", whereas it breaks altogether new ground with respect to the treatment of lunatics in pauper asylums. We scarcely should have thought it necessary to remind that gentleman that "compilations" are never admitted in the *Quarterly Review*.—Editor.]

MEDICAL PRESCRIPTIONS.

Letter from Joseph Stone, M.D.

Sir,—My thoughts have lately been directed to the subject of prescriptions. The profession and the public would, I think, be equally benefited by a rule like the following. All prescriptions written by medical men, and compounded by druggists, should be returned to the prescriber; and no druggist should make up an old prescription without the fresh sanction of the medical attendant.

Mr. Silex, a general practitioner, is called out of his immediate neighbourhood. To save his own time, or to spare the patient trouble, he writes prescriptions for the case. He finds, perhaps, in a month or two, that his patient has been seized with his old complaint. Mr. S. has not been called in; the old prescriptions have been used, and with success, without his knowledge. This is an injustice to the doctor. The patient has a third attack; the same prescriptions are employed until, matters getting worse, he sends for the practitioner, who finds himself called in too late. This is a serious matter for the patient and his friends, as well as an injustice to the doctor.

Again, Mrs. Essex has certain symptoms which she details to Mrs. Bristol, who immediately finds her a prescription which the said Mrs. B. "paid a guinea for", and which she assures her friend will prove an infallible cure. Poor Mrs. Essex—the good intentions of her friend have nearly poisoned her.

I have known a prescription sold for half-a-crown; and I have known a prescription lent for sixpence or a shilling a time.

The following case occurred to me lately. The child of a patient was taken into the country, and, while there, had a fresh attack of chronic eczema. He was placed under the care of a highly respectable physician, who undertook the case with a special proviso that the child should be frequently brought to him, that he might watch the action of his remedies. Much benefit was derived from the treatment. On his return, the symptoms reappeared; and a bundle of prescriptions, marked Nos. 1, 2, 3, etc., were about to be put into requisition, when it was suggested by a relative that I should be consulted. I found arsenic, in rather considerable doses, had been given. It was manifestly an improper use they were about to make of the prescriptions, and might have been attended with serious results.

I am aware that some patients think they pay for the prescriptions, and would insist upon retaining them; but they should be taught that they pay for *advice*, and not for the "paper written in Latin".

I cannot but think that, after a little while, respectable druggists would fall in with the plan I propose; namely, in all cases to return the prescription to the prescriber where practicable. A penny stamp and an envelope would be the only cost.

I will not take up further space, but submit the question to the profession, and especially to all Medico-Ethical Associations.

I am, etc.,

Joseph Stone.

Manchester, August 18, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, August 13th, 1857.

THE ATMOSPHERE OF THE HOUSES OF PARLIAMENT.

Mr. Estcourt said, seeing the First Commissioner of Works in his place, he begged to ask him a question. The other day the right hon. gentleman, in answer to a question put to him by the hon. member for North Staffordshire (Mr. Adderley), stated that he had entered into communication with the local authorities of Lambeth with regard to certain noxious trades carried on in that parish, and which, as was obvious to the perception of every one who put his nose out of the library windows of that House, were, to a considerable extent, the cause of the bad vapours which entered the House from the direction of the Thames. The question he had to ask of the right hon. gentleman was, whether that communication had led to any result, and if so, whether he felt himself at liberty to state it to the House?

Sir B. Hall, in reply, stated that the vestry of the parish of Lambeth had been requested by him to cause steps to be taken for the abatement of the nuisance, to which the vestry replied "that they were not prepared to take any legal proceedings in connexion therewith." The House would therefore see how important it was that the Act of 1855 should have contained the clause inserted on the recommendation of the Select Committee, imposing penalties on the local authorities for the neglect of duty on their part, and how much it was to be regretted that that clause should have afterwards been expunged. [*Hear, hear.*] He would only add that he hoped early in next session the House would pass a short Bill to remedy the omission, and to compel the local authorities, on requisition being made to them, to act in the discharge of their duty. [*Hear.*]

Monday, August 17th.

CROWDED DWELLINGS PREVENTION BLLL.

On the motion for going into committee on this Bill,

Mr. Ridley hoped that the Government would withdraw the Bill for the present session. Its provisions were of the utmost importance; they trenched upon the liberty of the subject, and ought not to be passed without great consideration. The hon. gentleman moved that the Bill be committed this day three months.

Mr. Henley joined in the request for the postponement of the Bill for the present session. It was very badly drawn, and one of the clauses read in conjunction with the preamble gave the police power to enter into every house in the kingdom. Another clause gave the London police power to go over all the kingdom to carry the provisions of the Bill into operation.

Mr. Kinnaird supported the Bill. If London were polled, the vote of every poor man would be given in favour of it. The state of the lodging-houses in London was terrible. Not long ago he went with one of the police to visit some of these lodging-houses, when he was surrounded by persons who begged that the provisions of the existing Act might be extended to houses which did not now come within their operation. There were many places which, though not technically, were practically lodging houses, in which several families were crowded together. In one tenement he saw thirty or forty miserable Chinese so crowded together as to breed all kinds of filth and

abomination. The crowding of 3,000,000 of persons into a single city was a highly artificial arrangement, and it required some special enactments, like those now proposed, to get for the poor some measure of air, water, and other matters required for healthy and convenient living.

Sir W. Jolliffe condemned the provisions of the Bill, which would defeat the operation of that very excellent measure—the Common Lodging-houses Act.

Mr. W. Cowper said that he was not responsible for the framing of this Bill, but he should not be doing justice to those who introduced it into the House of Lords if he were now to withdraw it. If they went into committee, he could show that the measure was not open to the objections which had been raised to it. The second clause did not, as had been alleged, apply to private dwellings, but only to lodginghouses or flats of dwelling-houses. In the third clause it would be desirable to introduce words limiting the authority of the Police Commissioners to their own district. The hon. gentleman concluded by repeating the explanation of the provisions of the Bill which he gave when its second reading was under discussion.

Mr. Locke said that the overcrowding of the dwellings of the poor was the result of our great improvements, and that we had now no right to turn the occupants out of their houses, as was proposed by this Bill, without taking any care where they went to afterwards.

Lord Palmerston said that the House did not appear clearly to understand the nature or the principle of the Bill. Hon. gentlemen got up and said that the Bill proposed an interference with the dwellings of the poor, but the fact was that it was not with the dwellings of the poor that the Bill proposed to deal. The fact was that the unfortunate wretches for whose welfare the Bill provided did not live in their own houses. A number of capitalists had built tenements which were occupied by the poor as lodginghouses, and, from a sordid love of gain, they kept the inmates of those tenements in a state of misery, of dirt, and disease. He trusted that the House would not be led away by misrepresentations, and retard the progress of a measure which would be productive of great benefit to the labouring classes. [*Hear, hear.*]

Colonel Sykes would not, at that late hour, trespass long upon the attention of the House, but there were certain facts with which he thought they ought to be made acquainted. The condition of the lodginghouses did not regard the poor alone, but being, as they were at present, nuclei of disease and pestilence, they affected the whole community. A report which had been drawn up for the Statistical Society of London, and part of which had been prepared from his own personal experience, disclosed a sad state of things with regard to the condition of the poorer classes. He would not trouble the House by quoting many passages from that report, but there were one or two which he thought that it would be advisable to refer to. There were many cases mentioned in that report illustrating the deplorable condition of the working classes with regard to lodging accommodation in the manufacturing districts. It appeared, also, from the report, and he could confirm it from personal observation, that in Church-lane, St. Giles's, in London, the population examined was 463, the number of families 100, and the number of bedsteads among them 90, the average being above five souls to a bed; and many rooms were inhabited by as many as 22 souls, without water, or drainage, or privies, while in one of the rooms containing 22 souls there was also a dead body. The condition, in fact, of those people was so revolting, that a committee of the Statistical Society of London had concluded a report, which they were called upon to make, as follows:

"Your committee have thus given a picture in detail of human wretchedness, filth, and brutal degradation, the chief features of which are a disgrace to a civilised country, and which your committee have reason to fear, from letters that have appeared in the public journals, is but the type of the miserable condition of masses of the community, whether located in the small, ill-ventilated rooms of manufacturing towns, or in many of the cottages of the agricultural peasantry. In these wretched dwellings all ages and both sexes, fathers and daughters, mothers and sons, grown up brothers and sisters, stranger adult males and females, and swarms of children, the sick, the dying, and the dead, are herded together with a proximity and a mutual pressure which brutes would resist; where it is physically impossible to preserve the ordinary decencies of life; where all sense of propriety and self-respect must be lost, to be replaced only by a recklessness of demeanour which necessarily results from vitiated minds; and yet, with many of the young, brought up in such hotbeds of mental pestilence, the hopeless, but benevolent attempt is making to implant, by means of general education, the seeds of religion, virtue, truth, order, industry, and cleanliness; but which seeds, to fructify advantageously, need, it is to be feared, a soil far less rank than can be found in these wretched abodes. Tender minds, once vitiated, present almost insuperable difficulties to reformation; bad habits and depraved feelings gather with the growth and strengthen with the strength."

Well, then, the hon. member for Southwark had talked about erecting buildings for the accommodation of the labouring classes. Now, such an attempt had been made; and in one building which had been erected in Old Pancras there was accommodation for nearly 100 families; and so well arranged were the sanitary regulations of that establishment that, during the cholera, not a single case of that disease appeared within it, although it was prevalent in the immediate neighbourhood. For his own part, he thought that the Bill was one which would, to a certain extent, remedy a great abuse, and he would therefore feel it his duty to support it. [*Hear, hear.*]

Mr. Ayrton thought that whether a poor man occupied a whole house or a single room, his dwelling ought to be as inviolate as that of the richest man in the land; and he could not approve of the power which this Bill would give to the police, to enter and inspect the residence of a poor man at any time they might think fit to do so.

After some discussion the House divided, when the amendment was negatived by 44 to 23.

The House then went into committee, but the chairman immediately reported progress.

The House adjourned at 2 o'clock.

Friday, August 18th.

CROWDED DWELLINGS PREVENTION BILL.

The House went into committee again on this Bill.

Mr. Ridley again suggested the propriety of postponing the further consideration of this Bill until next session.

Mr. Cowper said that the Bill had been before the House sufficiently long to be amply considered. It was true that the Bill as originally introduced was restricted to the metropolis, where the evil to be met chiefly existed; but, as the Bill referred to the Common Lodginghouses Act, which applied to the whole country, it was thought proper to extend the application of the Bill. Except for the purpose of defeating the Bill, he could not understand the reason of postponing its consideration. [*Hear, hear.*]

Mr. Cox seconded the motion. The Bill was a gross outrage upon the poorer classes of the country, and would place the whole metropolis in the hands of the police.

Mr. John Locke objected to this Bill because it interfered with every man in the metropolis, and throughout the country, as to the mode in which he chose to live in his own house, and enabled the police to enter every man's private dwelling.

Lord Palmerston said this was a question between speculating builders, who wished to overcrowd the houses they erected, and the poor, who were the victims of their cupidity. [*Hear.*] The hon. gentleman said that an Englishman's house was his castle. In this case every builder's house was his dungeon; and it was into this unhealthy dungeon that, for the sake of private gain, they crowded a number of persons, who could not live together with safety to either body or mind. [*Hear, hear.*] As to the question of time, that was a commonplace stereotyped argument, which hon. members, who felt they could not oppose a Bill upon its merits, frequently brought forward. He hoped the committee would listen to no argument of that sort. Every objection which had been urged against this measure applied equally to the Lodginghouse Act, which we proved to have conferred the greatest possible benefit on the poor of this metropolis; and he trusted that the committee would defeat the attempt to throw out this Bill, and would thereby complete the good work which that Act had begun. [*Hear, hear.*]

Mr. Knight regarded this as only one of a series of stringent measures for increasing the power of the Government over the subject, which ought to be strenuously resisted. The police ought to be strictly confined to their single, proper duty—the prevention of crime; otherwise, the same system of gradual encroachment which had enslaved the nations of the continent would be insidiously extended to this country.

Mr. Cox thought the chairman ought to report progress, in order to allow the noble lord at the head of the Government an opportunity of reading the Bill, of which it was evident he knew nothing. Had the noble lord ever read the *History of England.* [*A laugh.*] If he meant to play Wat Tyler with the people of

England, they would be able to find persons to play the tyrant against him. [*Much laughter.*]

Sir W. Jolliffe disclaimed the imputation that had been cast upon him of having opposed the Bill from unworthy motives.

Lord Palmerston did not know what was meant by saying that the Government had imputed base motives to those who opposed the Bill. If any imputations had been cast, they had been rather cast upon the Government by those who opposed the Bill, that under the semblance of improving the Common Lodging-houses Act, they were attempting a tyrannous interference with all private houses, and that they sought to establish domiciliary visits. The hon. member for Finsbury had even gone so far as to impute to him a desire to imitate the example of a person whom the hon. member conceived to be a great tyrant. [*Laughter.*] If the hon. member inquired within the limits of his own borough into historical facts, he would acquit him of any display of arbitrary government and tyranny, as resulting from an imitation of Wat Tyler. [*Loud laughter.*] He earnestly hoped the committee would adopt the amendment of his right hon. friend (Mr. Henley), which the Government were quite willing to accept. [*Hear, hear.*]

After a few words from Mr. S. Fitzgerald, Mr. Ayrton, and Mr. Carter,

The committee divided, when there voted—

For reporting progress	22
Against it	35
Majority	—13

The amendment proposed by Mr. Henley was then introduced, and clause 1, as amended, was agreed to.

The Chairman then reported progress, and the House resumed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Griffith. On August 13th, at Peckham, the wife of *John T. Griffith, Esq., Surgeon, of a son.

Hare. On August 13th, at Great Baddow, Essex, the wife of *Henry Hare, M.D., of a daughter.

Pollock. On August 12th, at 4, Chandos Street, Cavendish Square, the wife of James Edward Pollock, M.D., of a son.

Smith. On August 17th, at 13, John Street, Berkeley Square, the wife of Thomas Henry Smith, Esq., Surgeon, of a son.

MARRIAGES.

*Clarke—Grayson. Clarke, John, Esq., Surgeon, of Kenilworth, to Eliza, youngest daughter of the late John Grayson, Esq., of Dowdsby, Lincolnshire, at Kenilworth, by the Rev. B. J. Bickmore, vicar, on August 18th.

Dudman—Shirreff. Dudman, the Rev. L. S., rector of Pitney, Somerset, to Mary Anne Eyre, younger daughter of James Hales Shirreff, M.D., of Lympstone, Devon, at Lympstone, on August 12th.

Gooddy—Ward. Gooddy, George, Esq., Surgeon, of Thorne, Yorkshire, to Sophia Godson, youngest daughter of the late W. Ward, Esq., of Brompton, London, at Thorne, on August 13th.

Tresidder—Courtis. Tresidder, John N., Esq., civil surgeon, Cawnpore, East Indies, to Emily Hooton, fourth daughter of R. S. Courtis, Esq., of Falmouth, at Camberwell, on August 15th.

DEATHS.

Dods, George Douglas, Esq., Staff-Surgeon in H.M. Forces, aged 40, on August 16th.

Poulson, W. H., Esq., Surgeon, at Mansfield, Nottinghamshire, aged 52, on August 13th.

PASS LISTS.

Royal College of Surgeons. Licentiates in Midwifery admitted at the meeting of the Board on August 12th:—

Alcock, John, Cobridge, Staffordshire
Bannister, Alfred James, Chelsea
Barker, Samuel, Ramsgate
Bright, Richard Stonhewer, Richmond
Cobbett, Robert Newberry, Winchmore Hill
Crossley, William Henry, Wath-upon-Dearn, co. York
Duchesne, Robert, White Lion Street, Norton Folgate
Fluder, Charles John, Lymington, Hants
Harley, Thomas, Cleobury Mortimer, Salop
Harris, Edward, Calcutta
Hinder, John, Calcutta
Hogg, Francis Roberts, Gower Street
Mason, Benjamin Earnshaw, Calcutta
Newman, Augustus, Oxford
Philpott, Henry Gray, Brighton
Radley, William Hepworth, Doncaster
Rose, George Cowper, West Square, Lambeth
Scott, Thomas Alexander Fraser, Aberdeen
Simms, Frederick, Tonbridge Place
Whitefield, Arthur, Barnstaple, Devon
Wilkes, George, Stepney Green

University of London. M.B. First Examination, 1857.

First Division.

Adams, Samuel Hoppus, University College
Alford, Henry James, University College
Carter, Robert, University College
Cayley, William, King's College
Cooke, John, St. Thomas's Hospital
Cousins, John Ward, St. Thomas's Hospital
Crowfoot, William Miller, St. Bartholomew's Hospital
Durham, Arthur Edward, Guy's Hospital
Harley, John, King's College
Hickman, William, University College
Hill, Matthew Berkeley, University College
Hind, John Marriott, University College
Jeffcoat, James Henry, St. Mary's Hospital
Kempster, Felix Henry, University College
Knaggs, Henry, Guy's Hospital
Langdon, Thomas Charles, St. Bartholomew's Hospital
Lloyd, Edward Harford, London Hospital
Marriott, Charles Hayes, University College
Moxon, Walter, Guy's Hospital
Pemberton, Clarence Linden Henderson, Queen's College, Birmingham
Pile, William, University College
Ringer, Sydney, University College
Rivington, Walter, London Hospital
Rix, William Howells, Middlesex Hospital
Smith, Eustace, University College
Thompson, Edmund Symes, King's College

Second Division.

Buchanan, Albert, B.A., University College
Copestake, Walter, St. George's Hospital
Everet, Wilton, London Hospital
Gasquet, Joseph Raymond, University College
Harvey, Charles Hamilton, King's College
Sansom, Arthur Ernest, King's College
Shepherd, James, University College
Squire, Alexander John Balmanno, University College
Stokoe, Paul Henry, Guy's Hospital

HEALTH OF LONDON:—WEEK ENDING AUGUST 15TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London in the week that ended on Saturday (August 15th) were 1187, and exhibit a decrease on those returned in the three previous weeks, when they ranged from 1209 to 1238. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1255. But the deaths of last week occurred in an increased population, and to admit of comparison the average should be raised in proportion to the increase, in which case it will become 1380. The average rate of mortality would have produced more deaths by 193 than the number in the present return; but it is proper to state, that as that rate is derived in part from periods when cholera raged, it is too high as a measure of health when the population is happily free from such calamity; and that the mortality *from all causes* at the present time differs little from the ordinary amount at this season of the year.

The deaths from diarrhœa, which rapidly rose to 302 in the last week of July, and in the next week declined to 258, again exhibit a slight decrease, the number returned last week being

244. In the ten weeks (of 1847-56) corresponding with last week, the deaths from this complaint ranged from 81 to 253. The London registers during the last twelve years reveal a very striking increase in the prevalence of diarrhœa; for on referring to the returns for the second or third week of August in 1840-45 it will be seen that the number of cases in which it was fatal was as low as 20 or 11, and did not exceed 70. Besides the deaths from diarrhœa there were 21 last week from "cholera" and "choleraic diarrhœa," 12 of which occurred to young children. The Registrar of the sub-district of Woolwich Arsenal reports a death from "English cholera" after an illness of 40 hours. The deceased was a rigger in the dockyard, and had been employed for several days in raising the convict hulk "Defence," and it appears that he suffered extremely from what was described by him as "the awful stench" of the river during the performance of his work.

Last week the births of 875 boys and 743 girls, in all 1,618 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1,448.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·793 in. The *highest* reading in the week was 30 in. on Wednesday. The mean temperature of the week was 63·7°, which is 2·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was highest on Thursday, having been 68·6°, which is 7·1° above the average. The *highest* readings of the thermometer occurred on that day, and were 83·6° in the shade, and 105° in the sun. The mean dew-point temperature was 57·7°, and the difference between that and the mean temperature of the air was 6°. The mean temperature of the water of the Thames was 68·2°. The general direction of the wind was south-west. Rain fell to the amount of 1·52 in., of which so much as 1·12 in. fell on Friday. A thunderstorm commenced at half past 9 o'clock on Thursday night; it was very heavy during the first hour, and continued with intervals till five next morning. About five in the afternoon of Friday great darkness prevailed, which was followed by a very severe thunderstorm, accompanied with hail-stones of unusual size.

Nuisances on the Banks of the River Thames. Some correspondence between Mr. Goldsworthy Gurney, the Board of Works, and the Commissioners of Sewers, on the state of the river Thames and the pollution of the air on the banks of the Thames and at the Houses of Parliament, was published by order of the House of Commons on Saturday, on the motion of Mr. Estcourt, M.P. Mr. Goldsworthy Gurney, in May, June, and July last, pointed out at length, in some valuable reports to the Board of Works, a number of abominable nuisances arising from the state of the sewers in the vicinity of the New Palace at Westminster, and other causes most injurious to the health of the members. The source of the original evil (certain untrapped gulleyholes in St. Margaret's Street, New Palace Yard, and the open mouth of Bridge Street sewer) was cut off some time since; but, although the greater nuisance is removed, the minor annoyance remains. This was pointed out in a report of 1855. It arises from untrapped sewers on the south side of the river near Lambeth Palace, besides two at Millbank, one at the Penitentiary, and two at Vauxhall Bridge. The sewers at Lambeth and Millbank are the most offensive. Another source of pestilential effluvia, affecting the atmosphere of the Houses of Parliament, is the existence of bone and other offensive manufactories on the south side of the river, and also exhalations from the river itself. In June last, Mr. Gurney reported the river to be in so pestilential a state that it was difficult to keep the stench out of the Houses of Parliament, and he urged the trapping the open mouths of certain sewers forthwith. Mr. Gurney's appeals to the Board of Works were seconded by Mr. R. Burrell, of the Lord Great Chamberlain's office, House of Lords, who (July 16th) complained that the stench from the river compelled him to close all his windows, but that the poisonous effluvia penetrated to his rooms notwithstanding, causing headache, nausea, and loss of appetite. "The nuisance," he says, "is becoming greater annually;" and common humanity, he adds, requires that the Government should seriously take up the question of the purification of the Thames. The Board of Works ordered Mr. Gardiner, on the 21st ult., to put himself in communication with Mr. Gurney for the abatement of the nuisance arising from the manufactories on the south side of the river; and Mr. Bazalgette, the engineer, was also referred to. Ultimately it was intimated to the Board of Works by the Secretary of State (on the 29th ult.), that the prosecution of nuisances was left by the Metropolis Local Management Act to the local authorities of the parishes, to whom, as armed with ample powers, Sir G. Grey suggested that application should be made in the cases referred to. The state of the Thames, meanwhile, remains as before.

The Human Mind in Cities. Somehow or other, amid their crowding and confinement, the human mind finds its fullest, freest expansion. Unlike the dwarfed and dusty plants which stand around our suburban villas, languishing like exiles for the purer air and freer sunshine that kiss their fellows far away in flowery field and green woodland, on sunny banks and breezy hills, man reaches his highest condition amid the social influences of the crowded city. His intellect receives its brightest polish where gold and silver lose theirs—tarnished by the searching smoke and foul vapours of city air. The finest flowers of genius have grown in an atmosphere where those of nature are prone to droop and difficult to bring to maturity. The mental powers acquire their full robustness where the cheek loses its ruddy hue and the limbs their elastic step, and pale thought sits on manly brows, and the watchman, as he walks his rounds, sees the student's lamp burning far into the silent night. *(Dr. Guthrie, of Edinburgh.)* [If the lamp of life burns brightly in large cities, it burns quickly. It is a known fact that the citizens of a great metropolis generally die out in the third generation. Editor.]

New Charter of the University of London. A deputation on the subject of the proposed new charter of the Univerity of London had an interview with Sir George Grey, on the 13th inst., at the Home Office. The deputation consisted of—from the University College, London, Mr. Thornely, M.P., Dr. Booth, Mr. Fowler, Mr. Goldsmid, Mr. R. Hutton, Dr. Mackenzie, Mr. Frederick Wood (members of Council), with Mr. Atkinson, Secretary; from Manchester New College, Mr. R. H. Hutton; from Carmarthen College, Mr. D. Morris, M.P.; from the Committee of Graduates of the University, Mr. Mitchell, M.P., Mr. Hodgson, M.P., Professor Foster, Mr. G. Jessel, Mr. Osler, Mr. J. G. Flitch, and Mr. Heath.

Failure of the Atlantic Telegraph. (By Electric and International Telegraph.) Plymouth, Friday evening. The United States' steam-frigate *Niagara*, Captain Hudson, from the Atlantic, followed by the *Susquehanna*, Captain Sands, and Her Majesty's screw steamship *Agamemnon*, Master-Commander Noddall, entered the Sound this afternoon on their return from their unsuccessful effort to lay the telegraphic cable. On board the *Niagara*, they report that, at the time of the severance, a quarter to 4 o'clock on Tuesday morning, 335 nautical or about 380 statute miles had been laid, at a distance of 260 to 280 miles in a direct course from Valentia. The wind was southerly; there was some sea, and the ship was going from three to four knots, and the cable paying out five to six, and sometimes seven knots. As the quantity of slack thus expended was greater than expected at starting, and more than could be afforded, the retard strain was therefore increased to a pressure of 3,000 pounds, and the cable broke. The extra expenditure of slack commenced on Monday evening, when a strong breeze and heavy swell prevailed, and a powerful undercurrent was experienced. This current forced the wire from the ship at a considerable angle. When the break was applied with increased power, the stern of the *Niagara* was down in the trough of a sea, and the extra strain created by her rising was the immediate cause of the cable's parting. The *Susquehanna* was a mile off on the *Niagara's* starboard beam; the *Agamemnon*, the *Cyclops*, and the *Leopard*, were within signal distance. At 12 o'clock the *Cyclops* left for Valentia, and the *Leopard* for Spithead. The other three remained to make some experiments. Soundings were found by the *Cyclops* at 2,000 fathoms. At night they kept a course E.S.E., under easy steam, and on Wednesday morning, at 10 o'clock, bore up for Plymouth Sound. The *Niagara* is gone into Hamoaze. The general opinion is that the season is too far advanced for another effort now, but every confidence is expressed in the ultimate success of the undertaking. The machinery now aboard the *Niagara* is considered too heavy for the purpose. It is stated that the wheels ceased to revolve when the pressure was applied on Tuesday morning. *(Times.)*

The Heat in India. The *Moniteur de l'Armée* publishes a letter from Bombay of the 14th of July, which states that the heat is greater this year in the presidency of Bengal than ever was remembered. On the 25th of June the thermometer marked 52 degrees (centigrades) above zero in the English camp before Delhi. Several soldiers died that day of sunstroke.

The Spollens. There is really some show of justice in the continued demands of the *Cork Constitution* for further inquiry into the allegations preferred against Spollen's wife by Mr. Curran in the course of his able defence of the prisoner. Following up its recent remarks upon this branch of the case, the Cork paper asks,

"Is a woman publicly impeached of having attempted to procure the execution of her husband to remain at large? Is there to be no trial, no inquiry, no investigation of the grounds on which the accusation was preferred? If the Attorney-General sleeps shall the press sleep? Are our Dublin contemporaries to suffer the startling statement of Mr. Curran to be forgotten? Is it not better worth their attention than were the host of 'rumours' on which they expended so much speculation? Then why are they silent? There is a clue to the murder. Either Spollen was the murderer, or Mrs. Spollen knows who was. There is no escaping that dilemma. How, without knowledge of the murderer, could she have told where the plunder was deposited! How could her statements to the police have been verified and their search for it have been successful? How, moreover, did Spollen's razor get into the canal? We put these questions merely to show that if Spollen is innocent, Mrs. Spollen has a secret in her possession which ought not to be left there, and that if he is not innocent, she ought not to be made the victim of the foulest calumny ever uttered against a mother and a wife. No license can excuse, no exigency can justify it. Either it is true, and she is worse, more heartless, more hardened, more infamous than the shedder of Mr. Little's blood; or it is false, and —— but we must not trust ourselves with the inference. Be it which it may, it is the duty of the law officers to search it out, and the duty of the press to keep them to it. Wherever the accusation is believed, that woman stands in a more undesirable position than Spollen stood in before he was arraigned; and ought this to be so and she still at large? Is that the result we look for from legal process in superior courts? Is one to be acquitted that another, unconvicted and unquestioned, may be condemned?" *Times Correspondent.*

Ventilation by the Steam Jet. A somewhat novel application of the steam jet, for the purpose of ventilating a coal mine, has just been made by Mr. F. H. Pearce, of the Bowling Ironworks, near Bradford. The *Leeds Mercury* gives the following account of the application: "The application is at present in operation in a pumping shaft, 120 yards in depth, the ventilation of which had been stopped by the water rising at the bottom of the pit during the time some alterations were being made in the pumps. The water having stopped the air-courses, the pit, to within a few yards of the top, became full of the gas known to miners as black or choke damp, which appears to have been discharged freely from some old workings, and thus it was rendered an impossibility for the workmen to descend until the removal of the gas had been effected, and a constant current of pure air produced in the pit. Mr. Pearce has succeeded in maintaining so perfect a ventilation of the above-mentioned pit, simply by allowing a small jet of steam to issue into the atmosphere at a few feet from the top of the pipes through which the water is forced up when the pumps are at work, and the pit can be worked with perfect safety. The workmen were enabled to descend thirty minutes after the steam had been turned into the pipes. The principle is exceedingly simple. The jet of steam issuing from the top of the pipes produces in them a partial vacuum, which draws the foul air up these pipes, and thence out of the pit, with very great velocity. The cost of applying the steam jet in the above manner is very trifling; and this method of ventilation will, doubtless, be found a very safe and useful one in many instances, particularly in sinking deep shafts. In addition to other advantages, wood or any other kind of pipes may be used. It requires little or no attention, no machinery to get out of repair, produces a powerful current of air, and can be regulated at pleasure. As the steam is discharged into the atmosphere above the top of the pit, it does not interfere with the men working in the shaft."

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

We are obliged to Mr. Garstang for his communication, but we think the subject has been sufficiently discussed already.

Mr. Nathaniel Crisp, by referring to the Hospital Reports of August 8th, will find a detailed account of the death from Amylene at St. George's Hospital; and in the same department of this week's paper, he will find an account of the death from Chloroform at King's College Hospital.

Communications have been received from:—Mr. T. Holmes; Dr. Mackinder; Dr. C. Handfield Jones; Mr. Stone; Mr. R. L. Bowles; Mr. C. Bader; Mr. Walter Garstang; Mr. Augustin Prichard; Mr. Nathaniel Coats; Mr. Nathaniel Crisp; Mr. R. Wood; Mr. George Yates; Dr. J. Hitchman; and Dr. Joseph Stone.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. On Mineral Waters; their Physical and Medicinal Properties. By Robert Mortimer Glover, M.D. London: Henry Renshaw. pp. 375.
2. A Key to the Adulteration of our Daily Food. Compiled by William Dalton. London: Published by E. Marlborough & Co. 1857.
3. Metropolitan Workhouses and their Inmates. London: Longmans. 1857.
4. La Vaccine: ses Conséquences Funestes, démontrées par les Faits, les Observations, l'Anatomie pathologique, et l'Arithmétique. Réponse au Questionnaire Anglais relatif à la Vaccine, adressé aux Academies par la Chambre des Communes d'Angleterre. Paris, &c. Baillières. 1857.

ADVERTISEMENTS.

Just published, price 1s., by post 1s. 1d.

Observations on the Topography and CLIMATE OF ASPLEY GUISE, in reference to their superior Influence upon Health and Disease, as compared with celebrated English and Foreign Localities. By JAMES WILLIAMS, M.D., etc.

"Dr. Williams has here given a very pleasantly written and interesting book. He makes out a good case for Aspley Guise as a residence for invalids, and shows that England has in herself the advantages which sick tourists seek abroad."—*Journal of Public Health.*

London: Thomas Richards, 37, Great Queen Street.

Just published, Third Edition, post free, 6d.

Spectacles: when to Wear and how TO USE THEM. Addressed to those who value their Sight. By CHARLES A. LONG.

Bland & Long, Opticians to the Queen, 153, Fleet Street, London.

On the 1st October, Part I. of

The Grasses of Great Britain. Illustrated by JOHN E. SOWERBY. Described by C. JOHNSON, Esq. To be complete in 30 Parts, at 1s.: uniform with "The Ferns of Great Britain." The work will contain about 140 Coloured Plates. Prospectuses may be had through all Booksellers; or of the Publisher,

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Sowerby's Fern Allies. Flexible boards, 31 Plates, full coloured, 18s.; partly coloured, 9s.

British Poisonous Plants. By C. JOHNSON, Esq. Flexible boards, crown 8vo, with 28 Plates. Full coloured, 7s.; plain, 5s.

John E. Sowerby, 3, Mead Place, Lambeth, S.

Diabetes.—The Bran Biscuits made only by Mr. T. SMITH, Biscuit Baker, Gower Street North, Euston Square, are specially recommended for DIABETIC PATIENTS, by Dr. COLEY, 10, Bernard Street, Russell Square, on account of their containing the smallest possible quantity of Saccharine matter. Orders by post promptly attended to. 1s. per lb.

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BRITISH MEDICAL JOURNAL:

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EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BRISTOL ROYAL INFIRMARY.

LITHOTOMY:—THREE CASES OF STONE IN THE BLADDER, IN WHICH ALLARTON'S OPERATION WAS PERFORMED.

Communicated by AUGUSTIN PRICHARD, Esq., Surgeon to the Infirmary.

WITHIN the last two months, we have had three cases of stone in the bladder in young children requiring operation, in which the median section recommended by Mr. Allarton has been performed, and which are worthy of being laid before the profession in the pages of the JOURNAL. One of them was under my own care, one under that of Mr. Green, and another under Mr. Bernard's; and I publish the two latter with the kind permission of my colleagues, and in the order in which they were admitted.

CASE I. *Calculus Vesicæ: Lithotomy: Recovery.* John E. Macdonald, aged 3 years, was admitted under the care of Mr. Bernard, one of the surgeons of the Bristol Royal Infirmary, on June 13th, 1857. The symptoms of stone in the bladder were first noticed about a year ago, and they had increased lately. Upon being sounded, the stone was struck the first time. To relieve the irritation of his bladder, he was ordered a drop of laudanum with five grains of carbonate of potash three times a day.

The operation took place on June 26th, after the administration of an injection, and was performed under chloroform, with the aid of a curved staff, and the fore-finger of the left hand in the rectum supporting it, according to the description given by Mr. Allarton, in his little book called *Lithotomy Simplified.* The groove in the staff was speedily reached, and the probe followed by the finger passed into the bladder. The stone, composed of lithic acid and weighing nearly two drachms, was removed by a dressing forceps without difficulty. There was no hæmorrhage, and no sickness followed the use of the chloroform.

June 27th. He has no bad symptoms: the urine flows away altogether through the wound.

July 1st. Going on perfectly well; he passed water once through the urethra, but afterwards it continued to flow through the wound. No general symptoms; child quite well.

July 4th. Urine is passed by the urethra; the wound is filling up with granulations.

July 14th. Went out; the perineal wound being almost healed; and the boy being cured of all his other symptoms.

CASE II. *Calculus Vesicæ: Lithotomy: Death from Pyæmia.* William Harris, aged 11 years, was admitted under my care on July 22nd, 1857, suffering from stone in the bladder; from which, indeed, he had suffered since he was two years old. I sounded him the next day, and struck the stone at once, or rather the stones, for it turned out that there were two; and, indeed, the sensation given by the sound led me to suspect that this was the case.

July 24th. I performed Allarton's operation under chloroform, holding with my finger in the rectum the end of the straight staff which was in the bladder. The membranous portion was reached without any difficulty, and the probe followed by my finger introduced into the bladder without the least obstruction, and the staff withdrawn. The stones fell forward at once, and I removed them with a small lithotomy forceps, but not without some little difficulty, for the exterior scaled off, and it was not easy to retain my hold of them. After removing them, I washed out his bladder with cold water. He had no symptoms shewing that the chloroform in any way disagreed with him. He took about two drachms. The calculi weighed together three drachms all but twelve grains; one was oval, the smaller was flat, and they were composed of lithic acid and lithate of ammonia.

July 25th. The urine escaped through the wound at first; but in the latter part of the day he regained the power of holding it; and *when he made water*, it flowed partly by the urethra, but chiefly through the wound. I ordered him a good diet, as he had no constitutional symptoms.

July 27th. Has had no bad symptoms. The urine passes through the urethra in a full stream, some going through the wound.

From this time he continued to go on perfectly well, so that I had felt no uneasiness as to the result, allowing him to get out of bed to pass water, as by this means his bed was kept quite dry; when on the 30th (*i.e.*, the seventh day), he went to the water-closet, and for some reason remained there longer than usual, and on his return to bed, he was taken with severe rigors, and on the next day an eruption made its appearance all over his body, resembling a bad attack of urticaria. He was ordered a little simple saline medicine, and milk diet instead of meat; in fact, his appetite, which had been good up to this time, now failed entirely. His chief complaint was of pain in the left foot and ankle. Pulse weak and rapid.

On August 1st, his appearance was unsatisfactory, and he had a disagreeable smell about him; the eruption remained as before. He chiefly complained of his foot. His breathing became gradually more rapid and oppressed, and his pulse quicker and weaker; and he died in the night of the 3rd inst.

POST MORTEM EXAMINATION about twelve hours after death. Decomposition had already set in; *i.e.*, the lower part of the abdomen was of a green colour. The heart was healthy. There was a small deposit of pus immediately behind the sternum in the anterior mediastinum. The lungs were adherent by their margins anteriorly, the adhesions being firm, fibrous and old; patches of purulent lymph were scattered over the pleura on the right side. The lower part of both lungs was solidified, and upon and in the substance of both, but more particularly the right, were rounded deposits of purulent matter of considerable consistency. The liver was firmly adherent to the abdominal parietes by tough old adhesions, but no pus was discovered in its substance. The alimentary canal appeared healthy; the spleen very soft, without pus. His kidneys were of the usual size; but the cavity of the pelvis was very much dilated in each, the tubular and cortical parts being very narrow, and there was a considerable quantity of urine in the kidneys and ureters. The calibre of the ureters was much increased. The bladder was thickened, but not otherwise unhealthy. The wound in the urethra reached as far as the anterior edge of the prostate, being about three quarters of an inch in length, and it looked as if it would hardly admit my finger. I could not make out that the prostate had been touched. Everything connected with the wound and the parts concerned in the operation was in a satisfactory state. There was a considerable quantity of red and thin pus in the left ankle joint, and between the os calcis and astragalus; and a muddy, thick coagulum in the veins of the left lower extremity. The femoral vein of the left side was of a deep red colour, contrasting very strongly with the light semi-transparent healthy appearance of the corresponding vein of the opposite thigh.

CASE III. *Calculus Vesicæ: Lithotomy: Recovery.* A little boy, aged 4 years, named Thomas Evans, was admitted on the 24th of July last under the care of my friend and colleague, Mr. Green.

He has had symptoms of stone almost from his birth, but about six months before his admission they became much more severe and urgent.

July 25th. He was sounded, and the stone struck.

July 29th. A consultation* having been held on the case, as is the custom at the Bristol Royal Infirmary, Mr. Green operated.

The operation was performed with the aid of a curved staff, the child being well under the influence of chloroform.

At the first puncture the sharp pointed knife employed went just on one side of the staff, but immediately afterwards the groove was entered, and the incision *forwards* completed. The finger was passed at once through the wound into the bladder, and the stone extracted without the least difficulty with the short lithotomy forceps.

There was scarcely any hæmorrhage. The stone weighed one drachm and nineteen grains, and was composed of lithic acid internally, with phosphates outside.

July 30th. The little patient was rather feverish. The skin hot; pulse 160. He slept well last night.

July 31st. Better; pulse 112; skin cool, appetite good. He passes water only when he requires it, and then it comes both by the urethra and the wound. A little redness round the margins of the aperture.

August 2nd. Seems well in himself; the symptoms which gave him so much pain before have quite ceased.

August 5th. The only peculiarity about the boy is, that his pulse continues high, viz., 130.

August 7th. Pulse 112; tongue clean; appetite good; sleeps well. The wound fills up but slowly, and urine comes both ways.

August 8th. Urine comes through urethra altogether.

Remarks. It has been a source of much disappointment and vexation to me to have to record a fatal case of lithotomy, performed according to Mr. Allarton's method.

Upon fairly considering the particulars of my own case, which was the one that terminated in this way, I must, in the first place, admit that the death was a consequence of the operation; but the consequence was accidental and remote, and the boy had almost recovered from the effects of the incision when this enemy of operating surgeons—pyæmia, or purulent infection—attacked him, and carried him off in a few days. I think, therefore, that all will allow that the unhappy issue in this case was one that was dependent, not upon this particular operation, but upon a kind of accident attending any operation whatever.

My regret at having to record this fatal case is the greater, because I fear that it may, with some, prejudice the operation; for I feel so strongly respecting the many advantages to be gained by this mode, that I think it cannot but ultimately supersede the lateral operation in children. The latter plan is tolerably safe, but I think Mr. Allarton's plan is much safer; and, with respect to other advantages, I can speak with some certainty, having many times performed the lateral operation.

The *primâ facie* difficulty appears to be want of space for the withdrawal of the stone; but with reference to this point, I can only say that, in introducing my finger, I felt no more obstacle than was the case in the old operation where the prostate had been divided; and as it happened that we had *post mortem* evidence of the size and condition of the wound, besides the evidence of the soundness of the neck of the bladder, deducible from the fact that the children held their water in two days after the operation, we can affirm as a fact that the urethra alone was opened; and we know that stones of considerable size were removed without obstruction.

It remains to be proved whether large calculi can be removed with impunity in the adult; but, if not, they may readily be crushed through the wound, and removed piece-meal, a process which I have had to go through in a case of lateral incision.

The two important advantages of this proceeding appear to me to be these; viz., that the operation is a simple, straightforward dissection in comparatively superficial regions, without any of that perilous plunge of the knife into the patient's bladder, which forms the dashing attraction of the lateral operation; and secondly that the neck of the bladder, a part of great vital importance, generally escapes all injury beyond a little stretching, and that the patient, within a day or two, is usually able to hold his water. The risk of extravasation of urine, the cause of death in the majority of fatal lithotomy cases, is in this operation reduced to a minimum.

With respect to the time occupied in the operation, a point of but little importance, I think that perhaps Allarton's may be the longest by some fractional period; but safety will more than counterbalance that.

* The plan is as follows:—The surgeon of the patient causes a (printed) notice of "consultation and operation immediately, if deemed expedient", to be sent to his colleagues; and this ensures their presence, and also *the presence of the stone*, at the time of operation. For if the stone were felt on a Monday, it would not necessarily follow that it was in the bladder on the Tuesday, and if not felt at the time, no operation is performed.

KING'S COLLEGE HOSPITAL:

EXCISION OF THE UPPER JAW.

Under the care of W. Fergusson, Esq.

[*From Notes by* C. Heath, Esq., *House-Surgeon.*]

Donald M., aged 42, was admitted into King's College Hospital on June 24th, under Mr. Fergusson's care, with disease of the upper jaw. He was a farmer, a very robust-looking man, and had always, till lately, enjoyed good health. In the beginning of March, he first felt a throbbing pain in the right cheek, and then perceived for the first time that the cheek was swollen, and, as this increased, he sought surgical aid. In about a fortnight after he first noticed the swelling, an opening was made in the inside of the mouth just above the canine tooth of that side. This gave exit to about a teaspoonful of matter, and a good deal of hæmorrhage followed the operation. As the abscess reformed, he again was subjected to some operation with much temporary relief, but the swelling soon began to increase again and to project into the cavity of the mouth. Of late, the progress of the disease had been attended with but little pain, though at its commencement he suffered a good deal from neuralgia. He had been losing flesh. There was no family history of malignant disease.

On admission, the right cheek was found very prominent, causing that eye to appear sunken. The swelling extended to the median line, pushing the nose slightly to the opposite side. On looking into the mouth, a large mass of disease was perceived, involving the whole of the right superior maxillary bone, and even extending a little way beyond its junction with its fellow of the opposite side, the first incisor tooth on the left side being loose. The mucous membrane was much thickened over it. Most of the teeth on the affected side had dropped out, and the rest, except the last molar, were loose. The swelling extended in the arch of the palate as far as the palatial ridge. The molar bone appeared unaffected. The submaxillary gland and the glandulæ concatenatæ on that side were slightly enlarged from irritation.

June 28th. Mr. Fergusson proceeded to remove the disease under the influence of chloroform. Having extracted those teeth that were in the way, he made an incision through the lip in the middle line and along the right nostril. The left superior maxillary bone was then sawn through near the suture; then the fine saw was applied also to the nasal process of the right superior maxillary bone, and Mr. Fergusson was then enabled, owing to the soft nature of the tumour, to isolate the mass of the disease by means of the curved cutting forceps, sufficiently to allow of its removal with the fingers, the few remaining portions being removed with the cutting forceps, which instrument was freely used till healthy tissues were exposed. There was considerable hæmorrhage from deep branches of the internal maxillary artery, near the pterygoid processes, which required the free employment of the actual cautery. The incision in the lip was brought together with hare-lip pins and a suture placed in the nostril. The parts removed involved the whole of the superior maxillary bone, with the exception of its orbital plate, and a small portion of the molar bone. The tumour, from its great softness, was judged to be probably of a malignant character. Owing to an accident its precise nature and connexions were not ascertained.

He was a good deal depressed after the operation, so that it was necessary to give him a tablespoonful of brandy every half-hour. Ice was also kept in the mouth. He went on very well for some days, the stimulant being continued, though less frequently (every two hours), and the wound syringed out with myrrh lotion.

On July 1 the hare-lip pins were removed, and next day the external wound was found to be soundly healed.

On the 8th, some local inflammation was perceived about the wound, and the submaxillary gland became enlarged. This was connected with the formation of a small abscess in this neighbourhood, after the appearance of which the swelling in the glands subsided.

In a month from the time of operation (July 18th) the parts in the mouth were sufficiently sound to allow of his taking

solid food. Some discharge continued for some time from the right nostril, but this also subsided, and he was discharged cured August 12th.

Remarks. This case afforded a gratifying instance of recovery from a very severe operation, notwithstanding the unfavourable prognosis formed from the probably malignant nature of the disease. The severe collapse which followed the operation is to be noticed in connexion with the free administration of stimulants. Under less generous treatment we have seen patients suddenly sink after this operation, without the occurrence of hæmorrhage or any other obvious cause. Another point to be noticed is, the small extent of incision into the soft parts. The softness of the tumour allowed of its extraction by a smaller incision than a less yielding structure would have required. The history renders it probable that the disease originated in the antrum; and as it was taken at a time when no other bone seemed affected, there was some reason to hope for permanent success to the operation.

ST. BARTHOLOMEW'S HOSPITAL.

STONE IN THE BLADDER: LITHOTRITY UNSUCCESSFUL: LITHOTOMY.

Under the care of F. C. Skey, Esq.

[*From Notes by* F. W. Skey, Esq., *House-Surgeon.*]

Thomas G., a strong healthy man, of a florid complexion, living near Devizes, was admitted, on March 2nd, under the care of Mr. Skey, on account of stone in bladder. It seemed that he had been suffering under the symptoms of this complaint for three years, and that the urine had always, during that time, been thick and full of sediment, but that the real nature of his complaint had been overlooked until just before his application at the Hospital. Two days after admission, Mr. Skey sounded him, and the stone was easily felt and heard. On the 7th of March lithotrity was performed for the first time without chloroform. The stone was seized and crushed twice. There was some little difficulty in passing the lithotrite on account of constriction of the membranous part of the urethra. The patient felt little pain. Two or three small pieces of stone were passed in the next few days. The patient seemed relieved by the operation, and his expression was improved.

March 14th. The operation was repeated. Again no symptoms followed for several days; but on the 21st, when it was proposed to repeat the operation, he was found to be suffering so much pain that it was deferred. This pain was found to depend on the impaction of a stone near the neck of the bladder. This being pushed back into its cavity he experienced immediate relief. The symptoms, however, continued to recur, from fresh pieces becoming impacted, and the treatment for the next few days consisted in pushing them back into the bladder and soothing its irritable condition by opiate suppositories; but as he continued, in spite of this, to suffer much from the pain, Mr. Skey thought to relieve him by repeating the operation, and it was accordingly attempted on April 1st. On endeavouring to pass the catheter, however, it was found to be caught by some obstruction at the membranous part of the urethra; and although several different instruments were tried, it was impossible to reach the bladder. This obstruction was in all probability due in some way to the impaction of a portion of the calculus, although no stone was felt with the instrument. Warm baths and opium suppositories were again resorted to; and on the 3rd, Mr. Skey managed, with much difficulty, to introduce a No. 8 catheter into the bladder; a little bloody urine escaped. The perinæum was noticed to be swollen and red. The catheter was secured and kept in the bladder for a few days, but did not appear to relieve the symptoms; he continued to suffer great and increasing pain in the end of the penis and neck of the bladder—his countenance was anxious—he perspired freely—the penis and scrotum were much excoriated by the urine trickling over them.

As there seemed no prospect of relieving him by lithotrity, and his health was suffering so greatly, Mr. Skey determined on resorting without loss of time to the operation of lithotomy. This was accordingly performed on April 10th. Chloroform was administered. A considerable quantity of pus escaped from the urethra when the sound was introduced, and more still when the urethra was opened. The first incision was followed by profuse bleeding from one of the superficial vessels of the perinæum, which was of unusually large size and required a ligature. Mr. Skey made use of the cutting gorget, in order to make a free opening into the bladder and more readily to extract all the fragments. There were numerous fragments of various sizes, and one entire calculus, which had not been touched by the lithrotrite. The bladder was then syringed out. He suffered severely from the shock of the operation, and in the evening was still complaining of great pain.

For the next week he appeared to progress well, the wound granulated healthily, and the water came freely through it; but on the 18th a small hard swelling was felt in the urethra, just at the root of the penis, which burst on the second day afterwards, and gave exit to pus and urine.

On the 22nd it was noticed that the wound of the operation continued healing, but the appearance of the patient was not so favourable as on preceding days. Another small hard swelling, very tender to pressure, was to be felt at the upper part of the perinæum. Next day two or three small fragments of stone had passed from the urethra. Pressure on the swelling in the perinæum caused a discharge of pus by the urethra. A catheter was passed, and was heard and felt to grate against fragments of stone. Some of these were extracted by means of the urethra forceps; but as many more remained, Mr. Skey thought it better to remove them at once. Accordingly, a staff was passed down, and an incision was made through the perinæum into the urethra. This was followed as before by considerable hæmorrhage. Several fragments were extracted; and, as the bleeding vessel could not be tied, pressure was applied, which, after some time, controlled the hæmorrhage.

On the next day (24th) the tenderness, which had been so marked, was much diminished, but his general state was not improved; his pulse was very feeble and frequent; and he suffered much pain in the end of the penis.

From this time he continued to sink, without presenting any fresh symptoms. He was treated with morphia, stimulant and tonic medicines, and porter (for it may be noticed that wine or brandy caused sickness), but did not recover strength. The wound put on a glazed, unhealthy aspect; his features became pinched, extremities cold, and he began to lose consciousness; and in this condition sank on May 6th, apparently from weakness.

Remarks. This case well illustrates what we had occasion to remark upon in a late number (Journal, March 14th), the dangers of lithotrity where the stone is large, or when, from its hardness, it separates into large angular fragments. In such cases it too frequently happens, either that the fragments getting impacted in the urethra (especially when, as in this case, the urethra is narrower than usual), produce the violent symptoms noted in the above case, and necessitate lithotomy, or at least the opening of the urethra in the perinæum, or else that inflammation of the bladder supervenes, and is propagated upwards to the ureters and kidneys, or, as in the two cases there reported, causes death by pyæmia. We strongly suspect that, when the records of Hospital practice come to be examined on this head, it will be found that the mortality after lithotrity presents no such favourable contrast to that after the cutting operation, as is shown in the private practice of Sir B. Brodie and other eminent lithotritists. This is, however, a point which may be settled, approximately at least, by referring to the books of those Hospitals which preserve statistical records. In the case before us, when it became evident that lithotrity was not likely to succeed, and the patient's health was sinking under the constant irritation and annoyance caused by the impacted fragments, it was obviously necessary to give him the chance of recovery from lithotomy. It is probable that this operation would have been successful, in a countryman of his robust aspect, had it not been for the impaction of fresh pieces, and the necessity which then accrued of another operation, followed by bleeding, to which it seemed he was predisposed. In the absence of a *post mortem* examination, it is reasonable to conclude, from the state of his urine, that the kidneys were healthy.

WESTMINSTER HOSPITAL.

SCIRRHOUS TUMOUR OF THE BRAIN.

Under the care of Dr. Basham.

[*From Notes by* F. W. Perreau, Esq., *Clinical Assistant.*]

James B., aged 60, was admitted August 1st, under the care of Dr. Basham. He was then in a semi-conscious state, but, on being spoken to loudly, was able to comprehend what was said. His features were drawn to the left side; the pupils were contracted; the tongue was coated. He was unable to speak or to protrude his tongue; and the muscles of the right side of the body were paralysed. The breathing was quiet; the pulse

irregular (about 80) and feeble. The bowels had been open. It seemed that he was at work on the day of admission, having been complaining for some days of headache and vertigo; on that day he suddenly lost the power of speech and the use of his right side, but remained conscious, and did not fall.

He was freely purged with croton oil and colocynth, and a blister applied to the nape of the neck; and, for the next few days, he improved somewhat, so as to be able to protrude his tongue, and to give more signs of consciousness. The hemiplegia, however, continued.

August 3rd. Pil. antimonialis gr. v. o. n.

August 7th. Rept. pil. colocynth. c. oleo crotonis.

On the 8th (a week after his admission), he had so far improved as to be able to pronounce the words "yes" and "no"; and on the 10th appeared to have recovered the power of speech to some extent, but was still very stupid at times. This comparative improvement, however, did not last long; the stupor again increased, and on the 17th amounted to complete unconsciousness. Next day he had also lost the power of swallowing, and died completely comatose on August 19th.

On *post mortem* examination, thirty hours after death, the vessels of the surface of the hemispheres were found slightly congested, the arteries forming the circle of Willis were atheromatous. A slight elevation was observed on the surface of the left hemisphere; and, on making a section here, it was found to be caused by a tumour of scirrhous hardness, having a mottled appearance, due to the pressure of vessels mixed with a yellow-looking substance, the whole being like Sienna marble. It measured about one inch and a half longitudinally, one inch and a half laterally, and one inch in depth. It was surrounded to the extent of about an inch by brain-substance, in a state of yellow softening. All the other organs were healthy, except some appearance of old disease about the pleura and apex of left lung, which, however, had no bearing on the fatal illness.

Under the microscope, the tumour did not display any very characteristic signs. There were, indeed, a good many rounded granular corpuscles, of large size, and containing nuclei; but it would have been very difficult to point out in them any character distinctive of cancer.

Remarks. The occurrence of scirrhus in the brain is sufficiently rare to be worth noticing at the time of its occurrence, though it is by no means unheard of. This tumour presented in a most marked degree all the signs by which scirrhus is recognised by the naked eye, and there could be little doubt of its having been a primary or idiopathic disease of that nature, notwithstanding the failure (common enough to the best microscopists) of the instrument to detect any nucleated cells. The symptoms, as might have been expected, were exactly those of partial congestion, followed by apoplexy. In fact, as the symptoms were produced by the same causes as those of apoplexy—viz., pressure on the surface of the brain—it was in vain to look for any distinction leading to diagnosis; and such cases will probably never be recognised during life.

ST. GEORGE'S HOSPITAL.

CASE OF DOUBTFUL SEX.

Under the care of P. G. Hewett, Esq.

A child, supposed to be of female sex, and named Eliz. F., aged 5, was admitted a few days ago, under Mr. Hewett's care, on account of supposed enlargement of the clitoris. An operation had been performed some time ago by a surgeon of distinction in the country, for the removal of this body. The particulars, however, of this operation were not very well ascertained. After the operation it grew again, and had attained a greater size than before. On admission, the child presented a very remarkable appearance, as hair had begun to appear over the pubes when it was three years of age, and had acquired an extraordinary growth. On examination, two folds of skin were found, exactly resembling the female labia, in which no trace of any body resembling the testicles could be felt. Between these was a hiatus of considerable size, large enough to admit the point of the finger; and this, on examination, was found to be the orifice of the urethra, leading direct to the bladder. Above this opening, and between the upper commissure of the two folds above described, was a body about as large, when erect, as the end of a man's thumb, covered with mucous membrane, and showing no trace of a glans. This body consisted, evidently, of erectile tissue, and was liable to the changes of size and form incidental to that structure. When not erect, it was hardly to be seen outside of the parts. The whole of the pubes was covered with long red hair.

After careful examination of this case, Mr. Hewettt came to the conclusion that the child's sex was masculine. The entire absence indeed of any trace of vagina and uterus hardly allowed of any other conclusion; while the predominance of the female type in the external parts was naturally accounted for by the non-descent of the testes, and a fissure of the scrotum, with absence of the corpus spongiosum, forming a sort of aggravated hypospadias. Dr. Lee, whose opinion was requested, quite concurred in this view of the case.

It is worth remembering that such deformities are of occasional, though rare, occurrence, as a motive for rigorous examination in each instance that may come before us, in order to avoid uselessly interfering with cases which are beyond the reach of art.

Original Communications.

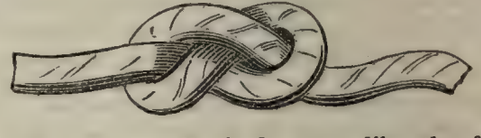
KNOTS ON THE FUNIS.

By R. U. West, M.D., Alford.

Some little notice is taken by medical writers of a circumstance which is very frequently met with in labours; I mean the coiling of the funis umbilicalis round the neck or some other part of the fœtus. When this circumstance occurs, the funis is commonly, but not always, of a greater length than usual. In one of my cases, where the funis was five times round the neck, it was four feet in length. It is a circumstance of very little importance. It can hardly be prejudicial: on the contrary, when the funis is of unusual length, there is greater risk of its being prolapsed, so as to be pinched during the birth between some unyielding part of the fœtus and the sides of the pelvis, than when it is of the normal length; so that it may derive some protection from this risk by being coiled round the neck. But there is another condition of the funis which I have met with several times, and which, so far as I know, is not alluded to or explained by obstetric writers; it is a condition which must have depended on this coiling of the funis round the neck, and would seem to afford a singular proof of the extent of motion enjoyed, if I may use such a phrase, by the *fœtus in utero*. *Knots* are sometimes met with on the funis; and they are now and then very complicated. I have had ten cases in which I observed this condition of the funis; and it was the remarkably complicated character of the knot in the very first case of the kind I met with, that induced me to pay some little attention to the cases I subsequently had the opportunity of observing. How the funis could ever have got tied in the extraordinary way shown in the annexed sketch, must be a



puzzle. I met with this knot in October 1836, and shortly after, viz., in March 1837, I met with the funis tied like the following figure—a sort of figure of 8. The remaining eight



examples of knots were all single ones, like the following figure:—



In every instance in which I found these knots on the funis, the child was healthy and lively. I cannot conceive how they could have been formed, except by the child slipping in some way through the coil of funis which had looped itself round the neck. I did not remark any unusual length of the funis in my cases. The subject, without being of any importance, is nevertheless a curious one. I would conclude that this tying of the funis occurs once in about 270 labours.

REMARKS ON PUERPERAL CONVULSIONS.

By Edward Daniell, Esq., Newport Pagnell.

[*Read before the South Midland Branch, May* 21, 1857.]

Amongst the many sources of anxiety to which the onerous duties of our profession subject us, I know of none more harassing and painful to the sensitive mind than that of being called upon to exercise our art in combating a severe attack of puerperal convulsions. The suddenness of the seizure; the frequently fatal character of it; the distance it may be from the opportunity of consultation, as well as the absence of needful appliances in the country; the alarming and frightful character which the disease assumes; the terror and incapacity into which the feminine assistants at a labour are thrown; the rush of equally incompetent neighbours; with the hurry-skurry, the clatter, the crying, and the distraction of the whole tribe,—are the features of a scene of confusion which, I think, can scarcely be paralleled in the history of human tribulation. Yet, in the midst of this "confusion worse confounded" must the doctor remain seemingly unnerved, buckling on his armour for the contest, and ready with his panoply of judgment and skill to meet the enemy as best he can. The odds are fearful; but glorious is the victory.

In the few remarks which I am about to make on the subject of puerperal convulsions, it is not my intention to enter largely into the theory of this obscure disorder. I shall merely present facts which have come under my own observation, and draw inferences from the results of my own practice.

It has been my lot to encounter many cases of puerperal convulsions, but I shall confine myself on this occasion to only a few examples. It has been my happiness, in the course of an extensive midwifery practice, not to have lost a single case of this distressing disorder. The only fatal one I have witnessed was in a young and plethoric woman, to whom I was not called until eleven hours after her confinement, and ten hours after the setting in of convulsions.

I need scarcely refer to the two particular conditions which must always be understood in treating puerperal convulsions—the anæmic or the plethoric diathesis of the patients; for, although the character of the symptoms is similar in each, the mode of treatment is opposite.

Ordinary convulsions are often induced from an impoverished state of the blood, where the serum is in excess, or rather where the red corpuscles are deficient, Extreme hæmorrhage will produce convulsions; hence anæmic persons become the subjects of puerperal convulsions, from the circulatory system being deficient in mechanical power over the central and spinal system, whilst occult sources of irritation in the parturient state act unduly on the excito-motory system.

Let us take the following case in illustration of this view.

Case. Mrs. S., a middle aged woman, was anæmic and very pale; her breathing was hurried; her muscles flaccid; her pulse weak; with other indications of poor and impoverished blood. Mentally, she was very excitable, of hasty temper, and naturally prone to either great depression or to undue elevation from equally trifling causes. I was engaged to attend her in labour; it was not her first child. During her pregnancy, she was continually ailing, at times hysterical, very low in spirits, and with sad forebodings as to the issue of her confinement. I was hastily summoned by a message that Mrs. S. was dying. I found her in violent puerperal convulsions; the distortion of the face was hideous; the mouth was twisted to one side; the eyes were convulsively forced upwards; the teeth were clenched; bloody saliva blubbered from the mouth, with the hissing noise peculiar to this disorder; and she had that livid and frightful aspect which nothing resembles but suffocation. I was anxious to know if any signs of speedy delivery were manifest; and, during the interval of a fit, I examined her, and found the os uteri dilated. The moment I withdrew my hand, a terrible fit supervened, which I could not but think was partly the effect of my own interference. I determined, therefore, to let the labour take its own course, and to use such means as suggested themselves to subdue the paroxysms. My first aim was to unload as speedily as possible the bowels, and thus take off one probable source of irritation to the excitor spinal nerves. For this purpose, I administered an enema composed of Venice turpentine, rubbed up with yolk of egg, and a drachm of powdered aloes dissolved in it. Two enemata were exhibited before an effect was produced, and then a copious evacuation of hard impacted fæces escaped, but without any abatement of the fits. I administered also, from the commencement, three or four grains of calomel in jelly, every hour; and once a drop of croton oil. Sinapisms were applied to the feet and legs. The fits continued during the whole night, but certainly less severe: in the meantime, the bowels were freely emptied. I fancied I saw tokens of parturient pains; nor was I deceived; for, in the midst of a severe convulsion, a dead child was expelled, with the secundines. The fits continued after delivery for some hours; but they grew fainter, and in the end passed off entirely, leaving the woman in a profound apoplectic coma. She continued in this state, wholly insensible, and incapable of being roused, for forty-eight hours, when she gradually returned to consciousness, but was a week before she could be convinced she had given birth to a child.

Was venesection indicated in this case? I opine not. Was vesication indicated? With my views, irritation over the spinal marrow is more likely than otherwise to keep up this disturbance in the excito-motory system; and I believe that, in this view, I am not singular. I have little doubt that my examination *per vaginam* increased the severity of the fit, trifling and temporary as that irritation was. What was the probable effect of the frequent doses of calomel? My impression is that they aided in the equalisation of the circulation, and exercised a specific sedative power upon all the nervous energies, central, spinal, and ganglionic; as well as assisting the expulsion of the alvine excretions. The spasmodic closure of the glottis in puerperal convulsions is, I think, one of the fearful characteristics of the disease, as the venous congestion in the central organ may so speedily terminate life, either by rupture of vessels or by effusion into the cerebral ventricles. In this case, I refer the long stupor either to congestion in the lateral ventricle, or to effusion there. One curious feature in the case is, that this woman, years after her convulsions, died paralytic. Was this traceable to spinal injury? Might not an organic lesion in the nervous system have existed previously to the fits? Was any *eccentric* source of irritation, coupled with the ordinary excitability of the spinal nerves, the cause at all of the convulsions? She was not paralytic until four or five years after her fits. Was the medulla oblongata involved by counter-pressure during the distended condition of the brain? The following is illustrative of what *eccentric* irritation will do, even when existing in a remote organ. Dr. Simpson, in recording a case of puerperal convulsions considered by him as produced by diseased kidneys, gives the following description of the *post mortem* examination:—

"When the lateral ventricle of the right side was opened, fluid blood escaped. The corpus striatum and outer part of the optic thalamus were broken up, and mixed with a large quantity of coagulated blood, forming a clot of large size. The fluid blood was found in the opposite lateral ventricle, also in the third and fourth ventricles. The right kidney was converted into numerous cysts, of about the size of a walnut, containing unhealthy pus, which passed along the ureter, and filled the bladder. The left kidney exhibited an advanced stage of Bright's disease."

Another case of anæmic puerperal convulsions fell under my care about twelve months after the one recorded. It was so perfectly alike in character, in symptoms, in treatment, and in result, that it would be a waste of time to describe it. In this case, the woman died a year afterwards, of tuberculous consumption. Might not the tuberculous deposit have been a considerable auxiliary in inducing the puerperal disease? I should assume that anything which interfered with the respiratory system would be very likely to impede the mechanical impulse which the nervous system requires, and which in health it receives from the circulation of unsophisticated blood.

The structure which is the seat of disturbance in puerperal convulsions is admitted to be the most delicate and least understood in the animal economy; and its widely spread sympathies are as freely acknowledged. The uterine function, in all its phases, makes considerable claim upon the nervous energies. We know of multitudes of disorders wholly dependent upon irregularities in the function of this organ, which involve both the cerebral, the spinal, and the ganglionic systems, creating a series of derangements, alike as difficult to comprehend as to cure—such as chorea, etc. Yet most of the disorders thus created are of the asthenic order, and involve a condition—an impoverishment—in the vital fluid itself, rendering it likely enough to be the direct agent of the mischief. If this view be correct, I take it that our business is not always with the uterine system, pregnant or unimpregnated, parturient or non-parturient.

Sources of irritation are traceable to other localities, to lesions in other organs. Occult they may be, but they exist; and

such conditions, I doubt not, are oftentimes the primary movers of puerperal disease. The spinal system becomes more susceptible, and less capable of enduring the claim made upon it by the process of parturition. When I speak in this way, I speak especially of anæmic puerperal convulsions. A weak bodily state must have a cause somewhere. If all the functions of life were perfect, life would be perfect. If all the organs of the body were in a normal state, should we have tokens of an abnormal condition? Would the face be pale? Would the powers of locomotion be impeded? Would the breathing indicate that the function of the lungs was at fault? Pregnant or otherwise, nature would exhibit all its processes perfect, all its functions normal; and the indications of health would be apparent under every phase of being, and especially during utero-gestation and parturient expulsion; and so, thank God, it does proceed in the great majority of parturient women, or Heaven knows who would take it upon themselves the office of accoucheurs.

I shall now take the converse of the cases I have recorded.

Case. In September 1853, I attended Mrs. C., 25 years of age, of full habit and florid complexion. She was in labour of her first child. It was a somewhat protracted case, but no real difficulty presented. In fact, it was in no way different from half the cases we meet with in *parturient women in labour with their first children.* She had been confined about half an hour, and I was preparing to return home, the case being in a village three miles from my residence, when my attention was arrested by the appearance of the patient. Her head was thrown back upon the pillow; her mouth distorted; bloody saliva was oozing out; and she presented all the common characters of puerperal convulsions. Fortunately at this moment my son, anxious at my protracted stay, rode up to inquire the cause. Nothing could have been more opportune; for the attendants were too wild and excited to understand any orders I gave them. My son instantly made a large opening into the vein of the arm, and abstracted, in a very short period, twenty-five ounces of blood. I applied sinapisms to the legs and feet, and waited my son's return with the turpentine and aloetic enema, which was then administered; and frequent doses of calomel were given as in the former case. The result was satisfactory. In seven hours the fits left her, and on the following morning, with the exception of the weakness which the abstraction of so much blood would necessarily produce, no untoward symptom presented itself. The woman has had three other children since this event, with no indication of convulsions. My son attended her in her labour with the last child only five weeks since.

Case. Mrs. B., a short, thick set woman, twenty-two years of age, fat, and with a remarkably short neck, in labour with her first child, was seized in April 1855 with puerperal convulsions. She had complained of intense headache for several days; and cooling aperient medicine had been administered. To describe the fits would only be to repeat what has gone before. Her case resembled in all the symptoms that of Mrs. C., the difference being that in Mrs. C.'s case the convulsions occurred after confinement, while in Mrs. B.'s they set in before any token of labour had commenced. She was bled instantly to the amount of twenty-five ounces: sinapisms to the legs and feet, cooling lotions to the head, and enemata of turpentine and aloes were repeatedly administered until the rectum was emptied. Calomel in very large doses was given in this case every hour or two. A dead child was delivered during a convulsive paroxysm. Several hours elapsed before the fits ceased, although a lessening in their severity was manifest. She remained afterwards in a comatose state for ten hours. A severe form of fever supervened, which rendered for ten days my prognosis uncertain. She has since had a living child, without any untoward symptoms, except a somewhat singular irritable state around the nipples, where the skin was denuded to the size of a crown piece, rendering the process of suckling exceedingly painful. She was residing at Leamington at the time of the birth of this child, but came home to visit her parents a few weeks afterwards, in order to consult me respecting her breasts. A solution of sulphate of zinc, with refrigerant medicine, very speedily cured this ailment.

If the value of medical treatment depends upon the successful issue, we may fairly infer that in these cases the end did justify the means. I am, however, inclined to take a wide field in the consideration even of well reported facts; and there can be no doubt, in the depths and intricacies of medical science, that practitioners have arrived at the same haven even by different, if not by opposite paths. The advantage, I think, of recording experience is to teach us by how many ways we may sometimes attain the same end: yet we are not permitted to shoot in the dark, on the mere chance that we may hit the object we mean to shoot. Something like a principle of philosophy should pervade all our doings, and something like "a reason for the hope that is in us" should influence our own minds, and satisfy the minds of those interested in the well-being of those whom we treat.

If we are satisfied that analogous symptoms may arise from opposite conditions—sthenic and asthenic—common sense will tell us that we cannot fairly and legitimately adopt like measures in both conditions. Here, then, is the grand secret of scientific practice. In the anæmic state we have deficiency of the red corpuscles—a weak and impoverished state of the blood; and this condition is proved to be a fruitful source of disturbance in the nervous system; quite as fruitful, if not more so, than its opposite, an overbalanced weight of nutrient material. As the causes are opposite, so must be the treatment.

In anæmic cases of puerperal convulsions, I studiously avoid lowering my patients. I look for other causes than uterine irritations or uterine action for the effect produced; and I have shown, by the experience of others, as well as by my own, that these causes do very considerably operate in producing the disorder under consideration. I have not read a single case of puerperal convulsions where the removal of scybalous fæces did not serve to mitigate the severity of the attack; and one case I remember to have read where a distended state of the bladder was supposed to influence, if not excite, the fits: five pints and a half of turbid urine were withdrawn, which sensibly lessened the severity of the convulsions.

I object in all cases to what is called counterirritation—or rather vesication—in the neighbourhood of the spine itself; as I have not read a well recorded case where it did not rather increase than lessen the severity of the fits. Although it is well to simplify the case by delivery, it is very seldom that interference in this matter puts a stop to the puerperal fits. On the contrary, the fits always continue for hours after delivery. Forced delivery, objectionable at all times, is, I humbly opine, singularly objectionable in puerperal convulsions, on account of its increasing the severity of the paroxysms.

Bloodletting is the sheet anchor in plethoric puerperal convulsions. It has an immediate sedative influence on the spinal system, and averts the danger, to which the congested state of the brain renders it liable, of rupture or effusion during the paroxysm, while it helps to relieve muscular pressure which an over excited vascular system produces. But even in the use of this great auxiliary in the treatment of plethoric puerperal convulsion, we must not "out-Herod Herod." If we can remove the mechanical pressure on the spinal marrow and the brain, and especially the counter-pressure exerted on the medulla oblongata, by lessening the excess of almost stagnant blood, which a condition approaching to asphyxia has produced, then we have accomplished a great end. In my cases I have stopped short at one large bleeding, and have been afraid to persist in this agent to the heroic extent recommended by many, lest I should, by that very excess, increase the excitability of the spinal marrow.

In presenting these cases, and in dilating upon them, I wish you to understand that I do not presume that there may not be conditions where it might be wise to depart from the practice which I have pursued. For instance, an anæmic patient may have her brain so severely congested, as to render it imperative to abstract some blood, in order to avert a greater evil. A plethoric woman may bear with impunity severer discipline than I have adopted; but these are matters for judgment, for the exercise of common sense, and of that discriminating quality with which, we trust, the enlightened practitioner is always furnished. A patient reduced to a shadow from acute rheumatism, who had never been bled during her attack, was seized with endocarditis. A few ounces of blood abstracted at this crisis checked the evil, and saved the patient. In practice rules and regulations are nought; the wisdom and common sense of the practitioner form the only guide of safety upon which he ought to rely.

P.S. This paper was written with a view to discussion. Of course, as I believed, many opinions would go counter to mine; and many cases were named where every possible success attended immediate delivery. Of this there can be no doubt; but my views and practice would be to make the operation the *dernier ressort*, not the primary act, if it were at all likely that nature

would or could right herself. One gentleman asked what was to be done in cases of preternatural presentations. It is a curious fact that, in puerperal fits, the presentation is never preternatural—at least, it has never been so in my practice, and I am not aware of a single case on record. Nevertheless, if such cases should occur, it is clear that, if the child could not be delivered without manual help, manual help must be employed, let the circumstances assume what form they might.

I am far from wishing to establish or uproot a principle: I simply wish to state my practice and its results, not knowing how soon I may be called upon to change it altogether, which I should not hesitate to do if, in my judgment, the case or cases imperatively demanded it.

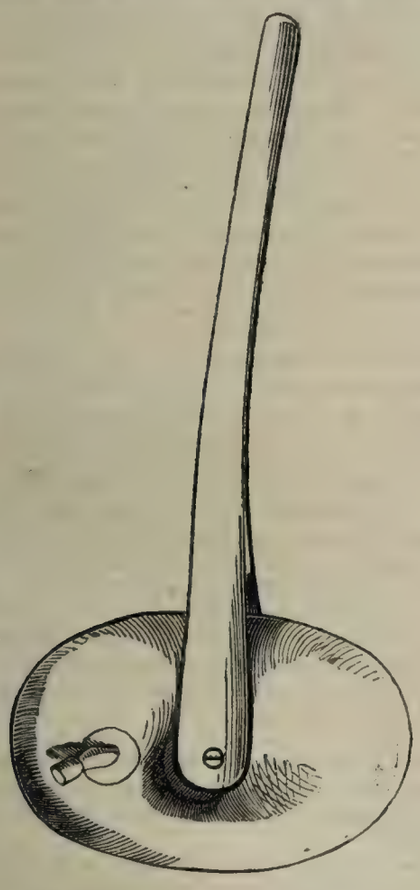
CASE OF RETROVERSION OF THE UTERUS PRODUCING RETENTION OF URINE, SUCCESSFULLY TREATED BY A NEW PESSARY.

By Nathaniel Coats, Esq., Sirhowy Iron Works, near Newport, Monmouthshire.

The person was Mrs. L., aged 28, the mother of five children, and having had one miscarriage. She was very healthy, and had at the breast an infant nineteen months old. She saw the menses when the child was twelve months old, and once since; but considered that she had not seen them for four months. I was called to see her on the evening of February 26th, 1857. She was then suffering from retention of urine. Her employment, that of keeping a public-house, caused her to be constantly on her feet. She was not aware of being pregnant; but was, no doubt, about three months advanced. Her symptoms were relieved by the catheter.

The following day (February 27th), she passed urine naturally, and continued to do so until March 1st, when she again had retention of urine, which was relieved as before. She then went on well until March 6th, when she again had retention, and was again relieved by catheter.

March 7th. She had retention. I had kept her in bed, and tried to replace the retroverted uterus, but to no purpose, the retention still coming on. I then considered that if I could make anything to press on the fundus of the uterus and not on the neck, it would be likely to benefit her by taking off the pressure on the urethra. I therefore made the instrument, ex-



cepting the oval India-rubber air-cushion, and applied it at 1 p.m., on March 7th. It was easily introduced, and gave no pain. At 8 p.m., I saw her again. She had passed a little urine. I passed the catheter, and drew off about half a teacupful of urine. The bowels had been relieved without any difficulty.

March 8th. She slept well, and passed urine at half-past nine a.m., and at one p.m. with ease: when out of bed, she felt more comfortable than before the introduction of the instrument.

March 9th. The patient was down stairs attending to her business. She had passed urine, and the bowels were also moved. She informed me that she had been up and down stairs several times without having the bearing down pain which she had prior to the use of the instrument.

March 10th. She slept well, and also passed urine freely.

March 13th. She removed the instrument last night, and cleansed it, and replaced it herself, and was very glad to do so, as it gave her great comfort.

On the birth of her first child, which was born alive, she had no unpleasant symptoms; nor at that of her second. When between two and three months advanced, she was assisting her sister-in-law to paper a room, standing on a chair, with the paper held over her head, she felt as if something had slipped or given way in her inside. A little time afterwards she had retention of urine, and the catheter had to be passed on several occasions, and at about four months she miscarried.

With the third, fourth, and fifth children, she did not suffer from retention, and the children were all born alive. With the sixth, when between two and three months advanced, she had retention of urine, and the catheter was obliged to be passed on many occasions. She had great difficulty in passing urine until the fourth month, when it ceased, and she went on well. The child was born alive.

Remarks. I have now given the history of the case, and hope the treatment will be as successful with other practitioners as it has been with me. I have sent a sketch of the instrument, and have also forwarded one to Mr. H. Bailey, 418, Oxford Street, London, who, I have no doubt, will be happy to forward any gentleman one. I should like to hear, if any gentleman should have occasion to use one, whether it succeeds with him as it has with me.

CASE OF NEURALGIA OF THE ISCHIATIC NERVE, TREATED BY DR. ALEXANDER WOOD'S NEW METHOD, OF APPLYING THE OPIATE DIRECTLY TO THE PAINFUL POINTS.

By George Lindsay Bonnar, M.D., Cupar, Fife.

On July 30th, 1857, I was called to see Mrs. P., a stout active lady, of a sanguineo-nervous temperament, who had been, since the preceding May, more or less troubled with shooting pains, from the region of the left hip, down the posterior aspect of the thigh and leg of the same side, in the course of the great ischiatic nerve and its peroneal branch. The pain had a periodic character, with an evening, and latterly a morning, exacerbation as well.

I prescribed the saccharated carbonate of iron in repeated daily doses, nourishing diet, and an anodyne draught early in the evening, to anticipate the time of the usual increase in the severity of the attack.

Various erythematous patches appeared in different parts of the limb: they were painful to the touch, but readily yielded to the employment of liquor plumbi diacetatis and tincture of opium mixed, largely diluted, and frequently applied.

The pain along the course of the nerve, after various degrees of occasional mitigation, gradually increased in severity, generally maintaining its periodic character, notwithstanding the application of various remedies, external and internal, until the usual means recommended in such cases were well nigh exhausted.

A strong embrocation, composed of compound tincture of camphor and Fleming's tincture of aconite, was rubbed into the hip and down the limb, morning and night; at first, with a very slight improvement, which, however, soon disappeared. The parts were repeatedly subjected to fomentations of hot turpentine, until the skin became too tender and fiery for the application; this in some measure mitigated the pain for the time being, but never overcame it. Acupuncturation was also persevered in, not only over the hip, but all along the course of the nerve, even to the ankle, to which part the pain had gradually extended; and, from the decided improvement which took place, I had reason

to hope that the continued use of this remedy would be productive of a cure. But, no! like all the other efforts to this end, it proved abortive, and, in the long run, had no effect even in temporarily lessening the pain. The modified cautery was also put in requisition, at a temperature considerably above 212° Fahr., sufficient in many parts to raise the skin in small blisters; but this remedy, generally powerful in relieving deep seated pains, failed to give any other than a very partial and evanescent benefit. I proposed to vesicate the surface, and apply morphine to the denuded part; but, from an unalterable prejudice, my patient would not on any account submit to have the skin broken.

Meanwhile, almost every internal remedy which seemed calculated to effect an improvement in the patient had been administered. The iron treatment was followed by the iodide of potassium with sarsaparilla, which was for some time persevered in. Arsenic was given to the utmost limits prudence would allow; but no improvement took place. The patient's strength was much impaired by the continual pain, which latterly had become excruciating; her limb was useless; her rest broken; her very existence made miserable. The least motion of the leg, the slightest turning of her body, brought on a paroxysm of agony; so that, in those intervals of comparative ease which she sometimes had, her enjoyment of life was destroyed by the constant anticipation of a sudden attack of acute suffering.

The only recommended remedies to which I had not had recourse during the persistence of this attack were croton oil internally, and, failing this, colchicum. But there were decided objections to both, as well as to any drastic purgative whatever; for a short time previously the patient had laboured under a very severe attack of dysentery, and was excessively weakened thereby, and this had left such a peculiar irritability of bowels for a long time after the severity of the disease had passed away, that I was afraid to employ any remedy which might possibly reinduce such a state.

It was now the beginning of October, and fully two months since the disease had manifested itself in a degree so severe as to require medical aid. As all that had been done had given only very casual relief, and the disease had gained ground steadily and surely, the relatives got anxious, in which state of mind I also shared, and it was agreed to consult Dr. Alexander Wood, of Edinburgh. Accordingly, I wrote to him, having been made aware, previously, of his proposed new method of treating neuralgia by the direct application of opiates to the painful points, and he saw the patient on October 5th.

Judging it to be a case of pure neuralgia, and well adapted for treatment by his new method, he proceeded at once to put it into practice. Having ascertained which was the most painful spot, by means of careful pressure along the seat of pain, just where the nerve escaped through the notch from the pelvis, he inserted the perforated steel nozzle of a small glass syringe, into the graduated body of which had previously been put twenty minims of Battley's sedative solution; and after the instrument had penetrated about an inch and a half, the fluid was sent home with gradual and firm pressure. The effect was instantaneous. The patient immediately began to saw the air with her hands, as if in a deep dream; in a few seconds they dropped powerless; her breathing became long and deep, and she lay in a profound sleep. This continued until an early hour next morning, when she awoke refreshed and reinvigorated, as if from a night's natural rest—the first she had had for many a long week: to her great delight, she was completely free from pain, and able to move her limb very readily without uneasiness. This was, however, too sudden and too complete to be expected to last long; there was still an acute twinge of pain when the thumb was pressed firmly down on the spot; but the patient was so delighted with the general effects of the treatment, that she readily—nay, anxiously, submitted to its frequent repetition.

Oct. 6th, 7 A.M. Twenty minims of Battley's solution were injected into the hip, which did not seem to produce the same immediate effect as last night's application.

Oct. 6th, 8 P.M. The patient had slept most of the day. The pain had disappeared; it was very obtuse at the hip on pressure, and more acute down the limb, but not at all of that lancinating character it was before. As the peroneal nerve seemed to be the part in which there was most pain, ten minims of Battley's solution were there injected, and the patient was left for the night.

Oct. 7th to 10th. The same treatment was continued morning and night, injecting at the one visit into the hip, and at the other into the leg, choosing the most painful parts, as indicated by pressure. The quantity was increased to forty minims daily.

Oct. 11th. The remedy was intermitted; but the pain, on the day following, threatening to return a little more severely than before, it was resumed for four days more, at the end of which time the pain had entirely disappeared (even on testing the state of the nerve by a smart blow) from the regions of the hip and leg, and was confined to the region of the external malleolus. The treatment was discontinued from this date, with the exception of two occasions, October 20th and 23rd, when on the former twenty, and on the latter thirty, minims were injected in front of the tendo Achillis, where the pain lodged very severely, but was relieved by the injection.

After this, the pain seemed to spread itself all over the dorsum of the foot, where at times it was very severe. Instead of further employing this new cure, which seemed to be now inapplicable to the case, from the very superficial seat of the pain, and the great extent of surface over which it spread, I recommended the cold douche every morning, and to be continued each time as long as it could be borne by the patient. This was faithfully persevered in, and after a short period the pain became much modified, and of quite a chronic character; in fact, it seemed to degenerate into a kind of nervous rheumatism of the part, and indicated the changes of weather in regard to rain, frost, thaw, etc., by those peculiar gnawing sensations which all martyrs to rheumatism so well know by their experience.

At this date (August 1857), nearly two years after the occurrence of the above case, the patient enjoys very excellent health, and never experiences the slightest throb or pain in the limb. She told me jocularly, not long ago, that she almost forgets which limb it is which was affected.

Remarks. I have allowed a sufficiently long time to elapse since the case occurred to do away with all doubts as to the permanency of the cure; and my conviction is now, as it was at the time, that in the application of anodynes to the seat of painful nervous affections, by this novel method, we have added to our therapeutics a mode of employing powerful remedies, for which the profession and suffering humanity stand much indebted to the talent and ingenuity of Dr. Wood. Since the above case, other instances have come under my observation and occurred in my practice which serve to corroborate my opinion of the value of this mode of treating neuralgic affections; but I prefer giving the details of the foregoing case alone, as it seems to bear such unequivocal testimony to the value of the remedy as could only be weakened by adducing other and less perfect cases alongside. In it, I had the opportunity of fully testing the powers of the other remedies usually recommended in similar cases, save those from the use of which I was precluded by special circumstances, as alluded to in the narration: all of which appeared abortive. During the process of cure by injection, all other means were suspended, except a recurrence to the use of an iron tonic, for the purpose of repairing the energy of the system, much spent by previous suffering. Indeed, the simple efficacy of the one mode of treatment put in juxtaposition with the usual routine of blistering and dosing, which constitute the other, admits of strong contrast, but no comparison.

The instantaneous effects of the first application of the narcotic surprised me much. I confess that I should have felt very considerable alarm at the sudden plunge which the patient made into the depths of narcotism, had not Dr. Wood assured me that he had seen the same in other cases, and that it had never been followed by any unpleasant result. This constitutional effect of the remedy subsided almost as suddenly as it had been evoked; for it was scarcely manifested in any other form than drowsiness on the second occasion, and subsequently not at all, while its local effect seemed to undergo no diminution. There was here exemplified the most perfect adaptation of *cure* to *disease;* for, while a host of sympathetic constitutional symptoms became developed because of this local affection, as soon as the remedy had been applied directly to the diseased point, and had proved effectual there, the general system, relieved from an incubus, rapidly improved, the appetite returned, and every disturbed function resumed its normal condition, while the limb itself, which had become remarkably atrophied, gradually assumed a firm and full appearance, like its opposite.

For a full account of the application of the remedy, with cases, I beg to refer to an admirable paper by Dr. Wood, in No. 203 of the *Edinburgh Medical and Surgical Journal*, April 1855.

Reviews and Notices.

How to Work with the Microscope. A Course of Lectures on Microscopical Manipulation, and the Practical Application of the Microscope to Different Branches of Investigation. Delivered, during the winter session 1856-57, by Lionel S. Beale, M.B., F.R.S., Licentiate of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and General and Morbid Anatomy in King's College, London. pp. 124. London: John Churchill. 1857.

This little book is one which is likely to be of use to the student, and no less so to the practitioner who, desirous to keep pace with the progress of science, endeavours to educate himself in the use of the microscope. It is not a treatise on optics, but a code of simple and concise instructions, capable of being readily followed. The subjects treated of in the lectures (which are eight in number) are: the various forms of microscopes; the apparatus for viewing objects by reflected, transmitted, and polarised light, and for drawing and measuring objects; lamps, cements, preservative solutions, cells, etc.; examination of tissues, and their preservation; injecting; advantages of chemical reagents; sketches and photographs; fallacies to be guarded against, etc.

We extract Dr. Beale's instructions on the method

"*Of taking Photographs of Objects in the Microscope.* Of late years many objects have been photographed very successfully. The advantages of such a plan are so obvious that I need not occupy your time in recounting them. In the hands of Mr. Delves, Mr. Shadbolt, Mr. Julius Pollock, and others, very satisfactory results have been obtained, and we may hope that in time perfectly good copies will be made in this manner.

"In arranging the microscope for taking photographs, the camera requires to be much lengthened. There should be a distance of two feet between the object glass and the position of the sensitive plate. This increased length may be obtained by having a brass tube, about two inches in diameter, arranged to screw into the ordinary position of the lens of the camera. The further extremity of this tube is adapted to receive either the object-glass itself, or that part of the body of the microscope into which the latter fits. The ordinary microscope stage may be used, or a stage may be adapted to the end of the tube as in the microscope camera of Mr. Highley, or the stage upon which the object is placed may be supported upon a separate stand. The foci of the chemical and visual rays are not coincident in the ordinary object-glasses, consequently several experiments have to be made in order to find the exact focus of the chemical rays, and we must take different pictures until one is found to be in focus. The degree in which the fine adjustment screw has been turned to produce the best effect is then noted.

"Negative photographs of microscopic objects can only be taken by sunlight, and the light must either be thrown upon the object from a plane mirror, or condensed upon it by means of a large plano-convex bull's-eye condenser. Care must, however, be taken that the object is not subject to the intense heat produced in this operation, longer than absolutely necessary, especially if mounted in fluid or Canada balsam.

"The whole apparatus should be mounted upon a stiff board which can be inclined conveniently at any angle.

"The plate is prepared in precisely the same manner as for taking ordinary photographs. The time of exposure must be found by experiment. From ten to twenty seconds will be sufficient in a very good light. The collodion made by Mr. Thomas takes capital pictures, but I have reason to think that the collodion prepared by my friend Mr. Hardwich, of King's College, will be found very advantageous for microscopical purposes.

"Mr. Delves, of Tunbridge, has produced some very beautiful microscope photographs, many of them being very highly magnified. Indeed, some representations of the navicula far exceed in delicacy and finish the most perfect engravings. It is impossible that such minuteness can be obtained by the hand of the artist as may be ensured by this simple process.

"Many anatomical specimens, however, cannot be copied by photography, especially if they be very thick. The yellow colour of the tissue in most instances precludes the possibility of making a photograph of it, as the transmission of the light is so much interfered with; and this is an especial objection in the case of injections viewed as transparent objects, for the tissue intervening between the vessels, is often so yellow that these intervals in the photograph become as dark as the vessels themselves. My friend Mr. Julius Pollock has nevertheless succeeded in obtaining for me some very tolerable copies of injections of the distribution of the ducts in the liver. By practice, doubtless, many improvements in the process of taking photographs of microscopic objects would be effected.

"When only few copies of a work are required, the researches may be very cheaply illustrated by taking photographs of drawings. A large drawing of the object must first be made in the manner described in page 21. From this a negative reduced to the proper size is taken, from which any number of copies may be obtained. In this manner I have illustrated my memoir on the anatomy of the liver with upwards of sixty illustrations. When many copies of a work are likely to be required, this mode of illustration is not applicable, as the original cost of engraving would soon be covered; but when only a *few* copies of a *great number* of drawings are wanted this plan possesses decided advantages."

Periscope.

PRACTICE OF MEDICINE AND PATHOLOGY.

RUPTURE OF THE HEART.

At a meeting of the Pathological Society of Dublin, on February 7th, Dr. O'Ferrall exhibited a drawing and preparation illustrative of a variety of rupture of the heart, which, in his opinion, had not been before described. The lesion consisted in fatty degeneration of the anterior coronary artery; rupture of one of its branches; injection of the areolar tissue, forming a clot round the vessels and nerves; and, finally, rupture of the serous covering of the heart.

The case was that of a man fifty-five years of age. His friends stated that for the last two years he looked pale; but his habits of exercise continued uninterrupted until two days before his death. At this time, not feeling so well as usual, he stayed in bed, and took some aperient medicine. On the day of his death, he was lying in bed, at about ten o'clock in the morning, talking cheerfully with his friends; soon after, his breathing was observed to become frequent; he, however, made no complaints, nor did he mention anything of his sensations to his friends. The dyspnœa rapidly increased, and at length (almost suffocated) he started up in the bed, his face flushed, and his eyes having a staring expression. He cried out, "Take me out of bed!" "Put a blister on my chest!" "Open the window!" And after other expressions of distress, the pallor of death overspread his features; he was lifted back into bed, and in a few minutes expired.

On opening the body after death, and slitting up the pericardium, a rent, two inches long, was perceived on the anterior and upper surface of the heart, along the line of the septum. The edges of the rent were separated about half an inch, and between them projected a firm clot, the upper and lower portion of which were the colour of dark venous blood; the middle had the appearance of fibrine. The heart was then carefully removed for further examination. On opening the cavities, the right auricle and ventricle were found over-distended with dark fluid blood; the left cavities were perfectly empty. There was no communication whatever between any of the cavities and the ruptured surface of the heart. The substance of the heart itself presented the tawny colour of what is termed fatty degeneration, and was so soft as to be lacerated by the slightest force. A probe passed into the anterior coronary artery, went down through the clot, and shewed that the trunk of the vessel was intact. Very careful dissection demonstrated one of its branches ruptured, and presenting an open mouth in the middle of the clot; the texture of the artery and its branches was so brittle, that the slightest force broke them down. The aorta was remarkably thin, friable, and presenting a layer of steatomatous matter beneath its lining membrane. The valves were all perfectly healthy. There was no blood in the pericardium, but there was about two ounces of serum, which had scarcely a sanguineous tinge.

Dr. O'Ferrall said that various forms of rupture of the heart had been described, viz.: perforating rupture; interstitial rupture (or the "cardiac apoplexy" of Cruveilhier); and rup-

ture of aneurism of the coronary artery. The case now presented exhibits the rupture of a *branch* of the coronary artery, without any previous aneurismal formation; and caused by the peculiar degeneration of the coats of the vessels which, when occurring in the brain, as described by Mr. Paget, occasionally gives rise to apoplexy. All these ruptures of the heart appeared to be connected with one common lesion, that degeneration which had been called fatty, but which he would prefer terming lardaceous or oleaginous degeneration, in order to leave the term "fatty heart" for that condition which consists in a deposit of fat on the *surface* of the heart, and which he had sometimes found in combination with a considerable degree of firmness of the muscular fibre beneath it.

The Dublin school had done much in elucidating this subject. Dr. Robert Adams took an early and efficient share in this inquiry, and since that time Professors Smith and Stokes have enlarged the sphere of our knowledge. The manner in which it destroyed life was well explained by the specimen, when taken in connexion with the history of the brief struggle which preceded death. A heart weakened by oleaginous degeneration, and performing its functions feebly, becomes suddenly embarrassed by the pressure of a coagulum upon the vessels and nerves supplying its right side; thus a partial paralysis of the right side of the heart is produced: and these cavities contracting feebly or not at all upon their contents, become over distended with blood, as was found in this case. This condition may be supposed to be connected with the symptoms of suffocation, and suffusion of the face, which marked its first stage. The right side of the heart ceasing to propel the blood, the systemic vessels must, of course, become gorged; and the countenance most probably, at that moment, indicated this condition. The dyspnœa is easily explained. Then comes the secondary consequence of this overdistension of the right side, viz.: the want of arterial supply into the *left* side of the heart. The left side of the heart not receiving its usual quantity of blood, the brain must, consequently, cease to have *its* necessary supply; and here comes the explanation of the sudden pallor and death by syncope.

It was probable that the hæmorrhage took place so slowly as to allow a coagulum to form before the serous membrane gave way, and this circumstance, together with the fact of the hæmorrhage having occurred from a small branch, would account for the absence of coloured blood in the pericardium. Dr. Robert Adams, in the *Dublin Hospital Reports*, had alluded to this paralysis as a consequence of deficient supply through ossified or calcareous coronary arteries. It is probable that in the present case the pressure of the clot upon the vessels and nerves occasioned a deficient supply, both of nervous influence and arterial blood, to the right side of the heart. (*Dublin Hospital Gazette, April* 1, 1857.)

CASE OF CANCEROUS DISEASE OF THE LUNGS, LEFT SCAPULA, ETC.

Professor Carl Santesson, of Stockholm, relates the following case. Anders Fredrik Andersson, aged 25 years, was admitted into the Seraphim Hospital on the 16th September, 1852. The patient, who was in the habit of carrying heavy loads on the shoulder, and also frequently got blows on the same, observed, at the end of May 1852, "occasional cramps about the left scapula and shoulder." There was developed, according to his report, in a single night, a large tumour on the shoulder in question, in the region of the supraspinous fossa. The occurrence of the tumour was accompanied by severe pain in its situation and the parts around. This pain had since continued constantly, although it varied considerably in degree at different times. Once during the summer the pain had almost entirely ceased; but about a month later—that is, about the middle of August 1852—it began again to increase in intensity. It was felt most acutely during the night, and when the patient was at rest. At the same time that the pain in the shoulder recommenced, pain set in in the waist, on the left side. This proceeded from the back and the superior lumbar vertebræ, extending downwards and forwards. This pain in the side had tormented the patient much more than that in the shoulder, yet he had not observed any redness or swelling in the part. The tumour on the shoulder had not, according to the patient's report, increased much, but he thought he had observed that it had shifted nearer to the spine. He said he had latterly emaciated, and that his appetite was diminished. At home he was cupped, and used a liniment, but without any beneficial result. His state on the 17th September was as follows. The patient was emaciated; had a pale, debilitated appearance; he complained most of pain in the left side, with tenderness in the same situation, as well as of cutting pains in the left shoulder. On examining the latter, a deep-seated tumour was found, of the size of the fist, but more oblong, filling up the entire of the supraspinous fossa on the left side, and extending towards the clavicle. Its boundaries could not be accurately defined, in consequence of the thickness of the superjacent soft parts. To the touch it felt elastic. A similar swelling had commenced in the infraspinous fossa, which had, however, not as yet attained so considerable a size as that just now described. There was no discoloration of the skin, which was perfectly moveable over the tumour. The patient said the tumour was tender at the edges, but not in its middle part; there was also tenderness towards the spine and base of the scapula. The tenderness in the side, already mentioned, commenced at the outer boundary of the dorsal muscles, in the region of the kidney, and extended towards the left side; it was also felt on pressure over the crest of the ilium. Neither redness nor swelling of the side was discoverable on examination. The patient was treated with poultices to the swelling on the shoulder, and a blister to the side, in connexion with tonics, and mild aperients for habitual constipation, from which he suffered. Under this treatment the pain diminished, sleep and appetite began gradually to return; but in other respects the patient's state continued much the same until the middle of October, when it was observed that the power of contracting the bladder was impaired. This by degrees increased, and at length passed into complete paralysis, so as to necessitate the constant use of the catheter. Sensation in the lower extremities slowly diminished from the beginning of this month, as did the power of motion—the loss of the latter taking place more quickly; and the patient was often distressed with involuntary twitchings and occasionally recurring painful sensations in the legs. The loss of sensibility subsequently advanced progressively upwards, and finally extended to the epigastrium. During the latter days of October paralysis of the rectum supervened, with symptoms of a similar condition of the other parts of the intestinal canal—inability to digest the food taken, obstinate constipation, and very intense and painful flatulence. In the beginning of November signs of pneumonia in the right, and of pleuropneumonia in the left lung, set in; there was profuse perspiration, general restlessness and pain, with severe pain over and around the left humeral region, and down the corresponding extremity. There were bedsores over the scapula, the sacrum, and the back part of the lower extremities. The debility constantly increased, and particularly during the last two days the strength sank rapidly. The patient died on the 14th of November, 1852.

Post mortem examination. The brain and its membranes presented nothing remarkable. The lungs were loaded with carcinomatous deposits, from the size of a hazelnut to that of a walnut, which in the right lung were partially softened, and formed abscesses, some of which had discharged themselves into the pleural sac. The right costal pleura was found, particularly posteriorly, invested with a false membrane. In the same pleural cavity was found about a pint of fluid effusion, which in itself appeared to be clear, but was mixed with the contents of the abscesses in the lung, which had opened externally. The liver was large, and congested with blood, as were the kidneys, the cortical substance of which was hypertrophied. The other viscera presented nothing worthy of note. The left scapula, both anteriorly and posteriorly, and in its whole extent, was embedded in a fibro-cellular tumour of a carcinomatous nature. This tumour was of considerable size, surpassing the normal extent of the scapula in all directions; it had destroyed the very substance of the bone in the scapula, so that only at its inferior angle and at the glenoid process, where the cartilage was unchanged, did any of the skeleton remain. With these exceptions, there were found only here and there smaller laminæ of bone, the remains of the original scapula. In the region of the last dorsal vertebræ there was found a smaller tumour, of the same nature as the foregoing, in a state of commencing softening, which extended on the left of the spinal column, into the very spinal canal, without, however, having attacked the membranes of the medulla. The cartilage between the last dorsal and first lumbar vertebræ was completely destroyed, and its situation was occupied by a softened cancerous mass, which destructive process had likewise extended to the bodies of the neighbouring vertebræ. Corresponding to this part, there lay, in front of the membranes, on the medulla spinalis itself, and on the posterior aspect of the terminal cone, a cancerous tumour, of the size of a hazel-

nut, below which the remaining part of the spinal marrow was somewhat atrophied.

Herr Von Lundberg, whom the patient had consulted shortly before his admission into the Seraphim Hospital, added, that he seemed to be of a strong constitution, and that his habit of body, at that time, exhibited no sign of the presence of so malignant a disease, which there was so much the less reason to suspect, as the patient stated that the tumour on the shoulder had developed itself in the course of a few weeks. On closer examination, however, Herr Lundberg had ascertained the serious nature of his illness, and therefore sent the patient to hospital. (*Transactions of the Swedish Society of Physicians*, and *Dublin Hospital Gazette*, Feb. 15th, 1857.)

British Medical Journal.

SATURDAY, AUGUST 29th, 1857.

THE RISE AND DECLINE OF DISEASE.

There has long been a very prevalent impression abroad among medical men, that the Board of Health has not assumed that position of usefulness which it ought to have done; that having before it a vast field of uncultivated ground to labour upon, it has not set to work with that hearty good will and initiative power that might have been expected from it, considering its opportunities and powers. From this imputation of inertness, however, we have ever excepted the principal Officer of Health, Mr. Simon. The ability and zeal of that gentleman are too well known to the profession to require any commendation from us. His unseen labours have resulted in the collection of such an enormous amount of facts in connexion with small-pox and its treatment, that we shall soon be in a position to show how entirely groundless were the attacks made upon Jenner's great discovery by the late member for Bodmin. To Mr. Simon and the Officers of Health of the metropolis we are indebted, however, for the foundation of a system of Medical Statistics of a far more comprehensive character—we allude to the Weekly Table issued by the General Board of Health, on the Health of the Metropolis, edited, apparently, by Conway Evans, M.B. The public must not confound this with the Report of the Registrar-General, so ably edited by Dr. William Farr. The duty of that document, as far as concerns the health of the metropolis, is, as our readers well know, to present simply a Mortuary Table. From its hebdomadal pages we gather a classified list of the victims death has claimed in the preceding week. This is indeed valuable information, but at best it can be considered as very imperfect, from the simple fact that very often the number of deaths may be very small, in proportion to the amount of disease prevalent at the moment. To take an instance in point: if we consult Dr. Conway's table, we find that whilst 4,825 cases of diarrhœa were recorded in the various public hospitals, and in the private practices of a few medical men, the deaths from this epidemic only numbered 258. From this fact our readers will perceive the advantage of noting "the rise and decline of disease," as well as its actual termination by death. The return issued by the Board of Health has now reached its 18th number, and we confess that we hail its appearance with the greatest possible pleasure. It must have long been apparent to everyone who has studied the matter, that statistical information, unless of a very comprehensive character, is one of the delusions and snares of the present age—particularly so as applied to medicine. What injury has the practice of our own profession endured from the too common practice, among even the best of us, of attempting the deduction of some general law, from the study of a comparatively speaking small number of cases? How many wild theories have arisen in our own time, and worked infinite mischief, simply because we could not bring their authors "to book" by appealing to such a mass of collected facts as would at once correct small groups of partial and isolated cases. There can be little doubt that the Board of Health and the health officers of the metropolis have initiated a system of medical statistics of the highest possible value, in the establishment of their weekly return of the state of disease in the metropolis. It is impossible that a record of the state of the public health, as weekly deduced from all the medical charities and public asylums connected with the sick, can be brought together without some invaluable result. Knowing, as we now shall do, of the rise of disease in the various districts of the metropolis, we shall be in a measure forearmed. For instance, diarrhœa is now admitted to be the forerunner of cholera: the knowledge, therefore, that diarrhœa increased in an alarming degree, should put the authorities upon their guard lest they be surprised by a more malignant foe. The system of dividing the capital into districts enables us to localise the mischief. For instance, Dr. Conway remarks, "It is worthy of note, that one-fifth (909) of the total number of cases of diarrhœa returned for the whole metropolis occurred in patients of the Western General Dispensary." The value of information which thus leads us to find out the enemy at once, must be invaluable to the Board of Health, inasmuch as it enables it to centralise its whole force, if necessary, upon the diseased spot.

We trust that, before long, the results of private practice will be added to those of the public medical institutions, in furnishing this weekly table of disease. Some of the medical officers of health (and among them we find our excellent and energetic associate Dr. Lankester) have come forward with this desirable kind of information—desirable for the double reason, that it not only adds fresh streams of information towards the general total, but that it gives us the condition of disease among entirely different strata of society—those of the upper and middle classes, who never seek the assistance of hospitals. Indeed, to provide a true table of the state of disease, it is indispensable that the results of private practice should be known, inasmuch as there are *class diseases* of as marked a character as there are class distinctions in society; and we can no more get the whole truth by tapping the statistics of the public medical charities, than we should get a fair sample of wine by tapping the lees. At present we must content ourselves with collecting metropolitan returns of disease; but we trust that, before long, the principal medical officer of health, through the agency of the officers of local boards, will be enabled to establish a return from the country generally. We know that among our own associates will be found very many officers of health ready and willing to aid in the great task of making a complete picture of the health of the kingdom, as shown in town and country. When such a return is furnished, and the power of truly analytic minds, such as those of Mr. Simon and Dr. Farr, are brought to bear upon them, we do not fear that the general law of many a disease, whose nature and

origin are at present obscure, will be elucidated, and that an immense impetus will be given to the prevention and treatment of the thousand maladies that man is (at present) heir to.

PAUPER LUNATIC ASYLUMS.

We have been favoured with a second letter from Dr. Hitchman, with respect to Colney Hatch and the non-restraint system. Our correspondent states that he merely wishes to protest against the inference that the system of so called non-restraint advocated by Mr. Gardner Hill requires dismal airing courts or a large bastile for its elucidation. As no such thing as non-restraint, in the proper acceptation of the term, exists, we cannot, of course, say whether it is incompatible or not with the present overgrown asylums. All we wish to insist upon is, that a philosophical treatment of the insane is impossible as long as they are cooped up by the thousand in immense buildings, constructed on the same principle as the neighbouring jail. As far as we have been able to judge from a personal inspection of the leading asylums in this country, the patient is rendered subsidiary to the "establishment", instead of the establishment being made subsidiary to the good of the patient. We know full well that this truth is deplored by the majority of medical superintendents of asylums throughout this country. The routine of such establishments as Colney Hatch is "inexorable"; like a machine, it must go on, and, like a machine, it must be incompetent to adapt itself to the individualities of the patients.

If it be granted, and we think no one will feel inclined to do otherwise, that the best and most philosophical method of treating the insane, is to bring about them as much as possible the happy and healthful conditions of the sane of *their own class*, it seems to us quite clear that the massing of large numbers in one huge house is a mistake. Were we Frenchmen, accustomed to aggregate in our ordinary dwellings, there might not be so much objection to the present system of asylums; but the contrary is the case, especially among the agricultural population, which forms so large a proportion of the inmates of our asylums. The cottage and the labour of a cottage, including the patch of ground, if possible, would be much more acceptable to the insane of this class than an airing court which looks abandoned by hope itself, or a dismal ward totally devoid of any object of human interest, such as we find at Colney Hatch. Dr. Hitchman must have strangely misread the *Quarterly Review* article on Lunatic Asylums if he found anything like "a glowing description" there of Colney Hatch. Its defects, on the contrary, are strongly and blackly painted. We did, indeed, contrast the treatment received by poor patients in workhouses and in secluded cottages with that experienced by them in such establishments as Hanwell and Colney Hatch—but, after all, treatment is comparative. No one would for one moment say that the errors of the present Asylum system are those of commission. It is the errors of omission for which it is responsible. The visiting justices, who know nothing about insanity or its treatment, have the sole management of the public asylums in this country, and their sole idea, in the majority of cases, is to save the rates. A philosophical treatment on the part of the medical superintendent is accordingly next to impossible. To destroy this heavy incubus on the labours of the medical attendants must be the first aim of any man interested in the proper treatment of the insane poor.

Dr. Kirkman, whose letter we this week publish, would seem to imply that the free air system of Gheel is nothing more than the old cottage system of England. God forbid that that old system should ever rear its head in this country again; and God be praised that it is about to be destroyed in Scotland. The cottage system of Gheel differs from that which once obtained in this country, inasmuch as every cottager who has the care of patients is under the strict supervision of the medical staff of the colony, and he can no more ill use his inmates with impunity than could the attendant at one of our asylums; not the slightest kind of personal restraint can ever be inflicted without the permission of the superintending physician.

Dr. Kirkman is undoubtedly right in stating that it would be impossible, in some highly cultivated districts, to allow the lunatics a free run of the neighbourhood; we do not think that he would see any objection, however, to the erection of cottages within the walls—even the privileges of being in these is highly prized by the patients, who are only too glad, in many cases, to get outside of the walls of the "hated" asylum. We must proceed by degrees in the treatment of lunacy as in other things. All the good of the present asylums may be retained with a return to a system more in keeping with the habits of the inmates. The chapel, the ball-room, the infirmary, and the workshops may still be the central points of gathering, long after we have abandoned the rows of sleeping cells, or the monotonous wards, for smaller dwellings, in which the patient may feel *that his own individuality is not merged and lost in the crowd that surrounds him.*

THE WEEK.

It is decided to place the statue of Jenner—the fruit of an European subscription—in the open space at Trafalgar Square. As this spot seems dedicated by public opinion to those who have deserved well of their country, the medical profession must look upon this decision as a recognition of the service medicine has conferred upon the nation. The statue of the illustrious Jenner will be placed on the same front of the square, but at the opposite corner to that occupied by the effigy of the late Sir Charles Napier. It would be invidious and unnecessary to draw any comparison between the characters of these two men. There can be no doubt that the great general at times saves life even by the swiftness and completeness with which he destroys it; he disarms opposition, where inferior men would only aggravate it. We shall, therefore, not moralise upon the superiority of the man of science over the man of the sword. Nevertheless, we cannot contemplate the placing of this new statue in the midst of "the finest site in Europe", without a feeling of pride and satisfaction. In future ages, the vast tide of human life which will flow past Charing Cross will pause for a moment and scrutinise the thoughtful brow of that great man but for whose philosophic labour twenty per cent. of that crowd would pass on seamed and scarred from the conflict with the most malignant of human diseases. The people are not forgetful of benefits received, if governments sometimes are; and we may feel sure

that our profession will gain in the public admiration when the effigy of one of its foremost men is placed amongst the busy haunts of men, as a testimony of the blessings conferred by medicine upon humanity.

We are glad to hear that our suffering associate, Mr. Tucker, has not been forgotten by our members or by the profession. In directing attention to the announcement of the Committee, which will be seen in our advertising columns, we can only express our cordial hope that, when the time comes to publish the list of subscribers, we shall not be disappointed either in the amount subscribed, or in the share which the Association has taken in this good work.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, July 1857.

Editor's Letter Box.

COLNEY HATCH ASYLUM AND THE NON-RESTRAINT SYSTEM.

Letter from John Hitchman, M.D.

Sir,—I rejoice, that after reading your article on "The Lunatic Asylum at Colney Hatch," I immediately wrote to you the letter which you are pleased to call "a very angry" one, because it has drawn from you a clear and eloquent enunciation of those great principles which ought to guide us in the treatment of the insane. I rejoice at this, although you have (of course unintentionally) misrepresented the purport of the "angry" letter in question. I felt, and still feel, that a wrong had been inflicted upon an earnest man by improperly connecting his name with "*a house of detention of the most dismal kind;*" improper, because Mr. Gardiner Hill would be as ready to condemn the use of "huge bastiles," and asylums "conducted on the self-same plan as the neighbouring workhouse, or jail," as you yourself would be; and I am sure that the system known as the "non-restraint system" requires neither "dismal airing courts," or "huge bastiles," for its proper elucidation. It is hostile to all of these things. It is the *germ* of all the improvements which are daily going on, in this and other lands, in the treatment of the insane; and we have only to compare Esquirol's account of the insane colony at Gheel, with that of our able countryman Dr. Webster, to perceive that its influence has been felt, even in that insalubrious spot, although in connection therewith, one reads with sorrow of *chains* "still used to restrain violent maniacs," and of "an old man peeling potatoes" whose legs and arms were restrained by leathern thongs and hobbles. How many more may have been still worse manacled in those far off places, where "disturbances and menaces have scarcely an echo"—where "the lunatic meets no person"—where there is "nothing but silence or solitude around"—there is no evidence in Dr. Webster's paper to determine. But I have no wish now to enter upon the merits or demerits of the insane colony at Gheel. I hope, for the sake of the patients, that the system may be as good, and may be carried out as kindly as you would wish it to be; but I think, sir, that you are not in possession of facts enough to be justified in eulogising Gheel at the expense of the English asylums—in writing of the former as an "interesting colony holding out a light which we shall be constrained to follow," and of the latter, as places in which "the man becomes a cog in the ever-turning wheel; and all the little healthy spring and play of mind which it is so necessary to foster in the lunatic is hopelessly crushed out of him." I know, sir, that "distance lends enchantment to the view," and, therefore, hope that the land in which Tuke and Ellis, and Charlesworth and Conolly, have lived and laboured, will bear comparison with Belgium in the treatment of her insane; and that that fearful description of yours does *not* apply "more or less *to all the asylums* throughout this country," but is rather to be reckoned as the eloquent wailing of a feeling heart shocked by the sight of some individual and exceptional establishment, than as the judicial conclusion of a clear mind after a careful investigation into all the facts of the case.

I cannot close this letter, without assuring you, Mr. Editor, that I did not intend anything discourteous towards you in using the word "compiled" in reference to the able article in the *Quarterly Review.* The graphic power, the kindly spirit, and the comprehensive information of that article pleased me much, but I imagined it was written by a man who had gained his information from books rather than from personal knowledge, and in my haste I used the word which I now feel to have been incorrect; in no journal had I seen your name associated with the article, and even if I had, I should have regarded it as an error, because in the *Quarterly Review* Colney Hatch is described as one of the places in which "the feelings of desperation are almost immediately succeeded by the inspirited dawnings of hope," whereas in the Journal it is designated as a "huge bastile"—"a place of detention of the most dismal kind." I did not think the same pen, which gave us the glowing description of Colney Hatch and Hanwell—which had borrowed the poetry of Gray to unfold the "blue-eyed pleasures" which were to be found therein, was the same pen which made one shudder at the recital of "caging poor people in the dismal airing courts" and "monotonous wards" of those "huge bastiles" where "restraint exists as wounding to the spirit and as depressing to the mind, as when hobbles, strait waistcoats and chains, were the favoured instruments of repression."

I wish, moreover, emphatically to state, that I have not written to the Journal, nor do I write now, as the advocate of large asylums like Colney Hatch—you are doing a good work in pointing out their evils—but I write to complain of the improper use of Mr. Gardiner Hill's name, and to protest against the inference, that the system which he has advocated is inseparably associated with huge "bastiles," and "with a treatment upon which men will look with feelings of disgust, differing only slightly in degree from those with which we read of the treatment of madmen in old Bedlam."

I am, etc., John Hitchman.

Mickleover, near Derby, August 22nd, 1857.

THE FREE AIR SYSTEM IN THE TREATMENT OF LUNACY.

Letter from John Kirkman, M.D.

Sir,—A lengthened association of between forty and fifty years with the insane, of which the last twenty-six have been passed in this Asylum, will be perhaps a sufficient apology for the expression of my opinion, that it is very questionable if the plan of treatment adopted with the insane patients in Belgium could be, under our present discordant authority of commissioners and magistrates, carried out in England. In 1842 I referred to this plan in a report, a copy of which I enclose; and since that time our ceaseless endeavour here has been to afford every latitude to our inmates *beyond* the boundary walls. This has been in some measure successful; but with gentlemen's residences on every side, and preserves adjacent to the Asylum land, it is difficult to avoid those encroachments which many regard with suspicion, if not with alarm. A patient went into a wood in which the proprietor, unknown to him, was shooting, and provokingly disturbed his game; and I was once threatened with an action for trespass for a more trifling act of similar vagrancy. There is (as you are doubtless aware) a very valuable clause in the 16 & 17 Vict. c. 97, s. 79, which sanctions a close approximation to the system pursued at Gheel; but the compilation of the statute appears to be imperfect, and both the spirit and letter of it have, I fear, been occasionally set aside. It is provided that the discharged patient should be the weekly recipient of the amount granted by the Visiting Committee of the County Asylum from which such patient may have been removed; but being placed under a cottager's care, the *cottager* often receives the money, and thus the old door of abuse, which we have so long struggled permanently to close, is thrown wide open again. The patient may become stinted in both food and clothing, and the surplus of the hebdomadal payment be kept in the cottager's pocket. It is said that this might be prevented by the patients being placed in a position of easy access to the inspecting eye of the superintending physician of the asylum; but if *he* has the care of a large establishment, surely he has enough to occupy his mind without tramping over a village once or twice a week to give each that attention which his case must still of necessity require. Poverty and destitution are too often the causes of insanity, we all know; and that such patients, in whom this origin may be traced, advance rapidly towards convalescence in the asylum, and that their permanent cure might be shortly effected at home: still ratepayers may complain (and justly) that these patients ought to be sent to their *parishes*, and the allowance still granted by the asylum visitors paid to them at their own homes by the parochial authorities. The effect might then be watched and reported to the Committee and the Superintendent of the asylum at short intervals. It is not necessary to go into the omissions of this portion of the statute in its retrospective views, or to anticipate any results from our adoption in England of the system of the Belgic colony; but with existing facts upon our minds, and with the example of Scotland (where the cottage system has been carried out) before our eyes, I cannot help thinking that we should do well to pause before we unreservedly sanction it, or look to Gheel as a model of imitation for us. I am, etc. John Kirkman.

Suffolk County Asylum, August 26th, 1857.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Richard Griffin, Esq.

Sir,—I shall feel obliged by your inserting the following correspondence, and informing the union medical officers that the movement of the Poor-Law Medical Reform Association, though apparently in abeyance, is in reality progressing, and daily occupies a portion of my time—for the ultimate benefit, I trust, of that great body of the profession whose interest I have so much at heart. My personal complaints may perhaps appear to hold too prominent a position; but they are, in truth, but the means made use of to illustrate the entire system. Were it not so, I should long since have resigned my worse than worthless appointment.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, August 22nd, 1857.

" 12, Royal Terrace, Weymouth, August 19th, 1857.

" My Lords and Gentlemen,—I have the honour to lay before you copies of letters recently addressed by me to the Weymouth Board of Guardians. I regret to say, the Board neither adopted my suggestions nor vouchsafed any reply regarding the inadequacy of my payment, though I understand it was stated that, if I did not like my appointment, I might give it up. During the last two years, I have repeatedly represented to them that my salary is insufficient for the duties I am required to perform, and that the division of the original sum was unfairly made; yet I have received no redress, but the reverse, as, during that time, two motions for my expulsion from office have been forwarded to your honourable Board—a novel mode, certainly, of redressing grievances, which, however, was not sanctioned by your acquiescence. During the same period, I have frequently memorialised your honourable Board, and have received promises of 'consideration' or 'attention', but nothing further. Two years and nearly a half of hard work, and little—I might say no remuneration (for such is the fact, when the expenses of my office are paid),—puts a man's endurance of ill treatment severely to the test, and makes him look through the Poor-law statutes, to see on whom the blame legally rests. In these statutes I find it recorded that the members of your honourable Board have sworn 'that you will faithfully, impartially, and honestly, according to the best of your skill and judgment, execute and fulfil all the powers and duties of commissioners.' And in the 4th and 5th Wm. IV, cap. 76, sec. 46, I read, 'And be it further enacted, that it shall be lawful for the said commissioners, as and when they shall see fit, by order and under their hands and seal, to direct the overseers or guardians of any parish or union, or of so many parishes or unions as the said commissioners may in such order specify and declare, to be united, for the purpose only of appointing and paying officers, to appoint such paid officers, etc.; and the said commissioners may, and they are hereby empowered to define and specify and direct the execution of the respective duties of such officers, and the places or limits within which the same shall be performed, and direct the mode of the appointment, etc., etc.; and, when the said commissioners may see occasion, to *regulate the amount of salaries payable to such officers respectively.*'

" From the foregoing quotation, it strikes me forcibly that in your honourable Board is vested the sole power to regulate the salaries of your medical officers; I therefore call upon you to act up to the true intent and meaning of your oath, and impartially to carry out the law of the land, and to award to me such a salary as will give me the means not only of purchasing the necessary medicines and appliances for my patients, but at the same time to remunerate me for my labour and professional acquirements, and no longer permit the guardians to dole out to me such a miserable pittance that, when the salary is divided in proportion to the number of my patients, it averages but 1*s.* 4½*d.* for each case of sickness. Let the law be carried out 'impartially', and compel the guardians to do justice to all their officers, and do not permit them capriciously to deal with the money of the ratepayers, and to give to one officer but 1*s.* 4½*d.* per case, while they give to another 2*s.* 6½*d.*, and to a third 16*s.* 3¼*d.*, for attending patients who are similarly situated, as far as concerns distance from their respective residences.

" The power of regulating our salaries has hitherto been delegated by you to the guardians; but they, as your representatives, have failed to carry out impartially the powers entrusted to them. I therefore now call upon your honourable Board to take the matter into your own hands, and regulate my salary, as by the law of the land you are bound to do.

" History teaches that most of the calamities affecting nations arise from the just complaints of individuals being unheeded by those in authority. Examples innumerable might be cited; but the sufferings of our army in the Crimea are so fresh in our memory, that it needs no other example. I pray you, therefore, no longer to disregard the complaints of your medical officers, in whom you have reposed a solemn trust—the care during sickness of no less than four millions of the labouring classes of this great kingdom. If you do not provide your medical officers with the means, how is it possible they can purchase the requisite materials to treat their patients successfully? It is not possible for me, without private sacrifice, to supply leeches, cod-liver oil, and a host of expensive medicines, out of 1*s.* 4½*d.* per case. Surely it cannot be right to tax a man's private resources; it is unjust to the officer, and endangers the welfare of the poor. On you, therefore, my lords and gentlemen, rests an awful responsibility. About 1200 petitions have within the last sixteen months been presented to the House of Commons and your honourable Board

—a number that implies something seriously wrong in the administration of the medical department of your service, and claims redress at your hands, in virtue of your oath. I live in a town, and my patients all reside there. I pray you, therefore, to fix my salary at such a sum that it may be regarded as a criterion for other officers who may be similarly situated.

"I have the honour to be, etc.,

"Richard Griffin.

"The Poor-Law Board."

"12, Royal Terrace, Weymouth, July 20th, 1857.

"Sir,—I am informed by Mr. Lithgow that he has offered himself as a candidate for the appointment of medical officer to the union house. Should the Board of Guardians elect him to that office, I shall feel obliged by their allowing me to exchange the Weymouth for the Melcome District, which, I presume, he would be required to resign. In most public institutions, it is usual for one officer to be permitted to take the post of another who vacates for a better. I trust, in this instance, the guardians will be kind enough not to depart from the rule, but allow Mr. Lithgow to have Dr. Boyd's appointment, and to give Mr. Lithgow's to me—an arrangement which would place Mr. Lithgow and myself each in a situation where he would receive far higher pay than at present, in proportion to the duties to be performed. In the event of my being elected to the Melcombe District, that of Weymouth would be at the disposal of the guardians. I should think an exchange would be sanctioned by the Poor-Law Board, without requiring the guardians to be put to the expense and trouble of a fresh election. "I am, sir, etc.,

"Richard Griffin.

"The Clerk to the Board of Guardians, Weymouth Union."

"12, Royal Terrace, Weymouth, August 3rd, 1857.

"Sir,—I shall feel obliged by your considering this note as a postscript to my letter of July 20th, and by your reading it with that to the Board of Guardians, on Thursday next, Aug. 4th. Should the Board not consent to my having the Melcombe District, then I trust they will at once proceed to take into their serious consideration my *repeated complaints* as to the inadequacy of my salary, and vote me such an addition to it as will make it commensurate with the duties I am required to perform. The payment I now receive, on an average of two years, is 1*s.* 4½*d.* per order; whilst the Melcombe surgeon has 2*s.* 6½*d.*, and the Wyke surgeon 16*s.* 3½*d.*

"I am, sir, etc., "Richard Griffin.

"The Clerk of the Board of Guardians, Weymouth Union."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Bisshopp. On August 16th, at 1, Lawn Place, South Lambeth, the wife of James Bisshopp, Esq., Surgeon, of a son.

Callender. On July 31st, at Winlaton, the wife of Edward E. Callender, Esq., Surgeon, of a son.

Druitt. On August 15th, at Wimborne Minster, Dorset, the wife of William Druitt, Esq., Surgeon, of a son.

Latham. On August 20th, at Greenford, the wife of R. G. Latham, M.D., of a son.

Manifold. On August 13th, at Templemore, Tipperary, the wife of M. Fenton Manifold, Esq., Staff-Surgeon, of a son.

Newington. On August 17th, at Ticehurst, Sussex, the wife of Charles Hayes Newington, M.D., of a son.

Popham. On August 16th, at Caledonian Place, Islington, the wife of Robert Honner Popham, Esq., Surgeon, of a daughter.

Ross. On August 19th, at 10, Commercial Place, Commercial Road East, the wife of Daniel Ross, Esq., Surgeon, of a son.

MARRIAGES.

Bird—Stone. Bird, William, Esq., Surgeon, of Albemarle Street, to Mary Hannah, eldest daughter of the late Orlando Stone, Esq., of Richmond, Surrey, at Richmond, on August 20th.

Hill—Pennell. Hill, James Turner, Esq., 14th Bengal N.I., to Agnes Jane, second daughter of R. L. Pennell, M.D., of Venbridge, Devon, at Cheriton Bishop, on August 13th.

Monro—Duffin. Monro, James, M.D., Surgeon-Major Coldstream Guards, to Maria, third daughter of the late Colonel Duffin, of the Bengal Light Cavalry, at Bath, on Aug. 18th.

Lovegrove—Heane. Lovegrove, George H., Esq., Surgeon, of Gloucester, to Mary Elizabeth Anne, eldest daughter of Mr. Alderman Heane, of Gloucester, lately.

Stedman—Dulley. *Stedman, Robert Savignac, Esq., Surgeon, of Sharnbrook, Bedfordshire, to Fanny, eldest daughter of *Benjamin Dulley, Esq., Surgeon, of Wellingborough, on August 18th.

Taylor—Gammell. *Taylor, James, Esq., Surgeon, of Wargrave, Berks, to Rosa Ann, widow of the late Ernest Gammell, Esq., of Portlethen, Kincardineshire, and Twyford, Berks, at St. Saviour's, South Hampstead, on August 20th.

Walker—Campbell. Walker, George, M.D., second son of J. D. Walker, Esq., Surgeon, Hurworth-on-Tees, to Selina Georgina, second daughter of Francis Campbell, M.D., Superintendent of the Lunatic Asylum, Jarban, by the Rev. G. E. Turner, at Ryde, near Sydney, N.S.W., on May 16th.

DEATHS.

Allsop, Robert, Esq., many years Superintending Surgeon of Her Majesty's Emigration Shipping, at 25, Castle Street, Falcon Square, aged 36, on August 23rd.

Campbell, John, M.D., Surgeon Royal Navy, at Portsmouth, on August 15th.

Darden, Miles, Esq., at Henderson County, Tennessee, U.S., recently. Deceased was seven feet six inches in height, and weighed above one thousand pounds.

Few. On August 17th, at Scarborough, from scarlet fever, aged 5 years, Arthur, only child of *W. Few, Esq., Surgeon, Ramsey, Huntingdonshire.

Malden, Francis C. F., Esq., Surgeon, of Worcester, son of *Jonas Malden, M.D., aged 32, on August 13th.

Marshall. On August 12th, at Mitcham, Surrey, aged seven months, the infant daughter of Edward Marshall, Esq., Surgeon.

Musgrave. On August 18th, at 1, Pembroke Place, Finchley Road, aged 14 months, Helen, youngest daughter of Johnson T. Musgrave, Esq., Surgeon.

Orsborn. On August 22nd, at Bitterne, near Southampton, aged 40, Agnes Clayton, wife of John Orsborn, M.D.

Thomas, Henry C. A. C., Esq., Surgeon, of Lower Norwood, Surrey, aged 27, on August 22nd.

Whiting, J. B., Esq., Surgeon, of King's Lynn, aged 56, suddenly, on August 11th.

Woolley, Edward, M.D., at Wright's Corner, Indiana, U.S., aged 40, on July 31st.

APPOINTMENTS.

Jones, Sydney, M.B., appointed Surgeon to the Surrey Dispensary.

Reid, J. Seaton, M.D., appointed Professor of Materia Medica in Queen's College, Belfast.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, August 20th, 1857:—

Buchanan, Albert, Myddelton Square
Furse, Robert, South Molton, Devonshire
Hopkins, Edward, Llandelo
Marriott, Charles William, Leamington
Martin, John, Great George Street, Liverpool

HEALTH OF LONDON:—WEEK ENDING AUGUST 22ND, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which in the last week of July rose to 1238, and in the first and second weeks of August were respectively 1224 and 1187, exhibit a very decided decrease in the week that ended last Saturday (August 22nd), the number being 1091. The heavy thunder storms and rains of the preceding week have doubtless been powerful agents in producing this result. It can also be shown that the deaths of last week were rather less than the number which the average rate of mortality in corresponding weeks of ten years (1847-56) would have produced, if, for better comparison,

the deaths from cholera in two epidemic years are excluded from the calculation.

Since the last week of July there has been a constant decrease in the deaths from diarrhœa. In the week referred to, they were 302; thereafter they were successively 258, 244, and (in the present return) 215. In the same periods, the numbers returned as caused by cholera (in most instances "cholera infantum" and "choleraic diarrhœa") were 24, 30, 21, and 12. Eight deaths from diarrhœa (including cholera) occurred last week in the sub-district of St. John, Westminster; seven in that of St. Margaret, Westminster; five in Brompton; five in the Hackney sub-district; five in Goodman's Fields; five in Bow; five in Trinity, Newington; five in Lambeth Church sub-district (second part); and five in Plumstead. Scarlatina exhibits an increase, for the deaths from it, which were in the two previous weeks 32 and 16, rose last week to 40. It appears to have prevailed chiefly in the north and east districts, for more than half of the fatal cases occurred in these two divisions. The registrar of Somers' Town records the deaths of three children from "scarlatina anginosa", all within four days, in a family at 8, Johnson Street. The parents, a fourth child, three lodgers in the same house, and a person who was sent to the Fever Hospital, have all suffered from the disease. Typhus and common fever were fatal in 41 cases; measles in 13; and small-pox in 4.

Three persons died of disease the effect of intemperance: 13 children from want of breast-milk. The deaths of five nonagenarians are returned: one at the age of 90 years, two at 93, one at 94, in Wild Street, St. Giles, and one at 98, at Putney. With one exception (a man, who was the youngest of the five), these old persons were all widows.

Last week the births of 860 boys and 832 girls, in all 1692 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1460.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·887 in. The highest reading occurred on Wednesday, and was 30 in. The mean temperature of the week was 65·1°, which is 4·2° above the average of the same week in 43 years (as determined by Mr. Glaisher). The highest temperature occurred on Sunday (the 16th), and was 83°. The lowest was 51·7°, on Tuesday. The range of the week was 31·3°. The temperature rose towards the end of the week, and on Saturday the mean was about 9° above the average. The wind blew almost constantly from the north-east, till the end of the week, when it changed to east. The mean dew-point temperature was 57·3°; and the difference between this and the mean temperature of the air was 7·8°. The mean temperature of the water of the Thames was 67°·5. Rain fell to the amount of 0·32 in., nearly all of which fell early in the morning of Sunday.

THE SALE OF POISONS.

We have already given an abstract of the Sale of Poisons Bill in its amended form, the modified measure, however, being only printed for the consideration of the public during the approaching recess. A blue-book of 140 pages has just been published, containing the interesting evidence adduced before the select committee of the House of Lords by the following witnesses—viz., Mr. J. Bell, Mr. T. N. R. Morson, Mr. G. Waugh, Mr. P. Squire, Mr. Lionel Bird, Mr. H. Denne, Mr. J. Abraham, Mr. J. Baker Edwards, Mr. William Herapath, Mr. Hammill, Mr. F. C. Calvert, Mr. Walter Wilson, Dr. W. T. Brande, F.R.S., Mr. S. J. Burch, M.R.C., Dr. A. Swaine Taylor (the toxicologist), and Dr. Moore Neligan. The evidence of Mr. Herapath and other witnesses points to legislative enactments as utterly impotent to prevent suicide by poisons. "If a suicide," observes this witness, "cannot have recourse to one mode of destroying his life he will to another." Even the Bill restricting the sale of arsenic has not been altogether successful. Mr. Herapath conceives that any "Poisons" Bill must have three objects in view:—1. Secret poisoning. 2. Suicide; and, 3. Chance-medley. He does not believe that any one system can be introduced to check the whole of these; and as to suicide he thinks "it will be totally impossible, under any circumstances, to prevent it." As regards intentional poisoning, he thinks registration in a book might do something to check it. Mr. Herapath objected to the absurdity of including in the schedule of poisons prohibited so large a number of Pharmacopœial preparations, all of them being used more or less for medical purposes. He thinks the list should be confined to drugs that may be used for secret poisoning, as those which are tasteless or not to be recognised by the victim are few in number. He would prohibit for secret poisoning, arsenic, Fowler's solution (or the liquor potassa arsenitis), prussic acid, strychnia, and nux vomica; for hocussing, cocculus indicus; and for procuring abortion, ergot of rye and savina. It would be impossible, or very difficult, to legislate as regards opium. Mr. Hammill, the police-magistrate, appears to object to compel persons wanting to buy poisonous drugs to go before a magistrate; he thinks "it would be a great impediment to the administration of medicines in proper cases, because there are few medicines that are not, in large doses, poisonous." He does not think you could legislate for the sale of laudanum, because a poor man, although "distressed" in appearance, might want it for the toothache as well as a rich man. Any medical man, too, will bear testimony to the immense value of opium, both in the solid and liquid form, as a check to choleraic diarrhœa and other alarming affections of the intestinal canal. Dr. Taylor, the toxicologist, thinks that legislation would have the effect, not of doing away with poisoning in any form, but of considerably reducing the number of accidents from poison, and also rendering it more easy to trace out crime where poison has been obtained for improper purposes. It is impossible, he adds, to prevent the use of poison for suicidal purposes. Dr. Taylor was asked how he could meet the case of opium where labouring men came to the extent of 200 or 300 a-day for that seductive drug. He answers that there ought to be "some limit" to that; but even now there is a difficulty. A gentleman in the city was refused the other day a drachm of laudanum for the toothache, he being unknown; and at a second shop he was only supplied with 25 drops, and no more. Dr. Taylor suggests that in these cases the dose might be swallowed in the presence of the druggist. It is certain that opium is consumed to a large extent in the manufacturing towns, and Dr. Taylor says that it causes 37 per cent. of deaths annually. The sale of opium he thinks it would be difficult to stop, as a smuggled trade would inevitably supervene on the supersession of the regular business of the druggist. About 20 to 25 drops of laudanum may even be obtained for a penny, and this for an adult is a safe dose, although a fatal one if administered to an infant as a *quietus*. It is further shown that if the sale of poisons by the regular druggists were restricted, sundry subtle poisons, such as hemlock and henbane, might be procured, and for improper purposes, from the herbalists of Covent-garden and elsewhere; and Dr. Taylor suggests whether those (often ignorant) herbalists ought not to be included with the druggists when they deal in any particular poisons. Here a curious anecdote is related. A gentleman living in Portland Place was ordered by his physician to take the well-known infusion of ash leaves. On taking the prescribed dose he was seized with very alarming symptoms, and was soon in a state of narcotism and convulsions. The physician was sent for, examined the infusion, and drank a wineglassful himself, but with the same alarming consequences. It turned out that the herbalist (of Covent-garden) had sold belladonna (the deadly nightshade) instead of the ash leaves. In another case a druggist's apprentice took the liberty of dispensing, instead of black dose (the well-known purgative preparation of senna), the "black drop," or acetate of opium, a deadly narcotic poison; and in another case, strychnia was dispensed with fatal effect in the place of salicine, a tonic prepared from the bark of the willow-tree. Such are a few points of the evidence which a cursory perusal of it has afforded us an opportunity of extracting. *(Times.)*

The following letter has been addressed to the editor of the *Times* in reference to the concluding part of the above paragraph:—

To the Editor of the Times.

Sir,—In your paper of yesterday there appears an article upon "The Sale of Poisons," which contains a misstatement that you will doubtless be willing to correct. The following is an exact quotation from the article referred to:—

"A gentleman living in Portland-place was ordered by his physician to take the well-known infusion of ash-leaves; on taking the prescribed dose he was seized with very alarming symptoms, and was soon in a state of narcotism and convulsions. The physician was sent for, examined the infusion, and drank a wineglassful himself, but with the same alarming consequences. It turned out that the herbalist (of Covent-garden) had sold belladonna (the deadly nightshade) instead of the ash-leaves."

The facts of the case are, that Dr. Garrod recommended the patient referred to in the above statement to us for the purchase of ash-leaves. We supplied him with two or three

parcels, but he afterwards found that he could obtain some at a lower price in Farringdon-market, and he therefore ceased to buy of us. One evening a gentleman called upon us in a state of great excitement, and producing a sample of leaves, asked us what they were. We immediately pronounced them to be belladonna leaves, upon which he exclaimed, "Then I fear my friend is dead," and told us that the leaves had been obtained from Farringdon-market.

The above explanation is due to us, as our firm has been established more than 100 years, and we have no doubt that Dr. Garrod will confirm our explanation.

We remain, your obedient servants,

Butler and M'Culloch.

Covent-garden, August 21st.

Medical Returns from the Baltic and Black Sea Fleets. Yesterday appeared a Parliamentary paper containing some interesting details relative to the mortality in the Baltic and Black Sea fleets in the years 1854 and 1855. It is shown that the total mortality from all causes, in both fleets, and in both years, amounted to 2,029 deaths, of which 1,574 were caused by disease, 228 by accidental injuries, suicide, and drowning, and 227 only by wounds received in action—a number extraordinarily low. The diseases most commonly prevalent in fleets and armies include three classes:—1. Those arising from privation and over-work. 2. Those arising from endemic or climatic causes; and, 3. Those arising from the inhalation of the germs of infectious diseases. The deaths from diseases of the first class, including typhoid fevers, scorbutic affections, dysentery, diarrhœa, and ulcer, were not numerous. The deaths from local or climatic causes were also few, for the crews of the ships were seldom exposed to miasmatic influences, and when they were landed in low swampy places, as in the Black Sea and Sea of Azof, quinine was almost invariably given as a protective against fever, and offensive exhalations in the holds of ships were got rid of by ventilation and the use of the solution of chloride of zinc. The mortality under the third head (infectious diseases) might indubitably have been lessened, it appearing that if the fleet in the Baltic had not anchored in Baro Sound during the summer of 1854, and if that in the Black Sea had shunned Baljik and Varna in July, August, and September of the same year, the mortality from cholera would have been greatly reduced. Cholera, like small-pox, yellow fever, and other infectious diseases propagated by a specific animal poison elaborated within the human system, and thrown from it into the atmosphere, is generally destructive among numbers in proportion to the force or concentration of the exciting poison and the poverty of the vital fluids of the patients. The mortality from consumption is much greater in the army than the navy. It appears that the proportion of wounds and injuries of all kinds to the 1,000 of mean force was greater in the Baltic than in the Black Sea fleet, but the reverse was the case as regards the rates of mortality. In the former, the total number of deaths, from all kinds of injuries and drowning, was 135, of which 21 were from wounds in action, 5 from gunshot wounds received during the infamous attack on the boat's crew at Hango, 57 from drowning, and 52 from falls from the rigging and other accidental hurts. In the Black Sea fleet, its total number of deaths, from external violence and drowning, was 286, of which 201 were killed in action, 40 were drowned, and 45 killed by external injuries. The medical evidence goes on to show, that sailors are more liable to rheumatic attacks than soldiers; but this will only hold good so long as the latter are comfortably lodged in cantonments or barracks. There is no evidence to show that the climate or soil on the bald steppes of the Crimea had the least effect in producing any form of bowel complaint, although the accumulation of filth and the effluvia arising from decay of organic matters were, doubtless, injurious to the general health, and so predisposed the weak and the anæmic to be attacked by various forms of disease. Affections of the liver and jaundice were more numerous in the Black than in the Baltic Sea, by as much as 9·3 exceeds 3·4, but the mortality for both was nearly identical. Defective or erroneous diet, in connexion, possibly, with peculiar states of the weather, would appear to be the inducing causes of these liver complaints. The proportional number of catarrhal attacks was greater in the Baltic fleet by as much as 277 exceeds 215. Cholera was far more rife in the Black than in the Baltic Sea; for there, in one ship alone, the mortality exceeded by about one-half the total mortality in the whole force of the Baltic fleet for two years. The mortality from pulmonary complaints and diseases of the air-passages was nearly the same in both seas, but the proportion was greater in the Baltic. Fevers were more common in the Black Sea, and also more fatal; in the two years there were 1,720 cases of continued and remitting fever, and 1,722 of the intermittent or agueish type. The mortality from cerebral diseases in the Baltic fleet was the same as in civil life; but in the Black Sea it was greater, probably owing to the indulgence of the seamen in bad spirits. (*Times*, August 20th.)

Report of the Lunacy Commissioners. A blue-book of 135 pages just issued from the warehouse of the Parliamentary printers contains the eleventh report of the Commissioners in Lunacy to the Lord High Chancellor of England. A large portion of the report is occupied with local details of no interest to the general public, but a few interesting points are presented to notice which may be briefly adverted to. The question of lunatic paupers has much occupied the attention of the Commissioners, and, although they are compelled to speak with strong regret and disapproval of the continued and obstinate avoidance by a large number of cities and boroughs of the provisions of the legislature in relation to it, and of duties in some cases imperfectly discharged by the county authorities also, it is satisfactory to discern, on the whole, a progress in the counties during the past year more considerable than for several years preceding. New buildings are in more active preparation, as well as additions to existing institutions. The Commissioners at the same time have always strongly objected to asylums exceeding a certain size, as they forfeit the advantage, which nothing can replace, of individual and responsible supervision, and the consequence is an accumulation of chronic cases in the larger asylums. Thus the proposition for the enlargement of Colney Hatch and Hanwell Lunatic Asylums was objected to by the Commissioners, but in vain; the committees, after a conference with the Commissioners, remained firm, and the latter reluctantly gave way. They still insist, however, on the necessity of more carefully classifying patients, separating recent and acute from chronic cases, and placing the latter in a less expensively-built asylum. The great increase of lunatic wards in workhouses is next adverted to, with the causes of such increase. In any case, it is obvious that the state of workhouses, as receptacles for the insane, is becoming daily a subject of greater importance. But lunatic wards generally are pronounced to be objectionable, as deteriorating the more harmless and imbecile cases, and rendering those that might have yielded to early care chronic and permanent. The irregular practice of sending lunatic paupers to workhouses in the first instance instead of to regular asylums is denounced by the Commissioners, as directly contravening the law applicable to insane paupers. An appeal has been made to the Poor-Law Board against lunatic wards, and in one case it is the intention of the Commissioners to appeal to the Secretary of State to require the local authorities (of Norwich) to provide for their lunatic poor according to the requirements of the statute. The consequences of the neglect of boroughs to provide for their insane poor has been often shown, and great exertions have been made to obviate the evil. The prosecution of Mr. Snape, the surgeon, for the manslaughter of the pauper lunatic Dolley, at the Surrey Asylum, and the details of the case, occupy a large space in the report, but, as the subject is now out of date, we forbear from dwelling upon it. Certain regulations for the use of the bath will be issued by the Commissioners for the guidance of medical officers, including one which abolishes the use of the bath as a mode of punishment. The grave structural defects of the criminal wards of Bethlehem Hospital are once more censured, but the resolution of the Government to provide a new State asylum, to accommodate six hundred criminal lunatics, will happily obviate the evil consequent on the neglect of the authorities of Bethlehem. The want of proper asylums for lunatic soldiers is pointed out, and attention is once more specially directed to the subject. It is sad to think that the vilest abuses still prevail, here and there, in the treatment of single patients, and still more so to be assured (by the Commissioners) that the provisions of the law are extensively evaded. The fact that one insane gentleman, near Exeter, was actually under the judicious care of a market gardener until his removal to an asylum was insisted on, may give some idea of the existing state of things; and as it was, notwithstanding the interference of the Commissioners, the cultivator of cabbages retained his office of mad doctor for a considerable time; at all events, "much delay took place." The great value of open air exercise and employment as a curative means is now fully established by experience. The statistical returns appended to the report show that on the 1st of January, 1857, there were 21,344 lunatics in durance (10,084

males and 11,260 females). Of these, 4,687 were in private asylums and 16,657 in pauper asylums, 276 were found lunatic by inquisition, and 581 were criminals. The proportion of lunatics and idiots to the population has risen from 1 in 847 (in 1852) to 1 in 701 in 1857. Such is the substance of the eleventh report. (*Times.*)

Assumed Childbirth. Mrs. Cunningham is determined not to be outdone by Madeline Smith. Dr. Burdell having been safely put in his grave, and herself acquitted, she turned her attention towards securing his property by establishing a marriage. The friends resisted, upon the ground that the alleged marriage never took place—the man representing the doctor being some unknown person. While this was going on, she gave out that she was with child; and from week to week and month to month exhibited the ordinary appearances of gestation. Last week was the time selected for the birth. To give an appearance of reality to her sufferings, the resolute woman ate cucumbers until she brought on a colic, and was in due time delivered of a fresh-born infant that had been brought from the lying-in-hospital for the purpose—so says the Government case, established by strong proof; for one of her physicians had played traitor, and the Government were aware of every step in the game. (*New York Paper.*)

Accidental Poisoning of a Lady. An occurrence of a very painful character has taken place in Somersetshire, by the accidental poisoning of Mrs. B. Escott, a lady of large fortune. Mrs. Escott was the widow of B. Escott, Esq., a gentleman of ancient family, who, during his life-time, was very popular, on account of the leading part he took in political and other public matters connected with the county; and Mrs. Escott herself was greatly respected by all the residents of her neighbourhood. She had latterly been confined to her bed-room by a severe attack of low fever, for which she was under the professional care of Mr. Henry, a surgeon of considerable repute, residing at the neighbouring town of Stogumber. In the course of her illness, Mrs. Escott had been in the habit of taking occasional doses of acetate of morphia; and a preparation of that powerful drug was unfortunately kept on the mantel-shelf of her bed-room, where also was placed another phial containing some medicine of a different description, which Mr. Henry had prescribed for her. The doses were usually administered to Mrs. Escott by her lady's maid, who was in constant attendance on her; but that from which her death so unhappily resulted, was administered by her own hand. The lady's maid had occasion to leave the room for a few minutes, and on her return, her mistress called to her, and said, "Oh, I have taken the wrong medicine." The servant immediately called to Mr. Henry, who happened to be in the house conversing with Miss Escott, who immediately proceeded to the bedside of the unhappy lady. He found her with the phial labelled "Solution of acetate of morphia." He asked her what she had taken? and she replied, "I am afraid that I am poisoned. For God's sake do save me." He administered emetics, and tried to use the stomach-pump, but the spasms in her throat prevented his doing so. She died at about six o'clock.

Escape of a Criminal Lunatic from Bedlam. No little sensation has been created among the officials of Bethlehem Hospital in consequence of the escape of a criminal lunatic, under circumstances that approximate the daring exploits of the renowned Jack Sheppard. From the particulars obtained it appears that a man named Joseph King had been liberated on a ticket-of-leave, he having been convicted for felony. Since that he had been again apprehended for felony, tried at Exeter assizes in December 1856, and sentenced to fifteen years' transportation. After being incarcerated in Millbank prison some time, he was pronounced to be insane, and was in consequence removed to Bethlehem Hospital. On Friday, upon going to the man's dormitory, the keeper was astonished at finding that the prisoner had escaped, and a large hole made in the wall, which it was quite clear had been made by the prisoner, through which he had got out. A sheet and a blanket had been tied together, and by those means he succeeded in sliding down into the street, a distance considerably over twenty feet, and then got clear off. The authorities are of opinion that it must have taken the man nearly a week to bore the hole in the wall, and how he had succeeded in accomplishing his object without observation appears a perfect miracle. The police have been actively engaged in looking after the lunatic, but he has not yet been apprehended.

Attempted Poisoning in Chester by a Servant. Fanny Stanley (15), was charged with having, on the 26th of April last, attempted to administer poison to her master's two children. She had been told to bring some bread and butter for the children who were in bed. After some time she carried it upstairs; but Mr. Dunn, the father, saw some blue powder on the butter. He went down stairs and found that the prisoner had spread some vermin poison on the butter. A chemist analysed the bread and butter, and found that the poison was strychnia; and two rabbits, to which the butter was given, died with the usual tetanic symptoms. The jury convicted the prisoner, and she was sentenced to be imprisoned for six weeks, and afterwards sent to a reformatory for four years.

Assassination of the African Travellers Vogel and Maguire. The official confirmation of the murder of Dr. Vogel, at Wara, the capital of Wadai, has just been received. He was beheaded by order of the Sultan. Corporal Maguire, R.E., was murdered by a party of Tuaricks some six marches to the north of Kuka. Apprehending danger, he had traced a few lines in pencil to our Vice-Consul at Murzuk, requesting him, in the event of his death, to discharge a small sum due to his people. The gallant fellow made a desperate defence, and despatched several of his murderers before he fell. The melancholy events tend strongly to confirm the opinion that no profitable commerce can be opened with Central Africa over the Desert from Tunis or Tripoli. The true way must be by means of its great rivers—the Nile, the Niger, and the Zambese.

The Heat in Belgium. Mr. T. Forster, of Brussels, writes:—"I have registered the weather, and find that the average heat of this summer has already no parallel, and indeed exceeds every other by at least seven degrees."

Begging Letter Impostor. The profession is cautioned against the visits of a notorious begging letter impostor, who for the last three years has subsisted almost entirely on the kindness of medical men; his name is John Spillan, a son of the late Dr. Spillan, and has just been released from a month's imprisonment and hard labour, to which he was sentenced by Mr. Henry, of Bow Street: he had on a former occasion appeared before the Marlborough Street magistrate, and was dismissed with a severe reprimand.

Foreign Degrees. At the assizes just concluded at Oxford, William Stuart Farquharson, aged 43, was sentenced to be kept in penal servitude for a term of twelve years, for forgery on the Banbury bank. The prisoner had assumed the character of a clergyman at the village of Chacomb, near Banbury, and his whole career had been marked by a long series of forgeries of legal documents, certificates of character, and, for some time, of diplomas of German universities, some of which we have seen, and at the time suspected them to be forgeries, and now in the possession of men standing high in the profession. The prisoner called himself a D.C.L., and, exhibiting his diploma, obtained large sums of money under the pretence of procuring others for his clients. He was the author of a work entitled *The Pleasures of Home.*

Royal College of Surgeons. It may save our readers some little trouble by informing them, that the Library and Museum of the College will be closed during the month of September for the necessary dusting, etc.

St. George's Hospital and the Beauchamp Legacy. A case has just been decided in the House of Lords, by which the trustees of St. George's Hospital lose a legacy of £60,000. It seems that the late Earl Beauchamp bequeathed that sum for the foundation of almshouses at a place called Newland, a small hamlet with a population of two or three hundred persons; but he provided no site for the erection, and left the money only on condition that some one would furnish a site within twelve months of his decease, which a benevolent gentleman accordingly did. From the nature of the bequest, however, some legal difficulties arose, and it was determined by the Master of the Rolls and the Lords Justices that the appropriation of the money to the building of almshouses was illegal, and judgment was given to pay it over to the trustees of St. George's Hospital, a provision in the will having been made to that effect. The case was then carried to the House of Lords, where the judgment of the other court was reversed, and the money was made to revert to its original destination. *(Medical Times and Gazette.)*

TO CORRESPONDENTS.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Communications have been received from:—Dr. T. Hayes Jackson; Mr George S. Connolly; Dr. George Lindsay Bonnar; Mr. Augustin Prichard; Mr. T. Holmes; Dr. R. U. West; Mr. Nathaniel Coats; Mr. Edward Daniell; Mr. Thomas Hunt; Mr. George Pollock; Mr. Henry Bevan; Mr. Richard Griffin; Dr. J. Hitchman; Mr. William Nicholson Price; Dr. R. G. Mayne; Mr. Stone; Mr. William Brigham; Dr. J. M. Coley; Mr. Smith; Mr. Marshall Hall Higginbottom; and Mr. Henry Thompson.

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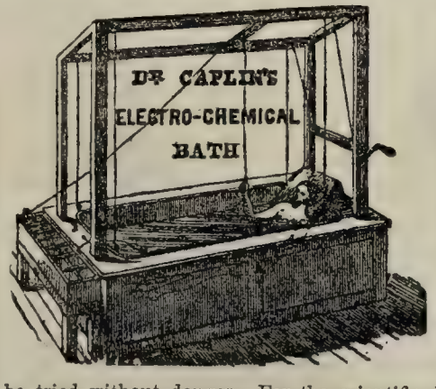
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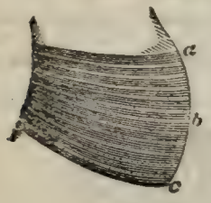
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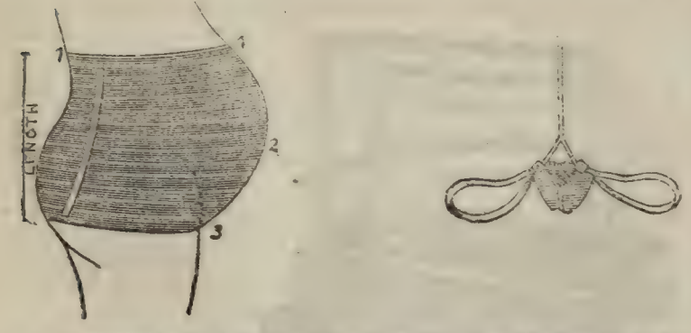
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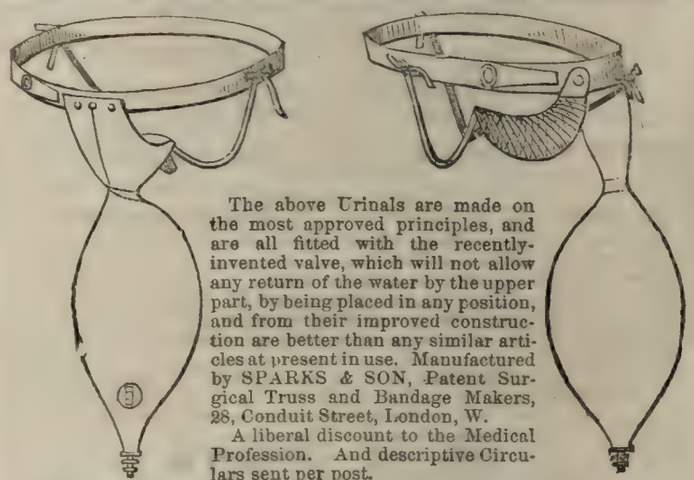
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BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXXVI.] LONDON: SATURDAY, SEPTEMBER 5, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

I. TETANUS TREATED BY PURGATIVES AND BLOOD-LETTING.

Under the care of J. PAGET, Esq.

[*From Notes by* T. HEWLETT, Esq., *Dresser.*]

SAMUEL M., aged 41, a labouring man, of robust appearance, was admitted August 10th, under the care of Mr. Paget. He had presented himself as an out-patient at the hospital surgery on Sunday night, August 2nd, having severely bruised his thumb in a fight. He was attended by one of the dressers. Lot. plumbi was applied, and no more was seen of him till August 10th, when he applied for admission, being unable to open his mouth or protrude his tongue. He complained also of stiffness about the jaws, and inability to swallow; and of severe pain down the spinal column, aggravated by occasional spasms. These symptoms had been coming on since August 6th. There was no mark of recent injury about the thumb, but there was evidence of an old dislocation. He was ordered to be freely purged with pills, of calomel and croton oil, to be taken every two hours, until a full action on the bowels had been obtained. Next day he expressed himself as feeling better. The bowels had acted four or five times. There was about the same amount of rigidity about the jaws, but he had had no real spasms since his admission.

August 12th. Not so well; has had a severe fit of shivering this morning, after which the whole body became perfectly rigid, and he was unable to move for about five minutes. He complains to-day of stiffness all about the neck, and cannot open the jaw or protrude the tongue so well as yesterday. The abdomen is very hard and tense, and he has some twitchings in the lower limbs. He can swallow fluids, but no solids. Pulse 80, natural; bowels open four times. To take a compound senna draught every four hours.

August 13th. Another severe fit of shivering, followed by spasms so severe that it was necessary to hold him in bed, occurred last night, and a less severe seizure of a similar kind this morning. The abdomen is still hard and tense, and he complains of much pain in it. Bowels open four times. No alteration in the state of the jaw.

℞ Sp. terebinth. ʒij, ol. ricini ʒss, nocte et mane; morphiæ hydrochlor gr. j horâ somni.

August 14th. Somewhat improved; has slept well, and can protrude the tongue rather better; it is clean and moist. He has had no more spasms. Bowels not open.

℞ Ol. croton. tiglii ♏j; panis q. s. ut ft. pil. xij. Capiat j omni horâ.

August 15th. The bowels continue costive. He is much worse; the countenance anxious; the pain in the abdomen more severe; he has occasional pains in the limbs; and the spasms have been so severe as to move his whole body. The muscles of the neck are stiff; the jaw more firmly fixed; skin perspiring; pulse 116, small.

P. in pil. crotonis.

℞ Pulv. guiaci ℈ij; conf. sennæ ℈ij; dec. aloes co. ʒij.

August 16th. He has had continual and violent spasmodic attacks, and complains of much pain. The bowels have been open once.

August 17th. Much the same as yesterday.

P. in pil. crotonis. Haust. terebinth. cum ol. ricini. Rep. morphia hora somni. Sumat hydrarg. chlorid. gr. x, pulv. opii gr. j, h. nocte.

August 18th. The bowels have been freely moved last evening. He is better; has had only one slight spasm to-day. The countenance is less anxious, and the muscles of the neck less rigid. The abdomen also is less tense; but the whole body is still stiff, and he is unable to move. He does not sleep much. Pulse 100, soft and full. A purgative was ordered every hour.

August 19th. Between 8 and 9 o'clock yesterday evening, the spasms came on with great violence. Thirty drops of opium were given; but, as this produced only temporary relief, forty drops more were given in half an hour. This produced quiet sleep till 12. It should be noticed that, before the laudanum was given, chloroform had been administered. This produced perfect relaxation of all the muscles, and quietude, while he was under its influence; but he returned to his former condition as soon as it was withdrawn. To-day the countenance is more anxious; the breathing hurried; pulse 100, full and hard; pupils contracted. He says that he feels himself dying. In the afternoon, twenty ounces of blood were drawn, which exhibited a thick buffy coat. This gave him some relief; the abdomen became less tense, and he could breathe more easily. The pulse rose to 130 after the bleeding, and was somewhat less full and bounding. In the course of half an hour, however, it had resumed its former condition.

August 20th. He seemed rather better, breathing more freely, having had no spasm, and feeling less pain. The pulse was 100, full; the bowels not open. Ordered ten grains of calomel. In the afternoon, he was again bled to twenty ounces, and ordered pulv. jalapæ ʒ ss, conf. sennæ ℈ij, decoct. aloes ʒij.

August 21st. Feels weak and low; countenance anxious; breathing hurried and laborious; abdomen and neck less rigid. Has had one violent spasm; pulse 120, full. Bowels not open for two days.

August 22nd. Next day, after the bowels had acted twice, he was much better, and could move his legs. The abdomen was soft; there was no rigidity about the neck; and he was able to protrude his tongue.

On the 24th, he felt very faint, but had no pain; the abdomen was soft; there was no rigidity of the muscles of the neck. He had had no spasms, and could protrude his tongue a little beyond the lips. It was furred and dry. The breathing was hurried and laborious; pulse 120, full and soft; bowels open. He was ordered to leave off all medicine, and take eight ounces of wine daily. In the afternoon, however (at 4.30), he was seized with a strong spasmodic attack and great difficulty of breathing. He made an attempt to get out of bed to get air, was then laid on his back, and gradually sank, and died in half an hour. The whole body, just after death, except the arms, was intensely stiff.

Post mortem examination, twenty-four hours after death, showed the body still rigid; blood was effused in the recti muscles of the abdomen, and the muscular tissue was lacerated. The right lung was adherent from old pleurisy. The heart was enlarged, in other respects healthy. The liver was large and fatty. The kidneys were healthy in structure; there was a good deal of blood extravasated in the cellular tissue around the left kidney. The spinal cord was examined throughout, and showed no trace of disease.

REMARKS. This case was one of much interest in many points of view. In the first place, its exciting cause was a most unusual one: a contusion in which no material damage seems to have been done to the deep parts, and no nervous or fibrous tissue injured. So trivial, indeed, was the injury, that, but for his previous application at the surgery, it might never have been thought of by the surgeons, and might very easily have passed out of the man's own mind. This fact may give us a hint that idiopathic tetanus is really even a rarer disease than we are accustomed to believe. Then as to the progress of the

case. It is very rare to see a patient survive an attack of well pronounced acute tetanus so long as nineteen days, and the majority of such cases are believed to recover. In the instance of this poor fellow, the treatment appeared to exert a most beneficial influence, and for a long time held the symptoms in check. The relief afforded occasionally by free purgation, and latterly by a full bleeding, was very marked; and in such a case as the present, where the patient is strong, the pulse presenting the inflammatory character, the pain severe, and the bowels obstinately costive, the anti-phlogistic and purgative practice is the only one that can be said to be rationally indicated. In the case of Mr. Paget's patient, there seems no doubt that it put off the fatal termination of the disease for some days at any rate. It may be a question whether this plan might not advantageously be combined with the stimulant system, so urgently recommended by Dr. Wilson in his work on Spasm, Languor, and Palsy; but such discouraging results have hitherto attended all methods of treatment, that, it is plain, we must wait for some satisfactory method of combating the disease till our improved pathology shall teach us more of its nature. An interesting fact in the *post mortem* appearance, is the rupture of the rectus muscle. Another example of this will be found, with some remarks by Mr. H. Gray in the sixth volume of the "Pathological Transactions," p. 381.

II. BICARBONATE OF POTASH IN HÆMATURIA.

Under the care of J. Paget, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

We append short notes of a plan of treatment which has been found very successful in this hospital. This plan of exhibiting the bicarbonate of potash in hæmorrhage from the bladder originated at St. Bartholomew's, we believe, in an accident. In the case before us it was peculiarly beneficial; the bladder quite recovered its tone, and there was no longer any necessity for passing the catheter, which had been done twice daily for some time.

William B., aged 66, a man of sallow complexion, rather thin, and not of a very strong constitution, came under Mr. Paget's care on the 31st of July, complaining of a severe pain about the perinæum, with inability to pass water. He states that about seven years ago he had a severe fall whilst playing at cricket, the bat striking him between his legs; the pain at the time was very intense, and he was obliged to walk home, being unable to bear the jolting of a carriage. A catheter was passed, and bloody urine was evacuated. He was laid up for fifteen days, and at the end of that time was able to go about. Until about three years ago his health continued very good; he then had another fall, severer than the former, followed immediately by retention. On his arrival home, to use his own expression, he was ready to burst with pain. A catheter was introduced, and, as on the previous occasion, blood flowed with the urine. The same treatment was adopted on this as on the former occasion, and he gradually got better; the retention, however, recurred every now and then, the urine being at times mixed with blood. In October last he was under Mr. Stanley's care, and the catheter was only once passed; he was able to make water, but the act was a very painful one to him, the neck of the bladder, he said, felt hot and irritant. He remained at the time three weeks in hospital, and left "comfortable." Since then the pain has come on at times, and then disappeared, leaving him always in a miserable state. Some time since he consulted an eminent surgeon, who sounded him for stone, but could detect no symptoms, the urine at that time being very much impregnated with blood, large clots passing with his water at every act of micturition. His health, since the last accident, had never been good; he grew weaker, and felt the pain more acutely. On examination, Mr. Paget found the prostate much enlarged. The catheter was passed twice daily, and each time blood came away with his water. He was ordered six leeches to the perinæum, a hip bath every night, and put under a course of nitrate of potash, bicarbonate of potash, and sulphate of magnesia. This was continued for several days without any apparent benefit; he then took the acids, with decoction of buchu, without producing any better effect, his urine being still very bloody. Bicarbonate of potash in ʒij and ʒss doses was then tried, and an immediate improvement took place; the urine was more of a natural colour, the patient felt better, and the weakness consequent on hæmorrhage disappeared. He was kept under observation for a few days, and the treatment persevered in. He had no recurrence of the hæmaturia.

ST. GEORGE'S HOSPITAL.

I. PHTHISIS: STRUMOUS DISEASE OF THE SUPRARENAL BODIES.

Under the care of W. E. Page, M.D.

[*From the Hospital Case-book.*]

James M., aged 43, was admitted under Dr. Page's care on August 5th. He had been a clerk, and had been able to follow his occupation till a very short time before admission. He had, however, had disease of the sternum for many years. Last Christmas, he began to complain of pain at the extremity of the penis and difficulty in making water. He put himself under homœopathic treatment, and the symptoms subsided in four months. Eight weeks before admission, he began to complain of lancinating pain in the loins, sometimes on one side, sometimes on the other, with retraction of the testicle of the side affected. On admission, he complained of pain and tenderness in the region of the kidneys, and pain along the course of both ureters. He fancied that the urine was too copious, but on examination, it appeared to be natural in this and every other respect. He had no cough or expectoration. He was low and depressed, with a feeble pulse, and could not sleep. There were no other symptoms. He was ordered to take a grain of opium every night, and a generous diet was allowed. No particular change was observed in him until the evening of the 9th, when the nurse noticed that he was rather purple in the face and short of breath. Without any complaint of pain or distress, he quietly sank, and died at 4.30 next morning.

On *post mortem* examination, the body was found not emaciated. The skin generally was of a dark tint. This was especially the case on the face, hands and legs. The colour was a brownish yellow, more resembling bronze on the parts exposed to the light. In the apex of each lung was a small empty vomica, and a copious deposit of miliary tubercle existed in the lower part of both lungs. The suprarenal bodies were much enlarged, weighing together nearly one ounce and a half; the left was about twice the size of the right. Their natural structure was quite obliterated, and replaced by a white firm parenchyma, in which was a copious deposit of crude tubercle, which had softened, and was in a state of suppuration in some parts. The kidneys, bladder, and ureters, were healthy. The heart was healthy; its right side filled with a very large decolorised clot. All the other viscera were examined, and found healthy. The sternum was perforated by old disease, and the cellular tissue in the anterior mediastinum much thickened, but there was no trace of recent acute inflammation.

Remarks. The above case, though not a very well marked example, seems yet worthy of record, as in all probability one of those instances of fatal cachexia from disease of the suprarenal capsules, which were first brought under the notice of the profession by Dr. Addison. The *post mortem* appearances are indeed complicated by the presence of extensive disease of the lungs, but there was no reason to suppose that this disease was the cause of the rapidly fatal issue of the case, as the symptoms were strikingly unlike those of acute phthisis, and both the history and *post mortem* appearances seem to prove that the pulmonary disease was perfectly quiescent. As to the bronzing of the skin, there was certainly a dark unwholesome hue about it, which was sufficiently prominent to attract Dr. Page's notice and to call for his remark during life; but the colour was not very characteristic, and was almost confined to the face and hands, just where the skin had been exposed to the sunlight. It will be observed that the disease of the glands was complete, there being no trace of healthy structure left. This is a most important point in the examination of cases of capsular disease. Very few cases have as yet been put on record where it has been clearly proved that the skin has retained its healthy hue over the whole body, notwithstanding the pervasion of the whole of both suprarenal bodies by disease. We believe that one such case was lately offered to the notice of the Pathological Society by Mr. Hutchinson; but at any rate, in the great majority of the cases hitherto alleged as instances of disease of the suprarenal bodies without bronzing of the skin, it has turned out either that the disease was partial, or that although no bronzing was known to have existed, the point had not been quite satisfactorily investigated. A more important point, however, than the change of the complexion, is the fatal cachexia induced by this disease; and in this point of view, this case presents a tolerably accurate parallel to those originally produced by Dr. Addison.

II. BELLADONNA IN INCONTINENCE OF URINE.

Under the care of G. D. Pollock, Esq.

Elizabeth S., aged 4 years 9 months, was admitted under the care of Mr. Pollock in November 1856, on account of incontinence of urine. It appeared that she had never been able to retain water since the time of her birth. The urine continually dribbled over her clothes, both by night and day, and she was besides teased with constant desire to pass it. On examination, nothing unnatural was discovered in the urine, except that it was extremely limpid. It was slightly acid, and free from albumen or any other morbid product.

She was ordered purgative medicine (Pulv. scammon cum cal. gr. iv. alt. noct.), and saline medicine, with bicarbonate of potash. This treatment was continued during the month of December without benefit. On December 30th steel was tried (tinct. ferri. sesquichlor. ♏vi. ter die), with blister on the loins; but after a full trial of this treatment for six weeks, it was given up, as no good was effected. On February 10th she was ordered extract of belladonna one-twenty-fourth of a grain twice a-day; and this was increased on March 3rd to one-sixteenth of a grain three times a-day. She now began to improve slightly, so as to pass a few hours during the day without making water. On March 17th the quantity of the belladonna was increased to one-twelfth of a grain three times a-day. She persevered in this treatment to May 26th, by which time she had so far improved as to pass three or four nights consecutively without passing water. The belladonna treatment was now combined with steel, and she has ever since been steadily improving, and is now quite well, with the precaution of waking her late at night to make water, and then giving her a dose of the medicine. Still, however, if she suspends the belladonna the irritability of the bladder again shows itself.

Remarks. The above case furnishes an addition to the series of the same kind which we have already published. It is even more successful than any of the others, inasmuch as the disease was congenital, and had reached a greater height than in any of the patients whose cases have been previously reported. It will be observed that still, if the administration of the drug is suspended, the symptoms show a tendency to recur. This, while it is one of the strongest proofs of the direct operation of the medicine upon the disease, does not necessarily furnish any practical objection to the use of the remedy, as the child has already taken the belladonna for a very long while without any unpleasant symptoms; and there is little doubt that, if the irritability of the bladder can be checked for some time, that viscus will ultimately recover permanently its natural power of retaining water.

We may mention that we understand that Mr. Pollock has found belladonna, administered in the same way, equally efficient in spermatorrhœa. As, however, this was not a Hospital patient, we are not in possession of the details.

UNIVERSITY COLLEGE HOSPITAL.

LITHOTOMY.

Under the care of J. E. Erichsen, Esq.

[*From Notes by* W. F. Teevan, Esq., *House-Surgeon.*]

The following case is remarkable, on account of the length of time during which the symptoms had persisted, the large sized mulberry calculus found in the bladder, the severe sufferings it had caused, and yet the perfect immunity of the general health, as indicated by the child's rapid recovery. We give the case as reported by Mr. Teevan.

J. M., aged 7, was admitted August 3rd, 1857. Although he has always lived well, yet he is very thin—his face being pale and anxious. When he was only a year old his mother noticed that the stream of water often stopped suddenly, and that it again flowed when the boy altered his position. For the three ensuing years the above symptoms remained much the same, at the end of which time, however, it became greatly increased in severity; the boy was unable to walk or run, without suffering intense agony. Small quantities of blood were now noticed to pass from time to time. For the three following years he remained subject to the above symptoms; they were, however, intermittent. In June last the mother took her son to a surgeon, who told her he thought that he had stone, and advised her to bring him to this Hospital to be sounded, and operated on, if necessary. As soon as he was admitted he was placed under chloroform, and sounded by Mr. Erichsen, who immediately detected a hard calculus. The click was perfectly audible to those around. He was then put to bed and kept quiet—crying loudly, however, nearly all day, and moaning in the intervals. The urine was found to contain a considerable quantity of blood.

On Wednesday, August 5th, he was placed under the influence of chloroform. Mr. Erichsen then cut him in the ordinary way, and extracted a single calculus. The stone was an inch long, oval, and weighed four drachms and two grains. It was composed of oxalate of lime. As the parts were very vascular, there was a good deal of bleeding during the operation; it speedily, however, subsided. When seen half an hour after the operation he was found tossing his limbs about, and bellowing loudly, so much so, that it was necessary to tie him down, and give small but repeated doses of liquor opii until he became quiet.

August 6th. He slept well all night. Is now calm and quiet; tongue clean and moist; skin ditto; pulse natural; tube taken out at 8 p.m.

August 10th. To-day, for the first time, urine came through the urethra; for the few following days it passed equally through the wound and urethra till August 15th, when it passed wholly through the latter, and continued to do so, with the exception of one day, up to the present time (August 25th). Since the operation, the boy has not had a single bad symptom. has never cried, nor suffered any pain. Is now up and about. Has a good appetite, and the wound is nearly healed.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

REPORT OF OPERATIONS PERFORMED FROM JULY 25TH TO AUGUST 25TH, 1857.

Communicated by C. Bader, M.D., Curator, and Registrar to the Hospital.

I. Lachrymal Sac. In two cases of purulent discharge from the lachrymal sac, treated by the actual cautery, no diseased bone could be detected. In one of them (a child) the incision was commenced from a fistulous opening in the skin, and enlarged upwards.

The ticket of a former case treated in this manner has been returned. The patient (a boy) has signs of scrofulous disease about him. The disease of the sac had been of three years standing; the contents of the sac escaped at differents periods by an abscess opening through the skin. There was, at the time of cauterisation (June 30th), regurgitation of purulent matter from the upper, and obstruction of the lower lachrymal punctum. On the 4th of August the wound was completely healed; and, according to the patient's own account, the tears do not overflow unless he is out in the dust.

II. Eyelids. Two cases of nævus of the upper lid in children. In order to secure the whole of the nævus, in one case a needle was first passed below it, then at right angles a double thread carried below it again, and each half separately tied beneath the needle first introduced, which was then withdrawn.

Removal of the palpebral edge of both upper lids, as far as regards the eyelashes. They were thought, by their unevenness, to keep up an irritation of the cornea.

For entropium of both lower lids, removal of an oval piece of skin, with the corresponding portion of the orbicularis.

Entropium of the right upper lid (case of Mr. Streatfeild). By a preliminary operation, the palpebral aperture had been enlarged at the outer canthus, so as to give a free movement to the lids. This having succeeded, an incision was then made about one line from and along the whole palpebral edge; then a triangular piece, comprising the whole thickness of the fibro-cartilage was removed; this piece had its base (about one line broad) at the skin and its apex near the conjunctiva. The skin incision was united by six fine sutures. The case, when last seen, was much improved.

One case of enlargement of both palpebral apertures, preparatory to the above mentioned operation for entropium, with the view of saving the eyelashes.

Fifteen operations for internal strabismus. The tendons were divided subconjunctivally. It may be remarked, that if more than the tendon is divided the eye will nevertheless not become everted, so long as the conjunctiva is spared.

III. Cornea. Removal of part of what is called staphyloma corneæ. In this case it consisted of lymph, which was effused, organised, and extended on the prolapsed iris; its most prominent part was excised with the canula scissors.

One case of conical cornea mentioned in the last report underwent the second operation; the object of the former

operation, to retain part of the pupillary margin in the corneal wound, has succeeded. Mr. Bowman adopted the same proceeding on the opposite pupillary edge, by which a pupil is formed, whose lower edge extends in a straight line from one corneal adhesion to the other, the remainder slightly arching upwards.

In another case of conical cornea (in a young woman), extraction of the lens has been tried. Mr. Critchett saw a decided improvement result from the use of biconcave glasses in a similar case, where extraction had been performed, which induced him to make this experiment. The slight opacity at the apex of the staphyloma did not disappear after extraction was completed. The intimate connexion of a healthy lens with its capsule made its extraction in this case more tedious than in most cataractous lenses where superficial softening facilitates their escape.

Case of a sailor (patient of Mr. Poland) where a deep yellow substance filled the anterior chamber, hiding the iris, the eye otherwise appearing normal. This followed a blow fifteen years ago. The yellow substance was supposed to be fluid. On opening the anterior chamber with the broad needle, a very little fluid escaped, which consisted of decomposed blood; the yellow covering of the iris could not be removed.

iv. Iris. One case of dense opacity of the cornea at its upper portion, with complete adhesion of the iris to it; in this case the portion of iris close to the outer and lower edge of the opacity was drawn out and snipped off.

In a similar case, the piece of iris drawn out was left in the corneal wound.

Excision of about one-fourth of the iris at its outer part in a case of glaucoma, after the manner attributed to Graefe.

One case where a foreign body, which had pierced cornea and iris at their lower part, could be seen lodged in the iris, and projecting into the anterior chamber. A small corneal incision was made; and the moment the canula forceps tried to seize it, it disappeared behind the iris, where it remains at present.

One case of (so-called) adhesions of the iris to the capsule of the lens. According to some pathological dissections, there are cases where the pupil is blocked up by pigment in its area, which is deposited on a membrane, the organised product of inflammation, which is attached to the posterior surface of the iris and its pupillary edge, and stretches across the area of the pupil. In the dissected eyes it appeared to press on the lens of the capsule, but was not adherent to it.

In the present case a very small portion of the pupil at its upper and outer part was not blocked up, as was seen after dilatation with atropine. Opening the cornea with a broad needle, a spatula was introduced through this remainder of the pupil and behind the deposit, which, without injuring the lens, was lifted away from its anterior surface. The patient is still under treatment. Further particulars will be given.

v. Crystalline Lens. Nine extractions for cataractous lenses by an upper corneal section; in one case, some vitreous humour escaped with the lens.

One case of extraction, in which the pupil was entirely closed by exudation, the patient had suffered much pain, and the conjunctiva was inflamed. The corneal section had, on account of the patient's struggling, to be completed under chloroform. After breaking through the pupillary occlusion with the curette, clear lenticular matter was scooped out.

Three cases of cataract, treated with the needle, exposing the lens to solution.

Four cases of congenital cataract. Two lenses were broken up with one, and two with two needles.

Five cases of linear extraction of the lens. In one of the cases, Mr. Dixon operated on both eyes at the same time: the lenses were thoroughly broken up, then the corneal wound enlarged with the broad needle. Part of the lenticular matter was carried away by the escaping aqueous humour, and part had to be scooped out.

It is of importance not to wound the posterior capsule, which, if wounded, allows the vitreous humour to advance into the pupil, and to press the fragments of lens against the ciliary processes, setting up irritation of the eye.

In one case of hydrophthalmus of both eyes, extraction was tried, with the view of admitting more light to the eye. During the escape of the lenticular matter and the aqueous humour, their place was occupied by blood; none of the tissues but cornea and lens had been touched; the bleeding is attributed to the loss of pressure from within the globe.

Nine operations for removing a false membrane from the area of the pupil, which in some cases was done with one, in some with two needles. The sooner these membranes are removed, the more easily they are torn through; if the shreds of these membranes hang into the area of the pupil, they, having one attachment, shrink.

Three cases where, after needle operation, part of the lens remaining had assumed a membranous, well defined appearance. In these cases, a corneal section was made, the membranous remainder of the lens seized with the canula forceps, and drawn out. The escape of the aqueous humour, and a contraction of the pupil, made it necessary in one case to postpone part of the operation. It is interesting, in this case, that the atropine, having been applied an hour and a half before the operation, the widely dilated pupil closely and suddenly contracted the moment the aqueous escaped.

vi. Excision of the Eyeball. The operation has been performed in the usual way in nine cases. This and some future reports will contain a short account of each case; because, as it is impossible at present to draw limits for the indication of the operation, it is therefore desirable to specify those cases in which excision has been performed.

Disease and Immediate Result.

Case i. H. H., aged 19; perforating wound of cornea, iris, and lens; loss of vision. The enlargement, inflammation, and pain, increasing, the sclerotic was opened at its most bulging part, and a quantity of pus escaped. The relief being only temporary, excision was performed.

Case ii. A. J., aged 55. Ten years ago, a dimness came gradually over the right eye, which, one year later, was followed by repeated attacks of inflammation, with severe pains. Within the last two years, the same dimness has attacked the left eye, with occasional pain in it.

Case iii. E. E., aged 55. Loss of vision by purulent ophthalmia, and, for three months past, repeated painful attacks of inflammation. The patient was unable to use the sound eye, on account of the state of the diseased one.

Case iv. M. A. B., aged 35. Analogous to Case 2; repeated attacks of inflammation.

Case v. J. R., aged 46. Injury to the left eye two years ago. He had to give up his work on account of the irritation set up in the right eye.

Case vi. C. P., aged 24. Ophthalmitis, with severe pain, enlarged globe, and loss of vision.

Case vii. M. J., aged 53. Sudden loss of vision in the right eye three years ago; lately it has become painful, with dimness and pain in the left eye.

Case viii. J. B., aged 30. The right eye painful, vision dull. The left eye had been inflamed six years ago; the inflammation continued for three months, and ended with partial loss of vision. Six weeks ago, inflammation commenced, with severe pain continuing.

Case ix. G. T., aged 38. As Case i.

The preparations made on the day of operation, with the history of the cases and microscopical reports of the globe excised, and sections, are preserved at the hospital, and are open to inspection.

Minor Operations performed in the Out-Patients' Consulting Room.

Twenty cases of removal of small tumours in the eyelids or their neighbourhood.

Slitting up of the lachrymal duct in fifty-one cases, either for the treatment of the disease of the lachrymal punctum or canal, or for facilitating the approach to the lachrymal sac.

Twenty-nine cases of probing the nasal canal, for the treatment of disease of the lachrymal sac or nasal canal.

Opening of abscesses, in or round the eyelids, in twelve cases.

Removal of foreign bodies from the surface of the eyelids in fifteen cases.

Three cases of purulent ophthalmia treated by scarification of the chemotic conjunctiva.

Total of major operations, 77.

Total of minor operations, 134.

NORTHERN HOSPITAL, LIVERPOOL.

EFFUSION OF BLOOD INTO THE CAVITY OF THE PLEURA.

By T. Inman, M.D., Liverpool.

The following is of great interest, as indicating the changes that take place when blood is effused into closed cavities.

M. I., aged 27, prostitute, was admitted into the Northern Hospital, Liverpool, with all the appearance of advanced

phthisis. Her complexion was pale and waxy, the lips livid, the respiration laborious, and the cough considerable. There was no expectoration; the pulse was rapid and feeble. She was extremely weak; her voice was low—a faint whisper; and the chief complaint was pain under the left mamma. Motion was too painful to allow of a full examination of the chest, and it was only ascertained that the left side was dull on percussion, and that there was no respiratory murmur there. The cough left her soon after admission, but the other symptoms remained unchanged. The pain in the side was incessant, and was aggravated by her constantly lying upon it. She was unable to lie either on the right side or on the back. Nothing gave any relief to the wearing pain. At last, an œdematous ridge was perceptible from the left armpit to the abdomen; the breathing became more difficult, the lips more livid, and the circulation more languid. She slowly but steadily sank, and died about six weeks after her admission.

Post Mortem Examination, twenty-four hours after death, July 24th. Decomposition had set in to such an extent that a very strict examination was all but impossible. It was ascertained, however, that the left pleural cavity was full of blood, and that it was making its way to the surface. The cartilages of the third, fourth, and fifth ribs, and a small portion of the bones, were partially absorbed. The intercostal muscles had disappeared at the part affected. The skin was œdematous to a corresponding extent; and at the spot so often complained of, below and behind the left mamma, the effusion was only separated from the air by the thickness of the skin. The blood was separated into bloody fibrine, which adhered everywhere to the pleuræ; and into sanguineous serum: the whole amount completely filled the cavity of the pleura, and the lung was completely carnified. A small white spot was perceptible at the apex, from which it was conjectured the blood had flowed. A few tubercles existed in the right lung; but the stench was so sickening that we could not get further particulars.

In consequence of her great feebleness during life, the only history we got was, that she had been ill a long time with cough and weakness, and that speaking was a painful effort. The time of the effusion could not be ascertained. It would seem, from the *post mortem*, that she had had phthisis originally; that a small vomica had burst into the pleura; that this had been attended with, or followed by, profuse hæmorrhage. Of course this is only a conjecture, in the absence of any history of a blow or wound. But it is of course possible that in her unhappy profession she may, while drunk, have been the subject of violence, which had produced rupture of an intercostal artery.

The case, as it stands, is interesting from the insight it gives us of the conduct followed by blood when effused into closed cavities. It is rarely, if ever, absorbed, but remains as bloody fibrine, attached to the walls, and bloody serum free. I have known an hæmatocele remain unchanged for two years; the blood was never absorbed; never apparently decomposing, becoming putrescent or organising. We find the same in the uterus when the catamenia are retained; the bloody secretion remains for years almost unchanged, the only sensible difference being that the globules shrink, and the serum is absorbed. In the case above, the blood acted as the matter of an abscess is currently reported to do—as if making its way to the surface of the body.

It is not right to draw deductions from one single case; yet I cannot abstain from asking—What is the bearing of this one upon the generally received opinion that the blood is the chiefest of all the organs of the body? If the blood is the life, surely when so large a quantity is effused, and in contact with the living body, there ought to be some attempt at organisation. The absence of this, in almost every instance where blood is effused, should teach us that the organic nutritive power resides not in the blood, but in the tissues; and, consequently, that any doctrine, built chiefly or exclusively upon presumed changes in the blood, must fail of explaining satisfactorily the phenomena even of so-called blood diseases.

Original Communications.

LABOUR, WITH PERFECT OBLITERATION OF THE OS UTERI.

By R. G. Mayne, M.D., Surgeon, Leeds.

I had drawn out the following statement many weeks ago, but was prevented from forwarding it by much occupation of another kind. Having read, however, the "Case of Labour attended with complete Occlusion of the Os Uteri," by John Hatton, Esq., of Manchester, in the Journal of August 15th, I felt stimulated to dispose of my case as being analogous to his in its most prominent feature, though happily different in its results, and in some other points.

I record the following case, not from the certainty of its being positively singular, but because I have met with nothing like it in my own practice, neither have heard nor read of an instance quite the same in that of others.

I had been engaged to attend, in her next confinement, Mrs. W., a respectable married woman, the mother of several children, and was accordingly summoned to her about 10 a.m. on 5th January last. I found her walking about her bedroom, with regularly recurring pains of considerable power. Having remained about half an hour, she suggested that I might safely see my other patients in the neighbourhood, as she felt she should be some time in requiring my assistance. I willingly embraced her considerate proposal, and was absent about three quarters of an hour.

On my return, she was still pacing the apartment, but evinced stronger indications of advancing labour; and I took the first opportunity of making an examination. My finger, introduced to the extent of two inches, encountered a large globular resistent mass, at once understood to be the head of the child. It was not the soft scalp, however, partially mobile on the yielding cranial bones and more or less supplied with hair, with which my finger came into immediate contact, but a tense, smooth, and what, though invisible, I felt to be a glistening surface. Surprised, I searched for the rim or border of the expanded *os*, supposing at first that my finger glided over the unruptured membrane; but the familiar boundary sought for was not to be found. Upon renewal of the expulsory efforts, I pursued my search, now seeking for the *os* itself, being satisfied that it had not yet expanded, though the pains were powerful, and the birth advanced to such a point as rendered that condition of it scarcely credible. Again and again I returned to the task, as opportunity was allowed, till labour had proceeded so far—further excited, no doubt, by the activity of my digitations—that the index finger could easily traverse the entire highly convex surface of the protruded womb, and into the surrounding angle of its junction with the vaginal parietes. There was no opening whatever. I do not state this under any qualification, but mean distinctly to imply that there was an obliteration of the *os uteri* so complete that, but for circumstances to be afterwards mentioned, and had it been a primaparous case occurring very early in practice, I might possibly have misjudged it to be an instance of total absence of the *os*, and come out strong in those days of lofty aim in support of the fanciful doctrine that impregnation must have taken place through convenient vessels in the walls of the *vagina*, or of an imperforate *uterus*, or in some other mysterious and very unintelligible manner.

With the advantages of many years experience, I confess to having felt for the time not only at a loss, but not a little anxious, the patient's straining having become violent, and her complaining loud. I of course knew where the *os* ought to be, and endeavoured most assiduously, from time to time, to discover, or induce by pressure with the tip of my forefinger, any lineament or trace of its former existence, but in vain. At length I did perceive a single minute elevation of membrane, such only as might have been scratched up by a small pin's point, in what I believed to be the true location. Strange to say, this gave me confidence, although I then suspected, and am since satisfied, that it was produced by the sharp pointed nail of the finger energetically employed to explore. Like others, I had before met with extremely contracted and rigid *ora*, especially in *primipara;* but this was an altogether different case; and while, in the most obstinate of the former, steady patient exercise of the ordinary simple expedients had sufficed, here there was literally no loophole, however small, to gain an entrance by: there was, at the same time, increasing risk of rupture of the anterior-inferior wall of the uterus; and delivery, I therefore decided, could only be effected by cutting through the abnormal substance which occluded, or rather, as already said, perfectly obliterated its orifice.

The circumstances were to me entirely novel; and, with some fears for the effect of such a proposition on the mind of my patient, though I knew her to be endowed with much good sense, I began by casually asking whether she had experienced any pain or uneasiness in the region of the womb after she became aware of her pregnancy, to which she readily replied, "Oh yes, a deal of pain"; and, to further questioning, stated

that this had existed for some time, about four or five months after that event, but then gradually got better; that, unlike her other occasions, she had no "show", nor any vestige of discharge whatever. I informed her of what was necessary to be done, and she at once assented.

I had no instrument with me but a lancet, and time did not allow of going or sending home for anything better, as the vertex, pressing powerfully on the highly stretched wall of the uterus, now reached the *labia pudendi* at every pain. I wound a narrow strip of rag round the handle and joint of the lancet, to render it fixed; and, taking into my service the nurse, who, fortunately, was a young intelligent married woman, I instructed her (placed at the patient's back) to insert the fore and second fingers of her right hand behind the *fourchette* or posterior angle of the vulva, and keep back the parts during next pain, so that I might *see* the actual state of the *os*, or of the adventitious substance by which it was hidden. This done, there was presented to view a quite smooth and continuous surface, the only distinctive indication discoverable being a slightly more livid hue of the new vascular formation which occupied the space of the natural aperture. I hastily pointed out this to the nurse, who, as well as she was able, marked the distinction. On recurrence of a pain, I made three or four scarifications with the lancet, all in the same line from right to left of the patient, producing an elliptical gap or separation in the new substance. I thus obtained partial admission of the point of my finger, with which I by degrees widened the opening to the extent of a shilling piece, distinctly perceiving that, in so doing, I had to *break down* what was more substantial than membrane—in fact, to the best of my judgment, was homogeneous with the *parenchyma* of the organ itself. I then ruptured the proper membranes: there was a considerable discharge of the waters, and everything went regularly on as in an ordinary case, but so rapidly that, within ten minutes from my using the lancet, a full-sized healthy female child was born; and no unfavourable circumstance has happened to mother or child to this time.

Such a case occurring to the young student, as yet innocent of the peculiarities occasionally to be met with in this branch of his profession, might prove (judging from my own recollections) bewildering in the extreme. But, in the hands of an ignorant midwife, or of one of those infamous impostors whose malpractice and its frequently horrible results our legal functionaries delight to shield from punishment, the reports of torture and mutilation, and of life sacrificed to gross presumption or bold reckless ignorance, indicate as too probable a more lamentable issue. In the outset, I have alluded to its singularity in my own experience, and have qualified my admission of anything similar in that of others. With your permission, I will, on a future occasion, state the grounds of that qualification.

SOME PRACTICAL OBSERVATIONS ON THE BEST METHODS OF INTRODUCING THE CATHETER IN CASES OF EXTREMELY NARROW AND IRRITABLE STRICTURE.

By Henry Thompson, Esq., F.R.C.S., M.B.Lond., Assistant Surgeon to University College Hospital; Consulting Surgeon to the St. Marylebone Infirmary.

[*Read before the British Medical Association, July 30th*, 1857.]

The object of the paper which I have the honour of presenting to the Association, is to offer as briefly as possible a few practical remarks on the best methods of passing a catheter through narrow and obstinate, or irritable organic stricture of the urethra, and of introducing it into the bladder, whether in the crisis of retention or otherwise.

I venture to recommend to the consideration of my brethren a course of practice which I have myself found successful in several cases of considerable difficulty, with the assurance that in the very large majority of cases it will enable us fairly and completely to afford relief by the catheter alone, without having recourse to the knife, and especially to that uncertain and sometimes hazardous method of dissecting through the deep tissues of the perineum, from the point of a catheter introduced as far as to the face of a stricture, but not through it—in other words, the operation long known as that of "the perineal section". And I conceive that, without entering upon any discussion of the relative merits of the knife or of the trochar, there can be but one opinion, *that relief by the catheter, where it can be afforded without force or damage*, is the most desirable result for the patient. At the same time, it may be stated, once for all, that the faintest approach to anything like forcible catheterism in stricture of the urethra is deprecated here, not only as a dangerous, but also as generally an unsuccessful expedient.

It is now many years since Mr. Syme, of Edinburgh, expressed in forcible terms, his belief that in every case of stricture, if the urine passed outwardly, a catheter could with care and perseverance be passed through it into the bladder. Five years ago, I stated in my work on stricture, presented to the Royal College of Surgeons for the Jacksonian Prize, that my experience at that time compelled adhesion to the opinion that cases of failure with the catheter ought to be exceedingly rare. And I may say now, that a much larger experience has but confirmed that belief. During the period named, I have met with but one among the numerous and obstinate cases which I have been called upon to treat in private and in public, in which I have not, sooner or later, succeded by the gentle use of the catheter in reaching the bladder. The case referred to was sent me by a gentleman in the Isle of Wight, and was an example of the disease in its most advanced stage and aggravated form, occurring in a thoroughly broken constitution. I ultimately relieved him by puncture of the bladder; and at death, about two months subsequently, with disorganisation of the kidneys, no catheter, however small, could be carried through a long and indurated stricture, although the urethra had been laid open as far as to the point of obstruction; nevertheless, the canal was not absolutely obliterated, for a drop or two of urine would occasionally pass through.

I beg leave, with the utmost deference, in the presence of so many of my distinguished *confrères*, to advert very briefly to the two or three simple means which have appeared to me greatly to facilitate the introduction of the catheter, in those cases in which the existence of more than usual difficulty has been verified. I would, however, first advert, and but for a moment, to the use of those constitutional means which, by the consent of all surgeons, are to be regarded as of great value in the circumstances described. And in order to do so in as few words as possible, we will suppose the case of a patient, with a twenty years' history of stricture, with fistulæ in the perineum, through which a large portion of the urine passes, with micturition painful and exceedingly frequent both by night and day, little urine passing by the external meatus, and that either in a slender stream or by drops. Further, that ordinary means, while visiting his surgeon on several occasions, have not enabled the latter to pass any instrument through the stricture, and that it has therefore become obvious that some other measures must be adopted in order to afford relief. There can be no doubt that in such circumstances much local irritation exists about the seat of stricture, and that there is much congestion of the already narrowed portion of the canal. The obstruction thus produced is often very materially diminished by a few days of rest in bed, by laxative medicines, a free supply of mild drinks to dilute the urine and destroy its acidity, hot hip-baths, a warm temperature to promote the action of the skin, and opiates, especially *per rectum*, if necessary.

After noting the improvement which usually follows such treatment in the case of a patient whose ordinary habits of life aggravate his complaint; after a week's lapse of rest to the urethra since any preceding attempt; the mode of conducting the first trial of the catheter constitutes one of the points which to me appears worthy of attention. In such circumstances, I prefer of all seasons to visit the patient early in the morning while he is in bed, when the skin is warm and moist after sleep under ample coverings.

When introducing an instrument, it is necessary that there should be no chill: all unnecessary exposure should be therefore carefully guarded against. Premising that the precise situation of the stricture has been carefully verified beforehand by passing a full-sized graduated instrument to the obstruction, and noting its distance in inches from the external meatus (or if not that, it is done at once), a small silver catheter may be selected. The size of this is, I think, to be determined by the known size of the stream of urine habitually passed; and this is best learned by ocular observation on one or two occasions, as patients often fail to represent it very accurately by words. As a rule, without entering upon the grounds on which this conclusion is based, the magnitude of the catheter selected should be a little less than that of the stream of urine. In the next place, it will be obvious in oiling the instrument, that the smaller it is; the less will be the quantity of oil which can be made to adhere to it; while it is

no less true, that just in the same proportion as the instrument diminishes in size, so does the presence of oil become increasingly necessary. All will agree that the smaller the instrument, the greater is the danger of injuring the urethra; that it is, in short, an axiom of the highest importance, that an instrument should never be employed a single degree lower in the scale than is absolutely necessary. But, granted that we require a small instrument for the case in point, it is a matter of no little importance to ascertain how we can best protect the urethra from injury or pain incident to the proceeding; and at the same time, facilitate the passing of the instrument through the stricture.

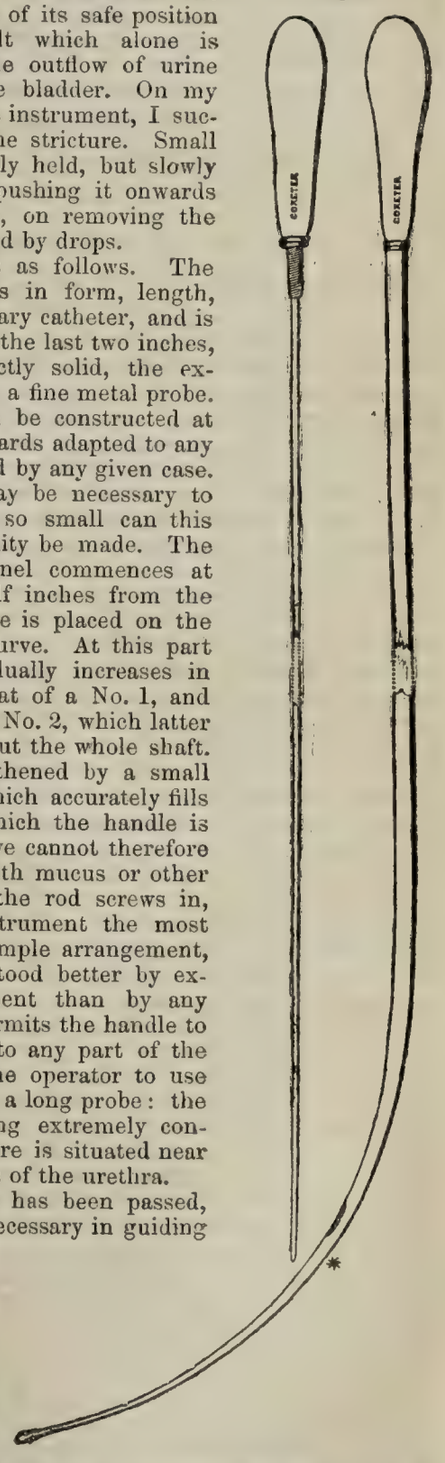
These objects may, in a great measure, I think, be attained by the simple method of applying the oil *to the urethra itself*, and very freely, rather than to the instrument. In order to affect this, the nozzle of a common glass syringe, containing from four to six drachms of pure olive oil, should be introduced into the urethra as far as it will go, the external meatus being at the same time closed upon the nozzle by the forefinger and thumb of the left hand, so that none can escape. Gentle pressure being now made on the piston-rod, the oil gradually finds its way down to the stricture; and if this be very narrow, the urethra in front of it slowly fills and becomes slightly distended; but as the piston continues to descend, the oil will gradually pass through the stricture, and onwards into the bladder, thoroughly lubricating every part of the canal. At the moment the oil passes through the stricture, the operator may sometimes distinctly perceive a slight but very complete sensation communicated to the hand, of resistance overcome, and partial collapse of the previously distended urethra in front. The syringe is then to be removed, the finger and thumb still commanding the meatus of the urethra, so that no oil escapes. The smallest catheter may now be introduced, and made to traverse the urethra—at all events, as far as to the stricture—with very little or none of that difficulty arising from the catching of its point against the walls of the passage, so often experienced with very small instruments, and which renders so much care necessary in their employment. But what is more, when arrived at the stricture, the instrument, if adapted in size, will gradually pass through it; or, at least, the probability of its doing so is greatly increased. The narrowed channel has not only been thoroughly lubricated but somewhat distended by the mechanical pressure of the column of oil which has passed through it; and this sometimes occurs to an extent which affords no inconsiderable amount of aid to the operator. On the other hand, in adopting the ordinary method of oiling or greasing a small catheter, no one can doubt that all the lubricating material has been removed long before it reaches the usual situation of stricture, the very part at which, if required at all, its presence is especially needed.

I am satisfied, from my own personal experience, that I have obtained a considerable advantage from the use of oil in this manner. No weight would be added to this assertion by the recital of cases, by which the length of this communication might easily be doubled, because the particular influence of any single given agent under such circumstances—that is, one acting simultaneously with several others—must be purely a matter of opinion. The success which has followed its use in my hands has nevertheless been witnessed by several, who have themselves adopted it in consequence. Furthermore, patients suffering with very irritable stricture have experienced so much less pain from the passage of a catheter after the injection of oil, that I have been repeatedly requested by them to employ it on subsequent occasions.

To return for a moment to the question of size as regards the catheter to be employed. Repeating a rule which cannot be too strictly adhered to, that danger increases conversely with the size of the instrument employed, we yet may not overlook the fact that experience shews that some of the worst and most obstinate forms of the disease have been proved after death to consist of a narrowing of the channel so extreme, that no instrument which is sufficiently small to pass through it can be made hollow so as to act as a catheter. When such a case presents, I have been able to succeed by the employment of smaller instruments than those usually employed—at all events, in solid material. But it appears to me to be especially desirable in such cases to use, if possible, a hollow instrument; one that has the power of conveying the urine outwards, and so of assuring the operator that he has fairly and successfully freed the stricture, and has arrived at the bladder. Indeed, the smaller the instrument, the more desirable is it that this practical test of its safe position should be afforded. I have long felt how desirable—indeed, how almost necessary—it is to combine in one instrument the quality of tubular construction with minute size; the possibility of making it sufficiently small to be capable of entering the narrowest stricture; and, at the same time, so strong and steady in the hand, as not to bend like flexible bougies, and thus deceive the operator.

This desideratum, as it appears to me, is supplied by the instrument to which I beg leave to request your attention, and which has recently been described as "the probe-pointed catheter". I designed it in the first instance, now nearly two years ago, for a case of great difficulty, in which the stricture was considered impermeable; and, practically speaking, had been so to all instrumental attempts for many years. Nevertheless, a few drops passed by the meatus, and I was convinced that if I possessed an instrument sufficiently small with sufficient solidity to enable me to guide it, it ought not to be impossible to insinuate it through the stricture. But I felt how doubly necessary it would be with such an one to obtain a guarantee of its safe position by that single result which alone is satisfactory; viz., the outflow of urine through it from the bladder. On my second trial with this instrument, I succeeded in passing the stricture. Small as it is, it was tightly held, but slowly and most carefully pushing it onwards for a short distance, on removing the stylet, the urine issued by drops.

Fig. 1.



Its construction is as follows. The instrument resembles in form, length, and curve, the ordinary catheter, and is made of silver. For the last two inches, however, it is perfectly solid, the extremity being in fact a fine metal probe. Accordingly, this can be constructed at the outset, or afterwards adapted to any form or size required by any given case. However small it may be necessary to use the instrument, so small can this probe-pointed extremity be made. The hollow part or channel commences at about two and a half inches from the point, and a small eye is placed on the inner aspect of the curve. At this part the instrument gradually increases in diameter; first, to that of a No. 1, and then to nearly that of No. 2, which latter it continues throughout the whole shaft. The whole is strengthened by a small steel rod or stylet, which accurately fills the interior, and to which the handle is affixed. The small eye cannot therefore become blocked up with mucus or other matters. Moreover, the rod screws in, and gives to the instrument the most perfect solidity. A simple arrangement, which can be understood better by examining the instrument than by any verbal description, permits the handle to slide, and be affixed to any part of the shaft, and enables the operator to use it either as a short or a long probe: the former condition being extremely convenient when a stricture is situated near to the external meatus of the urethra.

When the stricture has been passed, considerable care is necessary in guiding onwards the point through the canal behind, to prevent its becoming engaged in the enlarged lacunæ which are commonly found in the dilated urethra behind an old stricture. This being safely accomplished, and the stylet removed, the urine will issue, by drops only, on account of the small size of

* Fig. 1. The right hand figure shews the instrument complete. The asterisk placed just below its eye, denotes the point at which the instrument becomes solid; continuing so to its extremity. The left hand figure is the steel stylet, unscrewed and removed from the instrument.

the eye, but nevertheless in a manner which will soon relieve the patient, and which at once assures the surgeon of his complete success. The slight but very gradual increase in diameter which the lower end of the instrument exhibits, suffices also to dilate the stricture somewhat; and a No. 1 catheter may generally be made to follow, on the withdrawal of the first instrument, a short time after its introduction. If doubt as to the practicability of this be entertained, a fine gum elastic tube may be passed into the bladder by first removing the handle and stylet, and screwing in its place a long steel rod, over which the tube may glide. No doubt that the safest and most satisfactory practice is to permit a small catheter to remain in the urethra a few hours until it can be replaced by a larger, and for this purpose it is convenient to employ a small bent tube, containing a stopcock, and adapted to the catheter, so that the patient can easily command the outflow of his urine, and at all events be secured from the unpleasant results which sometimes occur, when, a mere plug of wood being placed in its orifice, the urine dribbles backwards along the shaft of the catheter upon the patient's person. An entire set of catheters may be supplied with a single tube which fits every one of them as in a set, which I have long employed for the purpose, and which may be seen here.

[*To be continued.*]

Wimpole Street, Cavendish Square, 1857.

CASES OF STRANGULATED HERNIA.

By Draper Mackinder, M.D., F.R.C.S.Edin., etc., Gainsborough.

Fortunately for suffering humanity, the introduction of chloroform has rendered the surgeon's knife not only less formidable, but less frequently necessary; and, perhaps, there is no class of our patients more deeply indebted to the friendly anæsthetic than the poor victims of hernia.

A rupture is an accident of frequent occurrence in this neighbourhood, often attributable, I think, in working people to the foolish custom of wearing tight inelastic belts and stays.

Several cases of strangulation have been under my care during the last few years, but I have only had occasion to operate in five, four of which recovered.

A short account of these, from the notes in my day-book, will not perhaps be unacceptable.

Case i. The first case was that of a labouring man, aged 65, who had had a right inguinal hernia for twenty years. It had always been reducible, and had been supported by a truss until a few weeks previously, when he had been induced to leave the instrument off. After a hard day's work at the end of June, the gut came down, and was soon followed by the usual symptoms of pain, vomiting, etc. Strangulation had existed for twenty-four hours when I first saw him.

In consequence of the great tenderness over the hernial protrusion and the severity of the constitutional symptoms, after a short trial of the taxis under chloroform, I proceeded to operate by the old plan of opening the sac, which I found adherent. The man was kept well under the influence of opium for three days, and left his bed well in a fortnight.

Case ii. The second case was a laundress, aged 45, a delicate woman of a spare habit of body, who had had a right femoral hernia for a long time, but had never attended to it. After lifting a heavy tub, she felt something give way, and was afterwards seized with pain, chilliness, and vomiting. I was not sent for until the strangulation had existed four days, when there were fæcal vomiting, great tympanitis, and jactitation. Reduction had been tried by a medical friend; and a short application of the taxis, with anæsthesia, not affording relief, I immediately cut down, opened the sac, divided the stricture, and returned the chocolate-coloured intestine.

The poor woman was kept under the influence of opium and ammonia for some days, and, with the assistance of good support, eventually did well.

Case iii. The third was a case of left femoral hernia, occurring in a charwoman, aged 40. This woman had not previously observed a swelling, but felt something give way after jumping out of bed in a state of alarm, and using some exertion to open a window. When seen, she was cold, vomiting, and suffering great pain in the abdomen, which was tympanitic. The vomited material being stercoraceous, attention was at once directed to the usual hernial apertures, and a small knuckle of intestine detected in the left femoral region.

After the common remedies had failed to effect reduction, I proceeded to operate, and divided the stricture without opening the sac. The gut was easily returned, and the woman was quite well in ten days.

Case iv. A woman, Mrs. W., aged 48, of moderate circumstances, but immoderate size, weighing twenty-two stones, is the next on my list. This unfortunate patient had had an immense irreducible hernia for fourteen years, from which she had occasionally suffered so much, that on my first visit, Nov. 2nd, 1855, she declared her suffering to be wholly independent of the rupture. She was accordingly treated for colic; but the next day she had stercoraceous vomiting, and an aggravation of all the other symptoms. Fearing she would die, I advised her to avail herself of the poor chance that remained, and submit to an operation; to which she then consented, and was immediately put under chloroform. The tumour was about the size of a child's head. The incision through the integuments was some eight inches long, and through a stratum of adipose tissue at least four inches thick. The intestine was found encircled by numerous bands of lymph, which were broken up, the gut replaced in its natural position, and the wound united by sutures, immense pieces of strapping, and several yards of bandages; for so enormously large was the pendulous abdomen, that the poor woman could only turn over by giving the body a complete swing. The sutures were soon torn out and useless. On the following day Mrs. W. appeared calm and comfortable, and the bowels had operated many times. On the third day, she was sitting upon the commode when I entered the room, and expressed herself well. The pain had subsided; but there was still occasional vomiting of a little fæcal matter up to the tenth day after the operation, when she had a sudden rigor, followed by pain in the right hypochondriac region, collapse, and death.

A *post mortem* was not allowed.

From the vomiting which followed the operation, and never entirely ceased till her death, though the bowels were acted upon more than twenty times, despite the repeated administration of opiates, it is but natural to infer that a portion of gut had been unrelieved of its strangulation.

This was certainly the most formidable operation for hernia that I ever witnessed, and my hopes for her recovery were never very sanguine. Indeed, from the all but universally fatal result of operations for umbilical hernia, nothing but a strong sense of duty would induce any one to use the knife in such cases.

Case v. In the evening of September 13th, 1856, I was requested by my assistant, Mr. Henry Towle, to visit a man who had got a strangulated inguinal hernia, which he could not reduce. The patient, Geo. Smith, aged 29, a fair complexioned, stout, healthy sailor, who had been on shore a few days, gave the following history of his case. He was a volunteer during the disturbance in New Zealand in 1845; and, in consequence of the breaking of a hook of the scaling ladder which he was ascending at the block house of Kororareka, Bay of Islands, he fell a distance of fourteen feet astride some pailings, and injured his perinæum. Next day he perceived a small lump in the groin, and his testicles were inflamed, for which he was ordered a suspensory bandage. The lump in the groin continued when in the upright position; but no notice was taken until four years and a half afterwards, when an American surgeon ordered him to wear a truss. This he left off the day before the accident, considering himself cured.

On the morning the strangulation occurred, he ran a race for a dinner, won and ate it; and an hour and a half afterwards he felt very ill, went to bed, and discovered a large lump in his right groin. He complained of much pain at the pit of the stomach, had slight vomiting, and a quick feeble pulse. There was a very tense oblong tumour extending from the symphysis pubis to within a couple of inches of the anterior superior spinous process of the ilium: in other words, an ellipsis with a conjugate diameter of about six inches. The taxis, with the ordinary concomitants, having failed, I at once, before the anæsthesia had passed off, cut down on the tumour, opened the sac, divided the stricture, and returned eighteen inches of congested intestine. A strong opiate was administered, the incision united by first intention, and the patient, to my surprise, was downstairs on the morning of the third day, and went to church on the seventh.

On a further examination, I found a considerable bulging of the right lower half of the abdominal wall, probably depending on a rupture of some of the fibres of the transverse or oblique muscles. For this I got the man to make himself a strong, broad, woollen belt to embrace the lower half of the abdomen, having a pad affixed thereto of sufficient size and

thickness to exert the necessary pressure on the weakened region. With this belt and the ordinary truss Jack expressed himself equal to any amount of work, and on the tenth day after the operation he embarked, lion-hearted, for another journey through "the wide, wide, world."

Periscope.

MIDWIFERY AND DISEASES OF WOMEN.

BLISTERING THE CERVIX UTERI.

Dr. Robert Johns has published in the *Dublin Quarterly Journal of Medical Science* for May 1857, some practical observations on blistering the cervix uteri, as a remedial agent in the treatment of certain diseased conditions of that viscus. He says:—

"As it is familiarly known that leeches, when applied directly to the cervix uteri in inflammatory and other affections of that and neighbouring organs, act far more beneficially than when employed externally, and at a greater distance from the seat of the disease (as first enjoined by M. Guilbert),—so, as blisters, when used externally, act sometimes salutarily in the cases now under consideration,—may we not reasonably expect that their direct application to the offending viscus will be still more likely to be productive of good. Actuated by this, as well as other reasons, I have made trial of their efficacy, and I have not been disappointed in my expectations.

"The plan I adopt for blistering the cervix uteri is as follows:—The parts are first brought into view by means of a speculum,—I generally use Fergusson's, but with moderate care any other will answer as well. They are then to be well freed from any mucous or other discharge by a dry, soft sponge; sometimes the mucus is so adherent, particularly when exuding from the os, that it is necessary to damp the sponge for its removal; in all cases, however, the parts must be well dried; after which a concentrated solution of cantharides in sulphuric ether, mixed with the ordinary solution of gutta percha in chloroform, in the proportion of two parts of the former solution to one of the latter, is to be rapidly rubbed on the cervix by means of a camel's-hair pencil two or three times, according to the effect produced, as indicated by the appearance of the part, or by the sensations of the patient.

"My first essay was with vesicating collodion; but as it caused great pain, both during its application and for hours afterwards, only ceasing on the appearing of the watery discharge; and as its operation was not sufficiently expeditious or efficacious, I had a strong solution of cantharides in chloroform, in which gutta percha was afterwards dissolved, prepared for me by Mr. Walsh, of Westland Row, which had the advantage of being painless during and after its use; but it was not so speedy in its action, nor so powerful in its effects as the collodion. Therefore, after consulting with several chemists in the city, I eventually applied to Mr. Williams (Dr. Butler's chemist), who, after having made several experiments, kindly presented me with a specimen of the preparation which I now use, and offer to the profession as being fully adequate to fulfil the indications required. It is frequently of advantage to keep open the blistered surface; and this is satisfactorily done by the weaker preparation in chloroform, which I denominate vesicating gutta percha, No. 2,—the ordinary one (vesicating gutta percha, No. 1) being rarely required for that purpose. For some days after the operation I direct vaginal injections of cold water to be used, and sometimes I wash over the parts with a weak preparation of nitrate of silver. At first I was in the habit of keeping open the blisters by some strong caustic, but I very soon learned that the weaker solution of cantharides answered the purpose better.

"During the appliance of this remedy the patient experiences a pricking, stinging pain, together with a sensation of heat, sometimes amounting to burning: it is very bearable, and ceases almost immediately; indeed, in some cases she will not tell you of it unless you ask her; in others a sweet, pungent taste and smell are experienced, or an ethereal odour is perceived on her breath by another. Very frequently, in fact generally, small vesications appear at the time, and a watery discharge sets in within half an hour afterwards (which has a scalding sensation whilst passing), sometimes even before the speculum has been withdrawn. This discharge, starching the linen, and in other respects similar to that from blisters externally formed, lasts commonly for three days, when to it succeeds one of a slightly purulent nature, but not productive of pain. At this stage we shall find the epithelium thickened and raised, and coming off in patches, like bits of chewed paper; but, prior to it, vesications, like to those on the skin, are very plainly visible with their exudation. On more than one occasion I have seen a watery discharge produced by preparation No. 2, from a surface previously blistered, used to keep it open; and the same phenomenon has occurred on an ulcerated surface.

"Blistering the cervix uteri does not cause any unpleasant sensations towards the rectum, bladder, or neighbouring organs. I never saw strangury or such like affection thereby induced: on the contrary, I have employed it more than once when vesical irritation was present, which, so far from being increased, was completely removed by two applications.

"The average length of time for repeating this treatment is about six days, unless it be desirable to keep up the process; then, in that case, it would be about three days."

Dr. Johns relates a number of cases in illustration of his practice, of which we quote several.

"Case I. Mrs. D., aged 34, of a strumous habit, several years married, but never pregnant, was under treatment for chronic inflammation of the cervix uteri, with endocervicitis, which gave way to local bleeding by scarification, the application of pernitrate of mercury alternating with a solution of nitrate of copper to the canal of the cervix, with the internal use of alteratives, cathartics, and tonics; however, pain in the left inguinal region, a symptom much complained of throughout the disease, persisted, resisting all treatment by medicine internally and externally, leeching, blistering, anodyne plasters, liniments, etc., for some months. I then, with a camel's-hair pencil, well saturated with vesicating collodion, brushed over the cervix uteri briskly for a minute or so, which caused great stinging, pricking, and burning pain through the pelvis, lasting for some hours; when a watery discharge of a hot, scalding nature, and starching the linen, set in and remained for one day, being then succeeded by one of a purulent character, but not causing pain or soreness in the parts. As the pain still remained, but less intensely, the blistered surface was kept open for a fortnight by powdered nitrate of silver, when it was permitted to heal up, the inguinal pain having been much lessened; but as, at the end of another week, the pain was still persisting, I had recourse to the vesicating gutta percha No. 2, which did not cause pain, either during its application or otherwise. It produced the same phenomena as the collodion had done, but neither so quickly nor so actively. On the third day from its use, the pain which had given her so much annoyance had completely disappeared, and she has enjoyed better health ever since than she has had for many years before she submitted to treatment.

"Case II. Mrs. C., aged 47, of a very bilious temperament, married upwards of two years, but never pregnant, was under treatment for acute inflammation of the cervix uteri and vagina, supposed to be of a gonorrhœal character. The disease was removed by warm baths, local bleeding by the lancet, and nitrate of silver, the bowels being kept well open; still, a burning pain in the pelvis, sacrum, and down the thighs (at all times much complained of), persisted, in spite of all means employed for its removal. The vesicating collodion, and vesicating gutta percha No. 2, were used as in Case I; but there was not any relief until after two applications (at the interval of a week) of the vesicating gutta percha No. 1, the effect of which was kept up for about ten days by the preparation No. 2, at the end of which time she was quite well. Whilst the solution No. 1 was being used in this case, a slight pricking and stinging warmth was experienced, ceasing on the appearance of vesication, followed by a watery discharge which was evident before the speculum was withdrawn. On the third day after its use, the surface of the cervix was raw, like a blistered surface on other parts of the body; and the epithelium was in some parts thickened, whilst in others it was hanging detached, like chewed paper; a purulent discharge, mixed with water, then issued from the vagina, but produced no inconvenience.

"Case III. Mrs. B., aged 24, of a nervous temperament, married about two years, but never pregnant, came under my care, being affected with chronic inflammatory engorgement of the cervix uteri, with retroversion of the organ, and a great amount of tenderness in the right ovary, which was found to be enlarged, as discoverable by the vagina and rectum. Under appropriate treatment, as bleeding internally by scarification, and externally by leeches, external blistering, mercury with sedatives, the mouth being gently touched, warm hip-baths,

cod-liver oil, iodide of potassium with sarsaparilla, and by regulating the bowels, which were confined and relaxed alternately, all disease was removed, and the womb resumed its natural position without the aid of any mechanical contrivance. Nevertheless, a fixed lancinating pain in the sacrum and coccyx, with irritation in the ovary, remained, defying all treatment. The vesicating collodion was used once, and the vesicating gutta percha No. 2 four times, at intervals of four and five days, during one month, at the end of which time all pain had left her.

"Case iv. Mrs. T., aged 30, of a sanguine temperament, married eleven years, had five children and two miscarriages, consulted me, as she was suffering from inflammatory engorgement of the cervix uteri, together with hypertrophy of the entire organ, and retroflexion, to which was superadded ulceration of the cervix, extending into its canal. By local bleeding, caustic potash, alteratives, absorbents, and, finally, tonics, all were removed, except the retroflexion, of which she is not conscious, as it gives her no inconvenience. A dragging pain in the inguinal regions remained for some time, but gave way to one application of the vesicating collodion.

"Case v. Mrs. S., aged 39, of a nervous temperament, married seven years, but never pregnant, had chronic inflammation of the cervix, and simple ulceration, with endocervicitis, which gave way to treatment as in Case i; however, a weakening, sickening pain in the back, sacrum, and loins remained, which resisted external blistering, etc., and only gave way to one application of vesicating collodion, followed by three of vesicating gutta percha No. 2, at intervals of seven and six days within three weeks.

"Case vi. Mrs. F,. aged 40, of a bilious habit, mother of two children, was under my care for acute inflammation of the os and cervix uteri, with ulceration extending into the canal of the cervix, which was removed by local bleeding, caustics, mercurial ointment to the part, warm hip joints, alteratives with taraxacum and cathartics; however, a pain in the left hip and lower part of the back, extending down the thighs, persisted, and only yielded to two applications of the vesicating gutta percha No. 1,—although the vesicating collodion, and vesicating gutta percha No. 2, had both been previously employed, without producing any beneficial effect. In this case the strong solution was reapplied in a fortnight from its first application, which latter had given some relief.

"Case vii. Mrs. A., aged 48, married many years, and has had children, was suffering from chronic inflammation of the cervix uteri, with simple ulceration, which yielded to local bleeding by scarification, caustics, alteratives, and tonics. A burning pain in the vagina persisted, and only gave way to two applications of vesicating gutta percha No. 2, at the interval of seven says, and one of vesicating collodion. The collodion in this case was used, as the vesicating gutta percha was found not to be sufficiently active.

"Case viii. Mrs. C., aged 32, of a sanguine temperament, married fifteen years, but never pregnant, came under treatment for inflammatory engorgement of the os and cervix uteri, abdominal enlargement from flatus, and a tumour in the left epigastric region. The former was removed by local bleeding, warm hip-baths, etc.; and the latter has greatly diminished by purgatives for the flatus, and absorbents internally and externally for the tumour. However, shooting pains in the inguinal regions remained for some time, but at last disappeared, under the influence of direct blistering of the cervix uteri by vesicating gutta percha No. 2, three times employed within five weeks, at an interval of a fortnight. In this case, vesication was very apparent in one part, and peeling off of the epithelium in another, at the end of four days, the discharge being partly watery and partly purulent.

"Case ix. Mrs. K., aged 30, married some years, but never pregnant, of a bilious and nervous temperament, had a very acute attack of inflammation of the cervix uteri, with endocervicitis, and engorgement of the entire uterus. By local depletion, caustics, etc. (as in other cases now recorded), together with alteratives, cathartics, and finally tonics, warm hip-baths, etc., all disease, after a lengthened period, was got under; but a fixed pain in the sacrum, with pain and irritability of the stomach, persisted, defying all external as well as internal treatment; however, it at last yielded to direct blistering to the cervix uteri by means of vesicating gutta percha No. 2, three times resorted to within a period of a fortnight, at the interval of five days. In this case, the phenomena attendant on blistering were well but slowly produced.

"Case x. Mrs. C., aged 26, of a sanguine and bilious temperament, a widow about one year, was married six months, and aborted when four months pregnant, since which time she has been suffering from inflammation of the vagina, os and cervix uteri, with aphthous spots in several places; there is suspicion of its being of a gonorrhœal foundation. External leeching, warm hip-baths, internal bleeding by scarification, caustics, alteratives, tonics, and cathartics with taraxacum, after a short time, cured the disease; but a burning in the pelvis and severe itching in the vagina remained, causing great distress, and resisted injections, etc., but was eventually removed by one direct blistering to the cervix by the vesicating gutta percha No. 2.

"Case xi. Miss S., aged 22, of a highly nervous temperament, came from one of the eastern counties of Ireland to consult me in consequence of chronic inflammation of the cervix uteri, with endocervicitis and retroflexion of the uterus. The os was felt very low down, the vagina being short (congenitally); by treatment very similar to that employed in Case i, all disease was removed, even the malposition; yet a weakening pain in her back, increased by standing, was very persistent; after three applications of the vesicating gutta percha No. 2 to the cervix, in ten days she lost all pain, and returned home shortly after, in the enjoyment of better health than she had for years.

"Case xii. Mrs. C., aged 32, of a strumous diathesis, married thirteen years, had one child. She came from an eastern county in Ireland to consult me for what she said she had been told was polypus of the womb; however, on examination, I discovered anteflexion of the womb, inflammatory congestion of the entire viscus, and an enlarged ulcerated cervix with patulous os, ropy mucus tinged with blood exuding from it. She was successfully treated by depletion from the cervix, caustic potash, etc., together with tonics. A severe pain above the pubes, corresponding to the fundus uteri (which no longer remains anteflexed), was very troublesome, but was removed by three applications of the vesicating gutta percha—one of No. 2 and two of No. 1—to the cervix in ten days, at the interval of four days. Vesication, followed by a watery discharge, was evident at the time of the first operation, four days after the pain was relieved; but I thought it better to repeat the remedy by preparation No. 2. At this visit there was a purulent discharge, and the epithelium was seen peeling off. During the two operations with the stronger preparation, she remarked to me that she had an ethereal taste in her mouth, which she felt coming up her throat, and which she also smelled. On the next visit, she told me that evening her sister had remarked the ethereal smell off her breath. As she was not completely free from pain when I saw her again, I, for the last time, used the stronger solution, when vesication was produced very quickly, and so actively, that I measured half a drachm of a red serous fluid produced by the operation."

Dr. Johns then notices the plan of blistering the cervix uteri, proposed by M. Aran, which was noticed in this Journal some time ago. He believes his own plan preferable to that of M. Aran, because—

"1. It is more simple, and more quickly performed.

"2. There is no necessity for keeping our patient in bed; on the contrary, she may go out immediately after.

"3. The burning sensations, which are only *once* produced, last but for a minute or so.

"4. The vesication, and its consequent watery discharge, is always produced within half an hour, indeed, sometimes whilst operating.

"5. Soothing or sedative washes are never required.

"6. It can be had recourse to in the cases not admissible by M. Aran.

"7. The retention of a plug for so long a period in the vagina, producing such consequences as M. Aran describes, would be likely, in certain habits, to cause irritative fever, if not phlebitis, or some such fatal disease."

From his experience of the treatment now under consideration, Dr. Johns draws the following deductions:—

"1. That minor idiopathic affections of the uterus and ovaria are curable by blistering the cervix uteri.

"2. That symptomatic and sympathetic pains at the decline of uterine and ovarian diseases, and after the cure of those affections, are removable thereby.

"3. That ulceration of the cervix uteri sometimes quickly cicatrises under this treatment.

"4. That the phenomena attendant and consequent on blistering the cervix uteri are similar to those produced on other parts of the body.

"5. That it is an operation completely devoid of danger,

and that it does not cause any unpleasant symptom towards the rectum, uterus, or other neighbouring organs.

"6. That irritation of the bladder is not necessarily a barrier to blistering the cervix uteri, as this unpleasant symptom is sometimes removed by it.

"7. That enlargement of the cervix or body of the uterus from engorgement, or hypertrophy, is not removable by blistering the cervix alone, but that it acts well sometimes in such cases as an adjuvant to other treatment.

"8. That the best and most speedy way of blistering the cervix uteri is by a strong solution of cantharides, well and quickly rubbed in with a camel's-hair pencil.

"9. That the combination of some sedative or anodyne with the blistering fluid is essential to prevent pain.

"10. That chloroform, with gutta percha, is preferable to any other medicament for combining with the blistering fluid, as, in the first instance, it increases its vesicating powers, and afterwards relieves and removes the pain thereby induced."

SURGERY.

DISPLACEMENT OF THE SCAPULA FROM PARALYSIS OF THE SERRATUS MAGNUS MUSCLE.

Dr. J. K. Barton, Senior Demonstrator of Anatomy in Trinity College, Dublin, has published the following paper in *Dublin Hospital Gazette* for June 15, 1857:—

Among the various causes which produce the displacement of parts from their normal position, should be enumerated a partial paralysis of the muscles attached to them. As examples of displacement produced in this way, I may mention paralysis of the muscles of one side of the face, causing the mouth to be drawn to the opposite side, the portio dura of the seventh nerve being paralysed upon the right side, the mouth is drawn to the left, by the muscles of that side, now no longer opposed by the paralysed set: also the flexed wrist, and fingers forcibly bent into the palm by the unopposed flexors, in cases where the extensors only of the hand have been paralysed. The bones are in general secure from displacement from this cause, beyond what the joints admit of, on account of the ligaments which bind their articulating extremities together. The scapula, however, being united to the trunk solely by muscles, is more open to this paralytic displacement than any other bone, and consequently we find a dislocation of one or both scapulæ has not unfrequently been observed, and accounted for upon the supposition of the paralysis of the serratus magnus, and consequent contraction of the trapezius and levator anguli scapulæ muscles.

The displacement, in its earliest stage, merely consists in a projection of the inferior angle of the scapula, most marked when the arm is raised above the head. This, should the disease progress, gets more prominent, while the posterior edge of the bone begins also to project from the ribs, so that the fingers can be readily thrust beneath it. The whole scapula now becomes drawn from its natural position in a direction upwards and inwards, so that the posterior edge approaches the spine, while the posterior superior angle is raised to the back of the neck; the bone finally becomes rotated upon itself, the glenoid cavity being drawn down by the weight of the arm, while the posterior superior angle is raised high in the neck, and the inferior angle projects from two to three inches from the ribs.

This displacement was at first accounted for upon the supposition that the inferior angle of the scapula had escaped from beneath the latissimus dorsi muscle, as it passes across it to be inserted into the humerus. The anatomist, however, cannot agree to this, for he knows that it is the serratus magnus, and not the latissimus dorsi, which holds the scapula to the trunk; the last-named muscle passing too loosely across the bone to confine it in any way. And besides, although the earliest stage of the deformity, when the inferior angle alone projects, might possibly be accounted for upon this supposition, it is evidently quite insufficient to account for the projection of the posterior edge, and the rotation of the bone upon itself. Again, it has been suggested that curvature of the spine, by forcing out the angles of the ribs, may cause the projection of the scapula. We, however, see numerous cases of curvature of the spine in which no projection of the scapula has taken place; and again, in several of the cases of projecting scapula, there has been no curvature; so that we cannot place them in the relation of cause and effect, in the majority of cases at least. There remains, then, nothing but paralysis of the serratus magnus muscle to account for this displacement; and the whole deformity is such as would be produced by this; for the action of this muscle arising from the ribs, and inserted into the posterior edge of the scapula, is to draw forward this bone, especially its inferior angle, into which the strongest portion of the muscle is inserted, and by so doing raise the shoulder-joint; also, to bind the scapula to the trunk, and thus give a fixed point for the action of the muscles arising from the bone. Also, if the upper extremities be fixed, it can act *from* the scapula upon the thorax, and aid in inspiration. Now, in cases in which the displacement exists, we find—1st, the loss of this action. The scapula cannot be drawn forwards; it looks loosely attached to the trunk, and is so movable that the muscles arising from it are greatly weakened, wanting a fixed *point d'appui;* and if the patient be made to fix the upper extremities, and take a forced inspiration, while a hand is placed upon each serratus magnus, the muscle upon the unaffected side will be felt as well as seen to act, while the one on the affected side remains immovable. 2ndly. We find the bone displaced in exactly the opposite direction to that in which the serratus magnus would draw it; that is, the inferior angle projects from the side, while the whole bone is drawn upwards and inwards, evidently arising from the contraction of the trapezius, levator anguli scapulæ and rhomboid muscles, no longer opposed by the paralysed serratus. From this we may conclude, that the real pathology of this displacement of the scapula is paralysis of the serratus magnus muscle.

The causes which produce this are twofold:—1st, any local injury by which the external respiratory nerve of Bell or posterior thoracic is injured, as that nerve alone supplies the muscle; 2nd, a centric cause—either disease or injury of the spinal cord, by which the serratus magnus is paralysed, while the trapezius and levator anguli scapulæ muscles remain unparalysed; which may be, if the disease or injury does not extend higher up than the middle of the cervical region, as the spinal accessory nerve, which supplies the trapezius and levator anguli scapulæ, takes its origin from the highest part of the cord, even from the medulla oblongata, while the serratus magnus is supplied through the long respiratory of Bell, from the brachial plexus, which is formed of the lower cervical nerves.

Cases produced by the first of these two, or the local causes, have not unfrequently been observed. Two cases of this kind were brought before the Dublin Pathological Society several years ago,—one by Mr. Adams, the other by Dr. Banks. Velpeau, in his *Traité d'Anatomie*, tome i, p. 303, when describing the long respiratory nerve of Bell, speaks of its injury producing a displacement of the scapula backwards and upwards, with projection of the bone from the ribs; and mentions the case of a young man who had fallen and struck the axilla with the sharp point of a piece of furniture. This was followed by paralysis of the serratus magnus muscle, and projection of the scapula. It had lasted six months when Velpeau saw him, but he recovered by the application of flying blisters along the scapula and side of the thorax.

Not long since, Mr. Brodhurst laid the particulars of a case of this description before the Royal Medical and Chirurgical Society of London. "The patient was sixteen years of age, tall and robust. The right shoulder was two inches higher than the left, and the inferior angle of the right scapula was five inches higher than that of the left side. The postero-superior angle of the scapula projected immediately beneath the skin on the anterior surface of the neck, an inch and a half above the clavicle. Immediately above this point the trapezius formed a thick, prominent cushion. The serratus magnus muscle of the right side could not be distinguished, even during forced inspiration. The motions of the right arm were limited; that is to say, the elbow could be raised only seven inches beyond a right line with the trunk; and violent movements of the arm occasioned pain, in consequence of the projection of the scapula. Paralysis of the serratus magnus muscle had been produced when the patient was two years old, by her being caught by the arm when falling from the arms of a relative. Weakness of the limb was observed soon after the accident, and in the course of some months the shoulder was observed to be unduly prominent."

If there was any further evidence necessary to prove that this displacement is caused by paralysis of the serratus magnus, it would be found in the fact, that the treatment most successful in its cure is that for paralysis of this muscle. Dr. Hutton had a case under his care some years ago, which perfectly recovered under the use of strychnine internally, and blisters and electricity locally. Velpeau's case recovered rapidly, although of six months' standing, when treated by repeated blisterings.

Mr. Brodhurst resorted to subcutaneous incision of the tensely contracted trapezius, for the purpose of restoring the scapula to its place, which was attended with some success. I should, however, be very slow to advise this mode of treatment. In ordinary cases, the power of the serratus magnus can be restored by blistering, electricity along the course of the nerve, and proper internal remedies; and this being done there is no necessity for any other means of replacing the scapula; for as the muscle regains its contractility, the bone will be restored to its place. In cases, however, where the displacement has lasted a great length of time, the recovery will be much expedited by mechanically keeping the scapula in its proper place; for while the serratus is constantly kept on the stretch, it is in the worst possible condition for recovery; when relaxed, it will much more readily yield to treatment, in the same way that the cure of paralysis of the extensors of the hand is much aided by placing a splint along the forearm, which, by supporting the hand, relaxes the extensors. I would suggest that, in cases demanding interference of this kind, a padded leather corslet might be made to fit the scapula, and be so strapped to the trunk as to maintain the bone in its natural position, while the paralysis of the serratus was combated by the means already mentioned. The second class of cases—viz., that in which paralysis of the serratus magnus arises from a *centric cause*, and in which, therefore, both muscles are affected and both scapulæ displaced—has been but seldom observed: this is not surprising when we remember that the condition necessary for its occurrence is a lesion of the cord affecting the origin of the posterior thoracic nerves, which supply the serrati, but leave unaffected the nerves which supply the trapezius, levator anguli scapulæ, and rhomboid muscles.

The following case has been recorded by Mr. Banner, of Liverpool. (See *Transactions of the Provincial Medical and Surgical Association*, vol. x, page 344, where further particulars and a plate of the deformity are given.)

"Mark Barnes, aged 23, of low stature, healthy appearance, was admitted into the Liverpool Northern Hospital 20th of June, 1842, with a projection of both scapulæ, and an inability to perform certain actions with the arms. He has, all his life, enjoyed good health, with the exception of the inconvenience arising from the paralysis, which was not preceded by, nor is it accompanied with, any pain in the head or spine, nor any diseased sensations in the skin or extremities indicative of cerebral or central nervous lesion, by which the paralysis might be explained. He is a joiner by trade. Eleven years ago he consulted me for the first time, experiencing at that period a slight difficulty in raising the right arm above the head. This he felt more particularly when striking any object placed higher than his head. This loss of power gradually increased; and at the expiration of eighteen months or two years the base of the scapula on the right side was noticed to stand out from the back; and at the end of three or four years it assumed its present appearance. At the same time the right lower extremity began fail to him, his gait becoming rather unsteady; and when in the bent position he experienced a little difficulty in raising himself. About four years ago, being seven from the commencement of the attack, the arm of the left side became similarly affected, the scapula being displaced; and the lower extremity began to fail him, as on the right side, although he retained more power in the left arm than in the right. The circumstance which more particularly strikes the attention in the present case is the appearance of the scapulæ, more especially when the man attempts to raise and make use of his arms. In the quiescent position, the base of this bone, instead of lying parallel to the spine, is approximated to it, while the lower angle stands out from the ribs a distance of two inches, leaving between the scapulæ a deep hollow, the upper angle being drawn high up into the neck, appearing on both sides, to the observer, in front, midway between the shoulder and ear. The clavicle is in its natural position, as is also the acromion process of the scapula to which it is articulated. When the patient attempts to raise the arm, all the appearances are much increased; the base of the scapula approaches nearly to a right angle with the spine, forming, with the base of the scapula of the opposite side, a very obtuse angle; and both stand out about three inches from the ribs. The arm cannot be raised beyond the horizontal position."

Without commenting upon this case, which is ably done by Mr. Banner, in the communication already referred to, I will recount the facts of the following case, which was lately under Dr. Kirkpatrick's care, in the hospital of the North Dublin Union.

W. Burgess, forty-six years of age, was admitted June, 1856, in a low typhoid condition, accompanied by general paralysis. It appeared, from subsequent inquiry, that he had been labouring under disease of the vertebræ for many years, which had caused complete paraplegia; but after issues had been opened near the seat of disease he improved very much, so as to possess complete control over his bladder, and to walk with the aid of crutches. Some time before his admittance to the workhouse, he had been exposed to cold and wet, and suffered from hunger and every sort of privation, when his former symptoms returned, accompanied by a low typhoid form of fever. Under Dr. Kirkpatrick's care he recovered from this state to such an extent as to be able to get about with the aid of crutches. His digestion was good, and he soon became fat; he complained very much, however, of being unable to use his arms; and it was upon proceeding to examine his spine, in connexion with this remaining want of power, that the remarkable displacement of both scapulæ was first noticed. He was unable to raise his arms beyond the horizontal position; when he attempted to do more than this, the projection of the scapulæ was increased, and in his ineffectual efforts, they moved up and down in an extraordinary manner, looking as if they were loose beneath the skin. When one of the scapulæ was firmly held in its proper position, he could then move the arm much better. Firm pressure on the spinous processes of the vertebræ, between the scapulæ, caused some pain. Cicatrices of issues existed upon each side of the lumbar vetebræ, where there was a curvature convex forwards; so that here, no doubt, was the original seat of the disease. The serratus muscle upon each side was manifestly atrophied; also the latissimus dorsi, the deltoid, supraspinatus and infraspinatus, and teres muscles, were soft, and smaller than natural, but not much so. The muscles of the arm and forearm were also atrophied to some extent. The man's digestion was good, and his strength increasing, so he was ordered as good rations as the dietary afforded. No special treatment was adopted for the displacement of the scapulæ; but, upon a cast being taken, he in a few days left the house, alarmed, I suppose, by the interest his case excited.

The sequence of pathological events, and explanation of phenomena observed in this case, seems to have been as follows:—In the first instance, some of the lumbar vetebræ were attacked with caries, the irritation connected with which being propagated to the cord, produced paraplegia. By means of rest and counter-irritation a stop was put to the caries, which resulted, as is sometimes the case in this part of the spine, in a curvature convex forwards. Subsequently, under the influence of cold, wet, fatigue, and insufficient food, disease was set up in the already enfeebled cord, which caused almost complete paralysis for the time. The disease in the cord then yielding to treatment, the patient gradually regained the use, first of his lower limbs, then of his upper—but of of these last very imperfectly; for the trapezius and levator anguli scapulæ muscles receiving their nervous supply from the very highest part of the cord, were never affected, and consequently when all the other muscles attached to the scapulæ were paralysed, they drew these bones out of their natural position upwards and inwards. Now, the nervous centre having recovered itself, all the muscles should have gradually regained their power; but the muscles inserted into the scapula were, on account of the displacement of that bone, very unfavourably placed for their recovery, particularly the serratus magnus muscle, which must be constantly kept stretched to its utmost limit by this displacement; hence this muscle would naturally be the last to regain its function, if it ever did regain it; and it would be just at this time, when the centric disease had passed away, but the serratus magnus remained paralysed, that the displacement of the scapula would be the most remarkable.

From the foregoing observations we may draw the following conclusions:—

1st. That the scapula is subject to a displacement, commencing in a projection of its inferior angle, the bone being subsequently moved in a direction upwards and inwards.

2nd. That this displacement is the result of paralysis of the serratus magnus muscle, and consequent retraction of the muscles which oppose it.

3rd. That this paralysis may arise—*first*, from disease or injury of the external respiratory nerve of Bell; and, *second*, from disease or injury of the spinal cord.

4th. That cases produced by the first of these causes may be cured by blistering and electricity locally, with suitable general treatment.

5th. That the displacement in the second set of cases may be accounted for by the fact of the trapezius and levator anguli scapulæ muscles being supplied by the spinal accessory nerve, while the serratus magnus is supplied from the brachial plexus.

6th. That in cases produced by a centric cause, the first and most necessary thing is to restore the nervous centre. This being accomplished, the recovery may be facilitated by mechanically keeping the scapula in its normal position, while the paralysis of the serratus magnus is treated locally.

Reviews and Notices.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L.

This is a very admirable number; the articles are of that mixed character so desirable in a serial of this class—alternately speculative and practical. Among the latter, we must put in the foremost place the paper by the editor, on Neglected Brain Disease. The pertinacity with which Dr. Winslow continues to dwell upon the fatal error, too often committed, of neglecting the first symptoms of cerebral disorder, will, we trust, have its due effect. He says truly enough, that, whilst we run to the medical man upon the first advent of any physical disorder, whilst we take alarm if a cog is out of place, and seek to have it immediately set to rights, we defer but too often until it is too late any attention to the failing mainspring itself. The words of the editor on this head are indeed worthy of all attention. He says:—

"It is, however, the purport of this paper more especially to direct professional attention to the inexcusable neglect with which the affections of the brain are generally treated by the public, and the lamentable amount of ignorance that unhappily exists in the non-professional mind respecting these disorders. This neglect and ignorance is fraught with much irremediable mischief—alas! often leading to the sacrifice of valuable human life. The poor overwrought brain meets with but little attention and consideration when in a state of incipient disorder. The faintest scintillation of mischief progressing in the *lungs*, *heart*, *liver*, and *stomach*, immediately awakens alarm, and medical advice and treatment are eagerly sought; but serious well-marked symptoms of brain disorder are often entirely overlooked and neglected; such affections frequently being permitted to exist for months without causing the faintest shadow of uneasiness or apprehension in the mind of the patient or his friends. Morbid alterations of temper—depression of spirits, amounting sometimes to melancholia—headache—severe giddiness—inaptitude for business—loss of memory—confusion of mind—defective power of mental concentration—the feeling of brain lassitude and fatigue—excessive *ennui*—a longing for death—a want of interest in pursuits that formerly were a source of gratification and pleasure—restlessness by day and sleeplessness by night—all obvious indications of an unhealthy state of the functions of the brain and nervous system, rarely, if ever, attract attention until the unhappy invalid, becoming unequivocally deranged, commits an overt act of insanity. Then the exclamation is, 'Poor fellow, his mind has been affected for months!' and no one expresses any surprise that he should, in such a state of mental disorder, have hung himself or cut his throat! It is difficult to induce the public to take a common-sense and right view of this important subject; for if the saving of life is our object, it is to the *public* mind we must plainly address ourselves. If a person, in a previous state of mental and bodily health, is conscious that abnormal changes are taking place in the mind—that trifles worry and irritate—that the brain is evidently unfit for work—that the spirits are flagging—that all the evils of life are magnified; if he is disposed to be fanciful—imagining things to exist that have no existence apart from himself—believing that kind friends ill-use and slight him; if symptoms like these, or analogous to these, are associated with headache, derangement of the stomach and liver, and want of continuous sleep, *the patient may assure himself that the state of the brain is abnormal, and requires careful consideration and treatment.* How often such apparently trifling symptoms of brain disorder precede the fatal act of homicide and suicide! How much may be said for those driven by unrecognized and neglected disorder of the brain and mind to acts of self-destruction!" (pp. 414-15.)

"We deliberately and unhesitatingly assert, having had no inconsiderable experience in the treatment of mental derangement associated with a tendency to suicide, that nearly all these fatal instances of self-destruction might have been averted if the patient had been brought within the reach of remedial measures; in other words, *if the abnormal or unhealthy state of the brain, as indicated by a disturbed state of the thoughts, mental depression, etc., had been fully recognised and properly treated by medical and moral agents.* How difficult, however, it is to persuade those ignorant of the physiology and pathology of the brain and mind, of the necessity and importance of attending, without delay, to the earliest scintillations of brain mischief and disorder! It is at this period when so much may be effected for the relief and probably for the positive cure of the patient." (p. 423.)

In support of the truth of this position, a number of cases of suicide which have occurred of late are given, in all of which the healthy condition of the brain was clearly disturbed for some length of time previous to the fatal act, yet without any attempt being made upon the part either of themselves or of their friends to seek the proper means of relief. We believe, with Dr. Winslow, that suicides would be decreased to a large extent if people would only take as much account of an abnormal condition of the brain as they do of a boil upon their toe or a pimple upon their nose. There are some admirable papers, statistical and otherwise, bearing upon the question of lunatic asylums at home and abroad, including a very valuable one on the state of lunacy in Scotland. The review of Spencer's Psychology is an ingenious attempt to fight with a shadow. Able as that book is in some points of view, yet in all practical aspects it is un-come-at-able.

British Medical Journal.

SATURDAY, SEPTEMBER 5th, 1857.

GOING OUT OF TOWN.

The *Times*, now and then, with its strong common sense, hits upon medical truths which the profession itself does not sufficiently recognise. Now that all the world is out of town, and the "blood has flown to the extremities"—now that partridges die that wearied city men and used up West-enders may live—now that the Grosvenor Square district is blank with fastened shutters, and Jeames, unpowdered and unplushed, talks familiarly over the area railings to the sly little groom out of place, with a lear in his eye, and a sprig in his mouth—now, we say, when all the world has run away, some to the moors, some to our own watering places, and the greater portion to the continent for a six weeks scamper, in order to "do Europe"—the *Times* comes out with a rather startling *Cui bono?* The leading journal does not believe in this sudden rushing about of universal creation—this panic of cits, this deciduous movement of May Fair. The editor probably, like ourselves, cannot go out of town this season; and this may account for a little of the ardour with which he levels his blows at flying John Bull. Nevertheless, there is much truth in what he says respecting the gross error of supposing that what is called "a six weeks scamper on the continent" is really calculated to set up the worn out worker, or to reinvigorate the nervous and dyspeptic patient. We set out by agreeing that attention to diet, regularity of living, repose, and refreshing sleep, are the prime necessaries to maintain

health, as well as to restore the overworked body and brain. Let us see how these desiderata are supplied by a six weeks run on the continent. To begin, John Bull in too many cases fixes his eye upon some distant part of Europe—say Vienna or Naples—calculates that he can steeple chase there and back in six weeks, manfully says I will do it, and begins his *labours* by fretting himself almost up to apoplexy pitch about his passport. The punctual Briton, who would discharge a cook if the soup was a minute too late by his repeater, who takes his preliminary nap after dinner, and enjoys his solid sleep for ten hours, then deliberately adopts a course by which he throws to the winds all these old and cherished habits. He commits himself to a system of travelling which disjoints all his preconceived ideas of the method in which a respectable man should progress in this world. Instead of sitting down to his mutton done to a turn, he condemns himself, like a flying swallow, to take the food necessary to sustain nature (for he persists that he can get nothing *worth eating*) upon the wing. Instead of his sacred nap behind the bandanna, he has to puff and blow to reach the diligence; and, in place of his solid sleep, he finds that he is fixed for sixty hours in the interior of that springless vehicle, between two German students, who alternately spit on his boots and puff in his face; and thus, in order to "do" the journey, he submits to be handed across the Continent—from steam-boat to diligence, from diligence to Eilwagon—as helplessly as bricks are "chucked" by Irish labourers.

That such a process can be consolatory to the nervous system of the halest Briton, is much to be doubted—that it is highly detrimental to the more delicate organisation of the professional man, there can be no question. The men who first invented and put in action the scheme to delude the Briton by what are termed monster excursions on the Continent—such as "to Venice and back in twenty days", "to Vienna, with a run into Hungary, and back in a fortnight"—ought to be ranked among the enemies of their species; they should have no quarter or mercy, for they clearly set themselves to destroy English equanimity and the English digestion.

It is not from these we have to fear so much, however, as from the restless spirit of the tourist himself, who but too often is his own excursion agent, working himself quite as unmercifully as those persons who shoot torrents of tourists at so much a head from one end of Europe to the other—nay even to Egypt and back again. Year by year the rage for rushing wildly about at this time of the year is spreading in widening rings among the population; class after class are catching the infection, and the grand tour, which was done in the last century only by the wealthy sons of the nobility or gentry, is now accomplished year by year by gentlemen who alternate that doubtful and fleeting pleasure with jumping the counter.

God forbid that we should censure the very natural desire to escape into the country for a month or so at this season of the year, but we cannot help joining the *Times* in pulling up John Bull for his absurd folly in torturing himself, and deteriorating his condition, under the idea that he is taking his pleasure. There are very few people, as our cotemporary observes, who know what they really would like; but of this the great public may be assured, that there is nothing to be got by rushing, with the spirit of a Yankee, from place to place, like so much "greased lightning;" for what is thus *quickly* gained by change of air and scenery, is lost by the fatigue and indigestion acquired in their pursuit. The true secret of travelling for those in search of either health or enjoyment is to take it easy, and to avoid cheap trips, as they would the old gentleman himself.

DR. MARSHALL HALL:

THE HISTORY OF HIS CASE, AND THE POST MORTEM APPEARANCES.

If the pages devoted to the science of medicine in this country may with advantage be illustrated with interesting and important cases, on no occasion can a space be more usefully or more gracefully afforded than in the present instance. We have to record the particulars of the case of one of the most distinguished, most talented, and most industrious of her professors: for such a man, in every sense, was the late Dr. Marshall Hall. To render the history of his case complete, it is necessary to go back some years previous to the appearance of the last severe and fatal symptoms; for some peculiar features connected with the earlier symptoms rendered the case somewhat different to those generally met with in practice, and made the sufferer himself, always patient, thoughtful, and suggestive, consider that it presented features worthy of notice; and also made him auxious that its investigation should be completed by a *post mortem* examination.

His own account of an early inconvenience or difficulty in swallowing best explains the symptoms as they occurred:—"Some fifteen years ago," he wrote to a friend, "I undertook to deliver two long and distinct courses of Lectures on the Practice of Physic, during the same winter." His custom was to lecture from six to seven, and then from eight to nine, in the same evening. He felt inconvenience during this winter from hoarseness and cough for the first time, and began to perceive that minute portions of food were apt to remain in his pharynx, and that after meals he occasionally raised some small portions. This difficulty of swallowing very gradually appears to have increased; and he was induced, some years ago, to consult Sir Benjamin Brodie and Dr. Chambers on account of the increasing symptoms of obstruction; but on Sir Benjamin passing a bougie, no evidence of obstruction by contraction of the œsophageal tube could be detected. Mr. Guthrie, whom Dr. Marshall Hall also consulted, told him that he was only suffering from what was called "clergyman's throat". But the dysphagia continued, and during deglutition much care was requisite in the act of swallowing, and food could not be hastily taken; and while in the act of swallowing much regurgitation could be heard by those sitting near him.

He considered this condition to be due to a defective reflex action, which prevented the muscles of the pharynx from acting with sufficient power to propel all the food lodged in it; but the probability is, that there was some such dilatation of the pharynx at this early period as is sometimes met with, and which in a measure acts upon the aperture of the œsophagus mechanically, and thus interferes with the ready passage of food. Such were the symptoms which continued slowly increasing, but which never prevented a sufficient amount of food to be taken, both solid and fluid, to keep up proper nutrition, until about the end of 1855; when Dr. Marshall Hall first perceived that in the expectoration which he usually had in the morning there was occasionally a slight tinge of blood, and this especially after much speaking or exercise. The dysphagia also commenced from this time to be troublesome and serious.

Previous to this date, Dr. Marshall Hall had retired from active practice in London, as he found his health was failing to a certain extent, and some spots of purpura appearing on

his legs. He wisely determined at once to give up the anxieties of professional occupation, though it entailed the sacrifice of a large professional income. He made a tour of the United States in 1854-55, and spent the following winter and spring in Italy. He returned to England much better in health, but not improved as far as the throat affection was concerned. After a short stay in town, he went to Hastings, and came to town again in October following. It was now that the symptoms of permanent stricture of the œsophagus were fully established. He had some time ceased to partake of solid food; milk, cream, and coffee, were the fluids he chiefly preferred. With the evident obstruction there was constant copious expectoration of purulent mucus, somewhat offensive in character, and occasionally during each day tinged with blood. He was seen in consultation by Dr. Williams, Mr. Cæsar Hawkins, Mr. S. R. Martin, and Mr. Pollock, all of whom were agreed as to the serious nature of the complaint. He was quite prepared for the expression of their most unfavourable opinion, and was even cheerful whilst under examination. In speaking to one of his medical friends, who was constantly with him whilst in town, he said, "I don't ask you what your positive opinion is as to my prospect of life, for no one can be certain of the result of a hidden malady; but I look upon my disease as a fatal one, and have long done so. I have no hope of recovery. I don't wish you to mention this to Mrs. Hall. I have no fear of death, and cannot be alarmed by the truth. My only wish to live is for the sake of others; but I am resigned to the alternative, if it be ordered that I should not live much longer." The calm, resigned, and almost cheerful manner in which he spoke, at once showed the preparation and the courage of a man who knew his end was not far distant, though still, as ever, unselfish, considerate, and affectionate, for those dear and near to him.

Whilst in London he had a wish to have the nitrate of silver applied in solution to the supposed ulcerated part of the pharynx; but when advised not to employ it, he readily acquiesced in the opinion of those he had consulted. He had applied the solution to the throat when in the country, but had been apparently much distressed by it; and though he had expressed a wish for its application a second time, he evidently had no great desire to persist in its use, from the distress it had occasioned.

After a short stay in London he removed to Brighton. He now placed himself under the care of Mr. Wildbore, whose constant care and attention to him he always spoke of with much gratitude, and to whose note-book we are indebted for the remaining particulars of his case.

After being settled in Brighton, he complained of, and suffered much from cold. It always distressed his throat, and rendered more difficult the efforts of swallowing. His room was obliged to be kept at a temperature of from 70° to 75°. His diet was entirely milk, cream, and coffee. In January of this year he wrote to Mr. Pollock:—"I have been for two months at Brighton, and the complaint has made no progress, but in cold, foggy weather my dysphagia is always worse. I am intensely susceptible to cold. I have been many days lately without blood in the expectoration; but last night it came on, after going to bed, without any assignable cause. Everything I take is apt to leave particles in my pharynx, even a light-boiled egg. Hence the cause of the irritation and consequent ulceration there. If so slight a thing will irritate and produce exudation of blood, there is surely ulceration there, and this, in fact, has all along been my opinion." We shall hereafter see how true was the opinion he had formed of his own case.

There was at all times, to a greater or less degree, "a stinging, burning pain" behind the larynx; sometimes for a day or two it was absent. During February the symptoms were variable, the dysphagia increasing as the temperature became colder. Once or twice there was slight regurgitation of fluid by the nose and mouth. Some considerable benefit was derived from sipping a solution of chlorate of potash in water several times a day, with marked temporary benefit to the swallowing, but the effect was not permanent.

In March he had a severe attack of gout, when much uric acid passed in the urine. This was relieved by small doses of potash sipped in water, and also used in an enema. The dysphagia slowly but gradually increasing, four pints of milk were now only taken in the course of the day, and it occupied nearly half an hour to get down half a pint.

On the 10th of March he walked out, after four months confinement to the house. The sun was hot, but the wind very cold; and the following day he was confined to bed, suffering from bronchitis, and all his ordinary symptoms aggravated. During several hours no fluid could be swallowed; and, on attempting to pass a tube for himself, an obstruction was met with opposite, as he said, the first or second portion of the sternum. This attack left him very weak. He complained much of thirst, and said his feelings of hunger were dreadful. Still he was most patient, and even cheerful in conversation, under all his sufferings.

In a few days the attack of bronchitis passed off, and he now derived much comfort from supping iced milk and sucking small pieces of ice; but the exhaustion and emaciation were becoming considerable, and the quantity of fluid taken by the mouth was reduced to about two pints in the twenty-four hours. Mr. Wildbore therefore recommended him to allow the administration of nutritious enemata, of which the following was the mixture: five ounces of strong beef-tea, one ounce of port wine, and three grains of quinine. This was given three times daily, and the whole quantity always retained. The quinine was added on account of his suffering from intermittent fever, which came on every night. The enemata were evidently absorbed, for the bowels only acted once in three or four days under the influence of a warm water enema, with some salt dissolved in it; and this would be followed by a healthy motion.

On the 10th of April, for twenty-four hours, there was complete interruption to the passage of fluid through the throat; but on the following day he was again able to swallow milk and some wine-and-water. Towards the end of the month, the difficulty of swallowing was so great that, if more than three teaspoonfuls were taken directly one after the other, the fourth would bring on cough, and the greater portion would be returned by nose and mouth, mixed with mucus, as if the fourth spoonful filled up the tube to the aperture of the glottis, and thus excited cough.

During the month of May he suffered much from hunger; but taking the enemata four and five times a day appeared to nourish him to the extent that he was able to bear the erect posture, which he could not a fortnight previously, owing to vertigo. The aguish attacks were also severe, and he took constantly about twenty grains of quinine in the enemata, which had the effect of relieving him, but produced deafness and singing in the ears.

In June the voice began to be affected; the expectoration, which had become white and frothy, was again purulent and offensive. The efforts to swallow were attended with much exhaustion, and the struggles to get fluid down were very great. The loss of voice at the end of June was unchanged; the "stinging, burning pain" greater, and debility increasing; the expectoration very copious.

In July, early in the month, he applied himself a four-grain solution of nitrate of silver to the pharynx five times. This increased the "stinging, burning pain" greatly, for two hours after each application; but no beneficial result of any kind was obtained. Chills and profuse sweats attacked him every evening, and the aphonia continued. During July he gradually

became weaker, and the quantity of fluid taken by the mouth was about a pint to a pint and a half of milk daily.

By his own desire, he went out in the early part of August in an open carriage, but all his symptoms were becoming worse; the breathing short and asthmatic, and the air-passages clogged with mucus. The rectum also became uncertain in its power of retention, and the enemata were sometimes returned. On the 11th of August, at twenty minutes past eight, he died, maintaining his consciousness to within a few minutes of his death.

His friend Mr. Wildbore wrote of him, but a few days before his death, "It is wonderful to me how he bears up against his disease. He is ever thoughtful of, and kind and considerate to, all around him, and most grateful for the least kindness or attention shown him; always interested in professional questions, and ever active in mind upon those subjects which have chiefly occupied his attention. He is most patient, and perfectly resigned." All who knew and watched him during the progress of his disease, and witnessed the high courage and true resignation with which he submitted to his sufferings and to the prospect of death, will feel that Mr. Wildbore's estimation and record of him was only what was just to the character of the greatest of English physiologists.

The *post mortem* examination of the body was made by Dr. Ransom, of Nottingham, thirty-eight hours after death, in the presence of Dr. Hutchinson, Dr. Robertson, Mr. Higginbottom, Mr. Eddison, Mr. Wildbore, and Mr. M. H. Higginbottom; and for the record of which we are indebted to Mr. Ransom.

The body was emaciated. No external marks of decomposition.

Thorax. The lungs did not collapse on the cavities being opened. The right one was universally adherent by old adhesions; the substance of the lungs healthy; no pleuritic effusion.

The pericardium contained nearly two ounces of dirty red fluid. The heart was flabby (perhaps from cadaveric changes); it contained frothy blood in the right ventricle and auricle. The valves were competent. There were some slight atheromatous deposits on the inner surface of the aorta, which was stained a deep red.

The bronchial glands were larger than usual, soft, and black.

On making examination of the parts higher up in the throat, it became evident that some undue thickening and adhesions existed behind the larynx. The latter was therefore removed, with the pharynx, œsophagus, and trachea. In doing this, the intimacy of the adhesions necessitated that the knife should be carried close to the bodies of the corresponding vertebræ; with every care, however, bottom holes were made in two or three places. On removal, it was seen that the walls of the pharynx were extremely thim, and that its cavity was dilated. Through the openings made by the knife there escaped a dirty brown flaky fluid, of a creamy consistence. The adhesions were to the bodies of the sixth and seventh cervical, and first and second dorsal vertebræ.

The parts removed, when examined, showed a stricture of the œsophagus, about the level of the eighth ring of the trachea, and a dilatation, with ulceration and vasculation of the œsophagus and pharynx above the stricture, to the extent of nearly three inches. The stricture was attended with but moderate thickening of the tube, and the aperture was not very small, but the membrane was folded in, so as to present a conical eminence upwards, the apex of which was opposite the narrowest part of the stricture, which here was rather larger than a goose-quill. In this way the passage was almost valved, and food would have had the tendency to pass down by the sides of the eminence into the pouches and sacculi of the ulcerated portion. Indeed, the finger passed down from above, previous to opening the œsophagus, could not enter the passage, though a similar difficulty did not exist if the finger was passed from below the stricture. The upper border of the ulceration was on each side about level with the bases of the arytenoid cartilages, but did not extend so high in the middle. The dilatation was throughout irregularly ulcerated, soft, pulpy, ragged, of a dirty-grey or slate colour, and with a few loosely-adhering flakes on its surface. Its base was not much thickened, though here and there it was somewhat so, and felt firmer in such parts. The walls of the pharynx and œsophagus were perforated in several places, leading to pouches or sinuses amongst the muscles of the neck, having very thin delicate walls of false membrane. Two of these pouches were very large, and ran upwards on the outer surface of the thyroid cartilages, one on each side as high as its upper border, the right pouch being the largest. A narrow slip of mucous membrane remained at the back of the trachea, but this at the lower extremity was quite undermined.

At the lower part of the dilatation the ulceration had nearly perforated the trachea through the posterior membranous wall, and had set free the right extremities of the fourth, fifth, and sixth cartilages. The pharyngeal mucous membrane above the ulceration appeared nearly natural except for two or three little rounded elevations, as if there was a deposit in the mucous membrane, each less than half a pea in size. There was a small pendulous polypus attached to the thyro-epiglottidean fold. The œsophagus below the stricture was healthy.

In the mucous membrane of the trachea, directly corresponding to the deep ulceration which threatened to perforate it, was a small deposit or growth—semi-transparent, solid, and slightly elevated. There was a similar one higher up, inside the cricoid cartilage, but it was more opaque and white.

The patch on the tracheal mucous membrane was cut across, and from a section of it were obtained cells which possessed all the characters of cancer-cells. They were delicate, large, irregularly angular, with elongated processes; some were, however, rounded, had peculiar large nuclei and nucleoli; often several of these in one cell, and sometimes a cell-wall around one or more of the contained nuclei. Some few of the nuclei presented a delicate, regular radial striation, which Dr. Ransom observes he had not before seen. These cells were contained amongst the meshes of the elastic tissue. From the whiter patch on the inside of the cricoid cartilage, similar cells were obtained, but they were fattily degenerated, and therefore were less characteristic. From the base of the ulcerated surface Dr. Ransom found in parts examined no satisfactory evidence of the nature of the pathological process which had preceded; but amongst a mass of granular and fattily degenerated elements, several bodies were always seen resembling retrograde cancer-cells.

The fluids from the surface of the ulcer consisted mainly of molecular detritus and fat, in drops and granules, with a great number of epithelium scales, mostly of the scaly variety; but a few were cylindrical and ciliated, probably separated from the upper parts of the pharynx. In the little elevations on the mucous membrane of the pharynx, nothing was found but globular corpuscles and cells filled with fat granules, of various sizes, and one beautiful hexagonal crystal-like cystin was observed.

A portion of the pharynx and œsophagus, examined by Mr. Cæsar Hawkins, Mr. Pollock, and Mr. Holmes, curator of St. George's Hospital museum, gave the following results:—

1. A portion of the disease was surrounding the great vessels in the neck, and apparently making pressure on the upper part of the pharynx. The interior appeared of a cellular character. Sections showed fibrous tissue, with numerous nuclear bodies, and much fat.

2. A small tubercle, beneath one of the rings of the trachea, contained an immense number of nucleated cells, resembling

those of healthy epithelium, but of more carious form and size, also a good deal of fat.

3. A mass containing dark masses (of black pigment), otherwise exactly resembling the portion first mentioned.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from D. Mackinder, M.D.

Sir,—For the benefit of our able and indefatigable advocate, Mr. Griffin, and such of our associates who happen to be union surgeons, I beg to forward you a copy of a correspondence which I have had with the Secretary of the Poor-Law Board, on a matter of considerable importance.

Hitherto I have had no occasion to join issue with our guardians on any subject having reference to myself, and should not have sought the opinion of the Poor-Law Board in the present instance, had I not considered that the case in dispute had more than an individual application.

You will perceive that a man named Hurd applied for an order for my attendance, and some relief. The latter was granted, but not the former.

Since, to my humble powers of reasoning, a man who is receiving relief in money and kind, thereby becomes a pauper, and entitled to gratuitous medical attendance, I felt dissatisfied with the decision of the guardians, put a question to head quarters, and was informed that the order of our local board had been confirmed.

Hurd had a pension of 7*s.* a week, and when in health was able to earn a comfortable subsistence for himself, wife, and family; but, unfortunately, he had sustained a fracture of his thigh, which disqualified him for labour, and compelled him to seek eleemosynary aid. By allowing him the half-crown and flour weekly, the guardians acknowledged his necessitous circumstances. But then the medical order is refused; and a man with a broken thigh wants a surgeon. Who is to attend him? The non-parochial surgeons would naturally object to attend a man who was receiving relief. The parochial surgeon, out of pure humanity, immediately responded to the summons, believing the "order" would be forthcoming, as it frequently had done, after the next board day. Perhaps the "order" was refused in consequence of my having had several accidents to attend to of late on the parish account; but surely the money has been earned. Hurd has now been attended for more than two months, for the enormous sum of £0:0:0! How many steaks and bottles of stout would that procure for a do-as-you-would-be-done-by guardian? It would not feed a poor doctor long.

We are told that we ought not to act until we get orders from the relieving officer, or some other authorised agent; but it is quite impossible (at least for any man of proper feeling) to wait at all times for the legitimate scrip; and medical men, I hope, will always have a sufficiency of the milk of human kindness to induce them to attend a suffering fellow-creature at a moment's notice, without discussing the security of "filthy lucre", however essential that material may be to their own existence. Besides, the "order" given is said not to be binding until confirmed by the guardians, who, in our district, meet once a fortnight.

Had this case not involved an extra fee, would the order for my attendance have been refused? When I told the clerk to the guardians that, in the event of my refusing to attend Hurd *privately*, they would be bound to grant an order, he replied that "the workhouse would be offered", *et ergo*, no fee! "You doctors", quoth he, "like the extras." *Et tu Brute.* Lawyers have a peculiar disrelish for the loaves and fishes.

On a former occasion, when I asked the said gentleman if he thought the guardians would allow me a trifle towards some bad cases which I had had, he replied, they would not, for they considered I had got some fame by my treatment of them. The astute lawyer, who causes a wretched criminal to pay the penalty of his transgression by a horrid death at the gallows, earns fame. His powerful eloquence takes wing, and fortune pours her favours into his lap. But the poor disciple of Æsculapius, wearied and fatigued, plies day and night, in secresy and silence, his noble vocation, amid the heart-rending scenes of plague, pestilence, and famine, yearning to bestow that which his cellar possesses not, and saves by his skill and devotion the lives of many, whose death would have spread lamentation, and sorrow, and poverty around. No ermine looms in the distance for him; no high-sounding patent to ennoble his name. He "works, works, works", in the arduous exercise of his God-like function, meriting a higher than mere temporary reward. Yet, while medical men are but mortals, having wants and necessities like other people, they should be rewarded for their services as other people are. We grudge not the able lawyer his fee, as well as his fame; let him be equally liberal in dispensing our hard-earned mite. The well-to-do people who get gratuitous medical attendance, *i.e.* filch from us that which leaves us poor indeed, are legion in number. Who ever robbed a learned expositor of the law?

It is high time that the poor whom we are expected to attend as union patients should be well defined; the scale of extras extended; the salaries of the medical officers made more in harmony with the amount of work they have to perform; and the surgeons of the workhouses paid, like their district brethren, for those cases for which an additional fee is charged.

I am, etc., D. Mackinder.

Gainsborough, August 1857.

"Gainsborough, July 21, 1857.

"Sir,—Will you have the goodness to inform me whether I am entitled to an order, and the extra remuneration involved, for my professional services in the following case?

"On the evening of Wednesday the 24th of June, I was sent for by a man who had just fractured his left thigh. Having been informed that he would be incapacitated for work for two or three months, the man said he should have to apply to the parish for an order for my attendance, and for some relief; since he could not support himself, wife, and three children, on his pension of seven shillings a week. Accordingly, an application was made to the relieving officer, who directed the man's wife to apply to the Board of Guardians on the following Tuesday, June 30th. The board remanded the case to the next meeting, July 14th, when a stone of flour and 2*s.* 6*d.* a week were allowed, but the medical order refused. The man is still unable to leave his bed, and must remain under treatment for some time to come.

"I am, sir, your obedient servant,
"D. Mackinder, M.D., F.R.C.S.,
"*Medical Officer, Gainsborough Union.*

"To the Secretary, Poor-Law Board."

In reply to this, I received a letter from R. W. Grey, Esq., M.P., Secretary to the Poor-Law Board, asking the name of the man referred to, in order to communicate with the guardians. This I sent, and got the following response:—

"Poor-Law Board, Whitehall, S.W., Aug. 19, 1857.

"Sir,—I am directed by the Poor-Law Board to inform you that they have communicated with the Guardians of the Gainsborough Union on the subject of your letters of the 21st and 27th ultimo; and that, under all the circumstances, it does not appear to the Board that you are legally entitled to claim any fee from the guardians in respect of the services which you rendered in the case of Joseph Hurd, who had sustained a fracture of the thigh.

"I am, sir, your obedient servant,
"W. G. Lumley, *Asst. Secretary.*

"To D. Mackinder, Esq., M.D., Medical Officer, Gainsborough."

SHARP PRACTICE.

Letter from John G. Harrison, M.D.

Sir,—Although I have been advised by my friends to take no notice of the scurrilous and personal attack made by Mr. Monk at the present Liverpool Assizes, in the case of Hargreaves *v.* East Lancashire Railway Company, as the jury fully negatived his charge of *fraud* against myself and Mr. Smithells, the general manager; yet I cannot allow a false and one-sided report of the case to appear in a Journal so widely diffused, and so generally read by my professional brethren, without eliciting a reply.

I need not tell you that it has been a part of my duty, in connexion with my railway engagements, to assist and advise in the pecuniary arrangement of claims for compensation arising from accidents, so as to avoid litigation by prompt settlements. Upon this point the lawyers and myself do not very well agree; consequently these unscrupulous attacks whenever an opportunity presents itself, although I have always endeavoured to accomplish my duties in a liberal manner; which, I think, is fully proved by the fact that no previous settlement has ever been disputed.

To be made the subject of such a leader as appeared in your Journal of Friday last—a journal presumed to be managed by a business-like man—is so gross a libel as to astonish even its best and warmest friends.

The statement of Hargreaves' mental incapability is a clever trick of his advisers: such an opinion having never entered the minds of four medical men who saw him at various hours up to the time of this transaction. I am positively convinced that he was as capable of making a pecuniary arrangement as you are; and I have no reason to alter my opinion, that I had every reasonable expectation that he would be capable of resuming his employment long before the twelve months had expired; presuming at that time that he was under the care of an experienced surgeon who was paid liberally for his services.

I have still to learn that the reduction of a simple fracture of the thigh must naturally be attended with unconsciousness, and that nearly three inches of shortening must be expected when it occurs in the upper third.

Your cunning observations upon the use of lithographic receipts are not in accordance with the facts, as this man signed a receipt (written at the time) with a pen given him by Mr. Smithells. He certainly made his mark, because he could not write his name.

This brief reply is not intended to provoke controversy, and I consequently decline any further notice of the subject, leaving myself, as I have done for the last thirty years, in the hands of my professional friends to judge of me as they feel disposed.

I am, etc., John G. Harrison.

East Lancashire Railway, 4, Piccadilly, Manchester, Aug. 25th, 1857.

[Our strictures upon Dr. Harrison's conduct in striking a bargain with a man whilst writhing under the pain of a severe accident may have been "unbusiness-like", but they certainly were not unjust. Dr. Harrison does not deny that he carries about with him, as the agent of the East Lancashire and other railways, printed forms of receipts in order to take his patients "whilst they are in the humour". This practice we shall call "sharp practice", however "libellous' we may be in doing so. It strikes us very forcibly that Dr. Harrison has placed himself in a false position in becoming the agent of a company in pecuniary transactions; it is his business as a medical man to cure the victims of his paymasters' neglects and errors, not to higgle with them—that task should be left to the lawyers.—Editor.]

ALLARTON'S OPERATION.

Letter from Joseph Hinton, Esq.

Sir,—Last week's Journal contained three cases of stone removed by this operation; and I am glad to find that Mr. Prichard speaks so favourably of it, even though he has to offer us a fatal case. I cannot but think that in the course of a few years it will be a commoner operation than the lateral, and that then the mortality after operation will be considerably diminished. As Mr. Prichard remarks:—"The risk of extravasation of urine, the cause of death in the majority of fatal lithotomy cases, is in this operation reduced to a minimum."

In the case which I communicated to the Bath and Bristol Branch, and which, I believe, was one of the earliest, excepting those of Mr. Allarton himself, the wound is, I think, still open; at least, it was open a few months since, when I left the Blaina Works. The man was a miner, and although the wound healed most rapidly, and appeared perfectly sound, yet when he resumed his underground occupation, but not before, the strain which the perinæum receives in their peculiar positions, a great portion of their labour being carried on in a stooping or rather "sitting on thin air" posture, seemed to tear open the cicatrix, and by degrees a regular fistula formed. When I left, the quantity of urine that passed was most trivial, he being scarcely conscious of it; but so great was his aversion to any instrumental interference, that I never could induce him to let me heal it. I mention the circumstance, as it may be as well to bear it in mind when the subject of the intended operation is a miner or collier.

I still am anxious to learn whether any experiments have been made to discover the extent of dilatation which the healthy prostate will bear without lesion. The *post mortem* rooms of our hospitals might speedily settle the doubt.

I am, etc., Joseph Hinton.

Hinton, near Bath, August 31st, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Hoffmeister. On August 25th, at Cowes, the wife of W. C. Hoffmeister, M.D., of a son.

Locking. On August 27th, at Tealby, Lincolnshire, the wife of John Locking, M.D., of a son.

Nind. On August 15th, at Harbertonford, near Totnes, the wife of P. P. Nind, Esq., Surgeon, of a son.

Times. On August 30th, at 4, Thayer Street, Manchester Square, the wife of Henry G. Times, Esq., Surgeon, of a daughter.

MARRIAGES.

Blackburne—Graves. Blackburne, Edward, Esq., barrister, to Georgiana, daughter of the late Robert James Graves, M.D., F.R.S., at Dublin, on August 25th.

Fearnside—Rofe. Fearnside, Henry, M.B., of Preston, to Frances, only daughter of John Rofe, Esq., of the same place, on August 27th.

Galt—Taylor. *Galt, John, Esq., Surgeon, of Ashton-under-Lyne, to Elizabeth, eldest daughter of Stephen Taylor, Esq., Oak Cottage, Ashton-under-Lyne, lately.

Holberton—Pout. Holberton, Vaughan, Esq., Surgeon, of Hampton, Middlesex, to Elizabeth Ann, second daughter of Henry Pout, Esq., Surgeon, of Yalding, Kent, on Aug. 26th.

DEATHS.

Gamble. On August 25th, at Barnstaple, Anne, wife of Charles Hanlen Gamble, Esq., Surgeon, aged 28.

Griffith. On August 25th, at Peckham, Henry John, infant son of *John T. Griffith, Esq., Surgeon.

Hurman. On August 25th, at Turnham Green, the wife of *W. Hurman, Esq., Surgeon.

Martin. On August 25th, at Staines, Eva Beatrice, infant daughter of Robert E. Martin, Esq., Surgeon, aged 9 months.

HEALTH OF LONDON:—WEEK ENDING AUGUST 29TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London in the week that ended on Saturday (August 29th) were 1177; they exhibit an increase on the number of the previous week, which was 1091. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1345, which if it be raised for comparison with the deaths of last week in proportion to increase of population, will become 1480. But the average is swelled beyond ordinary limits by cholera in the epidemic years 1849 and 1854; and if this disturbing element be withdrawn from the calculation, it will be found that the rate of mortality in last week exceeds, but only to a small extent, the average rate at the end of August.

The number of children born in the week exceeded the number of persons of all ages who died, by 479.

The total mortality of last week exceeded that of the week which preceded it, as has been stated above; but the increase does not arise from diseases of the zymotic character taken in the aggregate, for though typhus (with common fever) was fatal in more cases, the number having risen from 41 to 66, scarlatina and diarrhœa showed a decrease. The fatal cases of diarrhœa in the last three weeks were 244, 215, and 198; those referred to "cholera" in the same periods, 21, 12, and 15. The sub-districts of St. John, Marylebone, and St. Paul, Deptford, returned more deaths last week from diarrhœa than any other of the metropolitan sub-districts; there were 7 in St. John, and 8 in St. Paul. Eight fatal cases of small-pox are recorded, three of which occurred in the Small-Pox Hospital. Three persons died of intemperance; a child from "destitution"; 12 infants from want of breast-milk; and 13 women from diseases incidental to child-bearing. Six persons are returned who before they died had attained the age of 91 years

or more; of these, only one was a man, who died at the age of 95, at Lee; the rest were widows, at ages varying from 91 to 95, the oldest having died at Deptford.

Last week the births of 857 boys and 799 girls, in all 1656 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1470.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·943 in. The mean daily reading was above 30 in., on three days. The highest reading was 30·18 in., on Thursday. The mean temperature of the week was 66·9°, which is 7·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was above the average on every day of the week; and on Sunday and Monday the excess was respectively 12° and 13°. The temperature fell as the week advanced. The thermometer in the shade reached its highest point on Sunday (the 23rd), when it was 85·9°; the lowest point was 48·8°, on Friday. On Tuesday, the thermometer in the sun rose to 106·4°. The thermometrical range of the week was 37·1°. The mean dew-point temperature was 58·3°, and the difference between this and the mean temperature of the air, indicating its dryness, was 8·6°. The mean temperature of the water of the Thames was 69·1°. The air was calm during great part of the week: at the beginning the wind was in the south-east; at the end in the north-east. To rain was measured by the gauge.

Community of Contagion. The great mortality in courts and alleys is made to suggest a diminution of life that does not really take place in the mansions of the rich. Well, but it does sometimes. Dr. Druitt is the medical officer of health for St. George's, Hanover-square. Smallpox appeared in his district. One of the places in which it appeared was the room of a journeyman who—in this room, surrounded by his sick children—was making coats for the customers of a fashionable tailor in a fashionable street. Another was the room of a laundress, employed in getting up gentlemen's white ties. Another was inhabited by the family of an upper servant in a house in Berkeley-square. That is a broad hint to the selfish; but God knows we are not selfish as a people in this matter. When we are told that Dulwich, where the high ground secures light and air, where money secures all the wants of life, and where the population is but at the rate of one person in one acre, there died last year only 13 persons in 1,000, two of them children, and not one from a preventible disease; while in Peckham, to go no further, there died 20 in 1,000, we do not fail to see the influence of a man's dwelling-place on the duration of his life. We are not blind to the meaning of a comparison like this between neighbour and neighbour. Between Hanover-square and Hyde Park are the 137 houses of Lower and Upper Brook-street, besides 13 mansions at the north of Grosvenor-square. The deaths in them all between the 1st of April last year and the same date this year, were nine. Shepherd's-court, in Upper Brook-street, contains nine houses, and there were as many deaths in those houses alone. We give some more of these comparisons, which carry their own lesson with them too distinctly, and appeal too surely to our hearts to need enforcement. In the West Ward of Mile-end, the deaths are at the rate of 32 in every 1,000; in the Centre Ward, which is not much less densely crowded, there die out of the 1,000 only 21. The medical officer of health for Mile-end, Mr. Freeman, looks for the cause of this excessive destruction of life in his West Ward, and finds that it takes place in a new town which has sprung up during the last few years at the rear of Castle Tavern, sometimes called the Rhodeswell Estate. These houses form a main part of the ward; they have been inhabited several years, yet the roads were not made up, and the district was undrained. Under recent laws the drainage of a new street is made before houses are built, instead of afterwards. (*Dickens's Household Words.*)

Greenwich Election. A vacancy being likely to occur in the representation of this important borough, a requisition is in the course of signature inviting Thomas Wakley, Esq., the ex-M.P. for Finsbury, to allow himself to be put in nomination as one of the representatives. And when we state that it is rumoured, Admiral Berkeley, the rejected of Gloucester, is coming forward, it behoves every member of the profession practising in this large borough, to use his interest to defeat this great enemy of Naval Medical Reform. Mr. Wakley always made himself a very useful representative, and obtained great weight in the House.

Extraordinary Fecundity. It is stated, in a recent number of the *Magazine of Natural History, etc., of Moscow*, that the peasant Kirilow was presented, along with his wife, to the Empress. This peasant was married, for the second time, at the age of 70. His first wife was delivered twenty-one times: four times of 4 infants at a birth; seven times of 3 infants; and ten times of twins: in all 57 children, then alive. The second wife had already been delivered seven times: once of triplets, and six times of twins: in all 15 living children. This astonishing fecundity has been observed in other cases in Russia. Thus the peasant Gastorowa, of the village of Dolgam, was delivered, on the 1st of March, 1854, of five infants, —two boys and three girls, who all died the same day. At Torgowa, the wife of a Kalmuck had a quadruple birth,—one of the children died the next day. In the village of Iwokina, a peasant was delivered on the 26th of May, 1854, of four children, all of whom survived. In the Museum of the Royal College of Surgeons is a well authenticated case of a woman having been delivered of five children at a birth. The Russian journal above alluded to also gives some extraordinary cases of longevity; as for instance, in the year 1853 there were 2,181 persons died upwards of 90 years; 130 above 100 years; 7 from 125 to 130 years old; and, in the government of Pskow a man attained the age of 145 years.

Locusts. Several specimens of that rare insect, the *Gryllus migratorius*, have been found during the last week in the neighbourhood of London, a very fine one was found feeding in Lincoln's Inn Fields, and immediately transferred to the Hunterian Museum; another flew into the shop of a picture dealer in the Strand, and was captured. Mr. Gaylard, M.R.C.S., of Plympton, Devon, has also secured a fine specimen for his entomological cabinet, one of the finest private collections in Devonshire.

Royal Free Hospital. In addition to the resignation of Mr. Gamgee, we have now to announce the retirement of Mr. T. Carr Jackson from the surgical staff of the institution, with which he has been connected upwards of ten years. The committee has expressed its regret at losing the services of this deservedly popular surgeon.

Reports of the Inspectors of Coal Mines. The reports of the various inspectors of coal mines to the Secretary of State were published yesterday. It appears that last year there occurred the following number of fatal accidents—viz., in the northern districts, 135; in the North and East Lancashire districts, 84; in the West Lancashire and North Wales district, 103; in the Yorkshire, 52; in the Midland district (Derby, Notts, Leicester, and Warwick), 46; in the Stafford, Worcester, and Salop district, 70; in the South Stafford and Worcestershire district, 156; and in the southern district, 65. In the western district of Scotland, 45 lives were lost during the year.

Liverpool Royal Infirmary School of Medicine: Annual Distribution of Prizes, 1857. *Surgery:* Medal—Mr. J. J. Flinn; Certificate—Mr. H. G. Rawdon. *Practice of Medicine:* Medal—Mr. F. P. Weaver; Certificate—Mr. C. F. Oldham. *Senior Anatomy:* Medal—Mr. J. Robinson. *Junior Anatomy:* Medal—Mr. A. B. George; Certificate—Mr. G. C. Walker, Mr. A. Warburton. *Chemistry:* Medal—Mr. George. *Midwifery:* Medal—Mr. Weaver; Certificate—Mr. D. Mackinlay. *Materia Medica:* 1st Prize Books—Mr. Walker, Mr. Warburton, equal. *Practical Chemistry:* 1st Prize Book—Mr. W. Miller; Certificate—Mr. J. Finegan. *Ophthalmic Surgery:* 1st Prize Books—Mr. J. H. T. King, Mr. Miller, equal. *Botany:* 1st Prize Book —Mr. King.

Sickness in the Chinese Expedition. The sickly season is doing its work. Of the 600 men who now form the strength of the 59th (a regiment sent here some eight years ago), there are 150 in hospital. The proportion is still greater among the blue-jackets and marines up the river. Happily, however, the Hongkong fever has not reappeared in its old terrible malignity. Although fever, dysentery, diarrhœa, and ague, are rife, deaths are not numerous. There is plenty of hospital room, and the surgeons can hold every case well in hand. Precautions also are multiplied with a praiseworthy minuteness. Every sentry has sherry and bitters given him, to fortify his stomach against the night miasma; the ships are alternately moved down to the healthy islands at the Bogue; and the expulsion of our old friend, the Mandarin of Chuenpee, was because his fort was wanted for sanitary purposes.

TO CORRESPONDENTS.

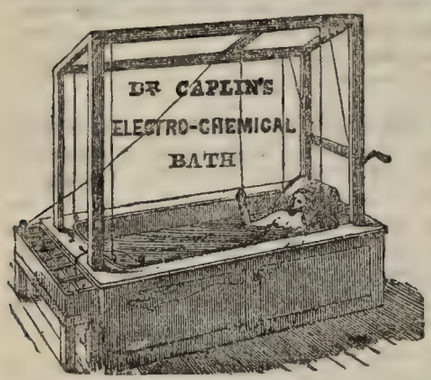
ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—MR. JOHN YATES; MR. JOSEPH HINTON; MR. HENRY BEVAN; DR. F. G. PROBART; DR. W. TINDAL ROBERTSON; DR. JOHN G. HARRISON; DR. THOMAS INMAN; DR. T. HAYES JACKSON; DR. GEORGE WOOLLAM; DR. R. G. MAYNE; MR. HENRY THOMPSON; DR. J. LLOYD; MR. GEORGE POLLOCK; MR. ARTHUR B. STEEL; DR. C. BADER; SIR CHARLES HASTINGS; MR. WM. COLLYNS; DR. CONWAY EVANS; MR. CHARLES FREDERICK CLOUGH; MR. JAMES ALLEN; MR. STONE; DR. D. MACKINDER; MR. J. HAWKES; DR. STANHOPE T. SPEER; and DR. B. NEVINS.

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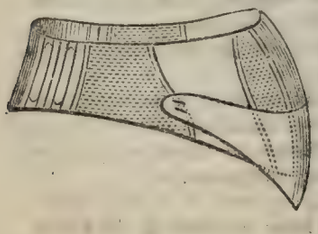
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXXVII.] LONDON: SATURDAY, SEPTEMBER 12, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

NORTHERN HOSPITAL, LIVERPOOL.

I. REPORT OF CASES OF PNEUMONIA DURING THE YEAR 1853.

By T. INMAN, M.D.Lond., Physician to the Hospital.

IN common with many others I have frequently considered whether it were possible that the statistics of pneumonia, published by Fleischmann of Vienna, could be correct. From his account we must either infer that his cases were slight, the character or type of the disease peculiar, or his treatment extremely successful. Before we are in a position to determine which of these alternatives to choose, we should have before us extensive statistics respecting pneumonia from other authors, not simply giving the relative mortality, but the nature of the cases, the plans of treatment adopted, and the duration of the illness.

I have myself been so much surprised to find that the pneumonia in practice differs greatly from the pneumonia in books, that I am tempted to record my experience, hoping that others will do the same. I will record the cases as shortly as possible, and in the order of admission.

To save time and space, I may say that the diagnosis of pneumonia has been based upon both the physical and the general signs, and that nothing has been put down as pneumonia in which there has not been dulness on percussion and pneumonic crepitation, unattended with bronchitis elsewhere.

CASE I. Jan Meyer, seaman, aged 27; speaks no English. Ill a fortnight before admission; subject to asthma; typhoid symptoms: improvement under stimulants: sudden supervention of intense dyspnœa. Death 36 hours after. Had been bled three times before admission.

POST MORTEM EXAMINATION. Hepatisation of lower fourth of right lung, the colour being dark and similar to the dark hue of the rest of the lungs, which were congested.

CASE II. Charles Seymour, aged 45, seaman. Typhoid pneumonia: moribund when admitted: ill three weeks. Treatment not known.

CASE III. Michael Plunket, aged 35, labourer. Intense pneumonia, involving the whole of the left side. Treatment: calomel, opium, antimony. Died on third day of illness.

POST MORTEM EXAMINATION. Grey hepatisation of lower lower lobe; red hepatisation of the lower part, and red engorgement of upper part of upper lobe.

CASE IV. John Raynet, aged 54, seaman. Pneumonia limited to a space about three inches square. Cupping, squills, and opium. Improvement immediately after cupping: duration ten days.

CASE V. John Redmond, aged 20, labourer. Pneumonia in lower lobe of left lung; advanced gradually during three days, first upwards, and then affected both lungs: dyspnœa on admission extreme. Calomel, antimony, and opium. Improvement decided in twenty-four hours, although there was evidence of the disease extending. On the ninth day of the attack a profuse sweating took place, and convalescence was at once established. In five days after, the man discharged himself as perfectly cured. Both lungs were hepatised in their lower third. I saw him some weeks after, and found they had recovered themselves perfectly. He was never affected by the mercury in the smallest degree.

CASE VI. Wm. Marrion, aged 18, seaman. Double pneumonia, pleurisy on left side in addition. Blister to left side, calomel, and opium. Urgent symptoms abated within twenty-four hours. Progress of the case rapid during the first fortnight; after that a complete standstill. The lower third of both lungs hepatised; copious expectoration of dirty mucus; dyspnœa at times; dropsy. Discharged at the end of four months in the same condition.

CASE VII. Charles Webster, aged 24, seaman. Pneumonia of right side, lower third; rapidly extending upwards and implicating the left side, ultimately affecting the lower half of both lungs. Calomel and opium. On admission the symptoms were very severe; they meliorated in the first twenty-four hours, although the pneumonia continued to extend for three days. On the fifth day after admission (the seventh of the disease) a profuse sweating occurred; this was followed by a ravenous appetite, which was indulged. All medicines were discontinued, and the man discharged himself on the eighth day. The mouth was never affected. The lower third of each lung was hepatised when he went out.

CASE VIII. Sirdar Khan, aged 56, Brahmin, seaman. Pneumonia of right side; would take no medicine; covered himself up with bedclothes, seemingly resolved to die. Death in four days after admission. Dark sepia hepatisation of lower half of right lung; cirrhose liver.

CASE IX. John Higginson, aged 73, old seaman: hard drinker. Pneumonia, implicating half right lung. Antimony, calomel, and opium; blister; stimulants; expectorants. For three days *was kept alive by a bottle of rum per day!* No improvement beyond a certain point. After remaining in a half-cured condition for four months, he fell into a typhoid state and died. The lower half of the right lung was in a state of incomplete red hepatisation.

CASE X. Esther Shiel, aged 16, nurse-helper. Symptoms at first those of typhus; pneumonia, distinctly marked, next day; lower half of right side. Cupping, calomel, and opium. Next day wine was ordered to counteract the depressing effect of the calomel. Improvement rapid: no salivation; mercury continued for four days only, then replaced by liquor ammoniæ acetatis. Recovery complete in twenty-five days.

CASE XI. John Gallagher, aged 17, boiler-maker. Pleuro-pneumonia of left side, implicating half the lung. Calomel and opium. Depression: wine to counteract it: no salivation. Improvement commenced on the fourth day after application of a large hot linseed meal poultice to the side. Duration of illness three weeks.

CASE XII. William Oczensky, aged 20, Polish emigrant. Double pneumonia; expectoration of about a pint and a half of blood daily. Calomel and opium; no effect in two days: antimony added; improvement in twenty-four hours after. General symptoms gave way long before the physical signs showed any alteration. Duration of severe symptoms fourteen days: duration in hospital six weeks; lung perfectly recovered.

REMARKS. These cases have all occurred under my own immediate care. I have seen many others under the care of my colleagues. They all bear testimony to the rapid improvement that takes place, even in very severe cases, shortly after admission; too soon, almost, in many instances, to be accounted for by the action of medicine. Calomel and opium has always appeared to be of service, and has been pushed rapidly or otherwise according to the intensity of the symptoms; in very rare instances has it ever produced salivation. Not having notes, however, of these cases, I prefer giving the conclusions drawn from own.

Twelve cases are recorded, and four deaths. The proportion seems unusually large; but it will be seen that we are only responsible for two, and one of these, an old drunkard of 73, was kept alive for four months.

Had we any choice respecting which to admit, it is clear that our mortality might have been reduced to a still smaller point by rejecting the case of Michael Plunket, whose symptoms were so severe as to lead to a very rapid termination.

In all cases we found the general symptoms of more importance in prognosis than the extent of lung implicated. In many

of the cases the improvement in the symptoms was so immediate after admission, that it was impossible not to put the question to oneself,—had treatment anything to do with it? It will be seen that general bloodletting was only practised in one case, and that before admission; the man died, though the amount of pulmonic disease was small.

Local depletion was tried in five cases, but was followed by marked results in two instances only.

These notes have lain by me, as will be seen, for some time, and I regret that from a variety of causes I am not able to complete the list up to the present time. I can only state, that the impression I then had has been confirmed by subsequent experience—viz., that the relief experienced after admission is generally well marked in twenty-four hours, and too soon to be solely attributable to the effect of the medicines employed.

We find in nineteen-twentieths of the cases admitted early, that the combination of calomel and opium suffices as a depressant; that its good effects are quite independent of salivation; that where the depressing effects are great it may be judiciously combined with wine; that as soon as the constitutional symptoms give way, a full and generous diet may be at once resorted to; that the physiological signs are of more importance than the physical; that amendment in the former is common for days before the lung shows signs of improvement, and is compatible even with extension of the inflammatory signs of the lung; that bleeding does harm in the majority of cases; by unduly depressing the system, it often ensures a prolonged convalescence. Blisters are rarely required, and I have seldom been able to trace a direct good result to their operation. Antimony we rarely resort to.

I have had about twenty cases under my care since 1853, and without a single death, which gives an average of thirteen per cent.; but my impression is, that if all the cases which occur in the hospital were tabulated, and those cases left out where the patients were moribund on admission, we should find that the mortality would not exceed ten per cent., if, indeed, it reached so high.

It has long been known that in pneumonia, the quantity of fibrine contained in the blood is very considerable; but if the subject is prosecuted, it will be found that this is no proof of pneumonia being a sthenic disease, for it is grouped in this respect with others of unquestionably asthenic character. Thus, in a case of leucocythæmia treated with mercury, the fibrine was found 1000 per cent. increased; in cancer, with intense anæmia, 700 per cent.; in a case of phthisis, 600 per cent., reduced to 200 per cent. by cod-liver oil; in pneumonia the increase is 300 per cent., increased by bleeding to 500 per cent.; acute rheumatism is the same, and at about the same figures stands the increase of the fibrine in Bright's disease, erysipelas, and scarlatina. In fact, there is strong physiological ground for the belief that, instead of being the fuel of inflammation, fibrine is the ashes, and that its excess denotes a diminution of strength rather than an access of power. If this be true, it affords the strongest argument in favour of a plan of treatment which diminishes the patient's strength in the smallest possible degree, and against a system whose chief aids are the lancet and the cupping glass.

II. HÆMATURIA CURED BY TURPENTINE.

By Thomas Inman, M.D.Lond.

A. B., aged 35, came into the Northern Hospital with hæmaturia. He told us that four years ago he and another man were carrying a box which contained two sixty-eight pounder cannon-balls, and that by some accident he fell down, and the box fell upon his left flank. He passed bloody urine immediately afterwards, and had done so daily up to the present time. He had been in many hospitals, but had never been cured. The quantity of blood passed daily was estimated at about four ounces, and was rarely clotted; being usually diffused through the urine. He was very weak, but not particularly anæmic. He was too feeble to leave bed, but his voice was pretty strong, and the pulse moderately firm. The strictest physical examination could detect no tumour or anything else abnormal. The microscope merely showed the abundance of blood globules that existed in the secretion. Tannin, iron, matico, alum, and lead, were tried, without any apparent results; and it was then determined to try the influence of the oil of turpentine in ten-minim doses, carefully noting the effects. In twelve hours, the quantity of blood notably diminished; and in twelve hours more, the urine appeared perfectly natural. On the third day there was strangury, and the medicine was suspended. Next day, the blood reappeared, but in less quantity than before. In two days more, the turpentine was renewed in smaller doses, and the patient was able to take it for a fortnight in five-minim doses three times a day. The blood entirely disappeared on the second day, and did not return. The man's spirits rose now very rapidly, and he regained health and strength wonderfully. He remained in the house a fortnight after giving up the use of the turpentine without any return of the bleeding, and was then discharged as cured.

In the absence of anything like a correct diagnosis as to the real cause of the hæmorrhage in this case, it would be idle to speculate upon the *modus operandi* of the turpentine. The case, however, affords a good illustration of the value of that drug as a styptic.

ST. MARY'S HOSPITAL.

I. THREE CASES OF INJURY OF THE HEAD.

[*From Notes supplied by* E. A. Hart, Esq., *House-Surgeon.*]

Case I. was that of a man under Mr. Ure's care. He was standing on the roof of a cab, watching a cricket match, when the horse moved and he fell to the ground, striking the back of his head. He walked to the Hospital, and did not appear to be suffering much pain or inconvenience. There was no external injury except a bruise on the occipital region. A purge was administered, he was put to bed, and slept comfortably. When he awoke in the morning, he complained of pain and giddiness in the head. At 6 A.M. he had what was described as a fit. There seemed to have been general convulsions and shouting. When seen by Mr. Hart, a very short time after he had been attacked, these symptoms had passed away; but the face was livid, and the veins of the neck turgid. The pulse was slow, and not very full. A turpentine injection was administered, and ten grains of calomel were put on the tongue. He soon returned to his former condition; but, at 1½ P.M., was attacked with another and more violent convulsive fit, and shortly afterwards died, apparently of exhaustion.

Post mortem examination showed no further trace of injury to the brain or its coverings, than slight vascularity of the membranes opposite the bruise of the soft parts. The skull and cerebral substance seemed quite natural. The lungs were much gorged with blood, not merely in the depending parts, but also in the front and upper portions. The heart was flabby, and was the seat of fatty degeneration. The spine and its contents were uninjured.

Case II. A man was brought in in the evening, having been drinking all day, and having terminated his debauch by swallowing a tumblerful of raw gin. This caused him to fall down stairs, striking his head. He was admitted quite insensible, with blood flowing from both ears. His skin was cold, face blanched and bathed in clammy perspiration, and the limbs relaxed. The stomach-pump was immediately used, and a large quantity of raw spirit was found to be still in the stomach. His head was shaved, a blister applied, and calomel put on his tongue; but he did not recover consciousness, and died in about an hour.

On *post mortem* examination, a fracture was found, running across the base of the skull, through both temporal bones. There was, however, no injury to the brain. The stomach was empty, and its mucous membrane presented no remarkable morbid appearance. The pericardium was adherent, and the heart fatty. Both lungs were adherent to the walls of the chest. There were cirrhosis of the liver, and granular degeneration of the kidneys.

Case III. A man received a blow from a heavy machine called a jack, which is a stone with a hook projecting from each side. The hooks struck him on both parietal bones. When admitted he was perfectly sensible, but felt giddy, and vomited. His pulse was feeble. A small quantity of serum, tinged with blood, flowed from the left ear immediately after the accident. He rallied in a few hours, and then the quantity of serum was observed to be on the increase, and it was mixed with a less proportion of blood. He complained then of a little headache and dizziness, but spoke rationally, and ate some food. The urine was high coloured and ammoniacal. The bowels were open naturally.

Next day the serum continued to flow in large quantities, and pure, of a watery consistency. His pulse was strong, quick,

110; the tongue dry; and the skin hot. He expressed a great desire to go home. He was cupped on the nape of the neck to six ounces, and ordered two grains of calomel and five grains of antimonial powder every two hours. The headache increased during the day; and in the evening the head was shaved, and a blister applied.

Next morning it was found that the serous discharge had ceased in the night. When seen (at 10 A.M.) his manner was dull; he was roused with difficulty, was moaning, and complaining of pain in the head. The pulse was strong, and the skin hot. In the afternoon, his pulse was soft, 116; the skin cold and moist. His manner was more natural. He was with great difficulty prevented from going home.

He did well till the middle of the following day, when he became partially insensible; his pulse fell, and became very rapid and soft (about 130); the motions were passed unconsciously; he refused food, and slept a good deal. In the night his breathing became stertorous; and he died next morning.

Post mortem examination showed a fracture, with slight depression, of the left parietal bone, leading down through the middle fossa to the internal auditory foramen in the temporal bone; and on the right side, an immense clot of blood, firmly solidified and partly organised, deeply indenting the cerebrum and proceeding from a laceration of the posterior branch of the middle meningeal artery. It should be noted that the quantity of fluid which flowed from the ear, and which had been collected, amounted to twenty-five ounces.

Remarks. These cases present several points of interest. In the first case the fatal result was wholly unexpected, and there were not *post mortem* appearances sufficient satisfactorily to account for it. The injury had been, to all appearance, trifling. There was no lesion of the brain, no large blood-vessel had been ruptured, nor any other important organ in any way interfered with. Yet the patient died in less than twenty-four hours. Whence this suddenly fatal termination to an injury apparently so little dangerous? The answer must be sought, it is presumed, in the state of the heart. Under the shock of the injury, the heart, already too feeble to meet the ordinary demands of the circulation, and which would probably soon have failed to perform its functions, became unable to propel the blood through the lungs. Hence the congested, loaded, condition of these organs, and hence, too, a defective aeration of the blood sent to the brain, the efficient cause of the epileptic convulsions, with their attendant lividity. This at least is the explanation which seemed most reasonable to those who had the care of the case, nor have we a better to offer. The case was one apparently in which bleeding, judiciously watched, might have relieved the overloaded heart; and this remedy would have been adopted but for the unexpectedly rapid progress of the disease. With such a condition of the heart, however, it is obvious that no great amount of blood-letting could have been borne, and it may very fairly be questioned, whether any remedy would have averted the patient's death.

In the second case, the termination was by no means unexpected. It seems to have been a pure case of alcoholic poisoning, to which the fracture of the base of the skull was superadded as an accidental complication, and one which had no share in inducing death. In fact, this injury is not one which, as far as our experience goes, is ever fatal (unless in the event of some important part of the nervous substance having been injured) before the time of the occurrence of inflammation. The relaxation which is induced by alcohol in all the voluntary muscles from want of innervation, and which, when the dose becomes poisonous, attacks the involuntary muscular organs also, is well illustrated in the details of this patient's death.

The next case is one of still more interest, on account of the very large clot which was found, and the great compression to which the brain had been suddenly exposed, without the occurrence of any symptoms to indicate it. This absence of symptoms was referred, by some who saw the case, to the abstraction of so large a quantity of subarachnoid fluid, thereby allowing a large space external to the membranes. This explanation, however, goes too far. If such a large quantity of cerebro-spinal fluid was withdrawn, why was the brain at all compressed? That it was so, however, was clear from the large dent in its surface; and that this effusion had begun at or about the time of the accident was proved by the appearance of the coagulum. It is very probable, however, that the effusion increased gradually, and that the brain was thus enabled to accommodate itself to the pressure. It will be seen that there were at no time, except just before death, any symptoms of compression; the man enjoyed and exercised the powers of voluntary motion, was quite rational, and even anxious to leave the house a very short time before his death. The fact of the effusion being on the side opposite the principal injury was, in this case, the less surprising, as both sides of the head had been struck.

II. AMPUTATION AT THE HIP-JOINT.

Under the care of S. Lane, Esq.

A case of primary amputation at the hip joint, for a compound fracture of the femur high up, with much laceration of the soft parts, occurred at this Hospital on September 7th. We shall give notes of it on some future occasion. When last seen, the patient appeared to be in danger of sinking from the shock of the operation.

ST. GEORGE'S HOSPITAL.

OVARIAN CYST: DEATH FROM ULCERATION INTO THE CAVITY OF THE PERITONEUM.

Under the care of Robert Lee, M.D., F.R.S.

[*From Notes by* Dr. Sutton, *Obstetric Assistant.*]

Eliza K., aged 34, was originally admitted on September 10th, 1856, under the care of Dr. Lee, on account of ovarian tumour. She had been a widow for six years. The tumour had been growing for eighteen months, and latterly with great rapidity. She complained of considerable pain in the tumour, principally on the left side. The catamenia were regular and profuse. On examination, a very large cyst was found occupying the whole of the lower part of the abdomen. The uterus was healthy. The presence of the tumour appeared to cause constipation of the bowels, and some degree of dyspnœa; and, as the latter increased after her arrival in the house, she was tapped, and nineteen pints of dark treacly looking fluid were drawn off from the cavity, as it seemed, of a single cyst. This afforded her considerable relief; and she left the hospital after a few weeks stay, much relieved. The abdomen had, however, been gradually filling ever since the operation.

Nothing more was heard of her till Aug. 15th, when she was readmitted, in a dying condition. The abdomen had increased to a very large size; and it seemed that, on August 10th, she had been suddenly seized with pain in the back and sickness, and with a reddish discharge from the uterus, mingled with clots. On the morning of admission, she felt acute pain in the abdomen, and a sensation as if something had burst inside her. She also vomited some stuff of a chocolate colour. The belly was very tender to pressure, and had a peculiar congested appearance externally. On admission, the lips were blue; the pulse was hardly perceptible; and she had some difficulty in breathing. Stimulants were administered, but she sank rapidly, and died in three hours.

Post mortem examination showed the belly much distended. The peritoneal cavity was full of fluid, which had flowed out of the ovarian cyst. On wiping away this fluid, no traces of inflammation were seen in the serous membrane. The left ovary was connected with an enormous cystic tumour, which had risen into the abdomen above the umbilicus, and pushed the intestines upwards. It extended across the middle line into the right iliac fossa, lying in front of the uterus and right ovary, and immediately below the abdominal wall. The cyst contained dark grumous fluid, something like coffee-grounds; and a large quantity of dark semi-solid matter, such as would be left by the inspissation of such fluid. It communicated freely with the peritoneum by a rounded ulcerated opening in the right iliac fossa, large enough to admit the point of the forefinger; and, on laying the cyst open, other spots of ulceration were seen on its inner surface. One of these had extended through all the cyst-wall except the peritoneal covering, which, however, gave way in removing the cyst from the body. There was also another smaller ulcerated opening above the situation of the principal communication. Lying in the wall of the principal cyst were numerous secondary cysts, containing clear serum. No traces of the original structure of the ovary could be seen. The pedicle of the tumour was formed by the broad ligament, and contained numerous large vessels. The opposite ovary contained also a compound cyst, similar to the above, except that the largest cyst was not larger than a hazel-nut, and that all the cavities contained clear serum. The uterus and bladder were healthy.

Remarks. This is an instance of a termination to ovarian dropsy which is believed to be relatively very rare. The reader, however, who is interested in this matter, will find several cases recorded by Dr. Bright in the third volume of *Guy's Hos-*

pital Reports, in which these cysts have ulcerated, and the contents been poured into the neighbouring cavities, the peritoneum, the large intestine, etc. None of these cases, however, is exactly parallel to the foregoing. Most, if not all of them, were taken to be malignant. This character was, to say the least, very doubtful in the present case, the only indication of it being the character of the fluid, a microscopic examination of which did not much tend to confirm such an opinion. In those of Dr. Bright's cases in which the laceration was not the result of violence, it seemed to proceed from the distension of the sac and pressure of the enclosed fluid: here, from some morbid action going on simultaneously in several parts of the cyst-wall; consequently, in them there was found a fissure or slit; in this case, several rounded ulcers, rather resembling those so often seen in the stomach. All these cases, however, point to the same practical conclusion; viz., the propriety of relieving the distension by operation in good time, before the pressure of the fluid, or the irritation which it occasions, has led to ulceration, with all its attendant dangers.

ST. BARTHOLOMEW'S HOSPITAL.

MEDULLARY CANCER OF THE GLANDS OF THE NECK FOLLOWING A GLANDULAR ABSCESS.

Under the care of J. Paget, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

The following case appears to have been one of those in which malignant disease shows itself in parts which have been subject to the irritation of morbid action originally of an ordinary character. In this particular instance, the occurrence may have been a mere coincidence; it is useful, however, to note such cases when they occur, as bearing on the interesting question of the deposition in innocent tumours of the material of cancer, a phenomenon which is now admitted by most pathologists to occur, although rarely.

James T., aged 47, a stout, robust man, was admitted into this Hospital on August 8th, with a large abscess about the neck.

His history is the following: about eight or nine months ago, he felt a severe pain extending up his arm, consequent on an injury to his finger; this pain subsided, but was soon followed by a swelling in the neck, which gradually enlarged, causing him much suffering and uneasiness. An abscess soon formed, and he applied for admission. During his stay in the Hospital, the swelling was opened, and the abscess discharged profusely, leaving him very weak. Under the treatment by tonics, he was soon able to leave, the abscess however not having altogether disappeared, as now and then matter escaped from the opening. While he was away, he had it punctured at different intervals, pus making its way out each time. Seeing that the discharge persisted, and that his health was materially giving way, he applied for admission on the 8th, the abscess at that time occupying a large extent of surface, with its borders of a dark livid colour, and somewhat of a hard, brawny consistence; the openings made not having healed up, and the discharge continuing at intervals.

His health has, up to the time of the appearance of the abscess, always been good; his family were all healthy; and his children, of which he has had sixteen, have always enjoyed good health.

On his admission, he was put under a course of tonics, with a free supply of wine and beef-tea; this, however, did not much improve his state; his diet was then changed into a more nutritious one, and he was put upon the iodide of iron, poultices being at the same time applied to the part. On August 20th, a large carrot poultice was substituted for the common linseed one; his health not having as yet derived any material benefit from the remedies applied.

Considering the swelling, and the recurrence of the discharge, Mr. Paget thought it was probably a mass of cancerous glands.

In this state the patient continued until the morning of Aug. 21st, when a sudden gush of blood issued from the wound; the bleeding continued profusely, some blood issuing from the mouth, but none from the ears or nose. The patient spoke a few words, then sank, having lost about three quarts of blood in the space of a few minutes.

On examining the body after death, the disease was found to be a mass of cancer of the medullary kind, which extended nearly as far as the pharynx; the course of the common carotid and its branches was traced with great minuteness, but no vessel was found ruptured, though the disease had involved a part of the sheath of the vessel. Part of the inferior maxillary bone was removed, and the course of the arteries was also laid open, but no signs of perforation could be found. The ear was examined, and the tympanum was found ruptured.

Original Communications.

SOME PRACTICAL OBSERVATIONS ON THE BEST METHODS OF INTRODUCING THE CATHETER IN CASES OF EXTREMELY NARROW AND IRRITABLE STRICTURE.

By Henry Thompson, Esq., F.R.C.S., M.B.Lond., Assistant Surgeon to University College Hospital; Consulting Surgeon to the St. Marylebone Infirmary.

[*Read before the British Medical Association, July 30th*, 1857.]

[*Concluded from page* 754.]

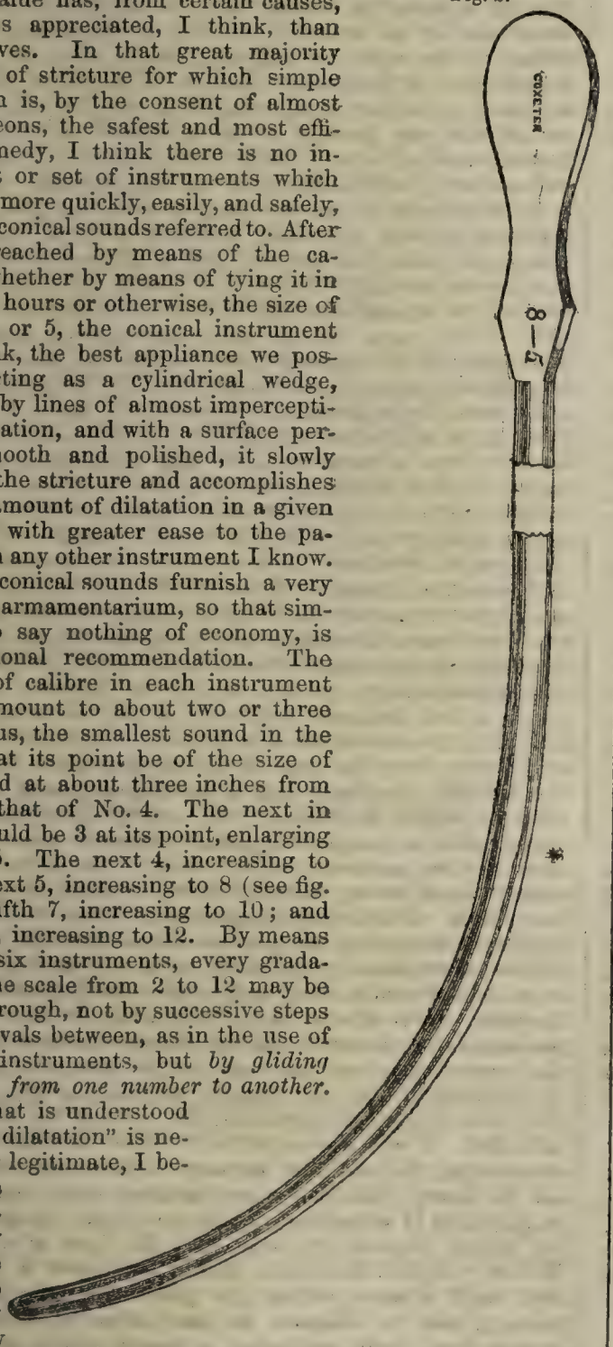
There is a point, the recollection of which is sometimes of considerable importance, in applying this or any other solid instrument of small size to a narrow stricture. It is the fact that *the orifice of the stricture very frequently does not lie in the direct axis of the urethra;* in other words, it may be situated either to the right or left side, either above or below the normal line of the canal. This is frequently so obvious that attention to the fact, as ascertained in any particular case, may ensure the easy passage of an instrument afterwards; while forgetfulness of it may render success extremely difficult. In endeavouring to find the orifice of the stricture, simple pressure at the seat of the obstruction with the point of an instrument is very frequently not only useless, but injurious, unless the point has entered, and is grasped by the walls of the narrow passage. But by withdrawing the instrument for an inch or so, and carefully sliding it closely *along one side only* of the canal two or three times, then repeating the manœuvre on the opposite side; if this be unsuccessful, by keeping the point closely to the roof of the canal, or, on the other hand, by maintaining it constantly upon the floor, and thus, in a methodical manner, exploring consecutively each aspect of the urethral walls, we may often succeed in becoming engaged in a stricture which could be entered by no other means, or, if so, only by chance. And a recollection of the aspect which proved successful on one occasion will generally enable us to introduce the instrument at a succeeding attempt with very little trouble. I have verified the utility of this proceeding so frequently as always to pay particular attention to the existence of deviation, which appears to me to be more generally present than otherwise, although its extent varies considerably, being greater or less in different cases. Certainly, in half the cases of difficulty which fall to my lot, a note is made in the case-book in reference to the nature and degree of deviation from the axis of the urethra which the orifice of the stricture presents; and I have found such a record of extreme utility in enabling me, on the reappearance of a patient after a considerable period of time, to pass an instrument for him, and with little trouble. The same record has been of equal use to other operators, to whom the patient may have been subsequently transferred. Thus, for example, a statement respecting any particular case that the obstruction will be encountered by the catheter at five and a half inches from the external meatus, and is most easily passed by letting the point of the catheter bear gently along the right side of the passage before it arrives at the distance named, may enable the surgeon who sees the case for the first time to introduce the instrument into the bladder, as easily as his predecessor who, after several observations, has verified the condition so indicated. It was a recognition of these deviations, as often constituting the difficulty in cases of obstinate stricture, that led M. Leroy d'Etiolles to recommend, some years ago, the employment of exceedingly small gum-elastic bougies, possessing points twisted somewhat into the form of a corkscrew. M. Leroy advised that these should be turned in every direction, until chance guided the point through the devious passage, and he claimed to have achieved a considerable success from their application, a result which appears to be natural. But it is clear that each application must be equally a chance proceeding; for with these long and slender filaments, susceptible of little guidance from the hand applying them, beyond the movement of rotation, it is impossible to learn the character of the deviation, or the precise nature of the move-

ment which successfully cleared it. Generally preferred as is the solid instrument to the flexible, I cannot but feel the value of solidity in an instrument in a threefold degree, when deviation of the orifice of a stricture from the axis of the urethra has to be encountered.

In conclusion, taking advantage of all the means which therapeutics, which appropriate instruments, and the collateral, appliances referred to afford us, it appears to me that little is wanting to success but patience and gentleness in manipulation. Adopting the methodical mode of search for the orifice of the stricture which has been recommended, it is advantageous to expend a considerable period of time on the attempt, while it becomes an easier and a more hopeful task to do so than when the obstruction is attacked only by simple pressure, or by chance gropings for the narrow orifice; a proceeding than which nothing can be more monotonous and wearisome. There is little doubt that long-continued and persevering efforts, provided they are made with the utmost care, and without inflicting any serious pain on the patient, will be generally rewarded by success in the most difficult cases.

I beg leave to request your further indulgence for a single remark on the utility of solid metallic sounds of a *slightly conical form*, in the subsequent treatment of stricture. This is a species of instrument long known; but its value has, from certain causes, been less appreciated, I think, than it deserves. In that great majority of cases of stricture for which simple dilatation is, by the consent of almost all surgeons, the safest and most efficient remedy, I think there is no instrument or set of instruments which effects it more quickly, easily, and safely, than the conical sounds referred to. After having reached by means of the catheter, whether by means of tying it in for a few hours or otherwise, the size of No. 3, 4, or 5, the conical instrument is, I think, the best appliance we possess. Acting as a cylindrical wedge, bounded by lines of almost imperceptible inclination, and with a surface perfectly smooth and polished, it slowly expands the stricture and accomplishes a larger amount of dilatation in a given time and with greater ease to the patient than any other instrument I know. Six such conical sounds furnish a very complete armamentarium, so that simplicity, to say nothing of economy, is an additional recommendation. The increase of calibre in each instrument should amount to about two or three sizes; thus, the smallest sound in the set may at its point be of the size of No. 2, and at about three inches from it reach that of No. 4. The next in order should be 3 at its point, enlarging to about 5. The next 4, increasing to 6; the next 5, increasing to 8 (see fig. 2); the fifth 7, increasing to 10; and the last 9, increasing to 12. By means of these six instruments, every gradation of the scale from 2 to 12 may be passed through, not by successive steps with intervals between, as in the use of ordinary instruments, but *by gliding insensibly from one number to another.* Where what is understood as "rapid dilatation" is necessary or legitimate, I believe there is no method by which we can so smoothly and easily pass through several sizes of the catheter scale in a short period of time, as with these curved conical instruments.

Fig. 2.



* Fig. 2. The asterisk denotes the spot at which the calibre of the sound begins to diminish. In the instrument selected for illustration here, it is No. 8 in the shaft gradually lessening to No. 5 at the extremity.

Our French brethren have endeavoured to obviate the objection to the ordinary instruments of uniform calibre, by employing numerous additional or intervening numbers, and thus lessening the intervals which occur in our catheter scale. This method renders necessary some twenty or more bougies or catheters in place of our usual number of twelve. The principal defect in this system is that several instruments must be passed into the urethra at each sitting, if much progress is to be made; while another certainly exists in the considerable cost which so extended an armamentarium involves.

I have only now to thank you for the honour you have accorded me, in so patiently listening to the few remarks which I have ventured to offer, and which are presented in the conviction, that, slight as they are, they may not be without a certain practical utility in their application to the difficult and often troublesome cases in question.

Wimpole Street, Cavendish Square, 1857.

CASES OF ABSCESS OF THE UTERINE APPENDAGES OPENING INTO THE BLADDER.

By F. Melland, Esq., and John Windsor, Esq., of Manchester.

[*Read before the Medical Section af the Manchester Royal Institution.*]

Case I. Abscess of the Uterine Appendages opening into the Bladder, attended by Desquamative Nephritis during four Months. By Frederick Melland, Esq., Surgeon to the Chorlton-upon-Medlock Dispensary, Manchester. Mrs. A. B. was confined on June 14th, 1855, after an easy and natural labour. Two days afterwards she had a rigor followed by fever, without any local pain or tenderness on pressure.

On the sixth and seventh days she had pain and uneasiness on the right side of the abdomen, quite removed by a free evacuation of the bowels. The fever gradually subsided, and on the twelfth day she was well enough to lie on the sofa. She remained, however, still delicate and weak, and about the sixteenth day œdema of the left leg and thigh, and to a much less extent of the right, came on, with puffy eye-lids and cheeks. There was no inflammation of the veins of the lower limbs; but on examining the urine I found it scanty, dark-coloured, containing albumen, with a sediment consisting of blood-corpuscles, casts of the urinary tubules, epithelial cells and crystals of uric acid. There were, in fact, the usual symptoms of acute desquamative nephritis. This, of course, was quite sufficient to account for the dropsical symptoms, but not for the left leg and thigh being more swelled than the right: this, which puzzled me at the time, became explained later.

After the use of gentle purgatives and diaphoretics for a few days, the tincture of sesquichloride of iron was given with digitalis, and afterwards with bitter infusions; the patient was kept in bed. All the symptoms improved very much, and the swelling disappeared in about twenty days.

Then occurred the first of several relapses, which very much retarded the progress of improvement. In this instance it was caused by the sudden and dangerous illness of the child; in the course of the same night there was a return in greater abundance than at the first of the blood-corpuscles in the urine, along with fever and loss of appetite. This and several subsequent relapses were treated much in the same manner as the first attack, with the addition of having large mustard poultices applied to the loins for an hour and a half at a time about every other night.

In the beginning of August, or about seven weeks after confinement, a tumour was first found on the left side of the hypogastric region, about the size of an orange, and appearing to rise up from the pelvis. It was very little tender, and gave very little pain. It gradually enlarged, but never became of very great size.

The absence of pain and tenderness, and the slow progress of the tumour, gave rise to some uncertainty as to its nature; its seat was apparently either the ovary or the broad ligament on the left side; and the fact of its having appeared after confinement, and having been preceded by illness, made it more probable that it was an inflammatory swelling going on to suppuration than an ovarian cyst.

The nephritis continued gradually to improve in spite of occasional relapses; and after a residence of six weeks at the sea side, by the middle of October no further symptoms remained: it had lasted about sixteen weeks. Towards the end of Octo-

ber, the tumour having gradually enlarged, seems to have contracted adhesions to the bladder; for, along with general febrile symptoms, there were much more pain in the tumour and tenderness on pressure; there was also considerable irritability of the bladder, the urine having to be passed very often.

In the beginning of November, about twenty weeks after the confinement and thirteen from the discovery of the tumour, pus was first found in the urine, the quantity being from one and a half to two ounces in the twenty-four hours, which has varied but little ever since; it seldom contains much mucus, and has always been free from any unpleasant smell.

I soon came to the conclusion that the pus came from the tumour having opened into the bladder; for the original affection of the kidneys had been cured for several weeks past, and there had been no signs, local or general, of pyelitis or abscess in any way connected with the kidneys. There was no irritability of the bladder to speak of; no phosphatic crystals nor ropy mucus to indicate its origin from the bladder.

The general health now improved; the appetite and strength returned, and were still further benefited by a long residence on the continent in the ensuing year. The menses reappeared early in January 1856, and have occasionally returned since, but with great irregularity. The health has again suffered this spring (1857), but not more than change of air will probably soon restore. The tumour appears still to be about the size of a small orange; it seems to be closely connected with the uterus.

After the opening of the abscess, she took for some time the ammonio-citrate of iron with calumba, and also cod-liver oil, with a view to the improvement of her general health. Other plans of treatment have been tried this year, but with no good effect. I am inclined to trust the most to that kind of change in the whole system which results from travelling and change of air, combined with the regimen and the medicinal effect of the waters at some of the spas on the continent, especially those containing iodine and bromine.

I would remark, in conclusion, that I attribute the much greater swelling of the left leg and thigh, which occurred about a fortnight after the confinement, to the pressure of the tumour upon the iliac vein, although the tumour was not discovered until a month later. As to the connexion between the inflammation of the kidneys and the abscess, I think that they both arose from a common cause, namely, the absorption of impure uterine discharges: in the abscess, more immediately, perhaps, through the medium of the veins and absorbents; in the kidneys, probably the irritation would take place on the separation from the blood of impure or poisonous matters, as is supposed to be the case in the nephritis which occurs after scarlatina. This explanation is strengthened by the history of the child's illness, which was fatal at the age of six weeks, after about a week's duration, and presented symptoms very much resembling those seen in pyæmia, which may have arisen from its having been nursed partially by the mother until the commencement of the more acute stage of its illness, only a week before its death.

Case II. Suppurative Ovaritis, communicating with the Urinary Bladder. By John Windsor, Esq., F.R.C.S., etc. April 30th, 1855. Mrs. Whittle, aged 29, married some years, but without children, came under my care Jan. 18th of this year, labouring under symptoms of irritation of the urinary bladder. She had frequent and painful micturition; the pulse was unaffected, the tongue tolerably clean, the bowels regular, the appetite and sleep indifferent. She had some pain often about the lower part of the abdomen, but not much in the back; urine slightly alkaline, as shewn by reddened litmus paper having its blue colour restored.

With the sound, passed two or three times, I explored the bladder, but could not detect any calculus. I prescribed for her an infusion of buchu leaves, with hydrochloric acid and hydrochlorate of morphia. This she took for awhile, until she was tired of it, and then various modifications of treatment were tried, but with only temporary benefit. The urine, however, always remained unnatural, alkaline or ammoniacal, with muco-purulent, if not quite (whitish) purulent deposit, and latterly it has been more so than formerly. Fugitive pains have also occurred about the sides, with occasional cough, and sometimes sickness and vomiting. Latterly diarrhœa has set in, and for the last two or three weeks has been very troublesome. There has also probably been some absorption of pus (pyæmia or toxæmia), as there have appeared four or five painful tumours, about the size of a horse-bean, in the veins (cephalic and basilic) of the fore-arms and upper-arms, but those are now subsiding and disappearing under the use of a liniment: ℞ Linimenti saponis comp. ʒiiss; liquoris ammoniæ, tincturæ opii, aa ʒij. M.

She has also lately been taking opiate pills each night, and an astringent opiate mixture during the day.

May 9th. She has since last report become gradually weaker, much emaciated, and died to-day, about six o'clock, P.M., with a good deal of preceding restlessness.

The diarrhœa had continued, and the evacuations had latterly been passed almost unconsciously, apparently from sheer debility. For a long time there had been complete anorexia, but of late not often vomiting. The œdema of the legs had been almost stationary during the last few weeks, and the painful swellings in the veins of the arms had gradually subsided and disappeared for some days before her death.

Inspection of the Abdomen about twenty-four hours after death. The abdominal parietes were thin and almost destitute of adeps. The omentum was somewhat adherent at the lower part of the abdomen; the smaller intestines also were adherent, near the same part, to what appeared to be the remains of the right ovary, but the adhesions were separable without opening into the intestine. The right ovary appeared strangely degenerated into a mass about the bulk of an orange, with a thickish but easily lacerable external tunic, containing internally a considerable quantity or number of somewhat glandular-looking dull-greyish bodies, with suppurating substance intermixed, pus exuding at various points when opened out, and in one part adhering to and opening into the urinary bladder; hence the appearance, probably, for a considerable time of pus in the urine, and perhaps also a cause, from absorption of pus and its circulation in the vein, of the phlebitis in the arm, if not in other parts also. The mucous membrane of the urinary bladder, especially in its posterior superior part, was almost black in colour, probably from long-continued irritation or chronic inflammation, occasioned by the presence of pus. The left ovary seemed converted into a cyst, of about the size of a very large apple, containing a thin almost transparent serum.

The uterus itself appeared natural, as did also the kidneys, ureters, and liver, etc. On opening the lower part of the small intestines, the mucous lining presented an injected appearance, coated with some reddish-looking mucus, but no ulceration could be seen. The head and thorax were not opened. In this case it would seem that the *origo mali* was in the right ovary, which had become inflamed and suppurated in part, the pus finding its way into the bladder, and probably by absorption into the blood itself.

In conclusion, I may mention that Mrs. Whittle informed me she had been, previous to seeing me, for some time under the professional care of a gentleman at Wolverton, her husband being then in the service of the London and North-Western Railway Company.

Reviews and Notices.

On Mineral Waters: their Physical and Medicinal Properties. With Descriptions of the different Mineral Waters of Great Britain and the Continent, and Directions for their Administration. By Robert Mortimer Glover, M.D., F.R.S.E. pp. 375. London: Henry Renshaw. 1857.

This volume comes barely in time to be useful to the profession and the public during the present holiday season. As, however, it promises to be a standard work, this is not of much importance. Dr. Glover has certainly made more of his subject than any of his predecessors; and, in the wide category of spas and mineral waters, he has not forgotten to mention our indigenous spas. The great world of London is not perhaps aware that, besides the well known Beulah Spa, there are three others upon the very skirts of the metropolis—at Hampstead, Sadler's Wells, and Kilburn; the two former, light chalybeates, and therefore highly efficacious, in the opinion of all those who believe in the value of extreme dilution; and the latter, of the same class as the Cheltenham and Leamington waters, sulphate of magnesia and sulphate of soda predominating. Dr. Glover observes that he has had carbonic acid forced into the

water, and found it, thus treated, equal if not superior to any artificial Seltzer water. As Dickens's charity school boy says of learning his letters, however, it is very questionable whether it is worth going through so much to learn so little. Dr. Glover, we are glad to notice, has not blindly adopted the opinions of those who have gone before him with respect to the nature of many of these spas, whether British or foreign: indeed, he seems to feel a particular delight in questioning the opinions of Dr. Granville respecting many of them. Whilst, however, he appears to be of opinion that the addenda of many foreign spas, such as magnificent scenery and the interest naturally attaching to a foreign people, are great aids to cure, he by no means coincides with the opinions of those who think that simple water, administered under similar conditions, would be equally efficacious.

"Taking into consideration the fact that water itself, used externally or internally, cold or hot, in different modes, is a powerful agent—that it stimulates the skin, dilutes the blood, favours the changes which are constantly going on in the body, increases the action of the secretory organs, and, in short, tends to affect the phenomena of life—the accompanying influence of change of scene, favourable hygienic conditions, and so forth, which every one can appreciate, there does not seem much difficulty in accounting for the general good effects of mineral waters. The absurd laudations of some have provoked the sneers of others. Great disappointment has often ensued from the injudicious choice of waters. This is often done, higgledy-piggledy, without consideration, or sufficient knowledge of the subject by medical advisers. The writer, for instance, remembers a case where an old man, in the last stage of asthma and heart disease, made his appearance at a certain spa, where he had been sent by his medical attendant to drink the sulphur water! Instances of this kind are innumerable. To be brief.—Where cold waters have not real medicinal constitution, so to speak, they either soon fall into oblivion, or owe what reputation they enjoy to other adjuncts—the air, scenery, etc. But it is different with thermal waters. Of this class are sources differing, not to say in little, as is often gently said, but, to speak out boldly, in nothing from ordinary spring water, possessing reputations for the cure of particular diseases almost as specifics, at which one is lost in astonishment. Take, for instance, the baths of Pfeffers and Wildbad; their temperature is about that of the body, or a little lower; their composition about that of pure spring water; yet they have astonishing reputation for the cure of particular affections. Gastein resembles the others in its purity; but the temperature is higher, and has to be reduced before the water is used. Not to speak of the more extensive classes of diseases in which these waters are used, which will be referred to under the heads of the particular spas, let us confine ourselves to a few specimens. Thus, Wildbad is more recommended in gout attended with the deposit of chalk-stones, or a tendency that way; Pfeffers, in gout, in people of weak habits, having a tendency to pass from organ to organ; in palsy of one half the body after apoplexy, and in palsy with the absence of sensibility; while Gastein is more recommended in irregular and depraved nervous action, based on weakness. When any doubt is expressed on the subject of the superiority of these waters, either taken internally or applied externally, over ordinary water with the same adjuncts, one is answered in a way to which, with a sceptic, there can be only one reply, viz., a shrug of the shoulders. But, on the other hand, it may be plausibly said, send your gouty, or rheumatic, or paralysed patient, to Naples, or Germany, or Norway; let him drink as much common water, and bathe in as much common water, as he likes, will he come back cured, as from Pfeffers, or Wildbad, or Gastein?" (pp. 8, 9.)

Dr. Glover states that he is personally acquainted with the majority of the foreign spas; consequently, we have in this volume something more than a warming up of other people's wares. The general practitioner will find it very valuable, as a judicious and scientific handbook to the thermal springs of Europe; and not only will he find the qualities of each minutely detailed, but also a well founded estimate of their respective worth in different complaints. The picturesque features of the principal spas are given in illustration—a very interesting addition to a volume of this kind, inasmuch as invalids like to know the features of places, as well as of persons, before having anything to do with them. As a book of reference, the volume should be upon the table of every medical man's library, in order that he may be enabled to make a judicious selection of spas in those cases where nature is called in as the handmaid of art in perfecting cures.

British Medical Journal.

SATURDAY, SEPTEMBER 12th, 1857.

THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

Social science is peculiarly the growth of the present century; we may almost say, of the men of the present day. Within the last twenty years especially, scores of earnest and able men have entered this vast and important field of inquiry, and the result has been a very general amelioration of all conditions of the people as regards their social relations. The fruit has been gathered, however, either by individual labourers, or by small societies which have no connexion with others of a kindred nature. Until the present time, we have had no machinery in existence by which all the scattered workers in social science could bring their knowledge to one focus, as do the followers of physical science in the far famed British Association. And yet it cannot be denied that man, in all his social relations, affords scope for inquiry of an infinitely higher kind than that which pertains to any other subject of a purely physical nature. In order that the whole subject of social economy shall be brought to one centre, we learn that an Association has been formed, mainly by the exertions of Mr. George Hastings, which bids fair to take the first place among the many associations of the present day. The presidency of the new society has been worthily accorded to Lord Brougham, and among the list of names of the General Committee will be found those of the Earl of Shaftesbury, John Simon, John Stuart Mill, the Rev. F. D. Maurice, Sir J. S. Pakington, Sir Charles Hastings, M.D., Dr. Conolly, Dr. Babington, the Bishop of London, Dr. Southwood Smith, Dr. W. Farr, together with those of many other well known leaders in social science. The first annual meeting of the Association is appointed to be held at Birmingham, on the 12th of October next; and we do not doubt that most of the foremost men in England will then congregate, on the interesting occasion of founding a society calculated to work immense good to our countrymen, and, through them, to the human race. In order the more clearly to lay before our readers the objects of this National Association, we copy the following from the prospectus just issued.

"The object of the National Association is, as its name implies, to aid the development of the social sciences, and to guide the public mind to the best practical means of promoting the Amendment of the Law, the Advancement of Education, the Prevention and Repression of Crime, the Reformation of Criminals, the Establishment of due Sanitary Regulations, and the recognition of sound principles in all questions of Social Economy.

"The proposed mode of action is, once in every year, to bring together the various societies and individuals who are engaged or interested in furthering any of the above objects; and without trenching upon their independent exertions, to elicit by discussion the real elements of truth, to clear up doubts, to

harmonise discordant opinions, and to afford a common ground for the mutual exchange of reliable information on the great social problems of the day.

"The better to carry out this plan, the Committee have divided the Association, for the present, into five departments, viz.:—Jurisprudence and Amendment of the Law—Education—Punishment and Reformation—Public Health—and Social Economy; but at the time of each Meeting any Department will, if necessary, be sub-divided into sections for the more convenient transaction of its business."

The department in which the feeling and knowledge of our own profession will be chiefly interested and valuable will undoubtedly be that of Public Health. This department is entirely in our own hands; there is not a name, in fact, of any eminence, with the exception of that of Mr. Chadwick, which does not belong to us. Such being the case, we rejoice that an occasion is about to arise in which Medicine will be enabled to assert its position in the face of the world as one of the most philanthropic professions. The science of Public Health has been built up and maintained by the leading men of our own body, and it behoves us keep the lead we have so worthily obtained. We trust that those of our own associates especially interested in this department of social science, will be found at Birmingham in the ensuing month, assisting in the good work of founding this important Association. The comprehensive nature of the objects that will come under discussion in this department, which we may state is under the presidency of Lord Stanley, may be estimated from the following extract from the prospectus.

"This Department will consider the various questions relating to the Public Health and the Prevention of Disease; it will collect statistical evidence of the relative healthiness of different localities, of different industrial occupations, and generally of the influence of exterior circumstances in the production of health or disease; it will discuss improvements in house-construction (more especially as to the dwellings of the labouring classes), in drainage, warming, ventilation; public baths and washhouses; adulteration of food and its effects; the functions of government in relation to public health, the legislative and administrative machinery expedient for its preservation; sanitary police, quarantine, etc.; poverty in relation to disease, and the effect of unhealthiness on the prosperity of places and nations."

In the pages of this Journal have from time to time appeared valuable papers on most of the subjects mentioned in this programme; as one of the pioneers of this new Association, we must therefore be allowed to wish it God speed, and to ask for it all the aid that our Association can accord to it.

THE WEEK.

The Emperor Napoleon, who has distinguished himself in no manner more than by his care for the social wants of his poorer subjects, has just set a good example to this country by determining to erect a Convalescent Hospital of, we believe, 500 beds, in Paris. This admirable establishment will be devoted to the working classes. In this country, we have nibbled at this great subject in different directions. For instance, there is the old established Convalescent Hospital at Carshalton, which has been the means of doing an incalculable amount of good; it is, in fact, the country house of the metropolitan hospitals. Then we have the establishment at Bournemouth, which principally receives consumptive patients; and the small hospital at Torquay, which receives a similar class of sufferers, and which owes much of its success to the exertions of our associate Dr. Radclyffe Hall. These institutions are, however, limited in their funds, and the latter two especially are calculated for a better class than those who labour with their hands. We look in vain in this country, so celebrated for its charitable institutions of all kinds, and especially for its medical charities, for a convalescent hospital on a scale commensurate with the real wants of the country. It is our firm belief that the most effective part of the cure of disease is brought about by the nursing and rest which should supervene upon active treatment—that the recurrence of old maladies, or the foundation of new ones, depends upon the manner in which the patient is able to rest and recruit after he has left the hands of the physician or surgeon. To send a poor fellow home from the comforts of a hospital to the misery and shortcomings of a confined room, which perhaps the poor wife has been obliged to strip of its scanty furniture for food during the illness of the bread winner—is to consign him in many cases to a lingering death. Rest, good food, and good air, are the three things required; and we have no means at present of supplying these three needful things to the convalescent poor of town or country. We trust that the good example set by the Emperor will speedily be followed in this country, and that before long a convalescent hospital will be established in London, at least as large as that designed for convalescent workmen of Paris.

The Honorary Secretary of the Bristol Humane Society has forwarded to us a copy of the method of treatment recommended by the Society for the recovery of persons apparently drowned or dead. This code of instructions is printed in two forms. One, of small size, is for the police constables to fasten into their instruction book, and is equally useful for private individuals. The other, in the form of large bills, is intended to be posted on the walls and other places along the quays, etc. It is *nearly* a copy of the "Marshall Hall" method of treatment. There is no alteration; but two or three additions are made.

THE LATE SIR CHARLES MANSFIELD CLARKE, BART., M.D.

Death has recently carried off one of the most distinguished ornaments of the medical profession in the person of Sir Charles Clarke, who died on Monday, the 7th inst., at his residence on the Marine Parade, Brighton, in his 76th year, after a lingering illness of nearly two years duration.

Charles Mansfield Clarke, the younger son of the late Mr. John Clarke, surgeon, of Chancery Lane, by a daughter of Mr. William Mansfield, of Thrapstone, Northamptonshire, was born in London, May 28th, 1782, and received the rudiments of his classical education at St. Paul's School, where he was the schoolfellow and, we believe, the playmate and form-fellow of the late Lord Chancellor Truro and the present Chief Baron Pollock. His father's example led him, at an early age, to turn his attention to medical studies; and accordingly, instead of passing to one of the universities, he attended St. George's Hospital, and the lectures on anatomy delivered at the Hunterian School by Mr. Wilson and Mr. Thomas, and those on midwifery by his elder brother, the late Dr. John Clarke, who for many years enjoyed a most extensive practice in that parti-

cular branch of the profession in which his younger brother was destined to become so distinguished.

Having finished his preliminary studies, Charles Clarke was admitted a member of the Royal College of Surgeons, and spent the first two years of his professional life as assistant-surgeon in the Hertfordshire Militia, which he subsequently exchanged for the post of surgeon in the 3rd Regiment of Foot Guards. Of this part of his early career he always felt proud, and frequently in his later years it was his lot to return thanks on public occasions at once for the military and the medical profession. Subsequently, however, he was induced by his elder brother to give up the army, and to devote his whole attention to the diseases of women and children, and more particularly to the practice of midwifery. He associated with his brother as a lecturer on these subjects as early as 1804, and continued to deliver his regular courses of lectures down to the year 1821, during which time he could reckon almost all the eminent accoucheurs among his hearers and pupils. For many years he held the appointment of surgeon to Queen Charlotte's Lying-in Hospital, which he resigned about the same time that he ceased to lecture, though the interests and welfare of that institution continued to the last to be objects of his attention and regard. In 1825 he was chosen a Fellow of the Royal Society.

Hitherto Mr. Clarke had practised only as an accoucheur, in which capacity his rise to fame and celebrity had been speedy, if not sudden, though not more so than he well deserved; for no man ever threw himself more zealously into his professional duties, or showed more tenderness and sympathy in all his dealings with his patients, or more kindness and courtesy to his professional rivals. He always had a kind word for every one around him; and even when in the height of his London practice, and when carriages thronged his doors in Savile Row, he would go on any distant visit to the wife or daughter of a medical gentleman, regardless of the consequences to himself. By these means, aided by his great sagacity and knowledge of the world and mankind, he attained so solid and substantial a position that he was able to retire from the constant cares of his London practice at an age when most men are still climbing up the hill, and to purchase the estate of Dunham Lodge, in Norfolk, when he had scarcely passed his fortieth year.

Having obtained the degree of M.D. from Lambeth, in 1827 Dr. Clarke became a Licentiate of the Royal College of Physicians; and, on the accession of King William IV to the throne, he was honoured by the appointment of physician to Queen Adelaide. On September 30th, 1831, he was created a Baronet, and in the year 1836 he was elected a Fellow of the Royal College of Physicians. In 1842 he had conferred upon him the honorary degree of M.A. by the University of Cambridge, and was created a D.C.L. of Oxford in 1845.

Incessantly engaged in the performance of the active duties of a most laborious department of his profession, Sir Charles Clarke had not the leisure for many literary productions, but it is observed by no less an authority than Dr. Pettigrew that the excellence of that which he published serves only to awaken regret that he should not have written more. His chief work, and that by which his name will be longest remembered among medical circles, is his *Observations on the Diseases of Women and Children*, which he published in two parts, in 1814 and 1821 respectively, and forms an essential part of every medical library. He was President of the Society for the Relief of the Widows and Orphans of Medical Men, in which he took the deepest interest to the last. He was the personal friend of nearly all the medical celebrities of the present century, and was beloved by all who knew him, whether in or out of his profession. Of late years he had resided almost entirely at Brighton.

Sir Charles Clarke married in 1806 Mary Anna, daughter of the late Wright Thomas Squire, Esq., of Peterborough, who died in 1856, by whom he had a family of five daughters and also two sons, the elder of whom has now succeeded to the title as second baronet. He is in holy orders, and was appointed to the rectory of Hanwell, Middlesex, in 1847.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	York House, Bath.	Thurs., Sept. 24, 6¼ P.M.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, September 1857.

A Bad Tenant Ejected. In the engagement which took place between the French and the Arabs at the Col de la Monzala, in Algeria, seventeen years ago, Commandant Uhrich, of the 8th battalion of Foot Chasseurs, was struck by a ball in the eye, which penetrated the head, and remained there in spite of all efforts to extract it. Since then, M. Uhrich, who has risen to the grade of colonel, has suffered greatly from the presence of the ball, particularly when obliged to ride on horseback. A few months back, the inconvenience having greatly increased, he was sent by his medical advisers to Allevard, a watering-place in the Isere. About ten days ago, he had a slight attack of apoplexy, which shook him greatly, and a few nights afterwards, he was awakened from his sleep by a sense of suffocation. Jumping up, he found that the ball had by degrees worked its way down, and had at last fallen from the upper part of the mouth into his throat. By violent efforts he succeeded in dislodging it, and he is now doing well. The ball, though diminished by corrosion, was found to weigh 25 *grammes* (about four-fifths of an ounce).—*Galignani.*

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-SEVENTH ANNUAL MEETING.

[*Held in Dublin, August 26th, and following days*, 1857.]

The twenty-seventh annual meeting of the British Association for the Advancement of Science commenced on August 26th. The General Committee met in the Board Room of the Royal Dublin Society; and the Annual Report of the General Committee, the Kew Report, and the Report of the Parliamentary Committee, were read.

The general meeting was held in the Rotunda, at 8 P.M. Professor Daubeny, President for the last year, resigned the Chair to the Reverend Humphrey Lloyd, D.D., who delivered an address.

PRESIDENT'S ADDRESS.

The subjects noticed were the progress made in astronomy, meteorology, optics, the science of heat, inorganic chemistry, and geology. We subjoin some extracts.

Meteorology. The most important step which has been recently taken in this country to advance the science of meteorology has been the formation of a department connected with the Board of Trade, for the collection and discussion of meteorological observations made at sea. The practical results of a similar undertaking in the United States are now well known; and when the United States Government invited other maritime nations to cooperate in the undertaking, the invitation was cordially accepted. A conference was held at Brussels in 1853; and a report was made, recommending the course to be pursued in a general system of marine meteorological observations. This report was laid before the British Parliament, and a sum of money was voted for the necessary expenditure. The British Association and the Royal Society cooperated, and the establishment was soon organised. It was placed under the direction of Admiral Fitzroy; and in the beginning of 1855, it was in operation. Agents were established at the principal ports for the supply of instruments, books, and instructions; and there are now more than two hundred British ships so furnished, whose officers have undertaken to make and record the required observations, and to transmit them from time to time to the Department. The observations are tabulated, by collecting together, in separate books, those of each month, corresponding to geographical spaces bounded by meridians and parallels ten degrees apart. At the present time, seven hundred months of logs have been received from nearly one hundred merchant ships, and are in process of tabulation. Holland is taking similar steps. For the purposes of meteorological science, this system cannot be considered as complete until observations on land are included. Most of the greater atmospheric changes are due to the distribution of land and water, and to the different effects of the sun's rays on each. Observation alone can furnish the data from which the effects of these agencies may be calculated; and we can therefore probably make no great advance in the knowledge of the meteorology of the globe, without a concurrent investigation of its two leading departments. Land observations exist in great numbers. In Prussia, in Russia, in Austria, and in Belgium, such observations are organised under Government direction, or at least with Government support. In other parts of Europe, as in Britain, the labour is left to individuals or scientific societies. What is needed is to give unity to these isolated labours—to connect them with one another, and with the results obtained at sea; and the first step to this seems to be to give them, in each country, that permanence and uniformity of system which can only be insured in measures adopted by the State. Here, however, we encounter an objection, upon which it is necessary to say a few words. It has been objected to the science of meteorology, as it has been usually studied, that it proceeds upon a false method, and that, consequently, it has led, and can lead, to no results. The number of those who are engaged in the discussion of meteorological observations is indeed disproportionately small, and the results obtained probably fall far short of what may be expected from the data already accumulated. But that the methods have led, and can lead, to no results, is sufficiently disproved by the labours of a single man—Professor Dove, of Berlin. And if it be true that the course pursued in the science has yielded much fruit, in proportion to the labour bestowed on the discussion, it will hardly be deemed widely erroneous. Still, it is quite possible that the methods pursued, though not fruitless, may be inadequate, and it seems therefore necessary to notice the objection somewhat more minutely. It is asserted, then, that the capital vice of the science of meteorology, as at present pursued, is that it has no definite aim; that it ought to embrace an inquiry into the physical constitution of the objects with which the science is concerned, and an investigation of causes as well as laws of phenomena. It may be admitted, at once, that the physical constitution of the bodies whose changes we are investigating is a proper object of study to the physicist; but it does not follow that it should necessarily be conducted by the same individuals who are in search for the laws of the phenomena, or even that the former knowledge is essential to the progress of the latter. There are two modes of studying the sequences of natural phenomena—one in their relation to time, and which is best accomplished by observations at stated periods; and the other in the relation of the successive phases of the phenomenon to one another. Of these, the latter, although not wholly neglected, has not been so much followed as it deserves; and it probably would, if more systematically followed, enrich the science of meteorology with a new harvest of results.

Light. The most important of the recent additions to the theory of light have been those made by M. Jamin. It has been long known that metals differed from transparent bodies, in their action on light, in this, that plane polarised light reflected from their surfaces became elliptically polarised; and the phenomenon is explained on principles of the wave theory, by the assumption that the vibration of the ether undergoes a change of phase at the instant of reflexion, the amount of which is dependent on its direction, and on the angle of incidence. This supposed distinction, however, was soon found not to be absolute. Mr. Airy showed that diamond reflected light in a manner similar to metals; and Mr. Dale and Professor Powell extended the property to all bodies having a high refractive power. But it was not until lately that M. Jamin proved that there is no distinction in this respect between transparent and metallic bodies; that all bodies transform plane polarised into elliptically polarised light, and impress a change of phase at the moment of reflexion. Professor Houghton has followed up the researches of M. Jamin, and established the existence of circularly polarised light by reflexion from transparent surfaces. It may be mentioned as one of the latest of the marvels of photography, that M. Poitevin has succeeded in producing plates in relief, for the purposes of engraving, by the action of light alone. The process depends upon the change in the affinity for water, produced by the action of light upon a thin plate of gelatine, which is impregnated with bichromate of potash.

Heat. In the whole range of experimental science, there is no fact more familiar, or longer known, than the development of heat by friction. Yet the science of which it is the germ dates back but a very few years. It was known from the time of Black that heat disappeared in producing certain changes of state in bodies, and reappeared when the order of those changes was reversed; and that the amount of heat, thus converted, had a given relation to the effect produced. In one of these changes—namely, evaporation—a definite mechanical force is developed, which is again absorbed when the vapour is restored by pressure to the liquid state. It was, therefore, not unnatural to conjecture, that in all cases in which heat is developed by mechanical action, or *vice versâ*, a definite relation would be found to subsist between the amount of the action and that of the heat developed or absorbed. This conjecture was put to the test of experiment by Mayer and Joule, in 1842, and was verified by the result. It was found that heat and mechanical power were mutually convertible; and that the relation between them was definite, 772 foot-pounds of motive power being equivalent to an unit of heat—that is, to the amount of heat requisite to raise a pound of water through one degree of Fahrenheit. The science of thermo-dynamics, based upon this fact, and upon a few other obvious facts or self-evident principles, has grown up in the hands of Clausius, Thomson, and Rankine, into large proportions, and is each day making fresh conquests in the region of the unknown. The dynamical theory of heat has materially aided in establishing true physical conceptions of the nature of heat. The old hypothesis of caloric, as a separate substance, was indeed rendered improbable by the experiments of Rumford and Davy, and by the reasonings of Young; but it

continued to hold its ground, and is interwoven into the language of science. It is now clearly shewn to be self-contradictory, and to lead to the result that the amount of heat in the universe may be indefinitely augmented. On the other hand, the identification of radiant heat with light, and the establishment of the wave theory, left little doubt that heat consisted in a vibratory movement, either of the molecules of bodies or of the ether within them. Still, the relation of heat to bodies, and the phenomena of conduction, indicate a mechanism of a more complicated kind than that of light, and leave ample room for further speculation. The only mechanical hypothesis which appears consistent with the present state of our knowledge of the phenomena of heat, is the theory of molecular vortices of Mr. Rankine. In this theory all bodies are supposed to consist of atoms, composed of nuclei surrounded with elastic atmospheres. The radiation of light and heat is ascribed to the transmission of oscillations of the nuclei; while thermometric heat is supposed to consist in circulating currents or vortices, amongst the particles of their atmospheres, whereby they tend to recede from the nuclei, and to occupy a greater space. The dynamical theory of heat enables us to frame some conjectures to account for the continuance of its supply, and even to speculate as to its source. The heat of the sun is dissipated and lost by radiation; and must be progressively diminished unless its thermal energy be supplied. According to the measurements of M. Pouillet, the quantity of heat given out by the sun in a year is equal to that which would be produced by the combustion of a stratum of coal seventeen miles in thickness; and if the sun's capacity for heat be assumed equal to that of water, and the heat be supposed to be drawn uniformly from its entire mass, its temperature would thereby undergo a diminution of 2·4° Fahr. annually. On the other hand, there is a vast store of force in our system capable of conversion into heat. If, as is indicated by the small density of the sun, and by other circumstances, that body has not yet reached the condition of incompressibility, we have, in the future approximation of its parts, a fund of heat probably quite large enough to supply the wants of the human family to the end of its sojourn here. It has been calculated that an amount of condensation, which would diminish the diameter of the sun by only the ten-thousandth part, would suffice to restore the heat emitted in 2,000 years. Again, on our own earth, *vis viva* is destroyed by friction in the ebb and flow of every tide, and must therefore reappear as heat. The amount of this must be considerable, and should not be overlooked in any estimation of the physical changes of our globe. According to the computation of Bessel, 25,000 cubic miles of water flow in every six hours from one quarter of the earth to another. The store of mechanical force is thus diminished, and the temperature of our globe augmented, by every tide. We do not possess the data which would enable us to calculate the magnitude of these effects. All that we know with certainty is, that the resultant effect of all the thermal agencies to which the earth is exposed has undergone no perceptible change within the historic period. We owe this fine deduction to Arago. In order that the date-palm should ripen its fruit, the mean temperature of the place must exceed 70° Fahr.; and, on the other hand, the vine cannot be cultivated successfully when the temperature is 72° or upwards. Hence, the mean temperature of any place at which these two plants flourished and bore fruit must lie between these narrow limits, *i. e.* could not differ from 71° Fahr. by more than a single degree. Now, from the Bible we learn that both plants were simultaneously cultivated in the central valleys of Palestine in the time of Moses; and its then temperature is thus definitively determined. It is the same at the present time; so that the mean temperature of this portion of the globe has not sensibly altered in the course of thirty-three centuries.

Chemistry. Among the most remarkable of the recent discoveries in inorganic chemistry are those of MM. Wohler and Deville, relative to silicon and boron. Each of these substances is now proved to exist in three very different states, analogous to the three known states of carbon, to which they are thus closely allied—namely, charcoal, graphite, and diamond. The last of these states is of course the most interesting. Crystallised boron possesses a hardness, brightness, and refractive power, comparable to those of diamond; it burns in chlorine, without residue, and with circumstances resembling those of the combustion of diamond in oxygen; it is not acted on by any of the acids, and appears to be the least alterable of all the simple bodies. Dr. Lloyd had been informed that its power is already used in the arts, instead of diamond dust; and it seems not improbable that, when obtained by the chemist in crystals of larger size, it may rival the diamond as a gem.

Section of Mathematical and Physical Science.

On certain electrical phenomena in the United States. By Professor Loomis.

Atmospheric electricity is very abundant in the United States, and often exhibits phenomena more remarkable than are witnessed in most of the countries of Europe, especially in England and Germany. These phenomena are not confined to any particular season of the year; but the exhibitions in summer appear under a different form from those of winter. In summer, free electricity exhibits itself chiefly in the form of lightning during thunderstorms; and these exhibitions are often among the most sublime and impressive phenomena witnessed in any part of the globe. The telegraph wires are exceedingly sensitive to the approach of a thunderstorm. The wires are often charged with electricity, from the effects of a storm so distant that no thunder is heard or lightning seen. Professor Loomis had often stood at such times in a telegraph office, and introduced his body into the electric circuit, by taking hold of a telegraph wire with one hand and with the other hand grasping a wire which communicated with the earth. A frequent twinge was felt in the arms and sometimes through the breast. The shock is pungent and painful, even when scarcely the slightest spark can be obtained by bringing the two wires nearly in contact. Such experiments are unsafe when the electric cloud is near. If, during the passage of a thunder shower, the telegraph apparatus is left in communication with the long telegraph wires, the fine wires of the electromagnets are almost sure to be melted, and the magnets thereby rendered useless. Sometimes, in telegraphic offices, there occurs an explosion, which melts large wires and is dangerous to human life. The effect of a feeble current of atmospheric electricity on the telegraph wires is the same as of a current from a galvanic battery. It makes a dot on the telegraph register; and, when a thunderstorm passes in the neighbourhood of a telegraph line, those dots are of constant occurrence; and, being interposed between the dots of the telegraph operators, they render the writing confused and often illegible. The operators are, therefore, commonly compelled to abandon their work when a thunder shower prevails in the vicinity of any part of the line. The aurora borealis is very common in the United States, even in summer; but, on account of the long continued twilight, it is seldom witnessed with such brilliancy in summer as in winter. During winter, thunderstorms in the United States are of very rare occurrence; but even at this season they are not entirely unknown. Sometimes in midwinter, after a series of unusually warm days, a strong wind suddenly springs up from the west, attended by a shower, during which several flashes of lightning, accompanied by thunder, are noticed. Such a shower is invariably followed by a great and sudden fall of the thermometer. But, while electrical discharges in the form of lightning are rarely witnessed in winter, other electrical phenomena of great interest are of almost daily occurrence. Those phenomena consist of free electricity residing upon almost all bodies resting on the earth, but sufficiently insulated. This free electricity is particularly noticeable on the clothes and hair of the human body. During the cold months of winter, the human hair is commonly electrical, and especially when it is brushed with a fine comb. Often at such times the fine hairs are seen to stand erect; and the more you comb to make them smooth, the more obstinately they refuse to keep their proper place. If you present your fingers to those electrified hairs, they fly to meet you, like a lock of dry hair attached to the prime conductor of an electric-machine. In such cases, there is but one remedy; the hair must be thoroughly moistened; after which it lies quietly in its place. During the same season of the year, all woollen articles of clothing become highly charged with free electricity. The pantaloons in particular are found to attract light, floating particles of dust, down, etc., especially near the feet; and it is impossible to cleanse them by brushing. The longer you brush, the more your clothes are covered with dust and lint. Nothing less than a wet sponge is efficient to cleanse them. At night, when you take off your pantaloons, you hear a distinct crackling noise, and, in a dark room, perceive a succession of flashes. You draw your fingers down over them, especially near the lower extremities, and you perceive a repetition of the crackling noise, accompanied by distinct flashes of light. As you take off your flannel drawers, the crackling is again heard, louder than before, and the flashes of light are more vivid. If you take a woollen blanket from your bed, hold it suspended in your left hand, and draw the fingers of your right hand over it:—the crackling is equally loud and longer continued. Your

fingers seem enveloped in a blaze of light, and the flashes can be several times renewed. Brute animals do not escape the general electrical influence. In a cold, frosty night, you draw your hand gently over a cat's back, and you hear a distinct crackling noise, while the cat shows unmistakable signs of bad temper, and refuses her consent to play the philosopher with you. Persons riding on horseback during a snow storm in the night have frequently noticed the extremities of their horse's ears tipped with light, like that of a pale, steady flame. The preceding phenomena are either unknown in summer or are only noticed occasionally, and in an inferior degree; but the aurora borealis is often witnessed in the United States during winter, and frequently attains a splendour such as is surpassed in but few portions of the globe. During the severity of winter, and especially in houses which are furnished with heavy carpets and kept thoroughly warmed, even more remarkable electrical phenomena are often witnessed. If you walk across such a carpet with a slight shuffling motion, and then present your knuckle to some metallic object, as the knob of a door, you perceive a decided spark and a faint snap. By walking rapidly two or three times back and forth the spark may be increased, and becomes, perhaps, a quarter of an inch or more in length, and has great intensity accompanied by a smart snap. This phenomenon is not peculiar to any particular house or style of carpet, but in the cold months can be witnessed in almost every house in New York where there is a thick woollen carpet and the room is kept habitually well heated and dry. In some houses these phenomena are so remarkable that persons who have never witnessed them have listened to the accounts with evident incredulity. A few winters ago, Professor Loomis received from a female friend an account of some phenomena which she had witnessed at the house of Mrs. C., in New York, and which appeared so remarkable that he concluded the account must be greatly exaggerated. He was induced to call on Mrs. C., and request her to favour me with an exhibition of her electrical powers, to which request she readily acceded. She was sitting in a parlour covered with a heavy velvet carpet, and lighted with gas by a chandelier suspended from the ceiling. Mrs. C. rose from her chair, advanced one or two short steps, and gave a slight spring towards the chandelier, which was above her reach when her feet rested upon the floor. As her finger approached the metal, he perceived a brilliant spark and heard a snap. The spark was more brilliant than that which is furnished by an ordinary electrophorus when most highly excited, but its length was not so great. A few steps upon the carpet were sufficient to renew the electric charge, and the spark was perceived whenever Mrs. C. touched a metallic object, like the knob of a door or the frame of a mirror. On approaching the speaking tube to give orders to the servants, Mrs. C. repeatedly received a very unpleasant shock in the mouth, and was very much annoyed by the electricity until she learned first to touch the tube with her finger. In passing from one parlour to the other, if she chanced to step upon the brass plate which served as a slide for the folding-doors, she received an unpleasant shock in the foot. A visitor, upon entering the house, in attempting to shake hands with Mrs. C., received a shock which was quite noticeable and somewhat unpleasant. A lady, on attempting to kiss her, was saluted by a spark from her lips. Her little girl, on taking hold of the knob of a door, received so severe a shock that she ran off in great fright. Larger children frequently amused themselves by shuffling about on the carpet and giving each other sparks from their fingers. The author had heard of several other houses in New York which appeared about equally electrical; and most of these phenomena had become so familiar in New York that they had ceased to excite surprise. The electricity thus developed exhibits the usual phenomena of attraction and repulsion, and is capable of igniting combustible bodies. By skipping a few times across the room with a shuffling motion, and then presenting the knuckle to an open gas burner, the gas may be ignited. This experiment generally fails unless the burner be warm; but if after a jet has been some time burning you extinguish the flame and then draw a spark with your knuckle from the warm burner, the gas is readily ignited. After a careful examination of several cases of this kind, Professor Loomis had come to the conclusion that the electricity is excited by the friction of the shoes of the inmates upon the carpets of the house. He had found by direct experiment, that electricity is developed by the friction of leather upon woollen cloth. For this purpose, he stood upon an insulating stool, and spreading a small piece of carpeting upon a table before him, rubbed a piece of leather vigorously upon it; and then bringing the leather near the cap of a gold leaf electrometer, he found that the leaves were repelled with great violence. The electricity of the leather was of the resinous kind. Electricity must, therefore, necessarily be excited whenever a person walks with a shuffling motion across a carpet; but it may be thought remarkable that the electricity should be intense enough to give a bright spark. In order to produce the highest effect, there must be a combination of several favourable circumstances. The carpet, or at least its upper surface, must be entirely of wool and of a close texture. A drugget spread upon an ingrain carpet yields a good supply of electricity. The effect of the increased thickness is obviously to improve the insulation of the carpet. The carpet must be quite dry, and also the floor of the room, so that the fluid may not be conveyed away as soon as it is excited. These conditions will not generally exist except in winter, and in rooms which are habitually kept quite warm. The most remarkable cases which he had heard of in New York had been in close, well built houses, kept very warm by furnaces. These furnaces are erected in the cellar, and are filled with anthracite coal, which is kept constantly burning from autumn till spring. The heated air is conveyed to the hall, the parlours, and to every room in the house, as far as is desired, through large flues built in the walls, the flues having a section of about one square foot. In such a house, the wood during winter becomes very dry, and all the furniture shrinks and cracks. The electricity is most abundant in very cold weather. In warm weather, only feeble signs of electricity are obtained. The rubber, viz., the shoe, must also be dry like the carpet, and it must be rubbed upon the carpet somewhat vigorously. By skipping once or twice across a room with a shuffling motion of the feet, a person becomes highly charged; and then, upon bringing the knuckle near to any metallic body, particularly if it have good communication with the earth, a bright spark passes. In almost any room which is furnished with a thick woollen carpet, and is kept tolerably warm and dry, a spark may thus be obtained in winter; but in some rooms the insulation is so good, and the carpets are so electrical, that it is impossible to walk across the floor without exciting sufficient electricity to give a spark.

REMARKS ON SOME PHYSICAL OBSERVATIONS MADE IN INDIA BY THE BROTHERS SCHLAGINTWEIT.

[*Communicated by* H. Schlagintweit.]

In reference to the magnetic phenomena, the observers were particularly surprised to find that the Himalayas exercise a well defined and a general influence on the magnetic laws, the declinations showing a slight but general deviation towards the central parts; and the magnetic force being generally greater than it was to be expected in that latitude. This was particularly evident in Thibet, and at the northern foot of the Huenluen in Turkestan. In Southern India, Herr Adolph Schlagintweit found the increase of magnetic intensity from south to north very rapid. The lines of magnetic intensity have a form which will probably show many analogies with some groups of isothermal lines, especially with those for the temperature of the soil. Local irregularities of magnetism are, comparatively speaking, more rare and more limited than has generally been expected. Only in the Khrisa hills the declination was about 4° more to the west than might have been supposed. When the instruments were carefully placed on alluvial deposits, even of a comparatively small depth, instead of being part of the rocks themselves, the magnetic action of the soil was always found a very small one. In reference to meteorology, besides meteorological researches of their own, the observers were furnished, particularly in reference to temperature, with a rich material of observation, made chiefly by the Medical Department of the India Service, which would enable them to construct a very detailed map of isothermal lines of India. For the mountainous parts of India Proper, as well as for the Himalayas, they propose to give the isothermal lines in connexion with the well known topographical contour lines, which, they think, already show much better than representations in the form of profile the characteristic forms of isothermal lines in a country covered by mountains. The barometric daily variation in the Himalayas, even up to heights of 18,000 and 20,000 feet, was found to show, when the curve was sufficiently defined, the maximum and minimum of the day at hours nearly corresponding to those on the plain, but the differences between the extremes gradually decreased. The barometric variation in the Himalayas has, therefore, in heights of 18,000 feet, not yet the inverted form, which was found formerly by theory to take place in the free atmosphere in Europe at about 9,000 to 10,000 feet, and which actually was observed on all high altitudes of

the Alps. In reference to electricity, detailed observations were particularly made in the eastern Himalayas. The transparency of the atmosphere was measured up to 16,000 feet with the diaphometer formerly used by the observers in the Alps, consisting of two black circles, on white ground, of unequal diameters. In heights above 17,000 feet, the two circles disappeared at the same angle, showing that there the diminution of transparency produced by a stratum of air of about 3,000 feet is no longer appreciable to our eye. During the dust-storms in Upper India, Herr Schlagintweit regularly observed a very unexpected coloration of the sun, the disk assuming occasionally a decidedly blue colour (as if seen through a blue coloured glass), and the shadow of a thin object on white paper becoming orange. This blue colour of the sun was invariably perceptible when the sun had declined so far that it could be seen through a sufficiently dense stratum of suspended matter. They also made some observations on the transparency of the water, similar to those made on the transparency of the air. A white stone, covered during some experiments with different colours, was allowed to disappear, under necessary precautions, whilst gradually lowered in the water, and then the distance from the surface measured. The greatest transparency in the water corresponded to a depth of 53 feet in the Mediterranean near Corfu. In the tropical seas, they invariably found it to disappear beyond a depth of 30 feet. In the rivers of India, in which suspended matters abound to such an extent, as in the Ganges, the Brahmapootra, and the Indus, it generally disappeared at five to six inches below the surface. Water containing the suspended matter, collected in many cases, will allow us later to establish more accurately the relative connexion between the transparency and the form and quality of suspended matter.

M. D'Abbadie asked whether M. Schlagintweit had ever used the method of taking altitudes of stations by the temperature of water boiling in an open vessel? and what his experience was as to the relative accuracy of that method, and of the barometer, in taking elevations? and what precautions he used?

M. Schlagintweit replied, that he had used that method; that he found it both accurate and convenient; that he used a small brazier of charcoal in preference to a spirit lamp, as he found the spirits in elevated stations apt to be thrown or blown out of the lamp; and that, by a simple contrivance of a tube drawing out like a telescope, he found he could protect the mercury from the cold, and keep it surrounded with the escaping steam as it ascended in the stem of the very sensitive thermometer—a matter which he considered of much consequence, as even touching the scale of the thermometer with the hand was found to affect it.

M. D'Abbadie asked whether M. Schlagintweit had ever experienced, during the dust-storms of which he spoke, those sudden darkenings of the sun with which he, as a traveller in the Desert, was so familiar, which suddenly seemed to surround them on all sides, and sometimes completely shut out the light of the sun? He also wished to know, if he had experienced them, to what height in the Himalayan range they were found to extend?

M. Schlagintweit replied, that he had experienced them, and that he had found them to occur at an elevation of 2,000 feet.

M. D'Abbadie asked whether M. Schlagintweit had ever in India observed a phenomenon which was common in many places he had visited. Those deep water-worn gulleys, which he believed in India were called *nullahs*, he had frequently met. Now in these, occasionally, when the most suffocating heat and calm prevailed, suddenly a light breeze sprang up, which soon increased to a gale, and at length became so furious a storm that man found it impossible to stand upright, and many and even large objects were irresistibly carried along by it. Now, his experience was, that the course of this storm always followed the course of the waters, insomuch that he was inclined to believe that it was a fixed law; and he wished to know whether the same law was observed to hold in the nullahs of India.

M. Schlagintweit replied, that the storms alluded to suddenly came on in those deep gulleys in India, as if the hot air in them was in a state of unstable equilibrium, which the slightest disturbance at any part was apt to overthrow along its entire extent; but, as to the law observed by M. D'Abbadie, this could not be the case in India, as, at the time when these storms take place in them, they are quite dry, and without water running in either direction.

ON SIMULTANEOUS ISOTHERMAL LINES. BY PROF. HENNESSY.

Having briefly referred to the interest shown by the Association in the question of distribution of temperature over the surface of the earth by the publication of the maps of Professor Dove, and acknowledged the importance of the results furnished by a comparison of mean temperatures in connexion with the climatology of the globe, Mr. Hennessy proceeded to describe the new species of isothermals now proposed. If temperature were recorded at every station on the surface of the earth at the mean time corresponding to any given meridian, then a line traversing the places where such temperatures were found to be equal would be a simultaneous isothermal line. The forms of such lines would manifestly depend on the diurnal range of temperature at the several stations, as well as the several physical conditions influencing mean temperature. If the earth were absolutely at rest, and stripped of its fluid covering, these lines would be circles, having their planes perpendicular to a line joining the centres of the earth and sun. This would be nearly the case in a body turning very slowly on its axis, like our satellite, in which Professor Hennessy anticipated that observations would ultimately show a great diminution of heat radiated from the edges, compared to the centre. With a more rapid motion of rotation, as in the case of the earth, the isothermals would be elongated in a direction parallel to that of the rotation. On introducing the influence of all the actual motions of the earth, and of the emissive and absorbing powers of the atmosphere, the ground, and the sea, the forms of these lines would be considerably modified. The forms of these lines on the land and sea would necessarily differ, and might be expected to present some important relations to the directions of land and sea breezes. It appears, in general, far more probable that a knowledge of the contemporaneous conditions of temperature at different places would assist in pointing to a connexion between these phenomena and atmospheric perturbations, rather than a knowledge of mean temperature. Atmospheric currents, whether vertical or parallel to the earth's surface, depend upon contemporaneous differences of temperature. A similar remark might be applied to many other important atmospheric phenomena; and these lines would also serve to indicate more clearly, or to lessen the possibility of the supposed connexion between terrestrial magnetism and terrestrial temperature.

ON A NEW AND SINGULAR ACOUSTIC PHENOMENON. BY M. DONOVAN.

The author explained the beats which are experienced when two strings, tuned nearly, but not exactly, to unison, are struck at the same time. Earl Stanhope had observed that, when a tuning fork, whilst vibrating, was held to the teeth, similar beats were heard, which he (Earl Stanhope) attributed to the two prongs of the tuning fork not being in exact unison. This effect the author often tried to experience, but never could succeed until upon one occasion, just after he had ceased from violent exercise, having applied the fork to his teeth, he distinctly heard the beats. He was thus led to the true origin of the phenomenon, which he could now experience whenever he wished, by running a short distance, particularly up and down stairs. The effect was caused by the beatings of his own heart, or the pulsations of the circulating blood. Mr. Ninnis, one of the Secretaries, would explain the phenomenon described by the author, to one set of vibrations propagated to the auditory nerve through the bones of the teeth and of the head, modified by the action of the heart interfering with other pulses propagated in the ordinary way through the air to the organ of hearing.

ON THE SOLIDIFICATION OF FLUIDS BY PRESSURE. BY PROFESSOR HENNESSY.

The views put forward were deduced from some propositions in the dynamical theory of heat contained in the writings of Professor W. Thomson and Professor Clausius. The general result arrived at regarding the influence of pressure on a fluid so circumstanced as to lose no part of the heat acquired by condensation would be, that so long as the matter continued in a fluid condition, the resistance to compression from this cause would be very small. If, however, the fluid were on the point of changing its state to that of solidity, the effect of the latent heat of fusion which by hypothesis could not be emitted, would interpose a resistance of great magnitude compared to that resulting from simple compression. The fused matter of which the interior of the earth most probably consists, would be under conditions similar to those mentioned, from the slow conducting power of the materials composing the earth, and

from the pressure of all the outermost strata of equilibrium of the fluid upon those near the centre, and thus the influence of pressure in promoting solidification would be less than at the surface

Section of Chemical Science.

ON THE PRESENCE OF SEVERAL ACIDS OF THE SERIES $C_n H^n O^4$ AMONG THE PRODUCTS OF THE DISTILLATION OF PEAT. BY PROFESSOR W. K. SULLIVAN.

Professor Sullivan stated, that he first observed the presence of butyric acid in the acetic acid prepared from peat, about five or six years ago, but had not an opportunity of examining the subject further until recently, when he became possessed of a large quantity of raw products of peat, which he hoped gradually to investigate. The process of separating the acids, and the result of the analysis of some of the compounds of each, were described. The salt of baryta, which was obtained with butyric acid, contains four equivalents of water, and, therefore, corresponds with one of Chancel's salts. The tendency of butyrite of baryta to crystallise in the anhydrous form was remarked, and the great difficulty of obtaining the hydrate ones, which accounts for Lerches having always obtained that salt as an anhydrous compound.

ON THE USE OF THE PRISM IN DETECTING IMPURITIES. BY DR. GLADSTONE.

This paper described the novel use of the prism in detecting impurities. The author described the methods of examining substances by means of a prism, especially the instructive results obtained with liquids when the ray of light traverses them in a wedge-shaped vessel. He suggested this as a means of detecting coloured impurities when they do exist, and of proving their absence when they are wrongfully suspected. He showed the value of the means in respect to coloured confectionery, tea, and mustard, and remarked on its use in examining wines, liqueurs, pigments used in the fine arts, gems, pharmaceutical preparations, etc. He stated that the prism and hollow wedge were already used as a commercial means of ascertaining the purity of certain substances.

ON A METHOD OF REFINING SUGAR. BY DR. DAUBENY.

Dr. Daubeny gave an account of a new method of refining sugar, conducted at Plymouth by Mr. Oxland, and known by his name. It consists in the adoption of the superphosphate of alumina in conjunction with animal charcoal, as a substitute for the albumen usually employed for that purpose. In both cases the object is to separate and carry down the various impurities which colour and adulterate the pure saccharine principle present in the syrup expressed from the cane or other vegetable which supplies it. As, however, bullocks' blood is the material usually procured for the purposes of supplying the albumen, a portion of uncoagulated animal matter, together with certain salts, is left in the juice in the ordinary process of refining, which impairs its purity and promotes its fermentation—thus occasioning a certain loss of saccharine matter to result. Nothing of the kind happens when the superphosphate is substituted, and so much more perfect a purification of the feculent matters, under such circumstances, takes place that several varieties of native sugar, which, from being very highly charged with feculent matters, are rejected in the ordinary process of refining, are readily purified by this method. The employment of superphosphate of alumina also gets rid of so much larger a portion of the impurities present in the sugar, that much less animal charcoal is subsequently required for effecting its complete defæcation than when bullocks' blood has been resorted to. The quantity of superphosphate necessary for effecting the object is, for ordinary sugars, not less than twelve ounces to the ton; whereas, for the same quantity, as much as from one to four gallons of bullocks' blood is found to be required. Dr. Daubeny suggested that this re-agent might be advantageously resorted to not only in the purification of sugar, but also in other processes of the laboratory, when the removal of foreign matters, intimately mixed with the solution of a definite component, becomes a necessary preliminary in its further examination.

[*To be continued.*]

The Meeting of German Naturalists and Physicians at Bonn in 1857. Professors Noggerath and Kilian, as the managers of the thirty-third meeting of naturalists and physicians, have issued their invitation to the scientific world, announcing that the assembling commences on the 18th and terminates on the 24th September.

Editor's Letter Box.

PUERPERAL CONVULSIONS.

Letter from J. Hawkes, Esq.

Sir,—In the last number of the British Medical Journal, among other valuable communications, is one of particular interest on Puerperal Convulsions by Mr. Daniell. The advancement of sound professional knowledge is ever most surely promoted by the consideration of such knotty and withal captivating inquiries, as are suggested in the paper above mentioned; and the profession is indebted to those of its members who devote their time to the agitation and elucidation of these subjects. If any excuse can be required for the liberty I take in thus ventilating Mr. Daniell's opinions, it will be found in one of his closing sentences, "that the paper was written with a view to discussion." First, then, let us contemplate the physical phenomena presented in the case of Mrs. S., as an example of "anæmic puerperal convulsions". The paroxysms occurred in a feeble individual, whose animal life was below par, and the subject of constipation; a severe fit of convulsions having supervened on the vaginal examination, an enema of turpentine and aloes is prescribed to excite intestinal action and promote fæcal evacuation. Now, sir, I must take exception to the rule laid down by the author, viz., of administering a strong stimulating injection, when, as we have seen, the excito-motor system is already labouring under intense sensibility, with a tendency to spasmodic action. Would it not be better in such a case, supposing it necessary to empty the intestine, to employ a less stimulating enema, say the common soap and water injection, or one of mucilage, containing a certain amount of laudanum to soothe the nervous centres in the pelvic region, and which, acting as a lavement, would also promote the disintegration and evacuation of the alvine secretions? I know well the advantage of turpentine injections combined with aloes, or assafœtida, in some forms of convulsion attending constipation; but I doubt its indication in the case of a parturient woman, when the whole nervous system, especially in the neighbourhood of the rectum, is in a highly excitable condition. For a similar reason, I should question the propriety of croton oil; and however useful sinapisms to the feet and legs may have proved in the after stage of "apoplectic coma", I fail to see their applicability during the period of convulsion.

While agreeing with the author that neither venesection nor vesication were indicated in the acute stage, I feel surprised that he should have allowed the patient to lie for forty-eight hours in a state of coma, without adopting, at least, the last named remedy. Why not have applied a blister to the nape of the neck? That the calomel "exercised a specific sedative power over all the nervous energies, central, spinal, and ganglionic", may be, I think, very fairly questioned, even if we ascribe to calomel, *per se*, the usual attributes of another drug. I imagine a more likely result of its use would be a wholesome check on inflammatory congestion, with an increased disposition to absorption. It is also very possible that the paralysis which occurred some years after, might have arisen from an injury sustained by the nervous system in consequence of the fits, as likely, I say, as that it originates in some cause preceding them.

In the second case, we have an example of "plethoric puerperal convulsions": no mention is made of any existing constipation, though, from the exhibition of the never-failing turpentine enema, we may presume it was present. Here, however, we find heroic venesection practised by the author's son, who appears on the scene just as the plot thickens, like a second Æneas—

> "Ergo age, care pater, cervici imponere nostræ,
> ..... Una salus ambobus erit."

Sinapisms are applied to the legs, frequent doses of calomel are exhibited, and "in seven hours the fits left her."

Mr. Daniell very sensibly remarks on the importance of discriminating between the two conditions; one, "the anæmic state," is proved to be a fruitful source of disturbance in the nervous system, "as the causes are opposite, so must be the treatment." "Blood-letting is the sheet anchor in plethoric puerperal convulsions," do most authorities tell us; but does not opium deserve any mention? If dangerous in states of plethora, should it be disregarded in anæmic convulsions? Some mention of this valuable agent would have been acceptable from such an experienced practitioner: but he writes, "If we can remove the mechanical pressure on the spinal marrow and the brain, by lessening the excess of almost stagnant blood,

which a condition approaching to asphyxia has produced." Now, I would ask, is blood, as a rule, *almost stagnant* in convulsions? because, if so, how can opening a vein prove beneficial? This mechanical influence, by the way, seems rather a favourite theory; thus we read of "the circulatory system being deficient in *mechanical* power over the central and spinal system."

After all, this is an interesting and instructive paper; and, for my own part, I am thankful to Mr. Daniell for the reflections to which his communication has given rise. With every apology for the length of my letter,

I am, etc., J. Hawkes.

The County Asylum, Devizes, September 1st, 1857.

TOPICAL TREATMENT OF NEURALGIA.

Letter from F. G. Probart, M.D.Edin.

Sir,—I have read with much interest the paper by Dr. Geo. Lindsay Bonnar in your number of August 29th, and venture to suggest to him, that as the success of Dr. Alex. Wood's method of treating neuralgia must depend mainly *on the manner* of applying the opiate to the affected nerve; and that as it is not in the power of many provincial practitioners to refer, as Dr. Bonnar directs, to the *Edinburgh Medical and Surgical Journal*, it might render great service to the profession if he were kindly to detail, through the pages of our own Journal, the exact means pursued by Dr. Wood and himself, in the cure of the painful affections referred to.

I may take this opportunity of stating that I have frequent occasion to treat sciatica and the other neuralgic diseases, and that I rarely find them resist *heroic* doses of quinine; but that when they do so, not doubting that their persistance depends on some local atmospheric *lædentia*, I insist, where it is practicable, on change of air, and seldom without the sought-for result.

I am, etc.,

F. G. Probart.

Bury St. Edmund's, August 31st, 1857.

[Abstracts of the communications on the topical treatment of neuralgia made by Dr. Alexander Wood to the Medico-Chirurgical Society of Edinburgh and to the *Edinburgh Medical and Surgical Journal*, appeared in the Association Medical Journal for 1855; January 19th, p. 60; February 23rd, p. 185; and June 1st, p. 513.]

BICHLORIDE OF MERCURY IN PHRENITIS AND MENINGITIS IN CHILDREN.

Letter from Thomas Hayes Jackson, M.D.

Sir,—I have lately attended an unprecedented number of cases of phrenitis and meningitis, occurring in children under five years of age. The treatment consisted in free leeching; purgatives of jalapine and calomel; salines, in combination with large doses of tincture of digitalis and squills; acetate of potass and ipecacuan; calomel and antimony, in small and frequently repeated doses; cold applications to the head; quietude and exclusion of light; sinapisms to the legs and feet; enveloping the body in a blanket wrung out of hot mustard and water; blisters and croton oil behind the ears and nape of the neck; and prussic acid to allay vomiting.

The cases were of that severe type that this treatment was ineffectual, or but of little service; death occurring in more than one instance. I then altered my tactics, suspended the calomel and antimony, and, as a *dernier ressort*, combined with the diuretic treatment, bichloride of mercury, in doses, according to age, of one-sixteenth or one thirty-second part of a grain, every three hours. The following is the formula which I employ:—

℞ Hydrargyri bichloridi gra. xvj;
Spiritûs vini rectificati ʒi. M.

Two drops contain one-sixteenth of a grain; one drop contains the thirty-second part of a grain.

The effect of this treatment was most marvellous; in a few days the gums became affected—mercurialised; convulsions ceased, intellect returned, the effused fluid became absorbed, and many of my little patients made a rapid recovery. It is most gratifying, when grim death has advanced a mile, to see him retreat a league.

After long antiphlogistic treatment, some exhibited symptoms of cachexia, which were relieved by small doses of tincture of sesquichloride of iron, or ammonio-citrate of iron, in combination with syrup of tolu as a placebo. In my last cases, I have administered an emetic of the wine of antimony or ipecacuanha, exciting free vomiting. Many associates may think emetics in head affections dubious treatment. All I can add in justification is, that all those cases in which the emetic had been administered at the commencement of the disease have been much more amenable to after treatment.

I have always found the administration of diuretics beneficial in head affections. There is, in such cases, a marked diminution in the quantity of urine excreted; and the kidneys being among the great emunctories, when they are stimulated to increased action, so as to produce free diuresis, and thus unload the cerebral vessels, mitigation of pain, etc., follow as "cause and effect". I am, etc.,

Thomas Hayes Jackson.

Darlington, August 26th, 1857.

P.S. My associates need not be informed that caution and close attention to the gums are necessary during the administration of the bichloride of mercury. T. H. J.

SELF-SUPPORTING DISPENSARIES.

Letter from James Cooper, Esq.

Sir,—Will you permit me, through the medium of the Journal, to request that some of our associates will do me the favour to furnish me with the rules and laws laid down for the establishment and government of dispensaries in small towns or country districts, either on the self-supporting plan exclusively, or this principle combined with aid from honorary subscribers?

I shall be glad also to learn from those, whose connexion with these institutions enables them to form an opinion, their judgment of the results, beneficial or otherwise, of this mode of providing medical relief to the humbler classes.

I am, etc., James Cooper.

Cromer, Sept. 7th, 1857.

THE JENNER MONUMENT.

Letter from Daniel Croome, Esq.

Sir,—I was glad to observe in the British Medical Journal of August 29th, that a statue of the late Dr. Edward Jenner is about to be erected. He has been dead now upwards of thirty-four years, and it is a disgrace and shame upon this kingdom that no public memento has been raised to him, nothing more than a little plain marble slab in the chancel of Berkeley church, and some sort of erection in Gloucester cathedral, mean and worthless to the memory of such a man. Statues are continually being made and set up to perpetuate the memories of very insignificant men (destroyers of life, etc.) compared with the illustrious Jenner, the greatest benefactor and protector of mankind that ever lived, or probably will in any nation. The site in Trafalgar Square may be very good for one, but why not place a handsome statue for him in the paddock opposite his residence where he died at Berkeley? This should be set on foot. It is most extraordinary and unaccountable that this matter should have lain dormant so very many years. Such a man never can or will be forgotten, yet more should be done by a grateful people towards his memory.

I am, etc., Daniel Croome.

Tintern Abbey, near Chepstow, Monmouthshire, 4th Sept., 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Kesteven. On September 4th, at Upper Holloway, the wife of *W. B. Kesteven, Esq., Surgeon, of a daughter.

Mann. On August 19th, at Great Bridgewater Street, Manchester, the wife of *Robert M. Mann, Esq., Surgeon, of a daughter.

MARRIAGES.

Baker—Parsey. Baker, Thomas, Esq., Surgeon, of Upper Holloway, to Elizabeth, daughter of J. L. Parsey, Esq., of Claverton Street, at St. Gabriel's, Belgravia, on Sept. 8th.

Evans—Macintyre. Evans, John, Esq., tea-broker, London, to Margaret Stewart, eldest daughter of *P. Macintyre, M.D., of Liverpool, on August 15th.

Hillier—Delf. *Hillier, Thomas, M.D., of Upper Gower Street, to Susan, second daughter of William Delf, Esq., of Annerley Villas, at Upper Norwood, on September 4th.

Rice—Rice. Rice, Bernard, M.B., of Stratford-upon-Avon, to Emily, second daughter of the late Rev. Dr. Rice, of Christ's Hospital, at St. Barnabas, Kensington, on September 8th.

Sparke—Barker. Sparke, Morton, Esq., of Liverpool, third son of J. G. Sparke, M.D., of Finsbury, to Lydia, second daughter of William Barker, Esq., of Huyton, Lancashire, on September 5th.

Vinen—Steede. Vinen, J. Northcote, M.D., of Southwark, to Caroline, eldest daughter of Joseph Steede, Esq., of the same place, on September 8th.

Whitfield—Bishop. Whitfield, George Corpe, Esq., to Laura Caroline, youngest daughter of J. G. Bishop, M.D., of Monksherborne, Hants, on September 1st.

DEATHS.

Ashwell. On September 3rd, at Brighton, after a short illness, Eliza, wife of Samuel Ashwell, M.D., of Brook Street, Grosvenor Square.

Barwell. On May 29th, aged 21, massacred in the fort at Hissar, with her husband, Margaret Anna, wife of Lieutenant Edward William Barwell, and daughter of Andrew Ross, M.D., Bengal Medical Establishment.

Bloxam. On September 21st, at Ventnor, James Mackenzie Bloxam, Esq., son of Robert Bloxam, Esq., Surgeon, of Newport, Isle of Wight.

Bowling, Henry Hawkins, Esq., Surgeon 28th Regiment Bengal Native Infantry, son of the late *John Bowling, Esq., of Hammersmith, murdered at Shahjehampore, by the mutineers of his corps, on May 31st: also, on or about June 9th, Jane, wife of H. H. Bowling, Esq., shot by some sepoys of the 41st N.I., near the fort of Mahomdee, after escaping from the massacre at Shahjehampore.

Brickenden, Thomas, M.D., formerly of St. John's, Southwark, at Shepton Mallet, aged 86, on Sept. 4th.

Clarke, Sir Charles Mansfield, M.D., at Brighton, aged 75, on September 7th.

Fletcher. On September 1st, at Upton-on-Severn, Carteret Halford Humphrey, infant son of John Welles Fletcher, Esq., Surgeon.

Mantell. On or about June 21st, at Allahabad, aged 29, of cholera, Reginald Neville Mantell, Esq., civil engineer, second surviving son of the late G. A. Mantell, M.D.

HEALTH OF LONDON:—WEEK ENDING SEPTEMBER 5TH, 1857.

[From the Registrar-General's Report.]

The deaths registered in London, which rose in the previous week to 1177, declined in the week that ended on Saturday (September 5th) to 1084, of which 537 are deaths of males, and 547 those of females. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week, was 1464; but as the deaths of last week occurred in an increased population, the average, with a view to comparison, should be raised in proportion to the increase, whereby it will become 1610. It will be seen, however, on reference to the returns of 1849 and 1854, that in the corresponding week of the former year, cholera carried off 2026 persons, and in that of the latter 2050, and that the average is, consequently, too high as a standard of comparison for seasons when only ordinary causes are in operation. After due allowance is made for this circumstance, the result is still very favourable as regards the public health at the present time.

Diarrhœa continues to decline, though by slow degrees; but it is more fatal than is usual at the beginning of September. The deaths from this complaint attained their maximum in the last week of July, when they were 302, after the mean weekly temperature had been for a fortnight 68°. In each successive week there was a decrease; and last week, when the mean temperature was 60·4°, the number of deaths returned from diarrhœa was 181. Besides these, 11 deaths are referred to dysentery in the table for last week; and only four to cholera; all the cases, in which the latter disease was fatal, having occurred amongst infants. As diarrhœa declines, typhus shows a tendency to increase; for though the deaths from it (52) were less than in the previous week, they were more numerous than in the earlier part of the summer. Two deaths from small-pox, and one from chicken-pox, are returned. The deaths of two persons are ascribed to intemperance, and no less than eight to delirium tremens. Eleven infants died from want of breast-milk. Only one person of the 1084 who died in the week had attained the age of 90 years, and she was a widow of 92.

Last week the births of 790 boys and 784 girls, in all 1574 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1483.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·620 in. The highest reading was 29·96 in., at the beginning of the week. The mean temperature of the week was 60·4°; which is 6·5° below that of the previous week, and is higher by 1·8° than the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was from 6° to 9° above the average on the first three days; it was afterwards below the average till Saturday. The thermometer in the shade reached its highest point on Monday, when it was 86·5°. The lowest temperature occurred on Thursday, and was 46·9°. The range of the instrument in the week was 39·6°. The mean dew-point temperature was 54·2°; and the difference between this and the mean temperature of the air was 6·2°. At the beginning of the week the wind was in the east; on the last five days its general direction was south-west. Rain fell to the amount of 0·84 in., more or less of which fell on every day, except Sunday and Saturday. There was thunder on Tuesday and Friday.

SANITARY STATE OF LONDON.

Dr. Letheby, the Medical Officer of Health, read the following report to the City Commission of Sewers on Tuesday last:—

"*To the Honourable the Commissioners of Sewers of the City of London.*

"Gentlemen,—The inspectors' returns, which are before you, relate to 551 houses that have been inspected during the last six weeks; and I beg to submit a list of 81 places that require your orders for their sanitary improvement in various particulars.

"The mortality tables for the same period indicate an average condition of the public health, and show that it has not been disturbed by any unusual epidemic. The total number of deaths in the city of London during the last six weeks has been 322, of which 154 were among children of less than five years of age, and 52 among old persons of 60 and upwards. The principal causes of death were the usual summer complaints. Diarrhœa has been fatal in 50 cases, of which 45 were among the infant population. The mortality from this disease rose very rapidly up to the last week of July, when it reached one-fourth of the total death rate. Since that time, it has gradually declined, and the influence of the heavy thunderstorms in checking the progress of the disease has been very remarkable. Among the other causes of death, there were 30 from hydrocephalus and the convulsions of infancy; 29 from mesenteric disease; 26 from phthisis; 13 from hooping-cough; 12 from pneumonia; 13 from typhus; 9 from measles; 6 from bronchitis; 4 from scarlet fever; 3 from small-pox; and 1 from cholera. These numbers are not in excess of those which were registered during the corresponding period of last year, and they are much below the comparative death rates for all London. Taking the whole of the metropolis, the deaths from cholera during the last five weeks have been as one to 58 of the total mortality, whereas in the city they have been but as one to 322; and again, while the deaths from diarrhœa and dysentery have been throughout London as one to 4·73, in the city they have been but as one to 6·31. It must not be supposed, however, that all parts of the city have been relieved to a like extent from the pressure of disease. In the eastern division of it the proportion of deaths from diarrhœa has been as one to 3·9 of the total deaths; whereas in the western districts it has been but as one to 6; and in the central division it has been only as one to 9·7.

"These facts are confirmed by the reports of the medical officers to the city unions, from which I find that 550 cases of diarrhœa, 98 of fever, and 21 of cholera, have occurred among the city poor during the last six weeks. Much of this sickness has been occasioned by the unusual heat of the season, the mean temperature of which has not only been at all times above the average, but it has frequently ranged in the course

of twenty-four hours from upwards of 100° Fahrenheit in the sun to less than 60 degrees at night, and even in the shade the range has sometimes been as much as 30 degrees.

"Since the last meeting of the Commission, a complaint has been made to me by some of the inhabitants of Whitefriars, of a very serious annoyance from the offensive effluvium emitted at certain times from the osier tanks belonging to Mr. Walden, who is a rod merchant and basket maker at No. 1, Grand Junction Street, Whitefriars. I have visited the premises, and find that there is ground for complaint. Mr. Walden has five large tanks, in which he steeps the willow rods until certain parts of the bark become putrid. This occasions a very offensive smell, especially when the foul water is disturbed. I beg, therefore, to recommend that orders be given for the covering in of all the tanks with close fitting covers, and that the foul water be run off from the tanks into the sewer, and the rods flushed with fresh water before they are disturbed.

"This will have the effect of carrying away the putrid matter, and will not in any degree affect the trade operations.

"I have the honour to remain your obedient servant,

"Hy. Letheby, M.B.

"Guildhall, September 8th."

Disease and Deformity in American Schools. In Miss Beecher's *Letters to the People on Health and Happiness*, it is claimed that the health of the American people is perishing at a fearful ratio, and that, while other nations, both in school and at home, train their children to be strong and healthy, we are training ours to be puny, sickly, and deformed. In proof of this, facts are exhibited showing, that of the American women, born in this century and country, probably not two in ten have the vigour and health of their maternal ancestors, while probably more than one-half of them are either invalids or very delicate. The object of this article is to direct public attention to the prospects of the coming generation, as indicated by the health of the children of our city schools. From the recent investigations there is reason to believe that more than one-half of the children of our public schools who were born in this country, and who are twelve years old and upwards, are either diseased or deformed. Will the public look at this? Bad air from stoves, rooms without ventilation, close sleeping-rooms, crowded school-rooms, improper food, poisonous medicines, want of proper exercise, and over-excitement of the brain by study, have all combined to produce a debility of the whole body, especially of the muscles. The result is often shown in a pale and sallow complexion, though this sometimes attends tolerable health. But the following are more sure indices of the debility and disease thus induced: the first is a sinking of all the intestines from want of this support of the muscles of the abdomen, which have become weak and flabby. It is the tight packing of the intestines by these and other muscles that sustain the spine and keep all the interior organs in place. These muscles becoming weak, the whole organism sinks downward, sometimes displacing the most important and delicate organs. One symptom of this condition is a flat chest; another is a flatness or caving-in near the pit of the stomach, with a consequent projecting at the lower part of the abdomen, instead of the curve outward from the breastbone to the lowest point of the body, which is seen in a perfectly formed young child. Still another symptom is such a weakness of the back and stomach as makes the child sit crooked. This is because the natural aid of tight packing and the strength of the supporting muscles are gone. Another index of disease and decay in schools, is curvature of the spine. When the spine is curved forward it is shown by a projecting neck, or by a crooked back, that no effort can straighten. If the curve is sidewise (lateral), it is shown by one shoulder or one hip being higher than the other, or by one shoulder blade being more prominent than the other. These deformities indicate the decay and debility which, sooner or later, bring on disease of various kinds. Teachers in our city schools say these marks of weakness and deformity are constantly increasing, and that the longer the pupils go to school, the more these indications increase; that is to say, they are found more in the upper departments than in the primary. Parents and guardians of our city schools, will you not look into this matter? (*New York Tribune.*)

Disease on the Continent. The *Times* correspondent, writing from Berlin, on September 7, says: "The affection of the eyes which has lately exhibited itself in so virulent a form among the Prussian troops in garrison here is stated, by medical men, to be the Egyptian ophthalmia; it manifests itself in a number of small white vesicles beneath the lower eyelid, which, if not promptly removed by a solution of lunar caustic, increase very rapidly, and soon extend in the form of a white crust or scab over the whole eye and dry up its fluids. Although some entire regiments have hitherto escaped this infliction, others have had such considerable numbers of their men rendered unfit for duty, that the men of the reserve have been obliged to be called out in order to keep up the regiments to even their peace complement. The exertions of the regimental surgeons have, for the present, succeeded in mastering the epidemic; and, if no new outbreak occurs, it may be looked on already as in a fair way of disappearance. The same seems to be the case with the sickness which has affected the horses of the cavalry in Potsdam. Very shortly after they were distributed throughout the surrounding villages, it became apparent that they were recovering so rapidly that they would soon be able to be brought back to their own stables and do duty. What the nature of this affection of the horses has been I have not been able to learn.

In Denmark also the same causes, viz., lengthened drought and excessive heat, bringing in their train vitiated air and want of water, have produced the same results, and the King has found it necessary to postpone the usual military exercises of his troops *sine die*, and to send back to their homes all the men of the reserve, etc., who had been called out for the purpose of these autumn manœuvres. The cholera is also showing itself in considerable force in Holstein and Sweden, as it has also done, nearly all this year, in St. Petersburgh; this, together with the very unsatisfactory sanitary state of Copenhagen, which is becoming rapidly worse, gives rise to very anxious apprehensions. The Danish public is even dissatisfied with the above mentioned wise measure of preventing the aggregation of troops in confined districts, by dispersing those already in barracks, on the ground that in this way the *virus* of disease will be most rapidly spread from its *foci* to the utmost limits of the kingdom.

The Mulberry-tree and the Silkworm. From an interesting paper recently communicated to the Academy of Sciences by M. E. Guérin Méneville, it appears that the existence of an epidemic disease of the mulberry-tree, which had been denied, is now fully ascertained. M. Méneville states, from personal observation, that the disease exists in Switzerland, and in all the departments of France through which he has passed on his way from the Basses Alpes to Spain. It produces numerous red spots on the leaves, which soon shrivel up and fall off early in June. This disease is not new, and single cases of it have been frequently observed; but this is the first time it has made its appearance under an epidemic form. It is most virulent in those districts where the silkworm has suffered most, and there is every reason to believe that it is one of the principal causes of the disease of that insect. The latter is now called the *gattine* in France, but it had been remarked before in solitary cases; the silkworms attacked with consumption have long been called *luzettes* in France, because they have a shining appearance and do not grow. In the south of France they called *arpians* and *passis*. (*Dublin Hospital Gazette.*)

The American Quarantine Convention. The following resolutions have been adopted: 1. That there are certain diseases which may be introduced into a community by foul vessels and cargoes, and diseased crews and passengers. 2. That of these diseases the most injurious are small-pox, and, under certain circumstances, typhus fever, cholera, and yellow fever. 3. That when the latter diseases are introduced in this manner, their action is limited to individuals coming within their immediate influence, and they cannot become epidemic unless there exist in the community circumstances which are calculated to produce such disease, independent of the importation. 4. That these circumstances consist in the vitiated state of the atmosphere from local causes, in connexion with peculiar meteorological conditions. 5. That efficient sanitary measures, including quarantine, will, in most cases, prevent the introduction of these diseases, and may, at any rate, disarm them of their virulence, and prevent their extension when introduced. 6. That the present quarantine regulations in most of our States are insufficient to prevent the introduction of disease, and are prejudicial to the interests of the community. Disease may be introduced, (1.) By a foul vessel, especially when measures are not taken to keep the hold free from stagnant and putrid bilge water, and more particularly when there exist in the hold droppings and drainings from putrefiable matters, which are allowed to penetrate and remain underneath the timbers of the ship. (2.) By cargoes consisting in whole or in part of rags, cotton, or other light porous sub-

stances, shipped from ports at which any malignant epidemic or disease of a contagious and infectious nature prevailed at the time when the vessel was loaded. (3.) By the filthy bedding, baggage, and clothing of emigrant passengers, particularly when they are crowded together in insufficient quarters, although the passengers themselves may be free from any actual disease. (4.) By the air that has been confined during the voyage in closely sealed and ill ventilated holds. (5.) By squalid and diseased passengers, landed and crowded together in unhealthy neighbourhoods, or in small ill ventilated dwellings. (6.) By passengers and crews who are actually labouring under, or infected with, any positively contagious disease; and by their bedding, clothing, or baggage. The above resolutions were adopted by a vote eighteen in favour, two against, and one tie-vote. (*Dublin Hospital Gazette.*)

SPIRITUALISM IN BOSTON. Professors Agassiz, Pierce, and Horsford of Harvard College, and Dr. Gould, the committee selected to pass upon the controversy between the *Boston Courier* and Dr. H. F. Gardner, respecting the alleged phenomenon of spiritualism, after a week's investigation, made the following report:—"The committee award that Dr. Gardner having failed to produce before them an agent or medium who 'communicated a word imparted to the spirits in an adjoining room,' 'who read a word in English written inside a book, or folded sheet of paper,' who answered any question 'which the superior intelligence must be able to answer,' who 'tilted a piano without touching it, or caused a chair to move a foot;' and having failed to exhibit to the committee any phenomenon, which, under the widest latitude of interpretation, could be regarded as equivalent to either of these proposed tests; or any phenomenon which required for its production, or in any manner indicated a force which could technically be denominated spiritual, or which was hitherto unknown to science, or a phenomenon of which the cause was not palpable to the committee is, therefore, not entitled to claim from the *Boston Courier* the proposed premium of five hundred dollars. It is the opinion of the committee, derived from observation, that any connexion with Spiritualistic Circles, so called, corrupts the morals and degrades the intellect. They, therefore, deem it their solemn duty to warn the community against this contaminating influence, which surely tends to lessen the truth of man and the purity of woman. The committee will publish a report of their proceedings, together with the results of additional investigations, and other evidence independent of the special case submitted to them, but bearing upon the subject of this stupendous delusion."

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

TO CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—MR. HENRY THOMPSON; MR. T. HOLMES; DR. S. W. J. MERRIMAN; MR. J. V. SOLOMON; DR. T. INMAN; MR. J. WINDSOR; DR. T. HAYES JACKSON; MR. F. MELLAND; DR. P. MACINTYRE; MR. JAMES COOPER; DR. GREENHOW; MR. ROBERT MANNERS MANN; MR. DANIEL CROOME; THE SECRETARY OF THE BRISTOL HUMANE SOCIETY; MR. J. HAWKES; DR. PROBART; MR. FREDERICK ROBERTSON; MR. G. W. MOULD; MR. W. PRUEN; and MR. BARTRUM.

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BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

I. AMPUTATION AT THE HIP-JOINT.

Under the care of S. LANE, Esq.

[*From Notes supplied by* E. A. HART, Esq., *House-Surgeon.*]

D. L., a navvy, had been working on the railway, and by an accident had fallen under the wheels of a truck laden with a ton and a half of clay. When admitted, he was in a state of extreme collapse, and had lost much blood. The soft parts of the anterior and upper part of the thigh were greatly bruised and lacerated; the finger, when introduced by a large quadrangular opening situated a few inches below the groin, reached a comminuted fracture of the thigh-bone. From the lower portion of the bone projected upwards a long spiculum, which had protruded and lacerated the flesh. The soft parts of the perinæum were ruptured in the middle line from the base of the penis to the rectum, which was laid open. The wound yawned widely, and a finger passed into the lower wound touched that introduced into the rent in the perinæum. The tuberosity of the ischium was exposed, and the skin of the buttocks greatly undermined. The wounds were temporarily dressed; sutures were applied to the rent in the perinæum; stimuli were freely administered. The serious nature of the injuries indicated amputation as the only resort. But it was not until sixteen hours after admission that the state of collapse had so far passed off, as to allow the performance of this operation. At two P.M. Mr. Lane proceeded to amputate the limb at the hip-joint. The knife was entered from within, and the anterior flap cut in the usual manner, the fingers of an assistant following the knife and compressing the femoral artery, so that no blood was lost from this source. The injury to the soft parts was so great that the anterior flap was cut smaller than usual. Disarticulation was effected, and a large posterior flap cut, a second assistant compressing the vessels as before. Three or four vessels were tied in the posterior flap; the femoral was secured. The femoral vein gave much blood, and ligature was applied. After the operation, stimuli were freely administered, and he partly rallied for a time, but soon sank again and died in a few hours.

The examination of the limb showed extensive injury to the soft parts. The muscles were bruised to a jelly on both aspects of the thigh, and pools of blood were collected in lacerated cavities of flesh. The line of fracture ran transversely through the lesser trochanter.

REMARKS. We alluded in our last week's hospital report (p. 769) to the above case. It was one of those painful occurrences in which surgeons are compelled to act, although without much prospect of success. The frightful laceration of the soft parts would of itself have precluded all hope of saving the limb, even had the bone been uninjured; with the addition of the compound fracture, it was still more imperative to remove it at once. The operation does not appear to have increased the collapse; on the contrary, a slight, and unfortunately only temporary, rallying was noticed after its performance. Nor was much blood lost either at the time of the operation or afterwards. There was, indeed, some oozing of blood from the vessels of the stump; but not from any vessel of considerable size, and not more than would inevitably have occurred from the great wound made by the accident. Still it reduced the patient's already exhausted forces, and appeared to be the proximate cause why the shock of the operation and accident proved fatal. The difference in result between primary amputations at the hip-joint and those on account of disease is well known; and the former are believed, as far as the small number hitherto placed on record enables us to judge, to be more fatal in civil practice than in military, from the greater amount of injury to the soft parts, and the greater shock produced by severe lacerations than gunshot wounds. The laceration of the perinæum and rectum in the case of this poor fellow was another most unfavourable feature in the case.

II. FRACTURE OF THE BASE AND VERTEX OF THE SKULL UNITED: DEATH FROM ABSCESS OF THE BRAIN.

Under the care of S. LANE, Esq.

[*From the Hospital Case-book.*]

JOHN G., aged 24, a sailor, was admitted May 7th, under the care of Mr. Lane. Eight weeks before his admission, he had fallen from the ship's yard, a distance of forty feet (the fall being broken by some obstacle), to the deck, striking his head. There was no external wound. He remained in Hospital for six weeks, being insensible, or partly so, for the first fortnight. Immediately on his return to consciousness, he found that he had lost the sight of the left eye, and the sense of hearing with the left ear. He also lost the sense of smell and taste, and the mouth was greatly drawn towards the right side. The sight and hearing on the right side were somewhat impaired, but soon recovered. On admission, a depression was seen on the superior part of the frontal bone, parallel to the wrinkles on the forehead, and about halfway between the brow and frontal eminence. All the above symptoms persisted, but there was some improvement in the sight and hearing. The features also were less drawn. Pressure on the affected part of the frontal bone caused much pain; and percussion on any part of the scalp was very painful, and caused involuntary closure of the left eye. His memory had entirely recovered, if it had ever been affected, as it was said to have been. It was observed that there was a little power of taste on the right side of the tongue, though none on the left.

He was ordered iodide of potassium, sulphate of soda (on account of hæmorrhoids), Plummer's pill, and occasional blisters, with good diet. He gained flesh rapidly, and lost the painful sensations. There was, however, no improvement of the special senses, except that of taste, which he had regained, although not entirely. No bad symptoms occurred till the beginning of June, when he fell into a fit, with convulsive jerking of the extremities, and clonic spasm of the facial muscles. He was bled to sixteen ounces, and consciousness gradually returned; but he was not quite restored to his former state for four days. The paralysis was not increased after this seizure. He went on very well till the middle of July, when he had another fit similar to the one above described. This came on after some unusual exertion. The same measures were adopted as before, and the symptoms followed the same course. After this he complained daily of confused sounds in the head, giddiness, and frequent inability to walk straight or control his movements. He had not, however, any diminution in the power of hearing or the other senses. His appetite throughout, except just after the fit, was good. The gums were never affected, notwithstanding that he took Plummer's pill regularly, and frequent doses of calomel. In the beginning of August, he was threatened with a recurrence of the fit. This was apparently put off for some time by care of the diet, etc. On May 20th, he was seized in the same way as before, rallied for a day, but then a recurrence of the fit finished his life, about five months after the accident.

Post mortem examination showed the muscles of the left arm and left side of the face wasted. The ridge of bone above described was traced on to the right, where it turned at a right angle, so as to gain the edge of the orbit. On exposing the bone, the parts of the fracture were seen to be firmly united.

On the inside of the skull, some deposit of new bone was found along the course of the superior longitudinal sinus. The meninges were congested. On removing the anterior lobes of the brain from the fossæ, a considerable quantity of pus suddenly escaped. This was found to come from the right side; and, on examining the anterior lobe on the right side, its under part was found broken down. The greater part of the under surface presented a ragged appearance, and part of it adhered to the dura mater on removal of the brain. The whole of the right olfactory nerve was destroyed, and the left partially. The left optic nerve was flattened and atrophied. In tracing the fracture of the frontal bone, it was found running from left to right, from a point just above the centres of the left orbital ridge to the anterior edge of the right orbit. Traced back from the orbital ridge, the fracture was found to traverse the orbital plates of the frontal and sphenoid, the upper surface of the orbital plate being carious in a small spot corresponding to the abscess of the brain. Another and independent fracture of the base of the skull was found to commence in the squamous portion of the left temporal bone; descending, it traversed the petrous portion, passing behind the aqueductus vestibuli, and terminating at the lower margin of the internal auditory foramen. The seventh pair of nerves were not found to be injured. All the lines of fracture were united by bony union. The preparation is in the Hospital Museum.

Remarks. The interest of head cases usually varies with the duration of the complaint, and with the number of points on which a diagnosis may be founded. Considered in both these respects, the case detailed above will be found of much value. Instances of fracture of the base united by bone are said to be very common, but the number to be found in our pathological collections is much smaller than is generally supposed. Mr. Hewett, in his lectures at the College of Surgeons, referred to those which have been preserved in London: the number was only five. Still there is no doubt that these fractures are of frequent occurrence, and that they do unite, although slowly. In the present case, the fracture is found united throughout in five months. In the Museum of St. George's Hospital is an instance of partial but firm union two months after the accident.

The number and variety of nerves involved in this injury is a very unusual symptom. Injuries of the seventh pair of nerves are very common, from the frequency with which fractures traverse the bony canal in which they are lodged; those of the nerves in the anterior fossa much less so; while it is very rare to find almost all the nerves in the two anterior fossæ of one side of the base involved as they were here. The olfactory bulbs, it will be observed, were implicated in the abscess; and the optic nerve showed traces of diseased action, doubtless following on the injury. The fifth nerve must, in all probability, have been injured somewhere, as the sensation of taste is said to have been more impaired on one side of the tongue than on the other. Now the loss of smell would, of course, impair the sense of taste very greatly; but this effect would not have been more perceptible on the affected than on the unaffected side. The seventh pair, although the lesion was not absolutely demonstrated, were traced to the seat of fracture.

The existence of two independent fractures may perhaps be accounted for by the nature of the accident, in which, besides the fall, there was a blow against some obstacle in the descent. The latter probably caused the fracture of the vertex, and the former that of the base.

All the other injuries, however, although useful in establishing the diagnosis of the direction of the fracture, etc., were subordinate to the morbid action in the brain, which was the immediate cause of death. The symptoms will show how insidiously abscess of the brain comes on and progresses. The giddiness, pain in the head, and epileptic convulsions, did indeed indicate the presence of some foreign body irritating the cerebral substance; but in the absence of the characteristic symptoms of abscess it would have been impossible to say that this was not a splintered portion of the internal table, or the remains of a traumatic effusion, of which latter injury a very interesting example will be found in the Pathological Society's *Transactions*, p. 8. Here the patient was subject to occasional epileptic fits and pain in the head. The abscess might stand to the caries of the bone below it in the relation either of cause or of effect. Considering the comparatively short time which had elapsed, the absence of traces of morbid action in other parts of the injured bone, and the rarity of such a consequence of injury in this region, it is probable that the caries was produced by the direct irritation of the abscess, which was itself the result of bruising and laceration of this part of the cerebral substance.

ST. GEORGE'S HOSPITAL.

TWO CASES OF INFLAMMATORY SOFTENING OF THE BRAIN.

[*From Notes by* G. G. Rogers, M.D., *Medical Registrar.*]

Case I. E. H., aged 24, was admitted on June 10th, under the care of Dr. Page. She was a married woman, of sallow complexion, and had been ill for a month with vertigo, and pain in the back of the head and in the chest. She had had several rigors during the last two days, and perspired at night. It was said also that she spat blood occasionally, and suffered from palpitation; but a careful examination could detect no disease in the lungs or heart. It was thought that she was suffering more from low fever, the result of poor living, than anything else; but on the day following her admission she had a severe epileptic seizure. Wine was given, and citrate of potass with ammonia; and after the fit, a blister was put on the neck. She had no other fit until June 17th, when the epileptic seizure was repeated. After this there was ptosis of the left eyelid, with loss of sensation in the part. Consciousness had never been thoroughly restored after the first fit. She generally lay on her back, frequently sighing; her skin bedewed with clammy perspiration. The right eye closed on touching the lid, but the left was not susceptible of impressions. She sank on the 21st.

On *post mortem* examination, the body was found in good condition, and well formed. The bones of the skull were remarkably thin; the dura mater was not adherent to the calvaria. Nothing was observed on the surface of the brain, except slight gorging of the vessels. On making a section through the convolutions, very free bloody puncta were seen. At the base of the brain was a large collection of fluid, and over the pores and medulla oblongata the arachnoid was very opaque. The lateral ventricles were full of reddish serum, and all the central structures of the brain were softened; the fornix and septum lucidum being quite destroyed.

The capsules of both kidneys were very adherent, and their surface was mottled; but there was no destruction of their cortical substance.

Case II. John M., aged 30, a man who had formerly been a soldier, and served in the West Indies, was admitted July 20th, under the care of Dr. B. Jones. It seemed that while abroad he had been subject to attacks of giddiness and fainting fits. These symptoms passed off, however, and his health continued good until three weeks ago, when he was suddenly seized while at work at his trade (that of a shoemaker) with pain in the forehead, gradually extending to the occipital region; and this had become so bad, that latterly he had been unable to rest this part on a pillow. At the beginning of his illness, and for some (uncertain) time before, he was frequently affected with vomiting, sometimes six or seven times a day. On admission, his pupils were much dilated; pulse 60, jerking; tongue furred, bowels open. The pain in his head was very acute, but he was conscious when addressed. If not spoken to he wandered from time to time. He could not lie on his back. Twelve leeches were at once applied to the temples, and a dose of calomel and senna given. In the morning the pulse was 90; the tongue furred; the pupils quite as much dilated. The pain was a little easier; and after the bowels had been well opened he experienced much relief. Two grains of calomel every six hours were ordered, and ice to the head. On July 22nd, at 1 A.M., he was taken much worse, the pain being more intense, and causing him to groan continually. The pupils were sluggish and dilated, but there was no strabismus. He was quite conscious, and was somewhat easier after sixteen leeches had been applied. The dose of calomel was increased to three grains, with half a grain of opium, and the bowels were unloaded by a castor oil enema. The cessation of pain was, however, only temporary. At 11 A.M. the head symptoms were much more severe; and after ten or eleven hours of great suffering he expired.

On *post mortem* examination, the body was found to be in good condition. The convolutions of the brain were flattened. There was much fluid in the lateral ventricles. The central portion of the cerebellum was very much softened, so as to be easily washed away by a slight stream of water. The lining membrane of the fourth ventricle was much thickened, and very opaque. There was a large quantity of gelatinous lymph on the free surface of this membrane, where it passes over the

floor of the ventricle, so that the markings of that part of the brain were quite imperceptible.

The kidneys were somewhat congested; the heart was dilated and thinned, There was no other visceral disease.

Remarks. We have given the above as tolerably well marked instances of a disease more frequently talked of than seen; viz., idiopathic inflammation of the cerebral substance. That this was the real nature of the disease in both cases, admits, we think, of little doubt. The distinct history of inflammatory symptoms in the first case, and the presence of all the products of inflammation in the second, constitute as good evidence of the nature of the disease as can reasonably be demanded. It will be interesting to compare the symptoms in these cases with those detailed in the case of injury which immediately precedes, and in which the occurrence of suppuration in the brain was accompanied by symptoms much resembling those in the first of these cases—the same dizziness, pain in the head, epileptic convulsions, with a longer or shorter subsequent period of partial unconsciousness.

BIRMINGHAM AND MIDLAND COUNTIES EYE INFIRMARY.

CASES OF EXCISION OF THE EYEBALL.

By James Vose Solomon, Esq., F.R.C.S., Surgeon to the Infirmary.

[*Concluded from page* 498.]

In a recent number of the Journal (June 13th), are recorded four cases in which I excised the eyeball for the relief of serious sympathetic disorder, that had resisted carefully directed and long sustained treatment by drugs: in one case, for four months; in another, for six months; and in a third, more than three months. Two of the patients were of intemperate habits as regards drink, one was a great tobacco-smoker, and a fourth diathetically strumous. In two instances, the operation was undertaken as a *dernier ressort;* one of these was cured, and the other signally improved. In two cases, in which a good result was anticipated by myself prior to the operation, one was cured, and the other much relieved, the reparative power in the latter being excessively feeble. The ages of those cured were respectively seventeen and sixty years of age; of those relieved, thirty-one and thirty-two.

The more important practical conclusions that seem to me to be safely deducible from the cases to which I refer, are the following: (1) A disorganised eye, although devoid in itself of any irritation appreciable to the patient or medical observer, is capable of exerting a very prejudicial influence upon the nutrition of its companion (case II); (2) An eye sympathetically affected, although much damaged by disease, is rendered a far more serviceable optical instrument after excision of the disorganised companion eye than it can be by any other means at present discovered; (3) That in some instances, a constitutional as well as a local cause is concerned in the first production, or recurrence, after a cure, of the sympathetic ocular mischief.

In the *first* of the three following cases, excision of the eye was undertaken not so much in relation to the sympathetic disorder in the fellow-organ, as to cure neuralgic and other sufferings, which had baffled for nearly six years the resources of the British Pharmacopœias and residence at various times at the seaside.

The removal of a disorganised and powerless globe was resorted to in case VI, as a preliminary step to the extraction of a hard cataract which had existed two years in the companion eye.

Case VII is chiefly remarkable for the very trivial inconvenience that followed the operation, only two hours pain having followed the excision.

Case V. *Recurrent attacks of Ophthalmia and Severe Neuralgic Paroxysms following Injury of the Eye, cured by Excision of the Globe.* Mr. P., aged 53, but in appearance much younger, of short stature, florid complexion, brown hair and irides, habitually temperate, consulted me in the autumn of 1854, on account of neuralgia of the right eye, for the permanent cure of which, after seeing him a few times, I informed him an operation would be necessary. At this opinion, being a timid man, he took alarm; and I saw him no more till the summer of the present year. In the interval, the assistance of several able practitioners, and of an eminent ophthalmologist, was obtained, unhappily, without any lengthened amelioration taking place in the symptoms. A visit to Rhyl, by improving the general health, worn by long suffering, was of temporary benefit. With the exception of Mr. Francis Burdett, the practitioners to whom I have alluded unanimously recommended that no attempt to remove either the front or the whole of the globe should be submitted to.

The tissues of the right eye in 1854, and in the summer of this year (1857), presented the following appearances. The superficial vessels of the globe, especially the muscular arteries, were more numerous and more dilated than normal; the sclerotic, cornea, and aqueous humour, appeared healthy; the iris, at its upper and outer part, was bossulated, in consequence of past inflammation of its parenchyma; the pupil was much narrowed, round, and fixed by adhesion; the capsule of the lens had a chalky white appearance. The muscles of the lids and of the globe were in no degree enfeebled, and they moved consentaneously with those of the companion eye. The perception of bright light was not quite extinct.

The history of the disorganised globe, and of the symptoms of which it became an excitant, is as follows. In 1851, while the patient was in good health, a bit of iron struck the right cornea; it was immediately removed by an experienced surgeon. Severe inflammation ensued, which destroyed the sight and disabled the patient from his employment for two months. For three or four months, beyond the loss of vision, no sort of inconvenience was experienced. The ophthalmia, however, now recurred, and has continued so to do three or four times in every year up to the present time. These inflammations were marked, he states, by redness of the eye, a sense of burning over the surface, and stabbing pains through it, accompanied by a serous discharge, which seemed to relieve the pain in proportion as it was abundant. When the eye was not inflamed, it became the seat of neuralgia of far more severity as respects pain than the inflammatory attacks. In a paroxysm that I witnessed, the usual symptoms of neuralgia of the ophthalmic branches of the fifth pair were present; viz., morbid sensibility to light, redness of the conjunctiva, epiphora, and tremor of the muscles of the lids and right side of the face. The sensation of the integuments of those parts was so exalted that the gentlest touch of the finger thereon greatly excited the patient, from the almost intolerable agony to which it gave rise. In some of the seizures, "a sensation of a hard substance twisting round in the ball" was present. His family informed me that, on some occasions, his agonies almost deprived him of reason. Causes apparently very slight were productive of pain: for instance, the sudden turning of the globe on its axis, rubbing the lids or face of the affected side with a towel, shaving the submaxillary region, or eating breakfast, occasioned acute lancinating pain within the globe. The omission of these several acts, and resting quietly in bed till midday, with the lids closed, procured comparative comfort. After midday the disposition to the attacks seemed lessened; but for about five years and a half he was never for one day, in his sensations, what he had been previous to the accident. The paroxysms were often concluded, and an interval of two or three hours ease was enjoyed, after a copious watery discharge from the affected part. The left eye, which had been dim in its vision since the occurrence of the primary ophthalmia, but not to such a degree as to prevent reading and other minute exercise of the organ, was sympathetically affected during the paroxysms. With the exception of the vessels which traverse the sclerotic being more marked than natural, its tissues appeared healthy.

Neuralgia of the fifth pair is frequently connected with alveolar or dental irritation, with cerebral disease, with intestinal irritation, or with exposure to malaria or cold draughts of air; but in this case I could not discover evidence of any such morbid agencies being or having been at work; nor that the patient had ever suffered from those constitutional diseases which predispose to nervous pains, such as syphilis, rheumatism, gout, or hysteria. Indeed, the cure of the neuralgia, and the prevention of the recurrent attacks of ophthalmia, appeared only necessary to render him one of the healthiest of men.

Having cleared the case of the possible causes that have been above enumerated, we had no difficulty in positively affirming that the *fons et origo mali* existed within the diseased eyeball—an opinion which was also supported by two important facts, viz., the absence of nervous pains previous to the traumatic injury, and the frequent recurrence of inflammation in the organ afterwards—a symptom which commonly indicates the presence of irritation, mechanical or otherwise, within the eye. The morbid sensibility of the surface of the lids and right side of the face was exceptional and peculiar, and no doubt veiled the real nature of the case from the minds of the scientific and practical men who referred the symptoms to some agency extrinsic to the globe.

With the concurrence and assistance of my sagacious friend Mr. Burdett, who had strongly recommended the patient to abide by whatever decision in regard to surgical treatment I might come to, the eyeball was excised on 25th of July, in the presence of the gentleman named, and his assistant, Mr. Nichol. From that day to the present (Sept. 10th), not a single twinge of the old kind of pains has been felt. In six days after the operation, the orbit was quite fit for the reception of an artificial eye; the patient went out of doors, and expressed himself as feeling better, more comfortable, and as enjoying better sight, than he had done for nearly six years.

I have omitted to state that, on the day of the operation, Mr. P. was suffering from severe neuralgia, which had been present for more than a week.

Case vi. *Excision of a disorganised Eye previous to the Extraction of a Cataract from the fellow-Organ.* J. B., a healthy boatman, residing at Stoke Prior, aged 50, applied to the Birmingham Eye Infirmary, in July 1857, with a green capsulo-lenticular cataract in the *right* eye, the pupil of which was widely dilated and fixed, and the iris orange-coloured; to the strongest sunlight the eye was blind, and had been so for the last three years. No pain had ever been felt in it.

The *left* eye was healthy, with the exception of a completely formed lenticular cataract. There were no cardiac murmurs.

Holding the views that have been above enunciated in regard to the possibility of a painless and uninflamed disorganised eye sympathetically affecting the fellow-organ, I excised J. B.'s right eyeball on July 8th. He soon afterwards returned home. On August 8th, I extracted by the upper section the left cataract without accident to the iris or vitreous humour.

The patient was discharged with a bright active iris, a renewed central pupil, and good vision.

Case vii. *Excision of the Globe followed by Two Hours Pain only: the Parts healed in Three Days.* J. H., aged 29, feeble, and of strumous diathesis, entered the Birmingham Eye Infirmary, in August 1857, with disorganisation and cataract of the *right* eye, which had existed from an early period. Inconsiderable pain was occasionally experienced in the part. In the last six or eight months the left eye had gradually failed, and he had become unable to identify persons; my features appeared all in a mist. The pupil was dilated, sluggish, and black.

On the 26th of August, I excised the right globe; only two hours pain resulted from the operation, which was performed under chloroform, as were the two preceding cases. In three days, the conjunctiva was firmly united, and the patient in every respect fit to be discharged. The sight is slightly improved; "more light is seen."

Original Communications.

ON THE ANALYSIS OF UREA IN URINE FOR CLINICAL PURPOSES:

By J. L. W. Thudichum, M.D.

In supposing it to be a recognised truth that the quantity of urea discharged in the urine during given periods of time is the exponent of the most important part of the metamorphosis of nitrogenised matter in the body, I hold it to be an irresistible conclusion therefrom, that, by analysing or determining the amount of urea discharged by a sick person (for example, a fever patient) in his urine, we may determine the intensity with which that metamorphosis is carried on under the influence of diseased action. I also suppose it to be useful with regard to diagnosis and prognosis, no less than with a view to treatment, that we should know the intensity of the change of matter in the system; because I see practitioners of medicine take the greatest trouble in ascertaining that intensity by observing the strength and number of the beats of the heart, the expanse and number of the respiratory movements, the temperature of the surface, the condition of the nervous system, and similar points, all of which could only teach the intensity of the disorder, not its nature, whether it be localised somewhere, or not anywhere in particular. The number and strength of the beats of the heart are excessive in rheumatic fever, and in pneumonia; the existence of both diseases must be ascertained irrespective of the condition of the pulse; but the excitement of the heart is a mark of the greater or less intensity of the morbid affection of the ordinary changes of tissue and matter, and is therefore watched with great attention. As all the factors of the process of oxydation are summed up in the quantity of urea, there is a strong presumption that an accurate knowledge of this point, at the bedside of every patient, would teach us as much as the observation of the assimilation, circulation, respiration, and their subservient functions, taken together. The correct quantity of urea would be an objective symptom in value far surpassing any symptom or group of symptoms that may be present at the time of the examination of the patient; because it must, under all circumstances, be the effect of a prolonged condition, and cannot in the slightest degree be influenced, like pulse and breathing, by causes of a transient nature.

Taking all this for granted, the consideration arises, whether the method of determining the amount of urea is such as to admit of its general application at the bedside of individual patients. The requirement is that the method be accurate, that it be applicable, and yield its result at once, within a reasonable time, to allow of its being included into the account of the patient's condition at the hour when the question is put, when prognosis and treatment are to be decided upon. Any method for analysing urea in urine, which does not yield its result within a quarter of an hour from the time where it has been found desirable to know that result, is, in my judgment, useless for practical or clinical purposes—useless for the diagnosis and treatment of disease at the bedside. Of course, if it is only intended to answer collateral questions—questions of general pathology, which are not intended to influence the individual case, affording the material—then no immediate question of time arises, and accuracy is the only desideratum; and the operator may take not only time, but also *his* time, according to his inclination.

To a method which would give quick results some slight inaccuracies might be forgiven, provided the possible extent of the error be known. Even the saving of great trouble would not counterpoise the advantage of immediate results for the demands of practice. No accuracy of any method can be useful to medical men in the treatment of disease, if accuracy is only to be obtained by the sacrifice of time, of even so short a time as three or six hours. But any proceeding which is neither quick nor accurate is the most useless thing in the world for any purpose whatsoever.

If the reader grants the requirements I have laid down to be correct, then he will agree with me that the only method for determining the quantity of urea in urine, for clinical or practical purposes, which gives immediate results, is the volumetrical analysis of Liebig. If the apparatus be ready, a single analysis may be made in a quarter of an hour; but if many analyses have to be made at a time, nothing is easier than to perform a dozen analyses in the course of an hour. But, if the analyses are to be worth anything, the fluids must be absolutely correct, just as the balance used for other proceedings; and the operator must possess a perfect knowledge of the somewhat intricate proceedings and their theory, in order not to be arrested or led astray by any difficulties that may present themselves. A man, unacquainted with volumetrical methods generally, will require some prolonged training for these analyses, of course providing him to be acquainted with the rudiments of chemistry. The standard solutions being once on sale, I do not apprehend French measure to be any objection to this analysis, as the operator may obtain the graduated vessels as easily as those based upon imperial measure or cubic measure; and, if he requires his results in apothecaries' weight, the easiest calculation will turn *grammes* into grains, and cubic *centimètres* into fluidounces.

As soon as the analysis of urea is to be combined with that of chlorine, the advantages of this method become much greater; for the same proceeding which prepares urine for the determination of urea by the mercurial solution, also prepares it for the determination of chlorine by the other mercurial solution, than which there is not a more accurate analytical proceeding in existence.

The method of Dr. Davy gives, undoubtedly, useful results, so that we may say that it fulfils the first condition—accuracy. The materials are simple, cheap, and easily obtained; and there are no great sources of error. Its simplicity recommends it to all beginners, and all those who dislike more complicated proceedings; but it requires at least six hours, mostly more, for its completion; and is only correct at an average temperature and an average pressure of air, or at a time when the effects of temperature and air-pressure upon gases enclosed in tubes over fluids counterbalance each other, as was the case

during several weeks in August. As soon as this method requires correction for air-pressure and temperature, it takes too much time in calculation, whereby its value as a ready means is much diminished; for to ascertain the volume of nitrogen obtained, to correct that volume for temperature and air-pressure, to ascertain the absolute weight of the corrected volume, and then to calculate the amount of urea in the fraction of urine, and from this the total of urea in the urine of a given time, and all this only six or twelve hours after the question has been put, is by far too troublesome a proceeding to have any chance to be useful for purposes at the bedside.

If many analyses are to be made at one time, the apparatus also becomes more complicated; twelve analyses would require the same number of graduated tubes. But there is one great objection to the analysis, namely, that the officinal liquor sodæ chlorinatæ is not a chemically defined preparation. That obtained in London contains so much carbonic acid, that, when it comes in contact with the solution of salt, a precipitate of carbonate of lime ensues at once, from the large amount of chloride of calcium present in the salt. A diffusion of the hypochlorite then begins, by the precipitate falling to the bottom of the vessel, and new portions of solution of salt coming in contact with the hypochlorite in the tube; so that, if the tube be at all large in diameter, the diffusion may interfere with the result of the analysis. The solution of salt must, therefore, be freed of lime by oxalates before being used for this analysis. But, even then, the solution of salt is inconvenient, as it dirties the fingers, and by no means permits the operator to have what he ought, namely, chemically pure hands and fingers. Dr. Davy replaced mercury by solution of salt, for the sake of cheapness, and in order to avoid calculation for a column of mercury. The calculation for the column of mercury may be avoided by immersing the tube in a deep vessel with mercury, until the mercury inside is on a level with that outside; but the quantity of mercury required precludes cheapness of the apparatus.

Dr. Davy's method is quite safe and accurate, as I have used it. A tube of 100 cubic *centimètres* capacity, and 20 cubic *centimètres* spare room, is filled more than two-thirds (two-thirds and the spare room) with mercury; upon this one-third of the tube is filled with the decomposing liquor. It is then inverted in mercury, in a deep cylindrical vessel. By means of a graduated pipette, with a springcock and long tube, five cubic *centimètres* of urine are now brought into the tube, which is gently raised out of the mercury; the inner branch of the pipette discharges the urine just above the surface of the mercury in the tube, and not a particle of gas or mixture can thus by any chance be lost. I then apply the corrections enumerated to the gas obtained after about six hours, and calculate the urea. A fresh portion of the liquor is also added by means of another pipette, if the urine was concentrated or of high specific gravity, to make sure that all the urea present has been decomposed. All this by no means simplifies the proceeding, but ensures its accuracy. I abhor simplification at the absolute expense of accuracy. I took these precautions after having found that the diffusion from the carbonate of lime may cause a difference of 14 per cent. from the truth; and further, that the liquor sodæ chlorinatæ met with in London frequently evolves some gas, when mixed with urine in Dr. Davy's original manner, before the operator has had time to close the tube with the thumb; and, even if it be closed, some gas and mixture will be forced out of the tube by remaining in the space between the lower meniscus of the mercury and the meniscus of the skin of the thumb pressed against the tube, after the latter is inverted.

Let us now compare with this the attempt of Dr. C. Handfield Jones to simplify Dr. Davy's method (British Medical Journal, Aug. 22nd, 1857, p. 712). Dr. Jones calls his proceeding a modification of Dr. Davy's mode of determining the amount of urea. I am astonished to find a proceeding against which Dr. Davy has especially provided in the following words: "The amount of mercury employed should, as a general rule, be never less than the volume of gas produced; for, if the volume of gas evolved be more than that of the mercury used, it will be more than that of the solution of salt, and therefore some of the mixture of urine and hypochlorite will be forced out of the tube before it is completely decomposed, and consequently some of the gas will be lost; so that, if this occur, we must repeat the experiment, using either a larger quantity of mercury, if our tube will allow, or diminishing the quantity of urine employed." In direct violation of this precaution, Dr. Jones omits the mercury altogether. The first bubble of gas evolved presses the mixture out of the tube, and so on until a volume of mixture equal to that of the gas evolved is forced out of the tube, and lost for analysis. This proceeding is so much in juxtaposition to method, that it might be called a method for making the determination of urea in urine impossible. Dr. Jones is certainly aware of his loss; he does not determine it; he consoles himself in the following words: "Much of the liquor sodæ chlorinatæ [it should be mixture of urine and liquor sodæ chlorinatæ] is wasted, being expelled by the nitrogen as it collects. *Some loss of urea no doubt takes place; but not much, I think, as scarce any gas is evolved in the lower third of the tube.*" What must be the chemical conscience of Dr. Jones, if, in a quantitative analysis, he permits a loss of urea to take place, which, by means of half a pound of mercury, he might prevent? What must be his care of observation, if he states that, in the mixture, where, by reason, an equal reaction must take place in all parts, no reaction took place in the lower strata; and that, therefore, it might be lost, without an attempt to produce the reaction which is the essence and soul of the entire analysis?

Though I was as much convinced of the utter uselessness of Dr. Jones's proceeding as I am now, I was curious to ascertain the loss of gas caused thereby. Five cubic *centimètres* of urine were decomposed by Dr. Davy's method, and, with my additional precautions, yielded 33 cubic *centimètres* of nitrogen. Another 5 cubic *centimètres* of urine were decomposed over an insufficient amount, namely, about 20 cubic *centimètres*, of mercury. After all the mercury was driven out, there ensued a loss of a considerable quantity of mixture; and, after the completion of the reaction, there were collected in the tube 21 cubic *centimètres* of nitrogen, showing a loss of exactly one-third of the nitrogen actually contained in the urine. And here there were 20 cubic *centimètres* of mercury to be driven out. In Dr. Jones's analysis, the loss of nitrogen, therefore, must be much greater, and must amount almost to one-half of the nitrogen actually contained. This is indeed borne out by the figures of all his analyses, which give a quantity of urea in the urine of fever patients far below the normal quantity in equal periods of time in health; while the fact is, that the quantity of urea in the urine of fever patients, during the rise and acme of the disease, and even after it, is far beyond, sometimes nearly, sometimes more than, double the amount of the normal average.

I tried a modification, and fixed the tube, filled in Dr. Jones's manner, by means of a cock, upon an inverted funnel, which had been ascertained to be large enough to take the whole of the contents of the tube, should the evolution of gas drive the mixture very much downwards. Five cubic *centimètres* of urine of a patient had yielded by Dr. Davy's method, with my additional precautions, 43 cubic *centimètres* of nitrogen. Ten cubic *centimètres* of the same urine in the other tube, fixed upon the funnel, and inverted in salt water, should have yielded 86 cubic *centimètres*, but they only yielded 67 cubic *centimètres* of nitrogen, showing a loss, even with this precaution, of 19 cubic *centimètres* of gas—a loss which was mainly due to the diffusion set up between the mixture in the tube and funnel, and the saturated solution of salt in which tube and funnel were inverted. The solution of salt had been coloured blue by some tincture of litmus. As carbonate of lime fell, the blue colour disappeared entirely, showing that liquor sodæ chlorinatæ, mixed with urine, was diffused through the entire bulk of the salt water (1½ Winchester quart).

Dr. Jones is modest enough not to suppose his proceeding so accurate as that of Liebig. He believes, however, that it affords, at any rate, results capable of being compared with each other. In my opinion—and I hope, hereafter, in Dr. Jones's opinion—the result of the comparisons is, that one result is as bad and useless as the other.

Dr. Jones has singular ideas of quantities. Thus, in another passage of his paper, he informs us that the acidity of a specimen of urine, per ounce, was represented by forty drops of saturated solution of bicarbonate of soda. I do not suppose that Dr. Jones himself knows the quantity of bicarbonate contained in the forty drops, for a drop is no quantitative definition; it may be large or small, according to the vessel from which it is poured; and many other circumstances, such as adhesion or the reverse, temperature of the fluid, have great influence upon its size. We readers, therefore, who are to be informed of the degree of acidity of a certain urine, are absolutely informed of nothing at all. The quantitative analysis is a sham and a spectre. It is clever enough to take bicarbonate of soda; for, as it is not very soluble in water, a saturated solution is not a very strong alkaline fluid; but the disadvantage lies in the working, for, as two equivalents of carbonic acid have to be removed by boiling, before litmus paper

yields a neutral test, the boiling has to be prolonged in every analysis—for what purpose? Merely to save the trouble of weighing a quantity of carbonate into a measured bulk of water. Here the trouble certainly surpasses the saving at the production of the test solution.

The nature of the analyses for uric acid also helps to strengthen my resolution here publicly to assure Dr. Jones that such analyses are of no use to pathology, to patients, or to readers. If such are to be the fruits which medicine is to ripen from the flowers of chemistry (and I believe both Liebig's and Davy's methods to be flowers of that science, the one by its profound shrewdness, the other by its great simplicity), we had much rather beg chemists not to trouble themselves in our behalf. We have long been sighing for a method to analyse urea and determine its quantity. Scarcely are we presented with a good one, when up start a series of incompetent critics and dissatisfied reformers, the first to find a thousand fallacies where nothing is fallacious but themselves, the others to deform by their intended reformation. I have heard Liebig's method declared to be fallacious by men who had never as much as read it, and who were not only utterly incompetent to try it, but also so destitute of the elements of chemistry as confidently to pronounce nitrate of baryta the best means for absorbing carbonic acid. To be sure, the best of us are liable to error, but always open to correction; it is, however, difficult to cure errors in principle. Our present morals in medical chemistry are rather lax as regards quantities. My intention in this article has been to contribute towards making them a little more stringent.

CASE OF RHEUMATIC PARALYSIS.

By Benjamin Dulley, Esq., F.R.C.S., Wellingborough.

[*Read before the South Midland Branch, May* 21, 1857.]

The patient was a man, E. S., aged 32, married, living at Wellingborough, in a somewhat damp house, but in a very healthy situation. He was by trade a shoemaker, and up to January 1856, had always, with slight intermissions, enjoyed good health. On the 16th of that month, he was attacked with severe pain in the bowels, which were tender and constipated: but he was soon relieved by purgatives, combined with calomel and opium.

On February 3rd, he began to complain of acute pain in the left shoulder and elbow-joints, accompanied by heat, thirst, and restlessness. On the second day, the pain extended to the left arm, then to both hands and wrist-joints, which were slightly swollen. In about a week or ten days the severity of the symptoms had in some degree ceased, but then the pain was felt extending down the back to the hips, knees, and ankles. Again, the febrile symptoms were renewed; the tongue became furred, the pulse quick, the urine scanty, and with bright red deposit; the breathing rapid and jerking; and he had occasional delirium. This state continued for six weeks. The treatment consisted of antimony, opium, and small doses of calomel; afterwards, when the lower limbs became affected, colchicum with bicarbonate of potash was added to the other remedies with marked benefit. The febrile symptoms gradually subsided, but unfortunately left the patient weak and incapable of the slightest movement. Paralysis seemed complete in all the voluntary muscles; but the patient retained his power over the rectum and bladder. Week after week now passed with no amendment; blisters and other irritants were applied to the spine; the patient took quinine, ammonia, iron, iodide of potassium, and zinc, in succession, and had the continued daily use of electro-galvanism up to June 21st. At this time, he had only so far recovered as to be able to move his neck freely, the right arm stiffly, and in some degree the fingers of the right hand. At this date, he was carefully conveyed to the Northampton Infirmary, and there most assiduously attended by Dr. Webster (who took a great interest in the case) for four months, but returned with his paralytic symptoms unalleviated.

At the present time (May 21st, 1857), more than fifteen months from the commencement of the attack, his health is good; he eats and drinks well; indeed, he gets fat and looks cheerful; he can move his head in all directions; he has the power when in bed of rolling from the left side on to his back, which is a great relief; he can move the right arm, but the hand is drawn back and incapable of much flexion; with difficulty he can grasp a fork, but is unable to feed himself. The left arm lies by his side useless; nor can the hand be flexed or brought up to the head. The right leg he can move freely when lying on the left side, but cannot draw it upwards. The left leg is useless. There is no swelling in any of the joints. He has no difficulty in passing either urine or fæces: the former is of healthy character and sufficient quantity. The bowels are generally moved once a day.

He has never had any loss of feeling; and has rather an exquisite sensitiveness to the least touch throughout the whole body.

Remarks. There is no novelty in rheumatic paralysis; and the present case was introduced to the attention of the meeting for the purpose of inviting discussion as to the nature and causes of paralysis in rheumatic fever. It was also desired to educe the practical experience of those members who had met with cases similar to that of my unfortunate patient; and to ascertain if any plan of treatment had been devised for alleviating so great a calamity. It was suggested that a general long continued use of the iodide of potassium was an important and frequently a successful remedy; as was also the frequent application of blisters to the spine, combined with attention to the state of the health generally. These remedies, as well as others mentioned above, had been fairly tried, and, I am sorry to say, had utterly failed.

EFFECTS OF FULL DOSES OF OPIUM.

By Frederick Pritchard, Esq., Stratford-upon-Avon.

Case i. About ten years since, my father and my assistant requested me to visit with them a person of the name of J. C., aged 33, of Shottery, in this neighbourhood, who had been suffering from intussusceptio for nine days. The symptoms were most violent, and accompanied with hiccup, stercoraceous vomiting, subsultus, and every sign of approaching dissolution. The usual remedies had been resorted to without any beneficial effect. I prescribed four grains of solid opium to be administered in the form of a pill. In twelve hours the bowels acted, and the patient speedily recovered, and has continued well from that period.

Case ii. Five years afterwards, my assistant requested me to visit another case with him. The patient, L. R., aged 50, residing at Clifford Chambers, as in Case i, had very nearly the same symptoms, and had been ill for several days before she applied. The same quantity of opium was administered, and on the following day she was relieved, and very soon recovered.

Case iii. Six years since, I was called to a lady, aged 63, with strangulated umbilical hernia, an irreducible one of long standing. I employed the ordinary taxis, and also resorted to the usual means for the purpose of relieving the strangulation, but without effect: vomiting of stercoraceous matter supervened, and the patient appeared to be sinking rapidly. A hospital surgeon was called in consultation; and it was agreed that, in consequence of the severity of the symptoms, as well as the exhausted condition of the patient, an operation was out of the question. The same quantity of opium I shortly afterwards administered, and with the same happy effect, for the bowels acted in the course of ten hours, and she rapidly recovered.

I have given a very brief but truthful sketch of these cases—cases in which I have felt much interested; and my opinion is, that in each the large dose of opium, by acting as a direct sedative, so unstrung (if I may be allowed the term) the bowel, as at once to relieve the intestinal obstruction.

The following case having occurred at the time I was thinking of sending the preceding ones for insertion, I waited to see the result of it; and as so much has been said and published lately respecting idiopathic tetanus, any contribution, I imagine, will be read with interest.

Case iv. On August 22nd, at 8 o'clock A.M., my assistant requested me to visit a person of the name of Richard Brown, aged 27, who he stated was suffering from tetanus, but he could not ascribe the affection to any particular cause. He informed me that when he first saw the patient, he found him in a state of great exhaustion; the pulse was small and fluttering; the extremities cold; and with these symptoms were tetanic convulsions. He prescribed ammonia, opium, and chloric æther, in full doses, and gave the patient a pint of brandy in the course of two hours.

When I visited him, reaction to a certain extent had come on; his pulse was firm, and the state of the skin improved, but the tetanic convulsions had very much increased in severity.

He had violent opisthotonos, the body being completely arched; his eyes were protruded; the face and neck were livid; the breathing laborious; the abdominal muscles were strongly retracted: in fact, all the muscles were so rigid and drawn, that it is impossible to describe the poor fellow's sufferings: added to which, during each paroxysm his penis became so turgid, and, I imagine, painful, that he grasped it violently with his hand, and it was with difficulty that we could get it disentangled.

I ordered him to have an injection of turpentine and assafœtida; to be put under the influence of chloroform; and the abdomen to be rubbed with it. These remedies caused a slight remission of the symptoms; but as soon as the effects of the chloroform were gone, they recurred with equal severity.

I continued to visit him every hour, and both my assistants remained with him, administering chloroform from time to time, and stimulating him well with brandy. At 4 o'clock P.M., the convulsions appeared to be fast destroying him, and having witnessed the good effects of large doses of opium in spasmodic affections, I resolved upon giving him five grains, which I had carefully made up into two pills, which he took with two ounces of brandy. At 7 P.M., the convulsions began to subside, and by half-past 11, they had entirely ceased. He then went to sleep; and at 6 o'clock the following morning, he awoke quite free from pain, and complained only of stiffness. The inhalation of chloroform was continued until 10 P.M., by which time six ounces had been administered.

During Saturday, he was unable to answer any questions, and I was therefore in the dark as to the cause of his illness; but on talking to him on Sunday, he told me that on the preceding Friday he ate some berries which he gathered off the hedge by the road-side; that they made his mouth feel hot; but beyond that he did not experience any inconvenience.

I sent into the country, and had some dulcamara and bryony berries gathered, and as soon as the man saw them, he selected the bryony as those of which he had partaken, and said that he had eaten about thirty.

Remarks. The peculiarity of this case is, there being no symptoms of poisoning prior to the attack of tetanus. Orfila mentions that bryony-root causes vomiting, fainting, violent pain, profuse alvine evacuations, etc. Pye mentions a fatal case from taking two glasses of an infusion of the root to cure an ague. Tormina and purging soon followed, and the patient sunk under it.

Whether the recovery of this man is due to the treatment, I will leave others to judge. The effects of the chloroform in at once relaxing the muscles, and removing all rigidity and pain for the time being, I think perfectly justified me in continuing the use of it for such a lengthened period. The administration of so large a dose of opium may be questioned; but when I saw the patient was being worn out by the convulsions, and when I recollected the beneficial results in the preceding cases of intestinal obstruction, I made up my mind to give it a trial.

In regard to the poisonous effects of bryony, I hope to gather more information from the leading toxicologists of the day.

Periscope.

PRACTICE OF MEDICINE AND PATHOLOGY.

CONTRIBUTIONS TO THE THEORY OF EPIPHYTES.

The *Dublin Quarterly Journal of Medical Science* for May last, contains a translation of an article on the above subject by Dr. Edward Koch, of Würzburg.

It was pardonable that investigators who had never succeeded in discovering fungi in mentagra should deny their occurrence or their pathognomonic signification in this disease; it is, on the other hand, surprising that the fungus in favus should at the present day be considered as an *accidental* product of albuminous transudations (Didot), and, accordingly, as unessential to that affection.

The general condition necessary to the growth of fungi on the human body is their transference from without to such parts as present the conditions essential to their development. Gudden has very well described the circumstances favourable to the growth of fungi on the integuments; but he has, it seems to me, omitted a very important element in the causation of the origin and spread of pityriasis versicolor, namely, morbidly increased secretion of the perspiration, coexisting with a neglected state of the skin. That this cause of the development of pityriasis is very active with respect to the fungi on which it depends, is evident, first of all, from its frequent occurrence in phthisical subjects convalescent from typhus, and, in general, in patients affected with permanently or temporarily increased cutaneous secretion, in whom, either from carelessness or from caution, bathing or washing of the skin is omitted.

Thus Dr. Koch remembers some patients of this description who were covered literally from head to foot with scales of pityriasis, but in whom he, unfortunately, did not employ microscopic examination, and can therefore not answer for the existence of fungi in their cases, nor can he insist on the existence of the latter in *all* cases of pityriasis after typhus, as he has convinced himself of their presence in only five or six such convalescents. The parts of the body most liable to circumscribed pityriasis might be adduced as a further confirmation of this view. Thus, it is particularly apt to attack the trunk, which is much more easily and frequently the seat of increased perspiration than the extremities; and if we examine more closely, we shall find that the parts most inclined to perspiration, from the neck down to between the scapulæ, the spaces above and beneath the clavicle, the axillæ, particularly the parts about their anterior portion, are most frequently and intensely attacked. In the latter situation, as well as between the breasts, he has very frequently observed it in women. He cannot give a general assent to Gudden's statement, that pityriasis versicolor in particular is of so very rare occurrence in women. This opinion may have arisen from the greater reluctance of women, for many reasons, to consult the practitioner for a few such spots, and also from the less chance of the accidental discovery in them, during medical examinations of other kinds, of the existence of such an affection, in consequence of their unwillingness, without absolute necessity, to expose the parts just mentioned. But if the physician is more frequently compelled to make such examinations in an hospital for syphilitic or cutaneous affection in the female, he will very soon be convinced that pityriasis occurs perhaps as frequently in women as in men. In children, on the contrary, it is certainly very rare; in the latter, profuse perspiration occurs less frequently, and more attention is generally paid by adults to the cleanliness of their skin, than grown people are wont to bestow upon themselves. Gudden further quotes the case of a man who was in the habit of leaving his chest exposed, and in whom the middle part of it remained free from pityriasis, certainly only because it was less liable to profuse perspiration, and because the latter was immediately dried by the access af air.

In pityriasis, the fungi grow chiefly in the external horny layers of epidermis; in favus, on the contrary, they are developed in the hair follicles, where they increase to form great scabby conglomerate masses, the so-called individual favi (*Favus-Individuen*). Leaving out of consideration that we have here to do with two different species of fungus, a strict separation of the two forms, as essentially distinct affections of the skin, is certainly justified even by the external microscopic phenomena. For the same reasons, as little can identity be maintained between favus and herpes tonsurans, or between pityriasis and the mentagraphyt described by Gruby.

Thus, in herpes tonsurans, the fungus is situated almost exclusively in the hairs, and in their fibrous substance; at least, Dr. Koch was enabled, in almost all the hairs he examined, to establish the freedom of the medullary substance from the affection. In the fine whitish scales of epidermis surrounding the diseased hairs, he has, on the closest examination, but very rarely found some few sporules, but never could discover such great masses as Hebra and Bärensprung mention. These small quantities of sporules must have been derived from the bursting and breaking of the hairs filled with them into the adjoining layers of epidermis. But even should Bärensprung's assumption be correct, that the growth of the fungi begins in the epidermis, and finds its way thence into the hairs, it is still in the hairs that the process, in this form, is to be considered as predominant and essential. If, on the other hand, in favus, hairs are found, here and there, containing fungi, this is certainly so rare as to be considered an incidental occurrence; while, in this case, the formation of the scabby fungous convolution around the hairs—whether isolated or confluent is indifferent—is to be considered as characteristic.

The arrangement of the fungi in the hair, in herpes tonsurans, Dr. Koch has, in general, found to be such as Malmsten and Bärensprung have described. They lie as garland-like, undivided strings of sporules between the fibres of the cortical substance, leaving the medullary portion intact. The hairs are broken off very short, so that, when pulled out, they are only a few lines long; they have a dirty-white colour, and are swollen, thicker than the unaffected hairs, and very brittle.

Both the upper and under (radical) extremities of these stumps of hair are, in general, splintering and broom-like, and the strings of fungi extend from the middle portion out between the splinters of the two extremities, so that it is hard to determine whether the fungi grow out from the root, or whether—as Bärensprung considers to be possible—they grow, after the fracture of the hair, through the fractured end into the fibrous substance. Dr. Koch would be inclined to look upon the former as the more probable, namely, that the fungus is developed in the root-sheath, and that it penetrates thence into the upper part of the hair. The growing-in of the fungi from the top of the hair would indeed be proved, if Küchenmeister's statement were correct, viz., that, first of all, a round heap of sporules forms in the root of the hair. But he looks upon this as impossible, since, in every diseased hair of the kind, the top breaks off in extraction; besides, it is more than improbable that a growth of fungi could arise in the centre of the root, without transference from without. Opposed to Bärensprung's view, that the fungus reaches the hair also through the upper fractured extremity, and grows thence downwards, it is yet the fact, that such hairs have never been found having their upper end filled with fungi, and their lower part still free therefrom; not to mention that, were such a process going on, the fungi should be found more abundantly in the epidermis than is really the case.

Dr. Koch has not as yet had an opportunity of observing the *Microsporon Andonini*. On the other hand, he has, in two cases of mentagra, succeeded in discovering the *Microsporon mentagraphytes*, and on both occasions as a dense layer of little round sporules situated between the roots of the hairs and their sheath, its limits superiorly coinciding exactly with those of the hair follicle. Fungoid filaments he has as yet not seen in this form of disease.

If we now consider once more the situation of the fungus in the four forms spoken of, viz., Pityriasis, Favus, *Herpes tonsurans*, and Mentagra, we find it to be in Pityriasis in the external layers of epidermis, leaving the hairs and their sheaths free; in favus in the hair follicle, leaving the lower parts of root-sheaths always (Gudden), and the inner part of the hair most frequently, free; in *Herpes tonsurans*, in the fibrous substance of the hair, with but slight implication of the scales of epidermis surrounding the hair; in metagra, in the inner root-sheath of the hair, leaving the hair, the hair follicle, and the surrounding epidermis free.

Did we now assume, that some of these forms of disease depend on the same species of fungus, which, however, is not the case, this constant difference of the tissue attacked should warn us to discriminate between the diseases in question. Gudden, on the other hand, correctly maintains that all varieties of favus are formed of one and the same species of fungus, and are only determined by the greater or less reaction of the cutis against the intruder, and by the degree of growth of the latter. This is not true of favus alone; it is equally so of all the forms mentioned. It is accordingly a matter of indifference, with respect to determining the nature of the disease, whether we find the crusts of favus on a dry part of the skin or on one affected with eczema, or meet them bathed in pus, the favus crust is distinctive. It was certainly a useless and superfluous dispute which was carried on, whether *Herpes tonsurans* commences with eczematous or herpetic vesicles, with papulæ or pustules; the *Trichophyton tonsurans* in the hairs is the essential point, and according to the degree and duration of its growth and the sensibility of the skin in the part affected will the case be attended with simple exfoliation of the epidermis, the formation of smaller or lesser vesicles, pustules, or even abscess.

It is further equally self-evident that, according to the different seat of lodgment of the fungus, the reaction of the skin in each form will in general vary. Thus we find in pityriasis, where it is superficially situated, for the most part no reaction of the skin, and a slight redness only when the process is very intense, or the skin tender. In favus, in which the fungus begins to grow in the hair follicle, a small yellow vesicle first forms around the latter, and soon dries; under the gradually increasing crust the cutis atrophies; if the scabs increase very much, or coalesce to form extensive crusts, the irritation excited is of course greater, and the more so as washing is very much impeded, and consequently superficial suppuration easily takes place under the crusts, though in most cases without considerable swelling of the skin. Wholly isolated crusts of favus may, if the atrophy of the cutis is once accomplished, exist a long time without any reaction of the surrounding parts. Thus, Dr. Koch once found, on the lower part of the left thigh of a girl suffering from constitutional syphilis, two isolated scabs, of the size of a six-kreuzer piece (equal in size to our penny), of a dirty-yellow colour, round, and smooth on the surface. He at first thought they were the scabs of dried pustules, but they separated, and he was surprised not to see the least redness of the surrounding parts, and the patient asserted that she had had them more than a year. They were convex inferiorly, and the corresponding cutis was atrophied. On the upper surface was a small, central, bowl shaped depression, leading to a fine little aperture perforating the entire crust. Microscopic examination showed them to be crusts of favus. The patient stated that she never had favus on her head.

Now, in mentagra, where the fungus penetrates to the deepest parts of the root-sheath, leaving the follicle free, we see the cutis first swell, producing node-like tumours, while a continuance of the affection gives rise to burrowing abscesses, with the subsequent formation of crusts. Thus he has, in one case, removed undermined crusts of the size of a half-florin piece, and from two to three lines in thickness, the numerous hair follicles projecting far, bathed in pus on their under surface. The nature and situation of the fungus are best studied on hair follicles removed in this manner.

Finally, in the last patient affected with favus whom he had an opportunity of examining, invariably he found in all the scabs peculiar bodies of a light green colour, and for the most part of a regular round shape, about double the size of the sporule cells, and consisting of a membrane in general containing from one to four smaller granules, apparently of a darker shade of green. He does not remember to have seen these bodies mentioned in any description of favus, nor had he himself observed them in his earlier investigation of such scabs; consequently, he cannot pledge himself that they are a constant constituent of the scabs in favus. However, it struck him as remarkable that in this one patient he found them in tolerably large numbers mixed with the fungi, and especially where the filaments were most crowded. In order to guard against the possibility of deception from the accidental conveyance of foreign bodies to the surface of the scabs, he cut several of the latter obliquely through the centre, and shaved off small portions from the innermost part; but in the objects thus obtained, he still found the green globules above described in numbers equally great. He does not venture to draw any conclusion from this observation of a single case; but he is inclined to believe that the chlorophyll bodies in question could not accidentally have got into the scabs. (*Virchow's Archiv*, Band x, Heft 3, 1856, page 317.)

British Medical Journal.

SATURDAY, SEPTEMBER 19TH, 1857.

THE MANAGEMENT OF THE INSANE IN SCOTLAND.

Our readers, being acquainted with at least an outline of the history and constitution of the kingdom of Great Britain, are of course aware that the laws and institutions of Scotland are, as a general rule, distinct from those of England. That is to say, for example, the provisions of the English Poor-law, of the Lunacy Act, of the recent Divorce Act, and so forth, have no force north of the Tweed. Hence some of the institutions of our Scottish neighbours may be in advance of ours, while others may be as much behind the requirements of the age. An illustration of this is afforded by the condition of lunatics in Scotland, as exhibited in the able and elaborate Report of a Royal Commission appointed in April 1855. We have endea-

voured, and will continue to endeavour, to inculcate the necessity of reforming the treatment of our English insane. But in England we have arrived at something like systematic arrangement: some kind of definite legal provision is made for the lunatic. In regard to Scotland, on the other hand, there has indeed been some attempt at legislation of a very imperfect kind; but chaos and confusion have reigned supreme in the affairs of the insane part of the population. One or two extracts from the recapitulation given by the Commissioners at the end of their Report will give some idea of the disgraceful state of affairs to which we allude.

"There are in Scotland at least 7,403 persons of unsound mind. Of these, 4,642 are pauper patients, a proportion which, though large, does not, as we have shewn, fully represent the number which might be set down under this head.

"No national provision whatever has been made for the accommodation of the insane poor of Scotland, and they are therefore altogether dependent on the benevolence of the public, who have, in some measure, supplied the want by erecting asylums in the more populous districts, capable of accommodating 1,511 patients, leaving 3,131 still unprovided for.

"Even in the southern portions of the kingdom, where the chartered asylums are situated, great difficulty is experienced in obtaining admission for pauper patients belonging to the neighbourhood; and extensive districts in the north are left without any accommodation whatever.

"The consequence of this want of public accommodation is, that numerous private houses have been opened for the reception of pauper lunatics. These houses have been licensed without due examination as to their fitness for asylums; and no limitation of the number or sex of the patients to be admitted has been made: nor has due regard been had to the qualifications of the proprietor, or to his means of providing proper lodging, board, and treatment.

"The premises are in most cases totally unsuited for the purpose of asylums, and are crowded in an extreme degree. The patients are badly lodged within doors, and are scarcely ever allowed to walk beyond small yards surrounded by high walls. They are generally scantily fed and clothed, and are provided with but a meagre amount of bedding, which is often of the worst kind. They are frequently subjected to mechanical restraint and seclusion, and are occasionally stripped naked and placed to sleep together on loose straw cast into rudely constructed bed-frames. They have few or no means of recreation or occupation, and scarcely any suitable books. The attendants and nurses are not in sufficient number, and their wages are too low to secure the services or continued stay of efficient persons. Generally, no religious exercises, or other agencies calculated to elevate the moral tone of the inmates, are employed, and scarcely anything is done to break the cheerless monotony of their existence.

"The statutory records would, even if kept, give only a very imperfect account of the treatment of the patients; but in none of the licensed asylums have the entries or returns been made in a satisfactory manner, and, in some of them, the necessary books and forms have not even been procured. No record has been made of the mechanical restraint to which the patients are habitually subjected in some of these houses; and, the statutes not requiring that any account of seclusion shall be kept, the solitary confinement employed is in no way set forth in any of them. There are no rules or regulations to secure the proper treatment of patients whilst in these houses, nor is there any legal requirement that a patient, when recovered, shall be discharged.

"Violent and also quiet patients, are, pending investigation of their cases by the sheriff, often improperly and cruelly detained in jails for considerable periods, during which they are deprived of all means of treatment, and their malady rendered more obstinate.

"Unlicensed houses have been opened, as trading concerns, for the reception of certain classes of patients, who are detained in them without any safeguard whatever against ill treatment or abuse.

"A very large number of single patients are detained at home, or illegally placed in the houses of strangers. The generality of these are in a most destitute condition, being badly lodged, ill fed, scantily clothed, and not provided with sufficient bedding. A few are subjected to personal chastisement; some are permanently chained; others are placed in outhouses, or are locked up in small closets just capable of holding them. Many are filthy in their persons, infested with vermin, covered by mere rags, or allowed to remain perfectly naked. Some are without bedding, except loose straw or heather cast on rough boards, and their rooms emit a most intolerable stench. Others, again, are homeless, and are allowed to wander at large."

The sheriffs in Scotland are the only functionaries specially entrusted with the care or guardianship of insane persons. Yet the practice of these officers in regard to the inspection and licensing of private asylums, the medical certificates required for the detention of lunatics, and other matters, has been utterly destitute of uniformity, and very often most lax.

Things being so, Parliament, under the guidance of the Scottish Lord Advocate (Moncrieff) and Sir George Grey, set themselves to work in the last session to mend matters somewhat, and to provide better for the care of the three thousand uncared for, and the fifteen hundred somehow cared for, pauper lunatics: as well as for other matters of more or less moment in relation to all these unfortunates of every class. The Act "For the Regulation of the Care and Treatment of Lunatics, and for the Provision, Maintenance, and Regulation of Lunatic Asylums, in Scotland," received the Royal assent on August 25th, and will come into force on January 1st, 1858.

One of the first and most important provisions in the Act is the formation of a Board of Commissioners in Lunacy for Scotland.

"iv. There shall be constituted for the purposes of this Act a Board, to be called the General Board of Commissioners in Lunacy for Scotland, in manner following:—

"1. Three persons shall be appointed by Her Majesty, one of whom shall be an unpaid commissioner and chairman of the Board, and two of whom shall be paid commissioners, and shall receive such salary, not exceeding one thousand two hundred pounds each per annum, as shall be fixed by the Commissioners of Her Majesty's Treasury.

"2. It shall be lawful to Her Majesty, as often as shall seem expedient, by warrant under the hand of Her Majesty's principal Secretaries of State, to appoint not more than three persons in all at one time, to be unpaid Commissioners in Lunacy, for such period as may be specified in such warrant.

"3. All vacancies in the Board may be supplied in like manner from time to time as they occur."

It is to be observed, that the original draft of the Bill provided that one of the said Commissioners, and *one only*, should be a medical person: and that the chairman of the Board should *ex officio* have a seat in the English Board of Commissioners in Lunacy.

Other clauses provide for the appointment of a Secretary and a Clerk, and, if necessary, of two "medical persons" to be Deputy Commissioners, at a salary not exceeding £500 a year each. At the end of five years, the General Board now appointed is to cease, and the two paid Commissioners are to become "Inspectors-General in Lunacy for Scotland, subject to the orders and direction of one of Her Majesty's principal Secretaries of State." Provision is also made for the regulation of licenses for private asylums, of orders and certificates, and for the establishment of district asylums for the reception of the insane poor.

We have before us a list of the appointments made to form the new Board. There are *three* unpaid Commissioners; viz., Viscount Melgund, M.P. for Clackmannan, as Chairman; Sir Alexander Maitland, Bart., of Mid Lothian; and George Young, Esq. The office of Secretary has been bestowed on Mr. Forbes of Medwyn, a Scottish advocate. Both the paid commissionerships, we are gratified to be able to announce,

have been bestowed on two members of the medical profession, highly deserving of the trust, and from whom much is to be hoped in the way of improvement of the system of treatment of the insane.

Dr. James Coxe of Edinburgh is well known as having long been a careful student of psychological as well as of general physiological science. He was one of the members of the Royal Commission of which we have spoken, and is reported to have had the principal share in the framing of the excellent Report issued by that Commission. He is also said to be the author of an excellent popular letter on the lunatic colony of Gheel, published very recently in the *Scotsman;* and we are glad to find that he is in favour of an introduction of the Gheel system, with such modifications as may be required by the circumstances of the case, into Scotland.

Of the high merits of Dr. W. A. F. Browne, the able Superintendent of the Crichton Institution at Dumfries, all who are interested in lunacy affairs must be aware. For many years this gentleman has been engaged as a superintendent of asylums; and for the last eighteen he has conducted the affairs of the Dumfries Institution, which has the reputation of being one of the best, if not *the* best managed in Scotland, and of being even a pattern to many English asylums. He was also the author, in 1837—twenty years ago—of a little work entitled *What Asylums were, are, and ought to be*—a book in which are expressed views of a highly enlightened character in regard to the treatment of the insane. And the practical carrying out of these views has, we may believe, tended to gain for Dr. Browne that high reputation which has now met with a graceful recognition.

While we express our high satisfaction at the excellence of the appointments of Drs. Coxe and Browne, we trust that the rumours which are floating about as to the deputy commissionerships may not be true. It has been noised abroad among the profession and public in Edinburgh, that one of these offices is to be bestowed on Dr. Archibald Cockburn, a son of the late Lord Cockburn. Now we do hope that the Lord Advocate and Sir George Grey will not so spoil their good work as to rashly appoint, as the colleague of Drs. Coxe and Browne, a person whose merits consist, on the one hand, in being the son of a well known Scotch judge, and in having served in the Turkish contingent force during the late war; and, on the other hand, in not being known to have devoted any special attention to the treatment of the insane, and, above all, in having been engaged, about two or three years ago, in partnership with the well known Dr. Pattison, of cancer-curing notoriety. Perhaps Dr. Cockburn has returned to the ranks of legitimate every day medicine; but, even if this be so, decency to the profession would demand that he should undergo a probation of several years before being appointed to a post of honour. And, after all, are there not other and better men in Scotland, who might fill the post—men whose practical knowledge of the treatment of lunatics is a recognised thing? There surely must be.

In giving the above outline of what has been done with the view of improving the state of the insane in Scotland, we have not entered on a full criticism of the new Act as to its probable working. To this we hope to return on a future occasion.

THE WEEK.

A very dreadful accident, by which a father and three children were drowned at Dunbar, on Saturday last, draws our attention to the fact that the means of restoring life in persons apparently drowned are not sufficiently made known to the people. It appears that two young daughters of a gentleman from London, named Wilson, whilst bathing, were carried away by the tide; the father and brother, perceiving the danger, rushed to their rescue; and the whole were unfortunately drowned. The body of the eldest daughter was recovered from the water within ten minutes after the alarm; and we are told that, upon being drawn upon the beach, "she was heard to draw a sigh, but no further evidence of life was given, and all efforts to restore life proved fruitless." Now we have no manner of doubt whatever that a prompt application of Dr. Marshall Hall's "ready method" would have restored this young lady's life, and lessened in some degree the agony of the mother who was destined to witness the destruction of her whole family within a very few minutes. "All efforts", which failed in restoring animation, did not, of course, include the only effectual one—that of simply turning the body, whilst prone, one half turn, and repeating the process until full inflation of the chest takes place. We cannot of course blame the bystanders for not putting in operation a plan of procedure with which they were doubtless unacquainted, and which is not, we believe, followed out by some of the Humane Societies themselves (the Bristol Society being an honourable exception); but we trust that, in future, every medical man living in the vicinity of dangerous water will not fail to instruct his neighbours how to act in cases of like emergency. One of the great advantages of the "ready method" is, that it requires no apparatus at all; the willing arm of a single person, and the free air of heaven, are all that are required, in the majority of cases, to restore life, when submersion has not taken place for too long a time. Those branches of the Humane Society who still obstinately pursue the old unscientific method of recovery are clearly committing a great public wrong, and lay themselves open to the strongest and most condign censure.

A singular accident was very nearly terminating the life of a most valuable associate the other day, whilst in pursuit of health in his autumn rambles. Dr. Day, the energetic and invaluable professor of medicine of St. Andrew's, in taking an excursion upon Helvellyn without a guide, unfortunately fell into an old mine, happily without further injury than the fracture of his arm. Whilst at the bottom, however, he found that the foul air was such that an immediate escape from it at any price was the only way to save his life. With great difficulty in his disabled state, he was enabled to climb to the edge of the mine, and by holding on first with one arm and then with the other, to procure pure air. In this condition, he was at length found and rescued by another tourist, but not until he was quite exhausted by thus maintaining himself for several hours just without the grasp of death. In all probability, any other gentleman unacquainted with the deadly nature of the foul air, would quietly have remained at the bottom of the pit until help came, and consequently would have miserably perished. We congratulate Dr. Day and the profession upon this fortunate termination of a very ugly mountain adventure. There are few men in the profession that we could find it so difficult to replace as the learned professor, who has done so much to elevate the character of the medical examinations of the very ancient University to which he belongs.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	York House, Bath.	Thurs., Sept. 24, 6¾ P.M.
East York and North Lincoln. [General Meeting.]	Yarborough Hotel, Grimsby.	Thursday, Sept. 24th, 2 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]		Thursday, Oct. 8th.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-SEVENTH ANNUAL MEETING.

[*Held in Dublin, August 26th, and following days*, 1857.]

[*Continued from page* 780.]

Section of Zoology and Botany, including Physiology.

REPORT OF THE COMMITTEE APPOINTED TO INVESTIGATE THE VITALITY OF SEEDS. BY C. G. DAUBENY, M.D.

Dr. Daubeny alluded to the circumstances which called the committee into existence, and stated, that after planting year after year all the seeds they were able to collect, they had now left but four species of plants whose seeds continued to grow. These were species belonging to the genera Ulex, Dolichos, Malva, and Ipomæa. He exhibited a register in which every experiment, as performed by Mr. Baxter of the Botanic Garden, was detailed. From this register it would be seen that the shortest period for which any of the seeds had retained their vitality was eight years, and the longest forty-three years. Grouping the plants according to their natural orders, the following selected will give some idea of the plants whose seeds retain their vitality longest: Gramineæ,.8 years; Liliaceæ, 10 years; Coniferæ, 12 years; Tiliaceæ, 27 years; Malvaceæ, 27 years; Leguminosæ, 43 years; Rhamnaceæ, 21 years; Boraginaceæ, 8 years; Convolvulaceæ, 14 years; Compositæ, 8 years; Myrtaceæ, 18 years; Umbelliferæ, 8 years; Cruciferæ, 8 years.

Dr. Lankester drew attention to the physiological interest of the Report just read. It would appear that the seeds which retained their vitality longest were those which had least albumen surrounding their embryos, as the Leguminosæ, whilst those which had large quantities of albumen, as the Graminaceæ, lost their vitality soonest.

Dr. Steele stated, that he had planted many seeds obtained from Egyptian mummies, but always failed to obtain any indications of their vitality.

Mr. Moore, of the Dublin Botanic Garden, related an instance in which he had succeeded in producing a new species of leguminous plant from seeds obtained by Mr. John Ball from a vase discovered in an Egyptian tomb. He also stated, that he had picked from out of the wood of a decayed elm, at least fifty years old, seeds of laburnum, many of which had germinated when planted, and produced young trees. He had once grown a crop of young barberry trees by planting a quantity of barberry jam, which proved that the process of preparing the jam did not injure the seed. Many seeds grew the better for being placed in boiling water before they were set.

Dr. Daubeny stated, that seeds did not retain their vitality whilst entirely excluded from the air; that, in order to keep them well, they should be wrapped up in brown paper, or some other porous material.

Mr. Archer stated, that the seeds sent from China in air-tight vessels always failed to germinate. Some seeds kept much better than others.

Mr. Ogilby stated, that some seeds germinated the better for being kept.

Mr. Nevins and Mr. Moore both confirmed this statement, and said, that gardeners were in the habit of keeping cucumber and melon seeds in their pockets in order to ensure their more efficient germination.

ON THE EMPLOYMENT OF THE LIVING ELECTRIC FISHES AS MEDICAL SHOCK-MACHINES. BY PROFESSOR G. WILSON.

The author stated that, in prosecuting researches into the early history of the electric machine, he did not at first contemplate going further back than the seventeenth century, or commencing with any earlier instrument than Otto Guericke's sulphur globe, of 1670. His attention, however, had been incidentally directed to the employment of the living torpedo as a remedial agent by the ancient Greek and Roman physicians, and he now felt satisfied that a living electric fish was alike the earliest and the most familiar electric instrument employed by mankind. In proof of the antiquity of the practice, he adduced the testimony of Galen, Dioscorides, Scribonius, and Asclepiades, whose works proved that the shock of the torpedo had been used as a remedy in paralytic and neuralgic affections before the Christian era. A still higher antiquity had been conjecturally claimed for the electric Silurus, or Malapterurus of the Nile, on the supposition that its Arabic name, *raad*, signifies thunder-fish, and implies a very ancient recognition of the identity in nature of the shock-giving power and the lightning force; but the best Arabic scholars have pointed out that the words for thunder (*raad*) and for the electric fish (*ra'ád*) are different, and that the latter signifies the "causer of trembling" or "convulser"; so that there are no grounds for imputing to the ancient Egyptians, or even to the Arabs, the identification of Silurus-power with the electric force. In proof of the generality of the practice of employing the living zoo-electric machine at the present day, the author referred to the remedial application of the torpedo by the Abyssinians, to that of the gymnotus by the South American Indians, and to that of the recently discovered electric fish (*Malapterurus Beninensis*) by the dwellers on the Old Calabar River, which flows into the Bight of Benin. The native Calabar women are in the practice of keeping one or more of the fishes in a basin of water, and bathing their children in it daily, with a view to strengthen them by the shocks which they receive. These shocks are certainly powerful, for living specimens of the Calabar fish are at present in Edinburgh, and a single one gives a shock to the hand reaching to the elbow or even to the shoulder. The usages referred to appear to have prevailed among the nations following them from time immemorial, so that they furnish proof of the antiquity as well as of the generality of the practice under notice. The author concluded by directing the attention of naturalists to the probability of additional kinds of electrical fish being discovered, and to the importance of ascertaining what the views of the natives familiar with them are in reference to the source of their power and to their therapeutic employment.

Sir J. Richardson stated, that there were not fewer than eleven genera of fishes known that had the power of giving electric shocks. There was one peculiarity in all these fishes, and that was the absence of scales. In every one of them an apparatus had been discovered, which consisted of a series of galvanic cells put in action by a powerful system of nerves. He read extracts from a letter from Dr. Baikie, now engaged in exploring the Niger, in which that gentleman stated that he had met with an electric fish in Fernando Po, and which Sir J. Richardson believed was identical with the Malapterurus, which had been described by Dr. Wilson, from the coast of Old Calabar. The natives called this fish the Tremble-fish.

ON BRITISH NAKED-EYED MEDUSÆ, WITH NOTICES OF SEVEN UNDESCRIBED FORMS. BY MR. JOSEPH R. GREEN.

The author commenced by alluding to the progress which had been made in the study of the Naked-eyed Medusæ since the publication of Professor E. Forbes's monograph; the researches of Agassiz, Leuckardt, and Gegenbaur being more especially dwelt on. He next gave a list of the Acalephæ, which he had hitherto observed on the Dublin coast, in all amounting

to twenty-five species. He then proceeded to describe the seven new species which he had discovered. Three of these he referred to the genus Thaumantias, one to Bougainvillea, one to Equorea, one to Steenstrupia, and one was deemed sufficiently remarkable to induce him to establish a new genus for its reception. It was, in all probability, identical with the medusoids produced from Coryne, as observed in Iceland by Prof. Steenstrup. In this medusa reproduction took place by germination from the tentacles themselves, as also from the tentacular bulbs. He had observed the latter mode to occur in his new species of Steenstrupia. The development of medusoids from *Laomedia geniculata* was next alluded to: in all the cases which the author had himself observed, the medusoids were free and detached, nor in any instance was he able to corroborate the statement of Loven, "that the medusoids merely expanded at the summit of the 'ovigerous vesicle', discharged ova, and then perished." He did not, however, wish to deny the correctness of Loven's description. Allusion was also made to the observations of Dr. T. S. Wright and Mr. C. W. Peach.

Professor Wyville Thompson stated it as his conviction, that the naked-eyed Medusæ were truly species, and not medusoid forms of Sertularian zoophytes. The only families of zoophytes producing medusoids, with which he was acquainted, were the Tubulariadæ and the Campanulariadæ.

The Rev. Thomas Hincks thought that the true nature of the Gymnophthalmatous Medusæ had not yet been demonstrated, and that there was still great reason to believe them medusoid forms of unknown species of zoophytes.

On the dispersion of particular breeds of domestic animals as connected with the great ethnological divisions of mankind. By Mr. Ogilby.

The author commenced by stating that the power of domesticating animals appeared to exercise a great influence on the civilisation of mankind. Where men had no cattle to attend to or breed, there they always exhibited the most degraded forms of their race. The great object of the paper was to show that certain breeds of sheep had always appeared with particular races of men, and that, at the present day, we had no better guide to the original types of mankind than were afforded by certain races of sheep. The paper was illustrated by maps and diagrams, illustrating the breeds of sheep.

On the reproductive zooids of Comatula rosacea. By Professor Wyville Thompson.

The author alluded to the history of Comatula, and referred to the fact that the pentacrinal form of this animal was originally regarded as a distinct animal. He had succeeded in dredging this animal, in Belfast Bay, in such a state as to lead him to believe that he had discovered the condition of the animal previous to its assuming its pentacrinal form. He then stated that, in certain stages of the growth of Comatula, he had detected, projecting from the surface of the animal, buds, or zooids, which, on examination, he had found to possess both germ-cells and sperm-cells; and from this were produced the eggs which were subsequently developed into the pentacrinal polyps, from which the mature animal proceeded.

Observations on the plants which, by their growth and decomposition, form the principal part of the Irish turf-bogs. By Mr. D. Moore.

The varieties of bog were divided into red bog, brown bog, black or turbary bog, and mountain bog,—which, being the names they are best known by, are retained. The differences of colour and consistencies of matter were considered to depend chiefly on the localities where the substances are produced, according as they vary in different degrees of moisture, temperature, and altitude. Iron and some other mineral substances had no doubt something also to do with the colouring. By far the greatest portion of the bogs in Ireland consists of red bog, which varies in depth from ten to forty feet, or more. This variety is the least valuable for fuel, owing to its soft fibrous consistency. It is supposed to have been formed on the sites of extensive ancient lakes, or very wet morasses, which may be inferred from the small quantity of wood found mixed up with it; besides the roots and trunks of trees being mostly found near the edges of the bog, the portions towards the centre being composed of nearly an uniform mass of the *débris* of plants. Although Sphagnums constitute a large portion of this substance, without the aid of the roots and branches of phanerogamic plants to form a kind of framework to bear up the cryptogamic species, the formation of bog could not go on at nearly so quick a ratio as it does. In limestone districts, where the larger species of Chara abound, whose stems and branches are always thickly incrusted with calcareous substances, the deposition of matter takes place faster than it does where those plants are not so common. The *débris* resulting from *Chora hispida* alone, where it grows freely, will soon fill up a shallow pool, so that plants higher in the scale of vegetation can grow on it. According to the Report of the Commissioners appointed to report on the nature and extent of the Irish bogs, upwards of a million of English acres are covered with red and brown bog, more than two third parts of which are westward of the river Shannon. The black or turbary bog is the most valuable for fuel, owing to the great quantity of woody matter it contains. This variety is supposed to have been formed on the sites of ancient forests, as is evident from the large quantities of prostrate trunks of trees and their roots, frequently *in situ*, which are found in it. The kinds consist chiefly of *Pinus sylvestris*, *Quercus robur*, *Betula alba*, and *Alnus glutinosa*, though large quantities of yew, *Taxus baccata*, and some mountain ash, are also found in particular districts. The roots of the oaks are generally nearest the margins of the bogs, resting on the clay or marl bottoms, whilst the Scotch firs occur further towards the centre, and rest on several feet of peat, thus showing that a considerable accumulation of that substance must have taken place before they vegetated on it. These roots are frequently found one above the other, where they have grown, which has led some to suppose that there have been several consecutive and distinct epochs of growth, and that some species of the trees which formed them are not now natives of Ireland. This hypothesis was not considered correct, but rather, that by the gradual growth of the bog, matter accumulated and covered the first tier of roots, and the seeds of contiguous trees, on falling and vegetating above them, grew and formed in their turn another tier, and so on up to the present surface. Mountain bog sometimes accumulates to a great depth on the tops of mountains, at elevations varying from 1,000 to 2,000 feet. The Sphagnums do not enter so largely into the composition of this kind, but their place is supplied by the grey moss, *Racomitrium lanuginosum*. The conclusions Mr. Moore has come to on this subject are the following, namely, that so far as proofs exist, the same plants which are now forming the bogs of Ireland have done so from the bottom upwards, though probably at different ratios, as drainage has increased, and that all the species are still in existence in Ireland which have ever formed any part of them. These formations he considers to be of a more recent date than the glacial epochs of geologists, with probably the exception of that at Lough Neagh, which may have been anterior to that period, but he thought it would be very hazardous to state the species which formed the fossilised wood found there.

Section of Geography and Ethnology.

On the physical characters of the ancient and modern Germans. By Dr. Beddoe.

Of no people have the physical characters been more distinctly handed down to us, though there was not the same kind of pictorial evidence on the subject as existed with regard to the Egyptians and other peoples; yet the descriptions of the Germans left by Greek and Latin authors were very full, and many of them tallied remarkably. They were invariably spoken of as a people with fair skins, blue eyes, and red or yellow hair. Niebuhr and Bunsen, however, have expressed an opinion that the Germans of the present day have, to a great extent, lost the physical characteristics which distinguished their ancestors. Dr. Beddoe was, however, disposed to doubt whether the differences in complexion between the Italians and the purest blooded Germans were more distinctly marked in the first and second centuries of the Christian era than at the present day. Perhaps the authors to whom he had alluded had laid too much stress upon the statements as to uniformity of aspect among the Germans, made by Tacitus, who was led to describe the barbarians as having yellow or red hair and blue eyes, because he observed these physical characteristics among the majority of the people. It was very unlikely that there were not among the Germans some who had black hair and black eyes and complexion, and if such did exist at all it was easy to believe that the gradations of complexion did exist among them, although men with light hair and complexions formed the majority. Niebuhr and Bunsen might also have been led astray, by a mistake, as to the true meaning of the words *flavus* and *rutilus*, as used to denote the colour of hair and complexion. The general result of all the author's investigation went to show that red hair was seldom as common in any district in Germany, as it was in some

parts of Scotland, and even of Ireland. However, in every district which might be supposed to form part of the original homeland of the Gothic races, fair hair and light complexions were in excess. The fairest hair was to be found in Grovangen, East Friesland, West Friesland, and Brunswick. The proportion of light eyes by no means corresponds with that of light hair. It was greatest in the district of Grovangen, where about four-fifths of the population had red, light, grey, or blue eyes. In Flanders the proportion was little more than half. The combination of blonde hair with hazel eyes was common in Germany and in the Saxon parts of England, but rare among Celtic populations. The Austrians differed greatly in appearance from the other Germans, and among them was a large proportion of persons having dark hair and eyes. On the whole the Germans were, in the time of the Romans, a people fairer than the Gauls, and much fairer than nations which inhabited southern Europe, and this description applied equally to them at the present day.

Section of Mathematical and Physical Science.

ON THE DIRECTION OF GRAVITY AT THE EARTH'S SURFACE. BY PROFESSOR HENNESSY.

If the earth's surface be considered to coincide with that of the liquid which covers three-fourths of the entire spheroid, gravity should be considered as perpendicular to it at every point. If, however, the earth were stripped of all its seas and oceans, the surface would present considerable inequalities. From what is now known regarding the depth of the ocean, the continents would appear as plateaus elevated above the oceanic depressions to an amount which, although small compared to the earth's radius, would be considerable when compared to its outswelling at the equator, and its flattening towards the poles. The surface thus presented would be the true surface of the earth, and would not be perpendicular to gravity. If a kind of mean surface be conceived intersecting this, so as to leave equal volumes above of elevations, and of depressions below it, it is not allowable to assume that such a surface is perpendicular to gravity. The mean surface of the solid crust of the earth would not be perpendicular to gravity, if, after the process of solidification had commenced, any extensive changes in the distribution of matter in the earth's interior could take place. If the fluid matter, in solidifying, underwent no change of volume, the forms of the strata of equal density within the earth would be the same at every stage of its solidification. But if, as observation indicates, such fused matter, on passing to the solid crystalline state, should diminish in volume, the pressure on the remaining strata of the fluid would be relieved, and they would tend to assume a greater ellipticity than they had when existing under a greater pressure. The general result of this action would manifestly be to produce a change in the direction of the attractive forces at the outer surface of the solid crust. The direction of a plumb-line would be slightly altered, so as to slightly increase the apparent latitudes of places over a zone intermediate between the equator and poles.

The President (Dr. Robinson) stated that he was the first to direct attention to those changes of level which depended on the season of the year. This he was led to observe from the fact that the entire mass of rock and hill on which the Armagh Observatory was erected was found to be slightly, but to an astronomer quite perceptibly, tilted or canted, at one season to the east, at another to the west. This he had at first attributed to the varying power of the sun's radiation to heat and expand the rock throughout the year; but he since had reason to attribute it rather to the infiltration of water to the parts where the clay, slate, and limestone rocks, met in their geological arrangement. The varying quantity of this through the year, he now believed, exercised a powerful hydrostatic energy, by which the position of the rock was slightly varied.

ON THE AMOUNT AND FREQUENCY OF THE MAGNETIC DISTURBANCES, AND OF THE AURORA, AT POINT BARROW, ON THE SHORES OF THE POLAR SEA. BY MAJOR-GENERAL SABINE.

Point Barrow is the most northern cape of that part of the American continent which lies between Behring's Straits and the Mackenzie River. It was the station of H.M.S. *Plover*, from the summer of 1852 to the summer of 1854. In this most dreary and otherwise uninteresting abode Capt. Maguire and his officers happily found occupation during seventeen months in observing and recording every hour the variations of the magnetic and concomitant natural phenomena. Their observatory, placed on the sand of the shore, which for a long tract nowhere rose much above five feet above the sea, was constructed of slabs of ice, and lined with seal-skins. The instruments had been supplied by the Woolwich establishment, with the requisite instructions; and the observations were made and recorded precisely in the same manner as those of the colonial magnetic observatories. These were sent by Captain Maguire to the Admiralty, and were in due course transmitted to General Sabine, by whom they were subjected to the same processes of reduction as those made in the colonial observatories. The author then exhibited to the Section six long rolls, containing the results of this discussion, giving the reduced observations at each of the hours of the twenty-four. A sufficient body of the larger disturbances having been separated from the rest, it was found at Point Barrow as elsewhere, wherever similar investigations had been made, that, in regard to the frequency of their occurrence, and the average amounts of easterly and westerly deflections, the disturbances followed systematic laws depending on the hours of solar time. The laws of the easterly and westerly were also found at Point Barrow, as elsewhere, to be distinct and dissimilar. Upon instituting a comparison between the disturbance laws at Point Barrow and Toronto, it was found that the laws of the deflections of the same name at the two stations did not correspond; but, on the other hand, there existed a very striking and remarkable correspondence between the law observed by the easterly at Point Barrow and the westerly at Toronto, and between the law of the westerly at Point Barrow and easterly at Toronto; and this correspondence was shown to exist, not in slight or occasional particulars only, but throughout all the hours in well marked characteristics of both classes of phenomena. The importance of eliminating these disturbances from the regular march of the solar variation was then pointed out in both; for when the diurnal variation is derived from the whole body of observations at Point Barrow, retaining the disturbances, the westerly extreme of the diurnal excursion, which, as is well known, occurs generally in the extra-parochial part of the northern hemisphere a little after 1 P.M., is found to take place at 11 P.M.; but when these larger disturbances are omitted, the westerly extreme falls at the same time as elsewhere—viz., 1 P.M. It appears, then, by a comparison of the Point Barrow and Toronto observations, that, in the regular solar diurnal variation, the progression at the two stations is similar; whilst in the disturbance diurnal variation this progression is reversed. Another distinction exists in their magnitude; and it would appear that the absolute disturbing force must be much greater at Point Barrow than at Toronto. The author then proceeded to point out the concomitant occurrences of the auroral manifestations. The observers noted at each hour whether or not there was an auroral display: from 11 A.M. to 3 P.M., no auroral displays were ever observed; but the number of them was found progressively to increase from 3 P.M. to 1 A.M., and then again in regular progression to decrease to zero at 11 A.M. The frequency of the occurrence of the aurora may be judged of, when it is said that during six months—December, January, and February, of 1852-53, and the same of 1853-4—the aurora was seen six days out of every seven. The hour of the day at which no auroral display is ever observed corresponds with the minimum of westerly disturbance, while the maximum of both is found at the same hour of westerly disturbance, viz., 1 A.M. The frequency of the aurora also, and the amount of westerly deflection of the magnet, also accord; whilst, on the other hand, the auroral hours appear to have little or nothing in common with the turning hours or the progression of the easterly deflections. When Sir John Franklin was going out on his last expedition, he had been furnished by the Admiralty with instruments carefully adjusted and compared with standards, and with full instructions; and, in the last letter which had ever been received from him, he had expressed his determination to put up those instruments at the several stations at which he should winter. There could remain no doubt that such observations had been made and recorded, and that these records still existed in some of the places he had last been in. When he (General Sabine) was with Captain Parry, in 1818, they had made observations with the pendulum for determining the figure of the earth, and others of great scientific importance, on their way towards Behring's Straits. They had been exposed to considerable risk of the ships being lost and were about to take to the boats and proceed overland, and in preparation for this merely prepared to carry with them abstracts of the observations, leaving the original full records safely deposited in secure cases in the cabins of the ships, to be found by those who doubtless would be sent out to look for them. He had, there-

fore, no doubt that if the ships of Sir John Franklin were still in existence, in their cabins were to be found those scientific treasures.

Captain Maguire said he much wished he could convey to the section any vivid impression of the beauty and brilliancy of the auroral displays in those regions. It was never seen during the hours of daylight, or those hours which corresponded to mid-day, but towards evening its displays began, at first towards the north; it then extended in splendid arches spanning the entire sky, and seeming to end in beautiful coronæ towards the zenith; these were occasionally of the most brilliant and varied tints and colours. It spread gradually more south, and at length died away towards the morning hours in the south. Such were the beauty and interest of these displays, that men and officers constantly, with the thermometer at and below 40° below zero, stood out for hours witnessing the glorious scene. During these auroral displays, he could not say that he had ever witnessed those violent agitations of the needle that others had described, but the easterly disturbance of the variation seemed to be simultaneous with its northerly display, and the westerly with its influence when it had passed to the south. At some distance from the ships, say about five miles, the water shoaled, and the ice had been driven up into beautiful rocky pinnacles; beyond this, again, the water was always free of ice, and its temperature was frequently found to be 28° above zero, when that of the air above was even 40° below zero; the consequence was, that it had all the appearance of a boiling sea, so great was the quantity of vapour thrown up from it.

NOTICE OF METEOROLOGICAL OBSERVATIONS MADE AT SEA.

[*Communicated by* Admiral Fitzroy.]

Admiral Fitzroy drew the attention of the section to the meteorological papers lying on the table, which had been recently published by the Board of Trade. The report to which he referred would show what progress had been made, and therefore he would not occupy valuable time by entering into details. He would only observe generally, that a great number of valuable observations had already been made on board some hundred ships, with excellent instruments approved by the Kew Committee of the British Association, and that those observations were regularly tabulated in such a manner as to admit of their being combined in groups or used individually. The willing cooperation of officers at sea had already accumulated more observations than can be reduced and tabulated with corresponding quickness; therefore, more reduction of observations rather than more observers with a larger number of instruments, seems necessary; and this can only be accomplished by employing a larger staff. The Government had shown the utmost willingness to attend to the recommendations of competent authorities with respect to the establishment and support of the Meteorological Office at the Board of Trade; and only desired to apply the vote sanctioned by Parliament for meteorological observations at sea to the best possible advantage. The United States, Great Britain, and Holland, had already cooperated largely in this work, and France had lately established a similar department for collecting and discussing such observations.

ON THE DISTRIBUTION OF HEAT OVER THE SURFACE OF THE BRITISH ISLES. BY PROFESSOR HENNESSY.

Since the author had communicated to the section at the Cheltenham Meeting of the Association an account of his general views as to the laws of distribution of isothermal lines, further confirmation of these views had arisen. It had been already shown that the isothermals in Ireland are partly closed curves surrounding a space of minimum temperature, having its centre a little to the north-east of the centre of the island. With the aid of the observations collected and published by Mr. Glaisher, those contained in Professor Dove's reports, and a few additional isolated results, the isothermals for Great Britain have been laid down on the map exhibited to the section. No correction has been made for elevation above the sea level, as atmospherical phenomena do not depend upon the fictitious temperatures so deduced, but upon its actual amount. This non-reduction would partly account for the remarkable decrease in temperature in going from the coast towards the interior of the island, and by which the space of minimum temperature in Great Britain is made to occupy a position between the midland counties of England and the north of Scotland, where it expands to its greatest breadth. The influence of distance from the sea and of height above it are, doubtless, both combined in producing the remarkable forms of the isothermals of the British Isles, and it would, therefore, be desirable in future tables of the distribution of temperature to have the former element noted in connexion with each station as well as the latter.

Section of Chemical Science.

ON THE ATOMIC WEIGHT OF ALUMINIUM. BY PROFESSOR MALLETT.

Some experiments were described which the author had made upon metallic aluminium prepared in Paris and in Berlin. The composition of the commercial metal had been found to be

	Paris.	Berlin.
Aluminium . . .	92·969	96·253
Iron	4·882	3·293
Silicon	2·149	454
Sodium	Trace	Trace
Titanium	Trace ?	. . . .
	100	100

Dissolving the metal in dilute muriatic acid, precipitating with ammonia, weighing the precipitate, and calculating from the results, and from the above composition of the crude metal, the weight of pure alumina yielded by a given weight of pure aluminium was found, and hence the equivalent of the element. The number deduced from our experiment, out of four made, differed so seriously from that given by the other three, that the investigation must be looked upon as still quite incomplete. The apparent cause of the discrepancy was pointed out—namely, the retention by alumina of a small amount of water at even a very high temperature. The importance of a speedy revision of the atomic weight of aluminium was insisted upon, the method by which the number now admitted was obtained being noticed as ill suited to give an accurate result.

ON SOME ARSENIATES OF AMMONIA. BY MR. ALPHONSE GAGES.

After mentioning the arseniates of ammonia already described by Berzelius and Mitscherlich, and noticing the doubtful character of the description given in books about the processes for preparing the salts of ammonia and arsenic acid, and the doubtful character of their constitution, he then described his own experiments, in which he verified the constitution of the salts mentioned by Berzelius and Mitscherlich, showing, however, that the salt containing three equivalents of ammonia described by the former, contains seven equivalents of hydrated water. He describes three new double salts, formed by arseniate of ammonia, in which soda, potash, etc., act as the second bases. He also exhibited some beautifully crystallised compounds of arsenic acid, with morphia and quinine, which may probably be of interest as therapeutical agents.

ON THE TIME REQUIRED BY COMPOUNDS FOR DECOMPOSITION. BY DR. WOODS.

The heat absorbed in the decomposing part of the cell was shown in all the instances to be the same in equal times, so that the decomposition, and consequently the intensity of the current, is inversely proportional to the quantity of heat required for the decomposition of an equivalent of the substances used in each case. Other important results, and some predictions which Dr. Woods had already had an opportunity of verifying, were also brought forward in this paper.

ON A NEW METHOD OF FORMING AMMONIO-IODIDES OF METALS. BY THE REV. J. B. READE.

It is only within the last few years that the attention of chemists has been directed to the compounds of metals with iodine and ammonia. The 5th edition of Brande's *Chemistry*, published in 1841, is silent on the subject. At the Oxford meeting of the British Association, in 1847, Mr. Reade exhibited the ammonio-iodide and per-iodide of gold, and since that time other experiments on other metals have furnished him with results which may be of some interest.—*Solution of Iodine in Ammonia.* Perhaps the best mode of dissolving iodine in ammonia for the purpose in question, is to place about fifty or sixty grains of iodine in an evaporating dish, hold it over the spirit-lamp till thoroughly warm and the vapour arises, and then add a few drops of liquor ammoniæ, which will be immediately charged with a large excess of iodine in solution. This may be poured into a bottle, and more iodine and ammonia added, until the requisite supply is obtained. —*Ammonio-iodide of Gold.* Gold-leaf when placed in the iodine solution instantly turns black (purple if the solution be diluted), and immediately dissolves, like sugar in water. If left to evaporate spontaneously in some quantity, we obtain

black four-sided prisms of the ammonio-per-iodide, which readily dissolve in water; and if a very weak solution be exposed for some months to the direct action of the sun's rays, a slight precipitate appears, and a drop or two of the clear solution furnishes a most striking microscopic object both as to crystalline arrangement and richness of tint when placed in polarised light.—*Ammonio-iodide of Silver.* Gmelin says of the ammonio-iodide of silver, that 'unfused iodide of silver absorbs with evolution of heat 3·6 per cent. of ammonia, and forms a white compound, which on exposure to the air gives off ammonia and turns yellow again.' The phenomena are far more interesting when silver leaf is added to the ammonia solution of iodine. The metallic silver is dissolved, and when a few drops are placed on a slip of glass beautiful brushes of prismatic crystals shoot out in all directions, which may be mounted as a microscopic object in Canada balsam after the excess of iodine is spontaneously evaporated. Under polarised light the colours of the crystals are brilliant in the extreme.—*Ammonio-iodide of Mercury.* The phenomena in forming this compound are varied and interesting. Mercury is added to the iodine solution, and after the application of heat and the addition of a little water, a few drops on a slip of glass give bundles of permanent prismatic crystals, similar to those of silver, and acted on with the same energy by polarised light. If ammonia be added to these crystals, they are immediately covered with tufts of snowy whiteness, and by degrees they are converted into ruby-coloured hexagonal prisms, which are also permanent.—*Ammonio-iodide of Cobalt.* Brande observes that, 'no precipitate is produced in solutions of cobalt either by hydriodic acid, or iodide of potassium, or by iodic acid, or iodate of potassa.' Mr. Reade finds, however, that cobalt yields to the action of the ammonio-iodide solution after some hours digestion and a little heat and water. As might be expected, it exhibits very strongly the sympathetic properties of the chloride, for when placed on paper and gently heated it becomes a brilliant green, which of course vanishes as the paper cools.—*Ammonio-iodide of Titanium.* As titanium, which resists every direct method of attack in the laboratory, yields after a period of digestion in the iodine solution, it is probable that other of the scarcer metals, which are with difficulty reduced by the ordinary methods, might be exhibited in the form of ammonio-iodides, and thus throw additional light on their respective equivalents. The crystals of ammonio-iodide of titanium which Mr. Reade has obtained were from a pure specimen of the metal obtained by Mr. Waterhouse, of Halifax, from the slag of the neighbouring iron-furnaces at Low Moor.—*Ammonio-iodide of Aluminium.* In forming this compound he did not, as on other occasions, use the pure metal, but alumina only, precipitated in the usual way. After allowing the alumina to digest for some time in the iodine solution, the whole was boiled in a little water, which dissolved the new compound, and upon evaporation and the proper measure of heat to volatilise the excess of iodine and ammonia, a white semi-metallic substance remained, as in the case of silver. It is soluble in dilute hydrochloric acid, and yields a blue precipitate on the addition of yellow prussiate of potash. Whether any use can be made of this process towards obtaining the pure metal is of course a problem for practical men.

ON THE PRESENCE OF COPPER IN THE TISSUES OF PLANTS AND ANIMALS. BY DR. ODLING AND DR. DUPRÉ.

The authors had made more than one hundred examinations by a great variety of processes, and had recognised the presence of copper in nearly every instance. In several specimens of wheat grain and human viscera the copper had been estimated. From 100 grains of wheat-ash the authors had obtained 251 thousandths of a grain, and from a sheep's liver rather more than one-half a grain of oxide of copper. The process was to precipitate the copper electrolytically on a platinum wire, to dissolve in nitric acid, and to ignite the residue of the evaporated solution.

ON THE CONDITION OF THE THAMES WATER, AS AFFECTED BY LONDON SEWERAGE.

BY R. BARNES, M.D., AND W. ODLING, M.D.

The authors said it was now established that the pouring in of the contents of the drains did not affect the water as seriously as had been thought. The organic matter of the Thames was chiefly in a state of vitality, and therefore there was not so much putrefaction as was generally supposed; at high water there was the greatest, and at the ebb tide the least amount of organic matter.

[*To be continued.*]

Editor's Letter Box.

KNOTS IN THE UMBILICAL CORD.

Letter from S. Palmer, M.D.

Sir,—The attention of your readers having been recently directed to the subject of "knots on the umbilical cord", I have thought that a case which occurred to me last week might likewise prove of some interest.

The child, a fine healthy male, when born had the cord twice round its neck, once round the right arm, and twice passed around the left leg. A knot was found nine inches from the umbilical extremity. The total length of cord was thirty-nine inches.

The suggestion of Hunter—viz., that the umbilical cord at birth may perhaps form a coil round the margin of the os uteri within; and that the fœtus, in passing the orifice of the uterus, may at the same time pass through the loop, carrying the umbilical extremity of the cord along with it, so as to form the knot at the very moment when the body passes into the world—will not explain the occurrence in this case, as the vessels are flattened, and closely applied one over the other, giving most unmistakable evidence that it had been formed long prior to birth. These are truly Gordian knots. Who can unravel them? I am, etc., S. Palmer.

London Road, Newbury, September 9th, 1857.

TOPICAL TREATMENT OF NEURALGIA.

Letter from Alexander Wood, M.D.

Sir,—I observe in the last number of the British Medical Journal, an inquiry by Dr. Probart as to the method of treating neuralgia introduced by me, and recommended in the very interesting communication by Dr. Bonnar in the number for August.

I would have replied to the letter in detail, were it not that, the first edition of my pamphlet on the subject being exhausted, I am now engaged in preparing a second with many additional cases.

I am, etc., Alex. Wood.

2, St. Colme Street, Edinburgh, September 14th, 1857.

FECUNDITY OF RUSSIAN WOMEN.

Letter from S. W. J. Merriman, M.D.

Sir,—Is it a fact that the Russian women are very much more prolific than other women? The cases you have transferred to the pages of the Journal from the *Magazine of Natural History, etc., of Moscow*, go some way to prove this; but one case clearly occurred some years ago, and another, detailed at length, bears so strong a resemblance to one published in England above seventy years since, that I am induced to place the two in apposition, to beguile the minds of your readers, who may be deprived of some of their accustomed business by all the world being "gone out of town".

MODERN (?) CASE. (*Magazine of Nat. Hist. of Moscow.*)		FORMER CASE. (*Gentleman's Magazine*, Sept. 1783.)	
A peasant "Kirilow" married a second wife at 70; was, with his wife, presented to the Empress.		A peasant "Feodor Wassilief", aged 75, was to be presented to the Empress.	
First wife had 21 deliveries:		First wife had 27 deliveries:	
4 of four children	16	4 of four children	16
7 of three "	21	7 of three "	21
10 of two "	20	16 of two "	32
	57		69
Second wife had 7 deliveries:		Second wife had 8 deliveries:	
1 of three children	3	2 of three children	6
6 of two "	12	6 of two "	12
	15		18
Deliveries in all	28	Deliveries in all	35
Children born	72	Children born	87
		of which eighty-four are living, and only three dead.	

Are these two wonderful cases distinct, or only two editions of one unique case?

Whichever it be, the case appears to me to prove fecundity in the men rather than in the women of Russia generally; and this will perhaps strike also such of your readers as can turn to Appendix 20 of my father's *Synopsis of Difficult Parturition*, so long a text-book in all the Schools of Medicine. Here they will find not only the case of the Russian peasant, but an account of a Frenchman, whose wife seven times, and servant once, brought him three children at a birth; besides some other curiosities of plural births.

I am, etc.,

S. Wm. J. Merriman.

3, Charles Street, Westbourne Terrace, Sept. 8, 1857.

THE SCOTTISH LUNACY BOARD.

Sir,—I observe that two erroneous statements, originally published in an obscure and intemperate Edinburgh newspaper, regarding Dr. James Coxe, one of the paid Commissioners of the new Scottish Lunacy Board, have been copied as facts into professional journals, and made the theme of very unfair comment. It is stated that Dr. Coxe does not owe his appointment to merit, but to his having been "family physician to the Duke of Argyll", and to his wife being "the relative of a cabinet minister". I have known Dr. Coxe and his family intimately for twenty years, and I can positively assert that he never was family physician to the Duke of Argyll, and that his wife is not related to a cabinet minister. Had it been otherwise, there would have been no reason why a physician of Dr. Coxe's high acquirements, learning, and experience, should not have been appointed to the new board; but, as a lover of truth, I think it right to point out the groundlessness of the inventions of a discontented northern clique. Dr. Coxe, I observe by the newspapers, is at present abroad, making a tour of the continental asylums.

The insertion of this letter will oblige yours, etc.,

Veritas.

London, September 16th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Ashley. On September 1st, at 8, Boyne Terrace, Kensington Park, the wife of W. H. Ashley, M.D., of a son.

Growse. On September 12th, at Brentwood, the wife of *Robert Growse, M.D., prematurely, of twins, who survived their birth only a few hours.

Hardey. On September 9th, at 2, Earl Street, Blackfriars, the wife of Key Hardey, Esq., Surgeon, of a daughter.

Haviland. On September 6th, the wife of *Alfred Haviland, Esq., Surgeon, Bridgewater, of a daughter.

May. On September 8th, at 16, Mount Place, London Hospital, the wife of Emanuel May, Esq., Surgeon, of a son.

Miller. On September 11th, at 1, Somers Place, Hyde Park, the wife of Robert Miller, M.D., of a son.

Otway. On September 15th, at 7, Canterbury Row, Newington, the wife of C. W. C. Otway, Esq., Surgeon, of a son.

Rose. On September 15th, at Hampstead, the wife of Henry Cooper Rose, M.D., of a son, stillborn.

MARRIAGES.

Crosse—Taylor. *Crosse, Thomas William, Esq., Surgeon, Norwich, to Mary Jane, eldest daughter of Adam Taylor, jun., Esq., of Norwich, on September 10th.

Hill—Drury. Hill, Alfred Octavius, Esq., to Elizabeth Alice, daughter of the late J. Drury, M.D., of St. Petersburg, at St. Petersburg, on September 3rd.

Kelson—Cumming. Kelson, Henry, Esq., of Poplar, to Emily Jane, daughter of William S. Cumming, Esq., Surgeon, at Limehouse, on September 10th.

Williams—M'Dougall. Williams, J. T., Esq., Madras Medical Service, to Flora, daughter of Thomas M'Dougall, Esq., of Eskmills, Penicuick, at Edinburgh, on September 8th.

DEATHS.

Bateman, George, M.D., formerly of Great Yarmouth, at Leamington, aged 69, on September 13th.

Lonsdale, Edward Francis, Esq., Surgeon to the Royal Orthopædic Hospital, suddenly, from the rupture of a blood-vessel, aged 46, on September 11th.

Norton. On September 16th, at Walpole Lodge, Strawberry Hill, Maria, youngest daughter of the late Matthew Norton, Esq., Surgeon, of Gloucester Place, Marylebone.

Rooke. On July 15th, at Malabar Hill, Bombay, Agnes Isabel, wife of Dr. Rooke, Surgeon-General.

APPOINTMENTS.

*Browne, W. A. F., M.D., Superintendent of the Crichton Institution at Dumfries, appointed one of the Paid Commissioners of Lunacy in Scotland under the new Lunacy Act.

Coxe, James, M.D., of Edinburgh, appointed one of the Paid Commissioners of Lunacy in Scotland.

*Steele, Arthur B., Esq., appointed Honorary Surgeon-Accoucheur to the Liverpool Ladies' Charity, in the room of G. B. Denton, Esq., resigned.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, September 10th, 1857:—

Fennell, Sydney, Cradly, Worcestershire
Hyde, William Edward, Ledbury, Herefordshire
Sharpin, Edward, Bedford

HEALTH OF LONDON:—WEEK ENDING SEPTEMBER 12TH, 1857.

[*From the Registrar-General's Report.*]

The present return indicates an improved condition of the public health. The deaths registered in London in the week that ended on Saturday (September 12th), were 1023; during seven previous weeks they rose in three instances above 1200, and the lowest weekly number was 1084. If the average rate of mortality, derived from deaths by all causes (except the cholera of two epidemic seasons), as they occurred in corresponding weeks of the ten years 1847-56, had prevailed last week, the number of deaths would have been greater by 128 than that which is actually returned.

Diarrhœa continues to decline; and last week the decrease was more decided than it has recently been. The deaths from this disease, which in the two previous weeks were 198 and 181, have fallen to 144. During the last fortnight, the mean weekly temperature was about 60·5°, being less by 5° and 6° than it had been in the latter half of August, and less by 8° than it had been in the great heat of July. Of the 144 deaths from diarrhœa, 115 occurred to children; and of nine deaths from cholera or "choleraic diarrhœa", all occurred to very young children, except one. Eight deaths are referred to dysentery, and these also, with one exception, occurred to young persons. The deaths from scarlatina rose to 44; and of these, 11 occurred in the west districts, and 9 in the central. Of 39 from typhus and common fever, none occurred in the central districts. Small-pox was fatal in only two cases. One person died of intemperance; one from want of food; one from grief; and one from a wound received in dissection; a lascar (in the *Dreadnought* ship) from scurvy. The deaths of five nonagenarians are included in the returns: viz., two women who died at the age of 90 years, two widows at the age of 94, and a spinster who died in Bow at the age of 97 years.

Last week the births of 813 boys and 762 girls, in all 1575 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1443.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·542 in. The greatest barometric pressure was 29·76 in., on Monday. The mean temperature of the week was 60·5°, which is 2·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer was at its highest point in the shade on Sunday, when it was 75·7°; it fell to its lowest point on the day following, when it was 51·4°. The thermometric range of the week was therefore 24·3°. The mean daily range was 16°. The mean dew-point temperature was 56·4°; and the difference between this and the mean air temperature was 4·1°. The

wind had on every day, or on part of every day, a south-westerly point. Rain fell to the depth of 2·24 in., nearly all of which fell on Tuesday and Friday. On Friday, the amount was 1·16 in. Rain fell almost incessantly from ten o'clock on the evening of Thursday till three o'clock in the afternoon of Friday.

Salaries of the Poor-law Medical Officers at Kenmare, in Ireland. We regret to understand that the Commissioners have ratified the decision of the Kenmare guardians, and cut down the salary of two of the physicians—reducing that of Dr. McCarthy by £20, and that of Dr. Taylor by £10. They allow the salary of Dr. Maybury to remain as it was. We regard this act of the Commissioners with no possible respect. On the contrary, we consider their conduct rather shabby. That they decided wisely in not touching the salary of one of the three, it is unnecessary for us to state. But why cut down the other two? Why victimise Dr. McCarthy, by sweeping away with one stroke of the pen, no less than one-fifth of his income? Is this done as a means of marking the respect which the Commissioners entertain to those who dare to speak out like men? Perhaps it is intended as a graceful recognition of some allusions made by Dr. McCarthy in his speech to the respectable salaries of their high mightinesses themselves! We put it to those gentlemen, how should they like this docking process applied to their own incomes? Public reasons might be pleaded in favour of cutting *them* down in one-fifth of the large amount which they now receive—at a time, too, when the pauperism of the country has been miraculously diminished. Same case same rule, Mr. Chief Commissioner. You say the doctor has less to do, now that the number in the workhouse hospital is less than it was two years since; and that therefore the pay of a third-rate mechanic is quite adequate to reward the services of an expensively educated and accomplished gentleman. For argument sake, we grant this proposition, made by the Guardians, and sanctioned by the Commissioners. But if it be good for the doctor it is equally so for the commissioner. Your duties, gentlemen, must be diminished at least two-thirds of what they were before; for your own returns of this year prove that the numbers have come down more than three-fourths of those in the workhouses of Ireland some four years since. By all means, then, let the Irish members insist upon a proportionate cutting down of the monster salaries of these official despots. This may be done with a free conscience, because £500 a year off the salary of a commissioner would have no effect upon his position in life, and would in no way cripple his resources; whereas the one-fifth of the salary of a physician in a poor district, is a serious curtailment of his means of living in a condition, not to say of comparative comfort, but of common decency. Now, £20 a year enables the country physician to dress himself as respectably as may be required, and even to keep a shilling in his pocket for a poor fellow-creature; but this twenty pounds deducted from his salary, he must cling for another year to the rusty coat, and the seedy hat, and the patched boots—or, gentleman as he is, he must descend to the slavery and the degradation of debt. We promise the Commissioners that the policy which they sanction, and which they themselves cannot but feel to be shabby in the extreme, will recoil on their own heads, and that ere very long. But in the meantime the profession have their duty to perform; for it cannot be supposed that they will stand by, and tamely acquiesce in this persistent attack upon the dignity and independence of their body. If they remain passive spectators of this docking process, the result will be that some guardians will at length come to consider that a labourer's pay is all-sufficient remuneration for their services; and commissioners will be found to ratify that estimate of their usefulness. We cannot shut from our mind the belief, that if Dr. McCarthy had been silent, and not spoken out as he has done, he would be better off in respect to the recent affair than he now is. But it is fortunate that there are men who will speak out at every personal risk; and when such men speak in behalf of a public body, that public body has a right to stand by and identify itself with its organ and its advocate. In this case, Dr. McCarthy has been the advocate of the Dispensary Doctors of Ireland, if not of the profession at large; and we should not be surprised if those whose cause he so eloquently pleaded adopted some means of letting the public understand how keenly they appreciate his courage and his services. (*Cork Examiner, and Dublin Medical Press.*)

Testimonial to Dr. McCarthy. At a numerous meeting of the Committee of the County and City of Cork Medical Protective Association, held on September 5th, Philip N. Walsh, M.D., of Middleton, in the chair, the following resolutions, proposed by Dr. Richard Corbet, and seconded by Dr. Lloyd, were unanimously adopted:—That, as a body of medical men, associated to uphold the honour and interests of our common profession, we feel it a pleasurable duty to mark our high admiration of the noble and independent stand made by Dr. McCarthy before the Kenmare Board of Guardians, against the gross injustice, done not only to himself and confrere, by reducing their salaries, but also in behalf of the Poor-law Medical Officers of Ireland, to whom is meted out a wretched stipend for arduous duties. That the faithfully eloquent, argumentative, and impressive address, which so earnestly and graphically pictured as well the slavery as the miserable pay of our brethren occupied in the medical charities, demands more than a passing encomium from the profession at large, and that we feel bound, not merely to accord our thanks, but, if possible, to present such a substantial testimonial to Dr. McCarthy, which, we trust, will be worthy his acceptance. That such a testimonial will evidence to the "Powers that be," who ought to have thrown their shield over a hard-working and zealous public officer, more especially when now in declining years and health, that there exists in the medical profession a feeling which will ever lead its members to mark their sense of an act of injustice, paltry in the extreme, and equally unworthy those who originated, as those by whom it was sanctioned. That a subscription be at once entered on, and that the amount from each member of the profession be five shillings. That Charles Hewitt, Esq., M.D., Patrick's-hill, Cork, be requested to act as treasurer. (Signed) P. N. Walsh, *Chairman.* Charles Armstrong, *Hon. Sec.*

Ventilation by Steam-jet. The *Leeds Mercury* gives the following account of the application:—"The application is at present in operation in a pumping shaft, 120 yards in depth, the ventilation of which had been stopped by the water rising at the bottom of the pit during the time some alterations were being made in the pumps. The water having stopped the air-courses, the pit, to within a few yards of the top, became full of the gas known to miners as black or choke damp, which appears to have been discharged freely from some old workings, and thus it was rendered an impossibility for the workmen to descend until the removal of the gas had been effected, and a constant current of pure air produced in the pit. Mr. Pierce has succeeded in maintaining so perfect a ventilation of the above-mentioned pit, simply by allowing a small jet of steam to issue into the atmosphere at a few feet from the top of the pipes through which the water is forced up when the pumps are at work, and the pit can be worked with perfect safety. The workmen were enabled to descend thirty minutes after the steam had been turned into the pipes. The principle is exceedingly simple. The jet of steam issuing from the top of the pipes produces in them a partial vacuum, which draws the foul air up these pipes, and thence out of the pit, with very great velocity. The cost of applying the steam jet in the above manner is very trifling; and this method of ventilation will, doubtless, be found a very safe and useful one in many instances, particularly in sinking deep shafts. In addition to other advantages, wood or any other kind of pipes may be used. It requires little or no attention, no machinery to get out of repair, produces a powerful current of air, and can be regulated at pleasure. As the steam is discharged into the atmosphere above the top of the pit, it does not interfere with the men working in the shaft." (*Dublin Medical Press.*)

Forged Diplomas. William Stuart Farquharson, who was recently detected as a pretended priest, and the author of a forgery on the Bucks and Oxon Bank, at Banbury, has just been sentenced, at the Oxford assizes, to twelve years penal servitude, having pleaded guilty to the forgery. The prisoner had run a long and successful career as a forger, principally of foreign medical degrees, for each of which he obtained, with great facility and rapidity, the sum of £40; this sum included an Inaugural Dissertation on any subject, which the intended recipient was supposed to defend before the heads of the university. The prisoner Farquharson was formerly in the 2nd Somerset Militia, but had to resign in consequence of the colonel discovering some of his disreputable antecedents; subsequently, however, he contrived to get into the Lincoln and the Elthorne regiments, obtaining his outfits by forged acceptances. He was the author of *The Pleasures of Home*, a goodly octavo; and he may, in fact, be looked upon as a very clever knave. (*Dublin Medical Press.*)

Preparation of Ink. Dr. Bley recommends the following method of preparing ink:—A decoction is made with a pound and a quarter of nut-galls, and as much hot water as will give five pounds of liquid after straining. Then four ounces of indigo powder is mixed with half a pound of sulphuric acid. the mixture left for twenty-four hours, then dissolved in five pounds of water and eight ounces of powdered chalk, and eight ounces of iron filings added. A part of the acid is neutralised by the chalk, and a part by the iron filings, forming sulphate of iron. The solution thus obtained, mixed with the decoction of nut-galls, gives ten pounds of ink, which does not deposit sediment or turn mouldy, and flows readily from the pen. (*Dublin Medical Press.*)

Central Africa. An official despatch has been received at the Foreign-office from Her Majesty's Consul at Tripoli, throwing some doubt on the reported death of Dr. Vogel. The courier who had been despatched in April last for the frontier of Wadai, to obtain, if possible, some tidings of the fate of this scientific traveller, having returned to Murzúk, brings with him also a letter from the Sheikh of Borgu. From the report of some people composing a small caravan that had reached Borgu from Wadai, it appears that Dr. Vogel, after having successively visited several places, had reached Andra, whence he was summoned to Wara, the capital of Wadai, by the Sultan, by whom he had been some time detained, but was supposed to be preparing for his departure to Darfur. Upon the receipt of this report the Sultan of Borgu, who had zealously interested himself in the matter, at once sent off two couriers to Wadai, both of whom had returned with reports corroborating the story of the caravan people. Respecting the death of the gallant Maguire, no doubt appears, unfortunately, to be entertained; and the favourable report of the existence of poor Vogel is still so much a matter of uncertainty that, should no positive tidings of his fate be received by the large caravan, which was daily expected at Murzúk, other couriers will be immediately hastened off to obtain, if possible, written evidence of his fate. To the friends of Dr. Vogel it will be a great consolation to know that Lord Clarendon is thus making every effort to ascertain his fate, and, should he be held in captivity, to devise means for his redemption.

Decay of Gutta Percha. From the reports of Mr. E. Highton on the state of the underground wires of the British Electric Telegraph Company, published in the *Journal of the Society of Arts*, it appears that wherever the wires had passed near the roots of oak trees they had failed, whilst in other parts, only a few yards distant, they were perfectly sound. On examining the soil, a whitish looking plant was detected, resembling the spawn of the mushroom, or some other fungus; the plant had spread over and around the wooden trough, covering it with a whiteness resembling whitewash, and wherever it had touched the gutta percha wires the gutta percha was rotten; a yellowish-green fungus, of which this plant was supposed to be spawn, was found growing luxuriantly under the oak, but not under any other tree. The plant possesses a powerful odour at once detected on breaking the soil. The presence of the plant and the decay of the wires were found coincident; the absence of the plant and a most perfect state of the wires coincident also. It was found that the wires in one locality passing under two oak trees were not injured; in this case no fruit of the fungus could be found in the soil, although plentiful under other oak trees in the neighbourhood. With reference to the decay of gutta percha in iron tubes, it was found at Winslow that the wires through the entire lengths of the iron pipings were in a state of decay, whilst the wires in the wooden boxing were found perfect. The decay in this case appears to be produced by a cause entirely different from that under the oak trees.

An Extraordinary Affair. A reward has been offered under the following circumstances:—On Tuesday, the 1st inst., a small box, covered with brown paper, and directed to Mr. Bennett, surgeon, the Square, Wilton, was delivered to Mrs. Ware, the Wilton carrier, near the Shoulder of Mutton Inn, Salisbury, by a boy about 14 years of age, dressed in a short jacket, trousers, and cap. If the boy who delivered the box to Mrs. Ware will come forward and prove the same, and give information as to the party who entrusted it to his care, he is offered a reward of £5, together with all reasonable travelling expenses; and a further sum of £10 is offered to him or any other person who shall lead to the conviction of the offender—the box having contained a machine so constructed as to explode on the raising of the lid, and intended to destroy Mr. Bennett's life. (*Hampshire Telegraph.*)

Extraordinary Inquest. The following almost incredible statement appears in the last number of the *Drogheda Conservative*:—"On the 27th ult., the body of a female infant was found, by the police at Kells, concealed in the soil of a privy, at the back of the house of Mr. Richard Close, medical practitioner, accoucheur, proprietor of a medical establishment, etc. They reported the circumstance at once to a local magistrate. Witnesses were instantly summoned, and a most respectable medical man, Dr. Pentland, all of whom agreed that Rose Meredyth, a servant in the establishment, was the mother of said infant, and that it was dead born, and had not come to maturity. After a short consultation between the magistrate and the police, having summed up, they came to the following conclusion:—'We find that Rose Meredyth, mother of the infant, is not only not guilty, but perfectly free from any blame whatever; and we further add, that she was justified in burying her offspring, dead born, even in a privy, dung heap, or sink, or where it suited her convenience.' Mr. H. Martin, coroner of the county, having got private information, lost no time in ascertaining the facts, when he was called on to interfere, and at once issued his precept and warrant to disinter the body, preparatory to holding a legal inquisition. He summoned fifteen respectable jurors on Thursday, the 3rd instant, fourteen of whom attended, and were sworn; and after a most minute and particular inquiry, without the slightest hesitation, the jury returned a verdict, that the body of the said infant was found concealed in a privy, in the town of Kells, and that Rose Meredyth is the mother thereof; and, finally, that she concealed the birth of the same. In the interim between the former and latter inquest, Rose Meredyth was allowed to escape, when the coroner had no alternative but to issue his warrant for her apprehension."

Locusts. Two or three specimens have been procured in Dublin and in the north of Ireland. Mr. Sweeny of Portobello, while passing over Carlisle Bridge, September 13th, was attracted by a crowd pursuing a locust of much larger dimensions than one previously found in the College Park. Mr. Sweeny captured it after much exertion, and presented it to Trinity College Museum.

The Ophthalmic Congress. First-Class Staff Surgeon Frederick Roberts has been selected by the Director-General of the Army Medical Department, and the Minister for War, to represent the medical officers of the British army at the congress of the Ophthalmic Society about to meet at Brussels.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Dr. Cookworthy; Dr. T. Herbert Barker; Mr. G. W. Hastings; Mr. James Craig; Dr. S. Palmer; Mr. J. A. Locking; Mr. J. V. Solomon; Dr. Alexander Wood; Veritas; Mr. T. Holmes; Mr. Frederick Pritchard; Dr. J. L. W. Thudichum; Mr. Benjamin Dulley; and Mr. A. B. Steele.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Phrenology made Practical and Popularly explained. By Frederick Bridges. London: Sampson Low, Son, & Co. 1857. pp. 185.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XXXIX.] LONDON: SATURDAY, SEPTEMBER 26, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

LARYNGITIS AFTER SNIPPING OFF THE UVULA: LARYNGOTOMY: RECOVERY.

[*From Notes supplied by* W. CHIPPENDALE, ESQ., *House-Surgeon.*]

THE removal of the uvula, when relaxed, was an operation of very frequent occurrence some years ago, when "the antiphlogistic regimen" was the staple of most people's treatment of most diseases, and the great benefit derivable from tonics was less understood. This measure is now not so often necessary, but it is advisable in many cases to free the patient from the constant annoyance which he is suffering by a trifling and easy operation, even in cases where there is no acute inflammation, and where constitutional treatment is the thing principally required. In such a case, it should not be forgotten that the uvula, though in itself a structure of no great importance, is in the neighbourhood of important parts, and that those low forms of serpiginous inflammation so apt to arise in persons of bad constitution and in situations submitted to a tainted atmosphere (and therefore eminently prevalent in our London hospitals), may involve consequences rapidly threatening to life. The present is not the only instance, as we are informed by Mr. Chippendale, in the practice of St. Bartholomew's, in which a similar result has followed this apparently harmless operation. The inflammation which follows such an injury will of course always be limited to the parts above the true vocal chords, and hence laryngotomy will always be sufficient, and recourse need never be had to the more formidable operation of tracheotomy. This fact was, we believe, first clearly pointed out, and its cause (viz., the intimate adherence of the mucous membrane to the vocal chords) insisted on, by Mr. Hewett.

Laryngotomy was performed on a beadle of the Hospital, aged 32, for œdema of the glottis, consequent on the removal of the uvula. He had been suffering from acute tonsillitis for three or four days previously, for which he had been leeched, and had taken antimony. At the time of its removal, the uvula was about an inch and a half in length, and very œdematous, causing much irritation of the glottis, and the efforts to vomit were so constant, that the man was unable to lie down. It had been scarified and cauterised with nitrate of silver, but without much benefit. About three-quarters of an inch were removed. This measure gave immediate relief to the symptoms of irritation, but was followed by great difficulty of swallowing, more especially fluids, which returned through the nose. Laryngeal breathing on a deep inspiration was heard almost immediately afterwards. About three hours afterwards, laryngitis set in with considerable severity, for which he was bled from the arm to thirty ounces, and numerous leeches were applied. He derived so much benefit from these depletory measures, that it was not thought necessary to appoint any dresser to sit up with him during the night. About two A.M., having remained very tranquil up to that time, he was attacked with a most urgent paroxysm of dypsnœa, and fell back apparently dead. The house-surgeon was immediately summoned, and at once opened the crico-thyroid membrane. Artificial respiration by pressure on the ribs, and, by means of the bellows applied to the tube, was resorted to and maintained for more than ten minutes before signs of returning animation appeared. At the time of the operation, the man was to all appearances dead; he was lying on his side; the eyes were fixed; respiration had ceased; no pulse to be felt at the wrist. The sister in attendance estimates that nearly two minutes elapsed from the time that the man fell back apparently dead, to the time of the arrival of the house-surgeon, and judging from the distance that had to be traversed, it could not be much less.

The man remained in a very precarious state for the next two days, the pulse ranging from 130 to 150, but on the third he began to amend.

The tube was finally removed on the eighth day. The wound closed in a fortnight.

LONDON HOSPITAL.

I. LARGE SCALP-WOUND: RAPID RECOVERY UNDER THE USE OF SUTURES.

Under the care of JOHN ADAMS, Esq.

[*From Notes by* F. OWEN, ESQ., *House-Surgeon.*]

THE question of employing sutures in scalp-wounds is one on which the practice of modern and ancient surgeons presents a strong contrast; for, while this was the favourite practice up to the last generation, it is now usually considered, as a general rule, bad surgery. Still there are, no doubt, cases in which the employment of sutures is attended with the most signal advantages, and in which there are clear indications for employing them. In the case which we append, all these indications seem to have been united. The immense size of the flap of the scalp turned back by the wound would have produced traction, which would have rendered it difficult to keep the wound in apposition by strapping; the situation of the wound near the most convex part of the skull would have further increased this traction; while the slight injury done to the bone made it advisable to produce union quickly, if possible; and the age and perfect health of the patient rendered this result likely, and an attack of erysipelas less to be apprehended than in the case of an adult. The result was most gratifying—one of the largest and most formidable scalp-wounds which can be imagined having entirely healed in about a week.

John B., aged 14, a sailor boy, was admitted into the London Hospital on September 12th, under the care of Mr. Adams, in consequence of a severe laceration of the scalp, caused by falling down the hold of a ship, a height of twenty-one feet. The occipital bone was exposed to some extent (the wound being situated rather behind the position of the coronal suture), and was bruised, a few spicula being apparently separated; but there was no fracture perceptible. The head was shaved, and the edges of the wound carefully brought together by the aid of six sutures, with strips of wet lint and bandages. Milk diet and beef-tea were ordered.

Next day he was rather feverish, for which a purge and saline medicine were given; and on the following day, as the bowels had not acted, the purge was repeated.

Two of the sutures were removed on September 15th. The

wound was healing. Better diet was now given; and, on the sixth day, the remaining sutures were taken out. The wound had now almost entirely healed, and on the tenth day the boy was discharged, the wound having healed quite soundly in its whole extent.

II. COMPOUND DISLOCATION OF THE GREAT TOE: ERYSIPELAS: USE OF COLLODION.

[*From Notes by* F. Owen, Esq., *House-Surgeon.*]

The following case afforded a good instance of the action of collodion in limiting the extension of erysipelatous inflammation—a purpose for which it is largely used now in several metropolitan hospitals. In the London Hospital, it has become a favourite plan to paint the outer edge with a layer of this substance, in the same way as, some years ago, nitrate of silver used to be employed. The success, however, is said to be much greater than with the latter plan. In fact, we can hardly charge our memory with an instance, out of a great number of cases which we have seen, in which the erysipelas has respected the boundary made for it with the caustic, while the collodion is said to succeed in a very large proportion of cases.

The case is also interesting, surgically, on account of the very free movement left after a compound dislocation, notwithstanding the occurrence of erysipelatous inflammation and abscess in the neighbourhood. The recollection of such facts may prove an addditional encouragement for endeavouring to save parts of the hand which are even more necessary to comfort than the important portion of the foot involved in this injury, and which besides, being more fully supplied with blood, enjoy, as it is reasonable to presume, an even greater power of perfect reparation.

Edward C., aged 26, was admitted into the London Hospital on July 30th, on account of a compound dislocation of the metatarso phalangeal joint of the great toe, caused by a horse falling with him. The wound was on the plantar aspect of the foot, and the head of the phalanx was dislocated inwards towards the middle line. The dislocation was easily reduced, and the wound was then brought together with sutures and strips of wet lint. A composing draught was given.

Next day a little inflammation showed itself. On the third day the sutures were removed, the foot being still red and swollen. On the following morning, erysipelas had appeared, and spread up to the ankle. Collodion was applied around the edges of the inflamed part, and spirit lotion was ordered.

August 4th. The discharge from the wound increased, and matter was forming on the dorsum of the foot; but the erysipelas had evidently receded. Three incisions were made, on August 9th, on the dorsum of the foot, with much benefit. The original wound now began to heal, and the patient from this time recovered steadily, but slowly, his convalescence being retarded by an attack of ague—a disease to which he had lately been subject, and which left him very weak, and no doubt delayed the reparative process.

He was discharged cured on September 19th. There was then slight pain in moving, which was increased by walking; but he could walk tolerably without a stick, the foot and ankle being supported by strapping.

ST. GEORGE'S HOSPITAL.

I. HYSTERIA: IDIOPATHIC PERICARDITIS.

Under the care of H. B. Jones, M.D.Cantab., F.R.S.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

S. M., aged 17, a servant of all work, had been suffering from violent hysterical fits for nearly a fortnight previous to admission. She came to the Hospital on the morning of August 15th, complaining of palpitation and rising in the throat. The case was looked upon as one of hysteria simply, and treated accordingly with valerian, etc. There was no history of rheumatic fever; and the catamenia had always been perfectly regular. She continued to complain of the palpitation; and on August 18th, said the pain in the left side was like a dagger running into her. On placing the hand over the præcordial region, no undue action of the heart was felt; but when the stethoscope was applied to the apex, a loud rough exocardial sound was heard, which occasionally corresponded with the systole. The pain increased, and was aggravated by the least movement. She was put to bed, and treated with calomel and opium; a blister being put on the left side. There was much globus hystericus at intervals, and such exaggerated descriptions of her symptoms as rendered the treatment of the case not a little perplexing. On the following day, the murmur was still very audible. Her countenance was distressed, and she lay in the supine posture afraid to move a muscle. The same plan of treatment was pursued, and the pain slowly diminished in severity. On the 21st, she could breathe freely, but deep inspiration caused agony. The first sound of the heart was then masked by a peculiar *churning* sound; and accompanying the second sound was a singular wavy vibration, difficult to describe, but unmistakable by those who happened to examine the patient. These singular additions to the sounds of the heart were not noticed on August 22nd. Her pulse was then quiet, the secretions healthy, and the mercury was discontinued. During the night, she experienced some returns of the præcordial pain, but derived instant relief each time from turning on her left side. After this date, bitter tonics were prescribed; and she quitted the Hospital on August 30th, in comfortable health.

Remarks. The cases in which we meet with pericarditis not associated with acute rheumatism are few and far between; and I do not remember to have witnessed one at St. George's where such marked hysteria coexisted. The history of palpitation for some days before any pain was felt in the præcordial region, strengthens the explanation given of this symptom by Dr. Graves; viz., that the increase of energy in the heart's action indicates some amount of inflammation in the muscular structure itself before the membranes participate in the disease. It is worthy of inquiry whether the violent hysterical fits with which this girl had been attacked prior to her admission, were not owing to some embarassed action of the heart, secondarily modifying the circulation through the blood-vessels of the brain, and causing convulsions. It would be absurd to class this case with the well marked ones which abound in our medical works of carditis, and the subsequent (misnamed) "metastasis to the brain". Yet, if in acute rheumatic carditis, delirium, mania, or coma, supervene in men of strong nervous power from the above mentioned causes; the same inflammation, milder in its character, and perhaps at first not appreciable by the physician, would act on a nervous hysterical girl, and produce less formidable cerebral symptoms.

This case may serve as a beacon to those who are sometimes apt to pay no attention to the complaints of their hysterical patients. Pain in the left side (a favourite ailment of this class of females) is ninety-nine times out of a hundred no pain at all. But should it constantly be the affection on which the patient dwells, the practitioner will act wisely in not omitting to use the stethoscope.

II. SOFTENING OF BRAIN: DISTENDED VENTRICLES: PHTHISIS.

Under the care of H. Pitman, M.D.Cantab.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

A. B., aged 15, a blacksmith's apprentice, was admitted on April 29th. He had been ill nearly eight weeks with what his friends designated "low fever". When admitted, he was suffering from frequent sickness. The pulse was very weak, tongue loaded, and breath extremely offensive. There was considerable photophobia, and some heat of the scalp; but the pupils acted properly, and there was no strabismus. His bowels had not been moved for four days; and it was hoped that free purgation would check the irritability of the alimentary mucous surface. But after the action of the bowels, the vomiting continued unabated, and constituted the chief symptom to which attention was directed for some time. When asked to name the seat of pain, he invariably pointed to his forehead, the skin of which was usually corrugated. His eyes were generally closed, and his head bent down under the bed-clothes, until his chin nearly touched his chest. And from this position it was very difficult to remove him, on account of his extreme irritability. Blisters were applied behind the ears, and calomel was given, at first alone, but afterwards combined with opium, until the gums were very sore; but no relief whatever was obtained as regarded the frontal pain. Iodide of potassium, iodide of iron, cod-liver oil, and a host of tonics, alteratives, and stimulants, were successively tried; but all the symptoms remained as before, except that the irritable condition of the stomach was lessened. The pupils were very sluggish, and his countenance often wore a look of extreme distress. The lad wasted rapidly; but to the surprise of all who watched the case, and knew how little nourishment he could

take, he continued to live, worn almost to a skeleton, until August 24th, four months from the time of his admission.

The body was examined twenty-five hours after death. The skull was large and dense. There was an increased quantity of subarachnoidean fluid, and a generally "wet" brain. The ventricles were distended with fluid, and the septum lucidum destroyed. There was no tumour or morbid deposit in any part of the brain.

Old pleural adhesions existed on the left side, and at the apex of the corresponding lung was a mass of crude tubercle, an inch and a half square. All the other thoracic and abdominal viscera appeared to be of less size than usual: the heart weighing only three ounces; the spleen one ounce; and the kidneys five and a half ounces. In other respects, these organs were healthy.

Remarks. The chief peculiarities in this case were the absence of many of the symptoms characteristic of *ramollissement*, and the non-appearance of tubercular disease in the brain and its membranes, although the lungs were not free from scrofulous deposit. From these circumstances, it contrasts well with the history and *post mortem* record of the following patient.

III. STRUMOUS TUBERCLE OF CEREBELLUM AND MEDULLA OBLONGATA: PHTHISIS.

Under the care of H. W. Fuller, M.D.Cantab.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

B. S., aged 6, came to the Hospital on May 6th with slight fever and headache, supposed to have been caused by the mother having given him an over-dose of treacle and laudanum. After a purge and a course of tonic medicines he got quite well to all appearance, and was ordered to leave on June 17th. But on the evening of that day, when getting out of bed, he suddenly complained of violent pain in the occipital region, and was seized with trembling in all his limbs, and great want of control over the lower extremities. When seen after being placed in bed, there was ptosis of the left eyelid, with great dilatation of both pupils, and the tongue was protruded to the left. All this time he had never exhibited the least sign of any chest affection. Respiration was performed easily, and there was no cough nor expectoration. The neck was blistered; and a drachm of citrate and acetate of potash, with five minims of tincture of cantharides, was given every six hours. Six days later the ptosis of the left eyelid was far less marked, but the uncontrollable shaking and tottering came on the moment he was made to stand on the floor of the ward. A week later (June 30th), he was affected with almost incessant hiccough, and his appetite, which had hitherto been pretty good, completely failed him. The urine was quite free from albumen. It had a specific gravity of 1010, and exhibited, under the microscope, a few crystals of urate of ammonia. On the 4th of July the gums were tender from calomel, which he had been taking in two-grain doses twice a-day for nearly a week. At this time another blister was applied to the nape of the neck. His symptoms assumed a more favourable appearance; the hiccough subsided; his appetite returned; and he could sit up a little, although the shaking was never entirely absent, when he was moved out of bed. On July 11th, the hiccough returned, and the trembling of the limbs increased much. He now began to waste rapidly, and refused his food, saying that it gave him such pain when he attempted to swallow. Cod-liver oil, calumba, and port wine, were ordered with good effect; and on the 21st he again took all kinds of nourishment with relish. But he was losing flesh daily, and had much pyrexia and thirst. The bowels for the most part were constipated, the scanty stools being green and very offensive. On the 29th he could swallow nothing but a little wine and water; violent hiccough came on late at night; and after thirty-six hours of great suffering he expired.

An examination of the body was made twenty-two hours later. On opening the head, the convolutions of the brain were found much flattened, and the ventricles were full of clear fluid. The fornix was also softened, and in the substance of the right lobe of the cerebellum was a large strumous tubercle of about the size of a walnut. Another similar but smaller mass was found in the medulla oblongata. The surrounding nervous substance in the neighbourhood of the tumours was healthy.

The apices of both lungs were full of crude tubercles, and riddled with numerous vomicæ, some of large size. The lower part of the left lung was hepatised.

The kidneys were large, pale, and flabby, and the stellate veins on the surface were beautifully marked. The microscope failed to detect any disease of the renal tubes. The other viscera appeared healthy.

Remarks. Here is an excellent example of the latent form which phthisis sometimes assumes. With respect to the cerebral disease, the autopsy exactly confirmed Dr. Fuller's admirable diagnosis; but the mischief going on in the lungs was unsuspected by all: at least it was never thought that more than a few scattered tubercles would be found. Although the left lobe of the cerebellum was unaffected, the disordered movements manifested themselves equally on both sides of the body, which is contrary to the effects noticed by Magendie and others in their experiments, and rather strengthens the supposition of M. Foville, that the cerebellum is "the organ through which the mind acquires that knowledge of the natural state and position of the muscles, which is essential to the exercise of the will upon them."

Dr. Watson, in his thirtieth *Lecture*, calls in question the absolute truth of Andral's statement, that in *cerebellar* effusions the palsy is confined to the side on which such effusion occurs; and gives as his own opinion, "that as facts multiply, the conjecture will be found to be a different one."

The limitation of the paralysis to the third and ninth pairs of nerves, and the subsequent involvement of the eighth pair, causing pain and difficulty in deglutition, accompanied by continuous hiccough, show, in a marked and interesting manner, the gradual progress of the scrofulous growth. The palsy of the eyelid, the dilatation of both pupils, and the protrusion of the tongue towards one side, which were dependent also upon serous effusion into the ventricles, lead one to inquire whether this case was not originally one of the many forms of what Dr. Graves, in his first volume of *Clinical Medicine*, calls "chronic scrofulous fever"; a disease intractable in its nature, generally connected with head symptoms, and often leading to the deposit of scrofulous matter in various parts of the body.

IV. TUBERCLE OF THE CEREBELLUM: PHTHISIS.

Under the care of H. B. Jones, M.D., F.R.S.

[*From Notes by* G. G. Rogers, M.D., *Medical Registrar.*]

John R., aged 4, was admitted on June 17th, under the care of Dr. Bence Jones. He had been born and reared at Gibraltar till six months before admission. A month after arrival in England he was observed to be wasting, and to become fretful and irritable. Three months later, epistaxis and cough were noticed. Next his abdomen began to swell; he complained of pain in his head, and moaned in his sleep. On admission, the pulse was thready, and beat 146 in a minute; the tongue was coated, and the face very pale. The liver was much enlarged. There was considerable dyspnœa; respiration 60 in a minute. Both eyes exhibited marked convergent strabismus. He was treated at first with small doses of calomel and magnesia at bedtime, and put on nourishing diet.

On June 18th, epistaxis occurred to the extent of half a pint. He had more cough the next day or two, and spat up thick mucus, not tinged with blood. The chest was carefully examined, but nothing was detected on this or various subsequent examinations. Five grains of gallic acid were given every six hours. The bleeding recurred on the night of June 24th, and again on the 28th, to such an extent, that it was necessary to plug the nostrils. Ice was applied, and the dose of gallic acid increased to ten grains.

On July 7th, acetate of lead, with acetic acid, was substituted for the gallic acid; and this seemed to produce some temporary improvement, as the bleeding stopped, and his lips regained their natural colour, but it recurred on the 10th and 11th. He now became much exhausted, and began to refuse food and medicine. The bleeding recurred frequently.

On the 25th it is noted that the blood was thin and poor, and lighter in colour. On September 6th convulsive attacks came on, and increased in violence during the next three days. He then fell into a comatose condition, in which he lay for two days, and died on September 11th.

Post mortem examination showed extensive strumous deposit in various organs. The ventricles of the brain were distended with serum, and its central structures so softened as to be quite diffluent. On the lower surface of the right hemisphere of the cerebellum was a strumous tubercle, the size of a large pea, imbedded in the substance of the organ just below the pia mater. The lungs were studded throughout with a copiou deposit of miliary tubercles. There were no vomicæ, and th e

substance of the lungs looked otherwise healthy. The bronchial glands contained large masses of crude tubercle. The glands in the gastro-hepatic omentum were similarly affected. The liver contained a copious deposit of miliary tubercle, as did the spleen. The other viscera seemed healthy.

Remarks. Of all the varieties of strumous disease which directly threaten life, there is none more insidious than its deposition on the brain, unless, indeed, it be that in the suprarenal capsules. We have often seen its presence proved by *post mortem* examination in cases where it seemed impossible to determine from the symptoms what the brain disease was, or, indeed, whether it were not merely functional disturbance owning some remote cause, and accompanied by no organic lesion; still oftener we have seen its absence demonstrated where it had been pretty confidently predicted. Hence it may not be useless, as a matter bearing on diagnosis, to study the two cases (III and IV) quoted above, even though the disease is beyond our present methods of treatment. In the first, so constant were the symptoms, and so distinct the functions which were interfered with, that Dr. Fuller was enabled, even without the evidence usually furnished by the presence of strumous disease in other organs, to indicate the nature and seat of the disease during life. The persistence of the same symptoms, and the evidence of pressure on one limited portion of the brain, denoted the presence of some solid deposit: the age of the patient, his appearance and constitution, with the history of the case, rendered it highly probable, at any rate, that this was of the nature of strumous tubercle. The well marked symptoms of loss of the power of co-ordinating motion afforded by the persistent tremor, the loss of control over the limbs without loss of motion, and the pain constantly referred to the occipital region, pointed to the cerebellum as, at any rate, one seat of this lesion; while the constant hiccough, and the interference with swallowing, rendered it likely that the deposit would also be found in that part of the encephalon which presides over the functions of respiration and deglutition. In the other, the symptoms were less distinct, probably because, on account of the smaller size of the tumour and its less central situation, it interfered less with the functions of the organ. Still the persistence of bleeding from the nose pointed to some morbid action in the head; and the convulsions were symptomatic of an irritation which might very probably have been referred to tubercle in some part of the brain; and the more so, had the symptoms of tuberculosis of other parts been more marked. In both, it will be seen that extensive phthisical disease was present, but latent: in the first, doubtless more accurate knowledge of the previous course of the complaint would have furnished a motive for the physical examination of the chest which could hardly have failed to elicit clear evidence of the presence of cavities in the lungs. The disease, however, with that mysterious inconstancy so characteristic of phthisis, was for the present quite in abeyance, and entirely subordinated to the still more urgent cerebral mischief. In the second case, the deposit, though copious enough and frequently searched for, did not reveal itself by any sounds audible to experienced ears—a fact by no means singular, and which has recently been the text of a controversy on the question of the alleged possibility of diagnosing phthisis in its early (even pretuberculous) stage, which is doubtless fresh in the minds of the readers of this Journal.

CITY DISPENSARY.

PHTHISIS (DOUBLE), FATAL BY MORTIFICATION OF THE PORTION OF OUTER CHEST-WALL CORRESPONDING TO AN EXCAVATION IN THE LEFT LUNG.

Under the care of John Cockle, M.D.

Elizabeth Bergman, aged 23, unmarried, of sedentary occupation, residing at No. 5, Peter's Hill, Doctor's Commons, was admitted a patient of the City Dispensary in July last. "About eight months ago she caught a severe cold, from exposure to the night air, and has since suffered from cough, dyspnœa, pain in the side, accompanied with emaciation, debility, and night perspiration. On physical examination, the ordinary signs of excavation existed below the left clavicle, and below the right clavicle marked signs of disease in an earlier stage."

During the subsequent progress of the case, considerable but varying effusion of the lower extremities was noted, as also a far greater amount of dysphagia than is usually observed. In the early part of the present month, she suddenly became restless, and at times delirious, the delirium being of mild form. When visited, a gangrenous spot was observed just below the left clavicle, which gradually spread during the two succeeding days over a surface about equal in extent to the palm of the hand. The fœtor, evidently arising from this surface, and not from the sputa, was intolerable.

Death from collapse occurred on the fourth day from the appearance of the gangrene. No *post mortem* examination was made.

This case is briefly detailed principally to illustrate the mode of its termination, which may, without doubt, be considered one of the very rarest occurring in cases of phthisis.

Original Communications.

ON INTRAUTERINE FRACTURES: WITH AN ILLUSTRATIVE CASE.

By T. Herbert Barker, M.D., F.R.C.S., Bedford.

[*Read before the South Midland Branch, May 21st*, 1857.]

Amongst the various singular phenomena which are ever and anon presenting themselves to the practitioner of medicine, none are more interesting, either in a physiological, practical, or pathological point of view, than those which bring before him the abnormal conditions of the animal body during the period of its intrauterine existence. A shadow of mystery overhangs, and must always overhang, these departures from the normal course of things. If it is impossible to trace out with accuracy the physical and chemical changes which the body of the born animal undergoes, as it is before us, and as it submits itself to our physical and chemical inquiries, how much more difficult is the task when the body is excluded from observation, and while the physiological laws, incident to the intrauterine state, are but dimly seen by those who look most keenly and with the broadest cast of thought on the problem of life in its simplest as well as in its more complicated manifestations.

It would be a hopeless task for me to attempt an elaborate description or speculation on any one of the numerous and debateable, and debated points, connected with the subject of fœtal development, either in its normal or abnormal conditions. I am not prepared for such a display of scientific skill, nor does the bent of my studies or pursuits strengthen me for such an effort. But a simple observation of natural facts always admits of being explained to others in a simple and natural manner; and as facts thus pourtrayed are never without their value, as they form capital on which other minds may draw, and as nothing positive could be made known in science without the evidence of facts, I have thought that the history of a fœtus born with its osseous framework in a very dilapidated condition, may deserve to be placed on permanent record in the literature of medicine.

Case. In the month of September 1856, I attended Mrs. L., of Bedford, in labour. It was her fourth confinement. Her three previous children had been delivered safely, and had shewn no peculiarities. The woman herself was healthy; had no sign of cancerous or tubercular diathesis; had no sign of osseous softening; had not suffered from syphilis. During pregnancy, her health had been good. Her dietary had been in no respect peculiar. She complained that during this pregnancy she had felt differently than on any other occasion; and that the movements of the child had been exceedingly feeble, although she had been of unusually large size.

Owing to the circumstance that the stairs leading to her bedroom were difficult to ascend and descend, she had fallen several times, and on one occasion fell down the length of the staircase, alighting on the back of a chair with her entire weight on the abdomen.

Such were all the particulars, constitutional and accidental, relating to the mother. The father of the child was healthy; he had not suffered from syphilis; he was not the subject of cancerous nor of tubercular disease. On neither maternal nor paternal side was there any hereditary tendency to congenital malformation.

At the period when the labour came on, Mrs. L. believed

herself to be at least six weeks from the full period of utero-gestation; the evidence of this was, however, doubtful.

The general symptoms of labour came on sufficiently naturally, and the membranes presented in the ordinary way; but, after they had ruptured, I was surprised to feel a large round soft mass presenting. Speedily the head was born, and resolved itself into the soft mass referred to, its softness apparently depending on an entire absence of cranial bones. The body soon followed; and the limbs, as they passed through my hands, were felt to crepitate on the least movement. The child (a female) breathed, and opened its eyes, but never cried. It lived about ten minutes only.

On examining this fœtus more closely after death, I noted in its conformation the following appearances. The head was preternaturally large, very round, and soft. No suture-lines could be traced, and no bones could be felt through the scalp. The limbs were very deformed and preternaturally short. The length of the fœtus, from the top of the head to the toes, was sixteen inches. The length of the body, from the upper part of the sternum, and level with the shoulders, to the crest of the pubic bone, was seven inches. The length of the arms was four inches; and the length of the lower limbs, along their outer curved surface, four inches. The eyes were widely separated, there being at least one inch and a half from one inner canthus to the other inner canthus. The nose was short and flattened; and the tongue partly protruded from the mouth, as though the latter were too small to contain it.

The right humerus was broken about its middle; and the right radius and ulna, at the junction of the middle and lower thirds, were in the same condition. The extreme phalanx of the right thumb was considerably elongated. The joints between the first and second phalanges of the fingers were enlarged, particularly that of the second finger.

The left humerus was fractured rather above its middle, and also the left radius and ulna about the junction of the middle and lower thirds. The left thumb was elongated; and the distal phalanges of the fore, middle, and ring fingers of the left hand, were wanting. The distal phalanx of the left little finger was considerably curved inwards.

The right femur appeared (from crepitation) to be fractured in its upper third, and the right tibia and fibula about the middle of the leg. The right patella was seen to be very prominent. The toes of the right foot were long, and much longer than those of the left foot.

The left femur was fractured about its upper third, and the left tibia and fibula slightly below the middle of the leg. The left patella was not so prominent as the right.

The clitoris and labia interna were preternaturally developed and prominent.

Such were the dimensions and external appearances of the fœtus. The breadth of the shoulders and of the hips was natural, and the circumference of the head was equally normal. There was nothing either in the size of the fœtus, or in the contraction of the maternal passages, that in any way could have given rise to unusual compression. The labour, in a word, was in every sense easy and ordinary.

Having an opportunity of obtaining the fœtus, I removed it, and took a photograph of it while in the fresh state. This has been engraved by Mr. Bagg with great exactness. The peculiarities just detailed are well represented in the accompanying woodcut; and the seat of the several fractures is indicated by the asterisks. (See fig. 1.)

Dissection. On dissection, with the exception of the osseous system, to which I shall refer last, the fœtus was found well developed in every part. The muscles were properly nourished; the lungs were healthy in structure; the heart was normal; and the vascular system was perfectly correct. The liver and gall-bladder, the intestinal canal, and the kidneys, were equally natural; but the spleen, which was of a size rather above the ordinary standard, was bound firmly by adhesion to the diaphragm at two separate points. The thymus was healthy. The tongue, which protruded from the mouth, at first sight seemed rather large; but, when the mouth was laid open, the enlargement was obviously due to the protrusion only. The brain was of full size, soft, as is common, in structure; but quite natural in conformation. All the cranial nerves were developed fully, and escaped from the base by their natural foramina. The cerebellum, medulla, and cord, presented no peculiarities. In none of the soft parts was there any arrest of development. The lips and palate were in no way cleft; and the nose was a normal pug.

In the osseous system, the peculiarities were very considerable. With the exception of two small osseous points in what should be the roof of the orbit, the frontal bone was *entirely absent*. Both parietal bones were *entirely absent*. The squamous portion of the ethmoid bone was *entirely absent*. The expanded, or, as it is sometimes called, the squamous portion of the occipital bone, was imperfectly formed. The osseous covering of the brain was thus wanting altogether.



Fig. 1.

Contrasting strongly with this fact was the circumstance that all the bones entering into the composition of the base of the skull were, for the period, well developed, natural, and more than ordinarily firm. The petrous and mastoid processes of the temporal bones were present; and the crista galli of the ethmoid stood up prominently. The condyloid and basilar processes of the occipital were likewise natural. There was no cleft in the basilar process.

The spinal column throughout its entire length was well developed, was free from any unnatural curve, and might be considered as in all respects normal. The scapulæ, the clavicles, and the ribs, were moderately developed; but the ribs were so fragile that the merest pinch between the thumb and finger nails snapped them like thin glass.

The left humerus, on being removed and cleared of its coverings, was as follows. The two extremities were cartilaginous; the shaft in its middle bulged out into a round ossified protuberance, of the size and appearance of a small bullet; above and below, the shaft was suddenly contracted to the diameter of a crow's quill. There was ossification at these points, but the bone was so fragile that it would not bear the slightest manipulation. Just above the protuberance, in this constricted portion, there was a distinct fracture, slightly oblique, but complete. The fractured ends were jagged, and could be refitted into each other.

The right humerus presented an appearance identical with the left; there was the same tuberosity in the middle of the shaft. This bone was fractured in a similar manner, but in two places, *i. e.*, above and below the protuberance.

The radius and ulna on each side were each fractured in two points, namely, in the upper part of the lower third, and in the lower part of the upper third. The ulna of the left side had at some time been fractured in the middle of the shaft, and the ends had been partly rejoined by cartilage. The extremities of all the bones were cartilaginous, and the shafts ossified.

The pelvic bones were natural in shape, and were not fractured, but fragile.

The left femur was cartilaginous at its extremities; its shaft was ossified, and was thick in the middle, and rounded into a tuberosity like the humerus. This bone was obliquely fractured in two places in the upper third, and in one place below

the tuberosity. The fractured ends were jagged, and could be refitted together. When thus placed in apposition, the bone was seen to have a twisted character from right to left.

The right femur resembled the left, but was free of distortion. It was fractured also in three places, and had the tuberosity in the middle of the shaft. The fractures and



Fig. 2. Right Femur.

tuberosity of the right femur are well shown in the accompanying sketch.

The tibia and fibula of each side were cartilaginous at their extremities, ossified in the shafts. All were fractured in the shaft in several places. The fibulæ were, in fact, so fragile that, in gently stripping off the muscles, it was impossible to avoid snapping them across.

The bowed appearance of the limbs observed before the dissection, and which is well shown in the woodcut, was due to the fractures and the action of the flexor muscles.

With regard to the structure of the bones themselves, their chief physical peculiarity was their extreme fragilty. This was mainly confined to the shafts of the long bones. These would not bend anywhere, but would break at all points. The shafts were covered with periosteum, which being removed, the bone had a darkish grey carious appearance. At points where ossified matter was most developed, as in the protuberances already noticed, the knife cut through it easily, and found an extreme thinness of bone. The cartilages were natural, and the joints well formed. There was no sign of dislocation in any part.

As, from the twisted character of the bones in this fœtus, one would be led to infer that the case was one of rachitis; so, from an analysis that I made of the left femur, is this opinion the more fully confirmed; for, after carefully burning out all the organic matter, I found that the relation of organic and inorganic matters stood thus:—

Organic matter	66·66
Inorganic matter	33·34
	100·00

So that the deficiency of inorganic matter was well marked.

It is true that in the fœtal the amount of inorganic matter is always less than in the adult bone; and Franz Simon gives several tables from Von Bibra, illustrating the fact. But in none of these tables is there any such an approach to this proportion: the organic matter in all these cases being less than the inorganic, and standing in the relation of from 34 to 40 per cent. of organic to 60 to 66 per cent. of inorganic. Lehmann, however, in his analysis of the bones of three rachitic children, found nearly the same proportionate deficiency of inorganic matter as was observed in my case; while Ragsky found in the scapula and humerus of a rachitic child as small a proportion as 18·88 per cent. of inorganic matter, with 81·12 of cartilage, vessels, and fat.

The cause of the fractures in my case is, however, quite compatible with the unusual amount of organic matter, from the fact that the earthy matter was irregularly deposited.

Analogous Cases. Such are the details of this case. The society will, I am sure, pardon me for stopping at this point for a moment, to compare the preceding description, with one or two similar descriptions recorded in pathological history. These cases are very rare; and of those practitioners who may have met with such cases, few have taken the pains to record their observations. My brevity, in this part, will therefore be rather the soul of necessity than of wit.

Dr. Richardson, in his Fothergillian Prize Essay on *Diseases of the Fœtus*, has included every recorded and authentic case of the kind, either in detail or in the way of reference. This essay is in the Library of the Medical Society of London, but is unpublished. I take from it one original case, narrated by Dr. Richardson himself, as supplied to him by my friend Dr. Moffat, of Hawarden; and I shall add the facts of one or two other cases related by other authorities.

"On May 10th, 1846," says Dr. Moffat, "I was requested to visit Mrs. E., who was in labour. On the night of the 4th of April previous, on going over the snow she slipped, and fell with all her weight upon her right side, on the upper rail of a stile over which she was climbing. The fall gave her so much pain that she could not move from the spot for a considerable time. The pains were, as I infer from her description, uterine. After she had rallied she walked home, and had to remain in bed for a few days. There was considerable ecchymosis on the right side of the abdomen. Ultimately, she completely recovered, and went on well to the full period of utero-gestation.

"The labour was natural: it was a first pregnancy. When I was satisfied that the mother was doing well, and was safe from immediate danger, the nurse directed my attention to the child, whose right arm was not, as she said, all right. I found a swelling on the lower third of the humerus, and on examination detected crepitus. There was here an ununited fracture; and the enlargement, I concluded, was produced by osseous matter. On examining the forearm, another swelling was detected, but union was complete. In the lower extremities, I found the right much enlarged by osseous tissue, in the same manner as though it had also been fractured.

"I found also on measurement certain remarkable differences. The length of the sound arm from the acromion of the scapula to the external condyle of the humerus was three inches. This space in the fractured arm was two inches and a half. The girth of the sound arm was two inches and three-fourths; that of the fractured arm at the fractured part was five inches. The length of the sound forearm was two inches and one-fourth; of the fractured forearm two inches. The length of the healthy thigh from the trochanter major to the external condyle was three inches and a half; its girth was three inches and three-fourths; the length of the injured thigh was three inches and one-fourth; its girth at the fractured part was five inches and three-fourths."

The next well marked instance of intrauterine fracture is related by Chaussier, in *Bulletin de la Faculté de Médecine*, tome iii. All the long bones of the fœtus were fractured in one or more places; some of the fractures were recent, some partly united, and others quite united. There were in all a hundred and twelve fractures.

Chaussier's case is thus detailed. The mother, aged 33, healthy, had already borne four children. Pains came on at 6 P.M., but were apparently slight. She went to the Maternité at 9 P.M.; but on arrival, was at once confined in the porter's lodge. It was a breech presentation. She had received no injury during pregnancy; but had a white discharge, to which she was not subject. The child lived twenty-four hours. The long bones were unusually short and thick. Crepitation was distinctly perceptible. The periosteum was white, and especially thick at points of flexibility and crepitation. On removing the periosteum, fractured surfaces of bones were seen; each was red, unequal, grating, formed of small granules scattered with little laminar filaments, which extended from one surface to the other.

The fractures were as follows:—

Spine, pelvis, and jaws—not fractured.
Ribs—numerous fractures, seventy in all; some consolidated and presenting a large callus; others still crepitant. Each rib was broken in several points, in at least two places, and at most in five.
Right scapula—one consolidated fracture.
„ clavicle—two fractures, one of which consolidated.
„ humerus—three fractures, two consolidated.
„ radius—three fractures, two consolidated.
„ ulna—two fractures, one consolidated.
„ fifth metatarsal bone—one fracture.
„ femur—four consolidated fractures. The bone was thick, curved inwards, and short.

„ tibia—four fractures, three consolidated.
„ fibula—two fractures.
„ second metatarsal bone—one fracture.
Left scapula—one fracture.
„ clavicle—one fracture.
„ humerus—three fractures, two consolidated.
„ ulna—two fractures, one consolidated.
„ fifth metatarsal bone—one fracture.
„ femur—four consolidated fractures.
„ tibia—five fractures, four consolidated.
„ fibula—two fractures.

The union of the fractures is mentioned where it was found.

A fourth example, related with less attention to detail, is given by Baudelocque. In the year 1803, he observed forty-three fractures in a new born infant in the Maternité (See *Dict. des Sc. Méd.*, tome xvi, p. 64). All the bones of the limbs were broken nearly in the middle. Mother had had no accident during pregnancy. Delivery had been rapid and easy. No violence had been exercised on the fœtus. On dissection, all the large bones of the limbs were found broken, some in the middle, others in two places; most of the ribs and most of the cranial bones were also broken. Some of the fractures were consolidated, others in process of reunion.

Arnaud (*Nouv. Observ. sur la Pratique des Accoucheurs*, p. 92, obs. viii) has briefly described a fœtus of four or five months, in whom the bones were separate and movable in the middle of the forearms, thighs, and legs, as if they had been intentionally broken; they seemed only joined by the skin. (*Dictionnaire des Dictionnaires de Médecine Français et Etrangers.* Par une Société de Médecine, sous le direction du Dr. Fabre. Tome 3me, p. 219. Paris: 1840.)

A case, in which the tibia of a new born child was fractured, is recorded from Carus in the *Lancet* for 1827-8, vol. ii, p. 14; and, with the succeeding case, is quoted by Dr. Richardson in his Fothergillian Essay. The labour took place at the natural period. The mother, who was twenty-five years old, stated that, during the sixth month of pregnancy, she fell on her abdomen, and felt internal movements immediately afterwards, as if the child were in motion. The child was born alive, but was emaciated and feeble. A transverse wound in the right leg passed from the one malleolus to the other. At this point, the tibia was fractured completely through and necrosed. The edges of the wound were in a state of sphacelus. The child died on the thirteenth day.

Billard, in his work on *Diseases of Infancy*, p. 494, narrates, from Devergie, an example of fracture of the clavicle in a babe newly born. The labour took place naturally, and at the proper period. The mother, in the last month of utero-gestation, had fallen with her abdomen heavily against a table. The child was born with a large tumour on the left clavicle. It died on the eighth day after birth. On dissection, it turned out that the clavicle had been fractured, and that the fractured ends had been rejoined by a large callus, the projection of which had caused the tumour.

Dr. Montgomery, in his elaborate and philosophical essay on *Spontaneous Amputation of the Fœtal Limbs in Utero*, refers to a few cases of intrauterine fractures. He relates the case of a woman eight months pregnant, who fell from a window, twenty-five feet, into the stony street, on her face; her hip-joint was dislocated, and her face and hands cut; but the uterus was not ruptured. She was delivered that night of a dead child, which had some of its bones broken, and had sustained several other injuries. She recovered perfectly.

Dr. Montgomery remarks: "Grætzer, after relating cases of intrauterine fractures recorded by several authors, observes that, on reviewing these cases, it appears that in some the cause was purely mechanical, and had less effect on the mother than on the fœtus."

He also describes another case in which fracture of an arm and wound on the head were produced by an accident happening to the mother. Madame K., when thirty-six weeks pregnant for the third time, fell backwards off a ladder, on the 21st of September. She was stunned, and had pains in the loins and lower belly until her accouchement, which took place on the 6th of October, fifteen days after the accident to the mother. The labour was tedious and painful, but terminated without any interference. The child was thin and puny, and had on its head three wounds or sores, two on the frontal, and one over the occipital bone: they were granulated, and suppurating healthily. In addition to these injuries, the forearm was fractured; but all did well under simple management.

With regard to fracture of the fœtal cranial bones, Dr. Montgomery observes: "Instances of injury to the cranial bones before birth have been recorded by Osiander, W. J. Schmitt, Schnuhr, D'Outrepont, and Grætzer; and, still more recently, three well marked cases, in which several fractures were found under bloody tumours, were published by Drs. Flugel and Schelling. When these injuries of the fœtal head were first observed, they were attributed to violence by Haller, Rosa, and others, the error of which opinion was first perceived by Rœderer and Baudelocque; and it is needless to say how important is the distinction, especially in a medico-legal point of view."

I have thus adduced various illustrations of cases analogous in many respects to the one which occurred under my own care, and entirely analogous as to the fact of the existence of fracture of bone. These cases are all so many texts for philosophical discourse; but it will be advisable now to take up such points only as are most interesting in a practical sense.

[*To be continued.*]

SINGULAR CASE OF PLACENTA PRÆVIA: IMMENSE ACCUMULATION OF HYDATIDS IN THE UTERUS: ABSENCE OF FŒTUS.

By R. Wynne Jones, Esq., Beaumaris.

Mrs. B., aged 25, a healthy subject, and mother of two children, the youngest being four years old, consulted me about the middle of May, under the following circumstances. Having menstruated (?) regularly up to this time, after weaning her last baby, she was surprised to find herself pregnant, having, as she alleged, decidedly "quickened", which she knew "from feeling a movement in the womb, a slight enlargement of the abdomen, a swelling of the legs, and a sense of general debility," etc. Having on the previous two occasions suffered nothing from the ailments and inconveniences usually experienced by pregnant women, she was not much astonished to find herself so far gone with child without being sooner aware of it; but she was quite at a loss to account for "being regular as usual every month". As there was a tendency to constipation of the bowels, I prescribed an aperient to be taken occasionally, and told her that a little time would prove whether she was really pregnant or not.

On the 1st of June, she was attacked with considerable "flooding", which was suppressed by rest and ordinary treatment. The hæmorrhage, however, appears never entirely to have ceased; for she says she continued more or less "unwell" from that time till July 17th. I was then summoned to her in haste, she having had labour pains some hours, and being represented as "flooding to death". On my arrival, I found the account not much exaggerated. Her cheeks were blanched; her pulse was small and feeble; and very alarming hæmorrhage had taken place, and was still going on. I immediately made an examination, and found, as I had previously suspected, that it was a case of placenta prævia; and I lost not a moment in taking the necessary steps. Fortunately, the os uteri was considerably dilated, and the placenta was so lacerable that I had no difficulty in passing my hand through its substance into the cavity of the uterus, which was fully as large as usual at the seventh or eighth month of pregnancy; but, to my astonishment, I could find no fœtus nor vestige of one. The womb was distended with hydatids, some of which were forced along my arm through the vagina. Having *seen* these, and being agreeably surprised to find that the discharge was not blood or coagula, I proceeded to detach the placenta, which was attached to the whole circumference of the os uteri. This I succeeded in doing piecemeal, for it was so easily torn that I could not do otherwise; and, on withdrawing my hand, the placenta, and about two-thirds of an ordinary sized chamber-potful of hydatids were expelled through the vagina. There was no further hæmorrhage, though there appeared little uterine contraction. I administered a drachm of ethereal tincture of ergot, and bound the abdomen, as I am in the habit of doing after natural confinements. In about two hours, my friend Dr. Llewelyn Jones came to see my patient, and examined the expelled matters. We found them to consist—1st, of an infinity of transparent hydatids, varying from the size of a marble to that of the smallest pea, united together by a white fibrous or membranous substance; 2nd, the torn placenta, which was apparently about the usual size and thickness, but its substance thickly studded with small hydatids, similar to those contained in the uterus. There was no funis.

My patient soon rallied, and felt very comfortable, occasionally discharging small quantities of hydatids, but without any pain. In a few hours, she slept well, passed urine freely, and passed an excellent night. She stated that her breasts had been "tender and lumpy" till about a week ago, when they began to diminish in size, becoming soft and flaccid, and without any secretion of milk. During the two following days, hydatids continued to be discharged, after which the lochia assumed their usual course, and her recovery was as rapid and favourable as under an ordinary accouchement attended with hæmorrhage. At the expiration of a month, she was quite well, and following her usual avocations and habits.

It is perhaps to be regretted that neither the weight nor measure of the ejected matters could be ascertained; but, in private practice, such accurate details are rarely obtainable: the quantity, however, may be easily surmised, from the size which the uterus had attained.

Remarks. The foregoing case may perhaps not be a solitary one, but I have not been able to discover any record of a like one, and it consequently appears to me worthy of publication. I apprehend—

1. That impregnation took place, but at what period must be uncertain; for menstruation (?) continued regular till within the preceding ten weeks.

2. That the ovum, from some cause or other, became "blighted".

3. That the placenta, being situated so as to occlude the os uteri, became subject to that condition favourable to the development of hydatids, which could not be expelled until the uterus became so distended as to bring on its contractions, as at the full period of natural gestation.

Periscope.

SURGERY.

FROTTEMENT IN INFLAMMATION OF THE SHEATHS OF TENDONS.

Dr. Henry Thompson, Surgeon to the Tyrone Infirmary, has a note on this subject in the *Dublin Hospital Gazette* for June 15th, 1857.

Three cases occurred to him lately, in which the patients complained of pain in different parts of the forearm, the cause of which, without the physical signs above mentioned, would have been obscure. In each instance the patient had been engaged in some work to which he had been previously unaccustomed. One gentleman was so anxious to get his potatoes set, that he took the spade in his own hand, and laboured with it the greater part of a day. Next morning his arm was useless, from a severe pain along the radial side of the forearm, increased to torture whenever he moved his thumb, on which occasions he was sensible of a creaking sound in his arm, so remarkable, that it was mistaken for the crepitus of a fractured bone by the gentleman to whom he first applied; and when Dr. Thompson saw the limb it was done up in splints and bandages *secundum artem*. He placed a stethoscope on the part, and made the patient apply his ear to it, when he at once compared the noise to the creaking of a new shoe.

A young lady, very fond of the piano and harp, became suddenly, and to herself unaccountably, incapacitated from practising, from a pain along the front of the forearm, in the course of the flexor tendons, greatly increased by stretching the fingers. By catechising her pretty closely, Dr. Thompson found she had been busily engaged in preparing a house for a newly married relative, and had been employing herself in sewing carpets, which were new and heavy, and required a great deal of force to pull the breadths into their places. This was quite enough. On applying his fingers and moving hers, he felt the grating, and at once diagnosed the case.

The other was in an hospital patient, and was very similar to that first described. There was some slight fulness in the affected parts, as well as some tenderness on pressure; but neither was very remarkable, the great complaint being the pain on motion. The cure was somewhat tedious in all, and seemed to be favoured by rest, a few leeches, and cold washes at first, and subsequently by tincture of iodine and liniments; but ultimately both pain and frottement disappeared.

INTERNAL REMEDIES IN STRANGULATED HERNIA.

Case I. *Strangulated Hernia returned, under the Influence of Acetate of Lead Enemata.* Dr. Flögel relates the following case:—Mr. N., whilst dancing, felt an inguinal hernia on the right side (from which he had suffered for some time) becoming strangulated. Taxis, ice, and leeches, did no good; vomiting set in; and, twenty-seven hours after the strangulation, there was much prostration and hiccough; pulse 140, small and intermitting; skin cold. The hernial tumour was of the size of a goose's egg, hard, immovable, of a dark red, and slightly painful on pressure. An enema was then given, composed of grs. xxij of sugar of lead, in half a pound of water; some ice was, besides, put upon the tumour. An hour afterwards, vomiting and hiccough were less frequent; the enema was repeated. The tumour then became less hard, and the sickness and hiccough ceased; pulse 128. The patient then slept for half an hour, and the swelling diminished one-half, became soft, and was easily reduced. Alvine evacuations were then obtained by purgatives, and the patient left the hospital in perfect health. Dr. Flögel ascribes the successful result to the styptic action of the saturnine salt, which, by causing retraction of the intestine, both in the longitudinal and transverse directions, draws the herniated portion of the bowel into the abdomen. Dr. Flögel adds, that he failed in one case only, viz., that of an old inguinal hernia, where numerous adhesions had formed. The dose of the acetate of lead is from fifteen grains to half a drachm for each enema. The enemata have been administered every hour, without any unpleasant effects. (*Œster. Zeitschr. für prakt. Heilkunde;* and *Lancet.*)

Case II. *Strangulated Hernia reduced under the influence of the Internal use of Extract of Belladonna.* M. Burgatti relates the case of a man, aged 42, who, whilst busy removing heavy logs of wood, felt a sudden violent pain in the right groin, a tumour in the same region appearing at the same time. He was obliged to keep his bed; soothing applications were used during the night. Dr. Burgatti found in the morning an inguinal hernia, the tumour of the size of a hen's egg, hard, and not as yet descended into the scrotum. The symptoms of strangulation were very severe. Taxis was immediately tried, but the patient could not bear it. M. Burgatti then gave two grains of extract of belladonna every four hours, day and night, and ordered enemata of sweet oil, in which dried camomile had been digested. No change next day was observed in the patient's condition; food and liquids were alike rejected, but the tumour was less hard. The same treatment was followed. Much improvement was observed on the following day; the vomiting had stopped, and an alvine evacuation had taken place; the face was less anxious; and the patient felt better. Reduction was then extremely easy; and in the course of three days the patient completely recovered. (*Il Raccoglit. medico di Fano;* and *Lancet.*)

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SUBURBAN FILTH.

A writer in the *Times*, under the signature of M.R.C.S., calls attention to the necessity for a more stringent supervision of all houses erected for the poor. As he very justly observes, the authorities have taken precaution that fresh air shall be supplied to emigrants on board ship, where it is sometimes difficult to provide it; yet on land, where nothing is easier, the parsimony and the fraud of builders but too often show themselves in running up cottages in which every condition of health is neglected, and successive crops of fevers and other epidemics are ensured for unborn generations. A very capital sketch appeared in *Household Words*, the other day, of the deplorable condition of that debatable ground between the metropolis and the country, known as the suburbs of London. Here,

where the evils of a crowded city would appear, on the first blush, to be in some degree mitigated by the freer access of fresh air, they are, in fact, vastly aggravated by the fact that no drainage at all is attempted. In the midst of a dense population, the very magnitude of the evil necessitates a systematic drainage. The combined wealth also of urban populations renders the construction of efficient sewers easy; but the case is entirely different with those houses which may be said to form the advanced guard of the town encroachment upon the country. They are either so isolated that it is found impossible to connect them with the existing system of drains without inflicting an expense which would put a stop to all such buildings, or the powers of the commissioners are so restricted that, even under more favourable circumstances, they cannot compel owners of mushroom terraces to link on to the general system of drainage. This is an evil which threatens to undo at the circumference all that is being done by health officers for the heart of cities. Only medical men who practise in the suburbs, who enter "rural paradise" after paradise, clustered in front with clematis and bright with flowers, but stinking and foul behind with stagnant ditches, overflowing cesspools, and undrained back yards, can appreciate the amount of disease at present entailed upon poor people through this state of things. Death, indeed, puts on a deceitful mask in such localities; and the rank health of the vegetation is only a measure of the human mortality to be anticipated.

It is a very prevalent, but a very mistaken notion, that, in the midst of the fresh air, any collection of morbific matter proves harmless. The infinite diffusibility of gases does indeed mitigate the evil to a considerable extent; but that this law is not sufficient to overcome the rapidity with which foul air is sometimes given off, must be obvious to every one who studies the subject. We know ourselves a *beautiful* village in Hertfordshire, where fever is a constant resident, scores of the inhabitants having perished within the last few years in consequence of the want of drainage.

Another cause of the serious mortality which overtakes the dwellers in the suburban districts of large cities, and especially of the metropolis, is the presence of large brickfields and lime-kilns. When at work, the amount of carbonic oxide and acid gas given off by them quite poisons the air; and we only wonder how any human beings can exist in an atmosphere which cannot be outdone by that of the infernal regions. Even the deserted brickfields themselves, which are generally pitched upon by speculating builders as the site of some "Albert Terrace" or "Victoria Grove", are noxious in their ruins. It has been observed that ague commonly attacks persons who dwell near such places; and this in some measure corroborates a statement made by Dr. Watson in his *Practice of Physic*, that ague is generally most virulent in places where the sun has cracked the earth lately saturated with rain, and set at liberty some noxious subterranean gas. Such ague and fever beds are constantly being made in the outskirts of this metropolis; and, when they are made, people lie on them as innocently as though they were lying on beds of roses, until the hand of death mows down in rapid succession, first the young, and then the middle aged and old. There is almost as much necessity for the selection of ground for the encamping of this semi-town population, as there is for the encamping of an army; nay, in some respects there is a greater necessity, for tents can be shifted, but suburban terraces are fixed in their filth, until lath and plaster rot from the effects of damp and age.

In order to mitigate the growing evil, it will be necessary before long to appoint health officers especially for these neglected districts, whose powers shall be of a more stringent and summary character than those possessed by officers of the more civilised portion of the urban populations. We want, in fact, a kind of irregular medical force, to keep in check these Bashi-Bazouk builders, who seem inclined to fling off every kind of restraint the moment they plant their bricks and mortar on some deserted brickfield or scrubby bit of common land. It is a disgrace to the Building Act that it cannot reach far enough to protect our outlying population from the shortcomings of such knavish personages.

THE WEEK.

We understand that a project has been formed among some of the junior medical officers of the Metropolitan Hospitals, principally house-surgeons, demonstrators, and registrars at the respective schools, having in contemplation the establishment of a Medical Society which shall embrace all students and junior practitioners of medicine, below a certain standing (to be fixed afterwards), in the metropolis. The mention of such a project is almost sufficient of itself to recommend it to all who have the best interests of our students at heart; and still more if they happen to know how much good has sprung from the prosperous activity of a similar society in Edinburgh. At present the students know too little of each other; even the schools at which they are educated know too little of each other; there are too many little jealousies and prejudices of this hospital against that—too little of the free communication and mutual assistance and sympathy which more frequent opportunities of intercourse would bring about. It is in vain to expect an improvement in this direction from the personal exertions of men so absorbed in other necessary matters as the senior officers of our great hospitals. It is to their juniors that we must look; and they are quite willing to devote themselves to the effort, with proper encouragement. A society of this kind, properly organised and well managed, might be made a most important means of medical education, and tend more than any other method yet devised to promote that habit of clinical observation which is so sedulously recommended to students by their teachers, but which most of them too much neglect. It might also be of still more important benefit in promoting a friendly fellow-feeling and *esprit de corps*, of which the medical profession is more destitute than any other, because its members are not sufficiently brought into contact. If any doubt had ever been entertained of the fitness of our students for public intercourse and discussion, their conduct "in public meeting assembled", on the subjects of Naval and Poor-law Medical Reform, would be sufficient to remove such doubt, and to show that they can conduct public discussion with as much intelligence and propriety as other gentlemen of their age and experience. Who amongst our university readers does not go back with pleasure to the vivid declamation and good humoured satire of the Union? What young lawyer but sharpens his new forged weapons at the clanging anvil of the legal debating club? Why should not the youth of our pro-

fession have similar intellectual recreation? The state in which matters stand with this project at present is, that a preliminary meeting of gentlemen from the various hospitals interested in this question has been held, and certain resolutions passed, embodying in general terms the opinion of their authors of the advantages which would attend the founding of such a society. They now appeal for aid in the execution of their project, primarily to the medical press and their seniors in the profession, and next to the zeal and intelligence of their coequals. Mr. Ernest Hart, Demonstrator of Anatomy at St. George's Hospital, has been named Provisional Secretary; and any of our associates who wish to promote the success of this scheme would, we are sure, be doing good service to medical education in its widest sense by putting themselves in communication with him.

We have more than once drawn attention to the fact that clergymen have of late evinced a strong tendency to recover their ancient office of physician as well as priest. The number of advertisements which appear in the *Times*, from clergymen, proposing to take charge of "nervous invalids" (otherwise, of the insane), are indicative enough of the pretensions of the cloth; but these advertisements only evidence a portion of the encroachment. A friend, who had occasion to advertise in the *Times* for some gentleman qualified to take charge of a mentally afflicted invalid, informs us that fully one-third of the answers received *were from clergymen*, and that these gentlemen arrogated to themselves mental control and influence in an extraordinary degree. In fact, we feel convinced that a very large class of the clergy believe that insanity is to be treated by spiritual influence only. The amount of damage which may be inflicted by this mischievous notion is incalculable; and we feel called upon to protest in the strongest manner against this poaching of unlicensed and unqualified persons upon the legitimate province of the physician. The insane, at the present moment, are not sufficiently protected by the law. There are thousands of mentally afflicted persons in this country, at the present moment, hidden away in the houses of clergymen and females, and totally deprived of any kind of medical treatment, or, if treatment they have, it is of the spiritual kind which these pseudo-priest-physicians indulge in, the irritating and irrational nature of which, under the circumstances, will be thoroughly understood by those of our associates who have made psychological medicine their study.

In our weekly list of deaths it has been our mournful duty to record, during the progress of the Indian mutiny, the massacre of several regimental surgeons and assistant surgeons. The dismal list of our brethren who have been brutally murdered by the very men whom they were devoting their lives to assist in the hour of their greatest necessity, is daily augmenting in length. From a list, published lately in the *Times*, of those known to have perished up to the last receipt of news, we take the names of the following victims, some of whom were doubtless known to many of our associates. Dr. Carl Buch (Bareilly), Dr. John Macdowall Hay, Dr. and Mrs. E. M. James (Augur), Dr. John Kirk (Assistant-Surgeon), Dr. Robert Lyell (Patna), Mr. James Graham (Superintending-Surgeon), Mr. Henry Hawkins Bowling (Surgeon), Mr. John Pierce Bowling (Assistant-Surgeon), Mr. Kinloch W. Kirk (Surgeon), Mr. Moore (Surgeon 60th Rifles), Mr. Anthony Dopping (Assistant-Surgeon), Mr. Joseph Fayrer (Assistant-Surgeon), Mr. John Colin Graham (Assistant-Surgeon), Mr. George Hansbrow (Assistant-Surgeon). We are afraid this is far from a complete list of the unfortunate victims. Peace be to their ashes, and may their manes be avenged! We trust that the names of our brethren who fell whilst doing their duty will not be allowed to pass into oblivion, but that they will be handed down on some memorial brass to show to future Englishmen how deeply our profession has suffered in the great Indian mutiny. Among the names given above, our readers will recognise those of the two sons of a highly respected member of our Association—the late Mr. John Bowling, of Hammersmith.

Association Intelligence.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, September 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [General Meeting.]	Harpur Charity Room, Bedford.	Tues., Sept. 29, 2 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]		Thursday, Oct. 8th.

SOUTH WESTERN BRANCH: ANNUAL MEETING.

The annual meeting of the South Western Branch was held at the Athenæum, Plymouth, on Wednesday, July 22nd, Joseph C. Cookworthy, M.D., President in the Chair.

The retiring President, Dr. Paterson (Tiverton) took the chair for the purpose of resigning it to Dr. Cookworthy, who, he said, had already filled the chair at one of the annual meetings with marked success. He hoped that Dr. Cookworthy would have a peaceful year of office, but he confessed that he would rather look forward to the settlement, during the ensuing year, of some of those important medical questions which had occupied so much of the attention of members of the profession as well as of the House of Commons during the past session, and not find them all withdrawn as had hitherto been the fate of the measures brought under the consideration of Parliament.

Dr. Cookworthy then took the Chair, and gave the following

PRESIDENT'S ADDRESS.

He believed it was customary for the President, upon such occasions, to prepare a written address, but he had not done so, feeling that the little he had to say could be better said than read. Had not the Branch met in Plymouth before, he might have thought it desirable to invite their attention to many subjects of local interest, with which they were probably now acquainted; he might have referred to the natural beauties of the district, unfortunately not to be seen to advantage on such a day as this; and to its medical charities—the South Devon Hospital, Public Dispensary, and Eye Infirmary—all of which institutions were creditable to the people, and beneficial to the sick poor, of the town and neighbourhood. He might have also asked them to look over the Government Hospitals—Naval and Military—in which the invalids of both arms of the national service received all the care and attention which they needed. He should have referred them, too, to the Naval Arsenals of this port—to the Dockyard at Devonport, the Royal William Victualling Yard, and the New Steam Yard at Keyham, all of which were establishments of national importance, and a visit to which would be well repaid by the inspection of many processes of mechanical science there in actual operation. He should also have directed their especial attention to the Railway Bridge at Saltash, which was an object of great attraction, and a day might be well employed in its inspection.

There were other subjects which were generally included in the address from the chair, and which related to questions of medical polity. In the repeated discussion of these matters, they had been worn almost threadbare; but still he hoped that the members of the profession would never abstain from agitating them, and in forcing them upon the attention of Government, until they succeeded in obtaining their just requirements. Although they had not yet secured the passing of any Bill on Medical Reform, he was not without the hope that a Bill of the provisions of which they could approve would soon become law. He could not but congratulate them upon the result—poor as it was—of the recent discussion on this matter in the House of Commons; the majority upon that occasion, though the Bill was opposed by the government and the Board of Health, was 197, a larger number of members than had ever been prevailed upon to give attention to the subject before. [*Hear.*] And when they considered the prominent part which medical men often took in the return of members to Parliament, he thought that they might very properly use their influence in inducing members of the legislature to give, at all events, a fair consideration to subjects in which the medical profession were so largely interested. He believed, too, that the success of any good measure for Medical Reform would, in no small degree, depend upon the success which attended that association. [*Hear.*] It at present numbered 2,000 members, which was less than one-tenth of the number of members in the profession in England alone. If the Association, however, were more numerous, they would speak with more power, and enforce, with a greater chance of success, the wishes to which they might give utterance. He hoped that the committee of the Association would, previous to the next session of Parliament, be enabled to prepare such a Bill for Medical Reform as would be less open to objection, and prove more advantageous to the profession than would either the Bill of Mr. Headlam or that of Lord Elcho.

He believed that the extension and success of the Association would operate most beneficially upon the character of the relief and medical attendance given to the poor. They would find that medical men would be better paid, and receive more consideration as medical officers of Unions. Some of the evils, however, which the profession laboured under originated with themselves. If, for instance, they did not often underbid each other, they would be better paid, and the sick poor would be better attended to, which latter consideration was in itself an important matter; for at present he feared that more was often thought by Poor-law guardians of the amount of salary than of the character of the medical relief which the poor were likely to receive. [*Hear, hear.*] This was, as he had said, an important subject; and when attention was drawn to it, it would assist to form that public opinion which would facilitate the attainment of the objects they had in view. The meetings of the Association would also conduce to social intercourse between members of the profession, and to greater unity of spirit, and a larger amount of consideration for each other. And if the members of the profession generally could be prevailed on to recognise and to act upon the principle of "*Quod tibi, id alteri*," they would want no code of medical ethics, inasmuch as this principle was the basis of all ethics, whether clerical, medical, or general. [*Hear.*]

Another subject upon which he thought it right to touch, was the Journal of the Association, in reference to which he thought there were very few who would not agree with him in the opinion that the Journal had very much improved under the able editorship of Dr. Wynter [*hear*], and that it was characterised by a genial spirit which was well calculated to produce harmonious feeling among the members of the profession. He should very much like to see an accession of numbers to the Association, as it would give the Journal a larger capital, and would tend to make it more valuable, both as a commercial speculation and as a literary production. It was a fact within his (Dr. Cookworthy's) knowledge, and many others would doubtless confirm the statement, that the principal object for which not a few of the members resident in the rural districts subscribed to the Association, was that they might have a weekly journal; and the improvement of the Journal was therefore a matter of no small importance. [*Hear.*]

Dr. Cookworthy then thanked the meeting for the high honour which they had conferred upon him in appointing him a second time to the office of President, though he could not help thinking the appointment alike unfortunate for him and the Association: for him, inasmuch as by putting a light on the top of a hill, its deficiency, which, in a lower situation, might have escaped observation, became obvious; and for the Association, inasmuch as they might have had others better qualified than himself to discharge the duties of the office. Still he thanked them for his election, which he accepted as an evidence of their partiality and friendship. [*Hear.*] He was happy to see so many of his medical brethren from other towns, and could only wish that more of the profession resident in this neighbourhood had been present to welcome them. He could assure them, however, that their brethren of the Plymouth Medical Society were desirous of doing them honour, and had invited not only them, but every medical man within an area of thirty miles, to a *soirée* that evening, to which, also, many of the clergy, army and navy officers, and other gentlemen interested in the advancement of modern science, had likewise been invited.

In conclusion, he had to inform them that a paper had been received from Dr. C. Barham, of Truro, which contained an account of the poisoning of two children by the leaves of common rhubarb; and it was extraordinary that the *leaves* should poison while the *stalks* were employed so largely for domestic purposes. This paper would be read to them in the course of the afternoon. The President referred to other contributions which had been made to the society for the inspection of the members, and the ordinary business of the Branch was then proceeded with.

VOTES OF THANKS.

Mr. J. Edye (Exeter) proposed that the best thanks of the meeting be given to the President, Dr. Cookworthy, for the

admirable address which he had delivered. He perfectly concurred with the observations which the President had offered upon the subject of Medical Reform, and trusted that a Bill would, by and bye, be prepared which would approve itself alike to the profession and to the public generally. With reference to the resolution which he rose to propose, he should observe that such sincere respect was felt for the personal character of the President, and so high an opinion was entertained of his professional abilities by the members of the profession resident at Exeter, that it was matter of great regret to many of these gentlemen that, owing to a variety of circumstances, they were prevented from meeting their professional brethren of Plymouth upon that occasion, and were denied the pleasure of seeing Dr. Cookworthy in the chair. [*Hear.*]

The resolution was seconded by Mr. W. POLLARD, jun., of Torquay, and carried.

Mr. P. W. SWAIN (Devonport) moved a resolution of thanks to Dr. Paterson for the ability with which he had sustained the office of President during the past year. He proposed the resolution with pleasure; for although he was precluded from giving his personal attendance at the meeting at Tiverton, he had heard from his friend, Mr. Whipple, that it was an exceedingly agreeable one, and that Dr. Paterson did everything in his power, to contribute to the pleasure of visitors from other towns. [*Hear.*]

Mr. EDYE, in seconding the resolution, remarked that he was one of those who were fortunately enabled to attend the meeting at Tiverton, and was therefore enabled to state, from personal experience, that the general arrangements were not only of the most satisfactory character, but that the address of Dr. Paterson was such as might have been expected of that gentleman; it was full of information, ably written, gracefully delivered, and possessed another good quality, that of not being too long.

PLACE OF MEETING IN 1858: ELECTION OF PRESIDENT.

Dr. PATERSON proposed that the next meeting be held at Exeter.

Mr. R. KERSWILL (St. Germans) seconded the motion, which was agreed to unanimously.

Dr. NANKIVELL (Torquay) proposed that JOHN EDYE, Esq., of Exeter, be requested to fill the office of President for the year 1858.

Mr. S. KERSWILL (Devonport) seconded the motion, which was carried.

Mr. EDYE said he considered it to be a very high position to be President of such an assembly, and he therefore felt all the more gratified that such an honour should have been conferred upon him. He hoped that all his professional brethren resident in these towns would endeavour to be present at the next meeting; and although they could not show them at Exeter anything that could compete in point of interest with the Hamoaze of Devonport, or the many objects which met the eye upon Plymouth Hoe, yet he could promise them that they would do what they could to make the visit agreeable to them.

VOTE OF THANKS TO THE SECRETARY.

Mr. EDYE moved a vote of thanks to C. H. Roper, Esq., the Secretary.

Mr. W. POLLARD, jun. (Torquay) seconded the resolution.

The PRESIDENT said he wished also to state how largely the Association was indebted to Mr. Roper for the able manner in which he discharged the duties devolving upon him. He considered, however, that a great deal of unnecessary labour was thrown upon the Secretary, through a defect in the organisation of the Association, by which four or five persons were empowered to receive the subscriptions of members, the result of which was that not more than 25 of the 150 members included in the district Association remitted their subscriptions to the Secretary. Much confusion and unpleasantness were thereby often occasioned, for it happened that whilst some members omitted to pay their subscriptions for a period of four or five years, and were perhaps never reminded of the fact, there were others who were asked for their subscriptions after the same had been paid. [*Hear.*] He suggested that this was a point which should be brought under the notice of the forthcoming annual meeting of the general Association, to be held at Nottingham; and at a subsequent stage of the proceedings, the matter being again adverted to, it was resolved that the members of the Association residing in the South-Western District, be requested to pay their subscriptions to the district Secretary, and that a like arrangement for other Branches be recommended to the general meeting to be held at Nottingham.

COUNCIL OF THE BRANCH.

Dr. RADCLYFFE HALL (Torquay) proposed, and Mr. W. J. SQUARE (Plymouth) seconded the appointment of five members of the Council of the Branch, in the room of the gentlemen who retired by rotation.

NEW MEMBERS.

Dr. PATERSON moved that Messrs. J. S. Smith and H. Bate, of Tiverton, R. Bryden, of Uffculme, Milsom, of Cullompton, Dr. Littleton, of Saltash, and Mr. Puddicombe, of Silverton, be elected members of the Association; which was seconded by Mr. BURROUGH, of Dartmouth.

REPRESENTATIVES IN THE GENERAL COUNCIL.

Mr. J. HICKS (Plymouth) proposed, and Mr. CLARK (Saltash) seconded the appointment of Dr. Shapter and J. Edye, Esq., of Exeter, Dr. Nankivell, of Torquay, and T. Pridham, Esq., of Bideford, as representative members of the General Council.

VOTE OF THANKS TO DR. WYNTER.

Mr. T. PRIDHAM (Bideford) proposed thanks to Dr. Wynter, for the improvement which the JOURNAL had sustained under his management.

Mr. C. H. ROPER seconded the motion, which was carried.

CASES AND COMMUNICATIONS.

The SECRETARY then read a paper of Dr. BARHAM, on the poisoning of two children in consequence of eating of the leaf of rhubarb, which they had amused themselves by chopping up in imitation of mint-sauce.

Mr. W. J. SQUARE remarked that he thought the proof offered of the children having been poisoned was not strong, and Mr. EDYE said he too considered that the case, as it stood at present, was not proven.

Mr. J. ELLIOT (Kingsbridge) moved a resolution of thanks to Dr. Barham, which was seconded by Mr. W. J. SQUARE.

Dr. RADCLYFFE HALL (Torquay) read a communication in confirmation of his former observations, on the mode of origin of tubercle in the lungs in pulmonary consumption, and presented a drawing.

Mr. T. PRIDHAM (Bideford) mentioned three cases which he had reported since the last meeting. The first was one of idiopathic tetanus, which occurred during Palmer's trial, and was said to be so rare that Sir Benjamin Brodie had stated that he never saw but one case of the kind. The second was a case of perforation of the heart by a needle, the result in both instances being favourable; and the third case was spontaneous separation of the leg of a man, aged 87, who was still alive.

The proceedings of the meeting terminated with a vote of thanks to the Chairman, moved by Mr. P. W. SWAIN, and seconded by Dr. PATERSON.

The members of the Association then adjourned to the Royal Hotel, where they dined together under the presidency of Dr. Cookworthy.

THE EVENING MEETING.

At 8 o'clock, the members of the Branch, with a large number of other gentlemen who had been invited to meet them, assembled at a conversazione in the hall of the Athenæum.

A number of objects of interest to men of science were displayed upon the tables; and many powerful microscopes, furnished by Mr. Heath of Devonport, were exhibited.—A number of beautiful botanical specimens were also supplied by Mr. I. W. N. Keys.—After coffee had been served, Mr. P. W. Swain read an interesting paper on the means to be employed in the restoration of persons apparently drowned, strongly recommending the "ready method" proposed by Dr. Marshall Hall.—Mr. W. J. Square gave some particulars of the cases operated upon for stone in the South Devon Hospital, and mentioned the gratifying fact that, whilst the average of successful operations of this kind was six out of seven, no less than thirty-one of the thirty-two operations in the hospital had proved successful.—Mr. J. N. Hearder followed with some clever experiments on the induction coil; after which Mr. R. Oxland traced the history of the manufacture of sugar; and Mr. Hands explained his invention for the preservation of meat.

The proceedings were brought to a close about 11 o'clock; and it must have been very gratifying to the President, and to the members of the Association, to witness the marked success which had attended their efforts to please and interest the numerous company which assembled upon the occasion.

[This interesting report would have been inserted long ago: but it only recently came to hand, having been lost in transmission through the post. EDITOR.]

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-SEVENTH ANNUAL MEETING.

[*Held in Dublin, August 26th, and following days*, 1857.]

[*Continued from page 799.*]

Section of Zoology and Botany.

METHOD OF APPLYING THE COMPOUND MICROSCOPE TO THE SIDES OR TOP OF AQUARIA LESS THAN TWO FEET IN HEIGHT. BY P. REDFERN, M.D.

The arrangement consists of a vertical stem, supported by a heavy foot. On the stem a short transverse tube slides vertically and rotates on the axis of the stem, as well as on an axis at right angles to the direction of the stem. This transverse tube carries a long sliding arm, made use of as a lever, with arms of very unequal length. The short arm of the lever terminates in the cup of a ball-and-socket-joint. A short stem attaches a tube to the ball, and this tube allows that which carries the objective and ocular to slide through it in coarse adjustment; whilst a fine adjustment is made by acting on the long arm of the lever. The body of the microscope may thus be placed either vertically or horizontally, and placed either over an aquarium or applied to its side with equal ease in the use of the two-inch, one-inch, and the half-inch objectives. For the purpose of illumination, Dr. Redfern employs a small mirror, which is let down into the fluid, and is capable of being moved in any direction by a simple arrangement of brass wires shown to the Section.

FURTHER REPORT ON THE VITALITY OF THE SPONGIADÆ. BY J. BOWERBANK, ESQ.

The author stated, that in his former report he had detailed a series of observations on the inhalation through the pores and the exhalation of water through the oscula of a marine sponge, *Hymenacidon caruncula*, and that he was enabled to determine with certainty the capability which that sponge possesses of opening and closing the oscula at its pleasure, but that he could not in that series of observations satisfactorily determine the nature and powers of the imbibing pores, as those organs can only be seen distinctly in operation in very young and transparent specimens; he, therefore, commenced a series of observations on the action of the pores in young specimens of *Spongilla fluviatilis* on October 3rd, 1856. He found that in a specimen about half an inch in diameter, which had attached itself to a watch-glass, there was at the summit of a large oval inflation, which varied its form remarkably within a very short time, a single osculum, which opened or closed in accordance with the necessities of the animal, and from which when in full action a powerful stream of water was poured forth. The inhalation of the water by the porous system presented some remarkable peculiarities. When in a state of repose the dermal membrane appeared to be completely imperforate, but when about to commence vigorous inhalant action, a slight perforation appeared here and there over its surface, the orifices gradually increased in size until the full diameter of the pores was attained, and their margin then became thickened and rounded. And if a little indigo be infused in the water, it is seen to be absorbed with avidity, and the inhalant action continued for a considerable period, the interior of the sponge becoming strongly coloured by the indigo. After a time the rapid inhalant process ceased, either abruptly or gradually, and a very languid action only remained, and nearly the whole of the pores were closed; when this operation was about to take place, the rounded margin of the orifice lost its form and became thin and sharp, and the circumference gradually melted inwards until the orifice was entirely closed, and not the slightest indication of the organ previously existing remained,—the operation of closing occupying rather less than a minute. When once closed these orifices do not appear to be re-opened, but fresh pores are produced in accordance with the necessities of the animal. The colouring matter absorbed during the period of active inhalation was apparent in the sponge from twelve to eighteen hours, and during this period the stream from the osculum when partially expanded was extremely languid. The author concluded by observing, that the structure and habits of the fresh-water sponges were in perfect accordance with those of the marine species.

NOTES OF A VISIT TO MITCHELSTOWN CAVES. BY E. PERCIVAL WRIGHT, ESQ.

In company with Mr. Halliday, Mr. Wright, in the early part of August, 1857, explored the extensive limestone caverns situated in the valley of Mitchelstown, between the Galtee and the Knockmildown ranges of mountains; the object of his visit being to examine whether any of the curious blind animals, so well known as inhabiting the Carniola and other caves, would be found in Ireland. Mr. E. Percival Wright gave a brief sketch of the geology of the district, of the various blind insects found on the continent and described by Schiodte, and of the Mitchelstown cave, and then stated that in the interior of the cave, and near some small pools of water formed by the dropping from the roof, specimens of a small white Lipura were discovered. This insect comes very near to the species figured by Schiodte, found in Adellesburg Cave; but on a very careful examination by Mr. Halliday many differences were detected, more particularly the total absence of ocelli, fourteen of which are figured by Schiodte on each side of the head of his Lipura; but not a trace of ocelli was found in the Mitchelstown Cave specimens. Schiodte's Lipura, as well as another species of the family (certainly blind), *Tritomuras scutellatus*, had both been ascertained to have an extensive range in the caves of the Austrian territory, and it did not seem so improbable that they should occur in similar situations even in these islands

The Rev. Mr. Higgins inquired if it were Mr. Halliday's conviction that the blind insects found in these caves were truly species, or not rather insects which had strayed from the light, and, being confined in these caves, lost an organ which was no longer of any use to them.

Mr. Halliday replied, that these animals possessed other organs besides eyes which distinguished them as species; and there could be no doubt they had been created for the special circumstances in which they were found.

Dr. Harvey remarked on the curious fact of many of these caves containing species peculiar to themselves. The same limited distribution of species was found in many other forms of animals. Thus many of the Unios (Mollusca) of the rivers of America were peculiar to the one river in which they were found.

A LIVING LOCUST (GRYLLUS MIGRATORIUS).

The President of the Association exhibited to the Section a living locust, which had been taken in the grounds of Trinity College, Dublin, a few minutes previously.

Mr. Halliday stated that this was the *Gryllus migratorius*, the common locust. It was abundant in the East, where it produced great destruction, especially on the borders of the Mediterranean. It was fortunately only an occasional and not a very common visitor in this country. It is eaten by the Arabs. Two different species from this occurred in the interior of Asia and America. When they arrive in this country they do not breed here.

ON THE EMBRYO STATE OF PALINURUS VULGARIS. BY MR. R. Q. COUCH.

The metamorphoses of the decapod crustaceans may now be considered as established by observation made in every part of the world. The first announcement of the discovery came from Ireland, from experiments made near Cork by the late Mr. J. V. Thomson. The form under which the young decapods first appeared was announced as belonging to the genus *Zoea*, and all subsequently public observations have confirmed this. But in *Palinurus vulgaris* there is an important exception. Mr. Couch has during the past summer again investigated the point, and has bred many thousands in confinement, and has under the microscope seen them escaping *ex ovo*. The young of *Palinurus vulgaris* differs from every other species with which he is acquainted. On escaping *ex ovo* the different parts are very obscure, from being so closely folded together. But in a few minutes they are sufficiently spread out to become recognisable by a moderate magnifying power. The carapace is globularly oval, and slightly pointed or produced both at the anterior and posterior margin, and is also slightly contracted anteriorly so as to give the appearance of a rostrum. The abdomen is moderately long, and from four of the six annulations of which it is formed arise eight pairs of tendril-like appendages. The lateral margin of each ring is expanded into a thin projecting process, from which the articulated appendages arise. These tendrils are long, slender, and dichotomous. Their double character commences at the third joint, and afterwards they are nearly of equal length, and

are covered with strongly marked spines, termination pointed. The caudal extremity is simple, contracted, pointed, and somewhat oval. On the centre of the rostrum is a dark spot. The eyes are on enormously long and stoutly club-shaped peduncles, which are attached by very narrow and slender points. The pedunculated eyes are about two-thirds as long as the carapace. The contrast between the present species and that of others is very great. In them the eyes are sessile, in this enormously pedunculated; in them the feet are beneath the carapace, in this they are attached to what, for clearness, he calls the abdominal rings. Mr. Couch would place it in *Phyllosoma* of Milne-Edwards, belonging to the Stomapodes.

ON THE LOTUS OR SACRED BEAN OF INDIA. BY DR. BUIST.

This plant belongs to the natural order Nelumbiacæ, and is allied to the water lilies, and is the *Nelumbium speciosum* of botanists. Dr. Buist states that there are three species of this genus at least. The only variety he had observed in India was one with pale rose-coloured flowers, which when full blown, but not open, formed a globe of from six to seven inches in diameter. The leaf is from fourteen to sixteen inches long, the leaf and flower stalks together from six to eight feet in length. The leaf and flower stalks abound in spiral vessels, which Dr. Wright says are extracted and burnt by the Hindús in the lamps placed before the shrines of their gods. Dr. Buist, however, states his conviction that all the spirals of all the lotuses of India, from the Himalayas to the Line, would not make a lamp-wick a yard long of the thickness of the finger. The stalks are full of air, the leaves buoyant and floating, the flowers small, like the Tonquin bean. After describing the external appearance and uses of the plant, the author proceeded to describe—1. *The internal structure of the root, flower, and leaf-stems.* The stalks are filled with air, and in their construction care is taken to prevent the percolation or introduction of water. 2. *Repulsion of water from the leaves.* This depends upon the surface of the leaves being covered with a fine fur of silvery hair, like papillæ, which, when magnified, show themselves in the form of a succession of beads, diminishing in size towards the apex. It is this structure which entangles and retains the air, and thus obtains a high degree of buoyancy. It is the same structure which enables the rose, clover, and young cabbage-leaves, young shoots of grain and grass to exhibit the pearly forms of dew-drops, and to repel water from their surface. The same structure performs the same function in the wings of diving birds. 3. *Respiration of the lotus.* The lotus leaves constantly give out air from their surface, which Dr. Buist has not examined. He found that one plant gave out from a cut stem 33 cubic inches of air in an hour. The greatest quantity of this air was given off two hours after sunrise.

Section of Geography and Ethnology.

ON THE MACROCEPHALI. BY DR. MINCHIN.

The statements of Hippocrates regarding a tribe of men whose heads presented an altogether different cranial outline from those of the ancient Greeks presented much difficulty when compared with the writings of Strabo, Pliny, and others, upon the subject. In 1850, Dr. Cecil Meyer said that up to that period only three macrocephalic heads were known, viz., one found by Rathke, another by Baron Asch, and the third by Rudolph Wagner. From Hippocrates, it appeared that no other race of men had heads like the macrocepali: that their cranial elongation arose from artificial compression by means of bandages, etc.; that in the course of time Nature took the matter into her own hands, so that bandages had nothing to do with it: that those men who had the longest heads were considered the most noble, and that after a certain time these usages fell into disuse, owing to intercourse with other men. Dr. Minchin then described the three skulls alluded to by Meyer, as the only specimens of the macrocephalic shape. He then referred to the description by Strabo of the shape of the long head. He said: "The long head is necessitated by ossification of the sagittal suture. The closure of this suture is for the most part perfect, and is felt through the integuments in the form of an elevated ridge." He then proceeded to describe a boy then living in Berlin, whose head was a perfect example of this formation. Dr. Minchin then proceeded to review the statements of Strabo and others as to the macrocephali, and argued that it was highly improbable that the form of head which they undoubtedly possessed could be caused by the use of compression in youth, for notwithstanding the prevalence of skull compression in different parts of the globe, yet in no place had travellers found that the overhanging forehead for which the macrocephali were distinguished, was caused by the use of bandages. He then expressed it as his opinion that the macrocephalic head was not the result of compression, but was a peculiarity which existed from birth. That shape, which may have been originally produced by artificial means, became afterwards not only hereditary, but absolutely congenital. This skull should not be considered a type of a series, of which the individuals were characterised by the following features:—Smallness of biparietal measurement, great antero-posterior elongation, frontal region overhanging the face, and congenital absence of the sagittal suture, this last being the determining cause of which all other characters were the distinguishing results. To the present day numerous instances of this conformation were found. He himself first noticed these peculiar radiating lines which indicated a central ossific origin of the os bregmatis. Every day fresh instances were springing up which showed this remarkable shape of head was not the exponent of physical degeneracy.

ON THE INFLUENCE OF THE GULF STREAM ON THE CLIMATE OF IRELAND. BY PROFESSOR HENNESSY.

Professor Hennessy showed on a large map of the British Isles the isothermal lines, or lines indicating the equal degrees of temperature; and these ran, not horizontally in the direction of the parallels of latitude, as might be expected, but in curves almost concentric, and following very nearly the windings of the coast. These curves were laid down from the results of a long series of observations on the climate and temperature, by Dr. Lloyd, the President of the Association; and one of these results, founded on a series of both day and night observations, was, that the mean temperature of the sea off the west coast of Ireland was four degrees higher than the main temperature of the land. All these facts were easily explained by the phenomenon of the Gulf Stream, or warm current of water, which, as was well known to navigators, flowed from the Gulf of Mexico in the direction of this country and the north-west coast of Europe. That current of water, heated in the warm regions where it commenced, exercised its influence very sensibly on the atmosphere, raising its temperature, and charging it with vapours, which were known to give out a certain amount of heat. In Mr. Wilde's historical *Report on the Diseases and Cosmical Phenomena of Ireland*, presented with the Census returns, they read of several extreme changes of temperature having taken place in remote ages in this country; and those might have been caused by the temporary deflexion or deprivation of the Gulf Stream, arising from some perturbation in the tropical regions, and leaving this country for the moment in the same position it would be in if no gulf-current existed.

Section of Mechanical Science.

REPORT ON THE DEVELOPMENT OF HEAT IN AGITATED WATER. BY MR. G. RENNIE.

Mr. Rennie, in alluding to his former papers on the subject, read before the section last year, at Cheltenham, stated that the subject of the mechanical or dynamic force required to raise a given quantity of water one degree of Fahrenheit had long been the object of the research of philosophers, ever since Count Rumford, in his celebrated experiments on the evolution of heat in boring guns when surrounded by ice or water, proved the power required to raise one pound of water one degree, and which he valued at the dynamic equivalent of 1,034 lb. M. Moya was the first who announced that heat was evolved from agitated water. The second was Mr. Joule, who announced that heat was evolved by water passing through narrow tubes, and by this method each degree of heat required for its evolution a mechanical force of 770 lb. Subsequently in 1845 and 1857, he arrived at a dynamical equivalent of 772 lb. These experiments had since been confirmed by other philosophers on the continent. In the present paper, Mr. Rennie stated that his attention was called to the subject by observing the evolution of heat by the sea in a storm, by the heat from water running in sluices. He, therefore, prepared an apparatus similar to a patent churn. In the first case he experimented on fifty gallons, or 500 lb. of water, inclosed in a cubical box, and driven by a steam engine instead of a weight falling from a given height, as in Mr. Joule's experiment; secondly, on a smaller scale, by 10 lb. of water inclosed in a box. The large machine or churn was driven at a slow velocity of eighty-eight revolutions per minute, and the smaller machine at the rate of 232 revolutions per minute, so that the heat given off by the water in the large box was only at the rate of three and a half degrees per hour, including the heat lost by radiation; whereas the heat evolved by the ten gallons of water

contained in the small box agitated at 232 evolutions was fifty-six degrees Fahrenheit per hour. Thus the temperature of the water in the large box was raised from sixty degrees to 144 degrees, and the temperature of the water in the small box to boiling point. As an illustration, an egg was boiled hard in six minutes.

Section of Mathematical and Physical Science.

On a law of temperature depending upon lunar influence. By Mr. J. P. Harrison.

The author commenced by saying that, although the question of lunar influence on the atmosphere of our planet was very generally considered as set at rest by the investigations of M. Arago, yet he felt very confident that he was in a position to prove the law he was now about to announce without fear of contradiction. He had reduced and thrown into the form of tables and of curves 280 lunations, with the corresponding mean temperatures; and the laws at which he had arrived were, first, between the first and second octant the temperature immediately after the first quarter, both on the average and also, with rare exceptions, in each individual lunation is higher than the temperature shortly before the first quarter; secondly, and more particularly the mean temperature of the annual means of the second day after the first quarter (or the tenth day of the moon's age) is always higher than that of the third day before the first quarter (or the fifth day of the lunation). The tables and curves accompanied the essay, which illustrated these laws at great length.

On the electro-dynamic induction machine. By the Rev. Professor Callan.

After stating that he had discovered the induction coil in 1836, that in 1837 he had devised an instrument for getting a rapid succession of electrical currents from the coil, and that thus he had completed the coil in 1837, as a machine by which a regular supply of electricity might be furnished, he said that he would lay before the Association the results of a long series of experiments on the induction machine. The first of these results is a means of getting a shock directly from the armature of a magnet at the moment of its demagnetisation, by using, not a solid piece of iron, but a coil of very fine insulated iron for the armature of an electro-magnet, between the poles of which the coil would fit. When the helix of the magnet is connected with a battery, the armature is magnetised on account of its proximity to the magnetised iron; and when the battery connexion is broken, if the ends of the insulated iron wire be held in the hands, a shock will be felt. The second result is the discovery of the fact, that if iron wires be put into a coil of covered copper wire, the ends of which are connected with a battery, and if another coil be connected with the same battery, the quantity of electricity which will flow through the latter will be greater when the first coil is filled with iron wires than when they are removed. The third result is, a core for the primary coil, which consists of a coil of insulated iron wire, and which has five advantages over all the cores in common use. First, there is no complete circuit for any electrical current excited in any section of the core, because all the spirals of the coil are insulated from each other, and no spiral returns to itself. In the common cores, even when the wires are covered with thread, there is a complete circuit for every current induced in each section of every wire. Secondly, the currents in the various sections of the iron do not oppose each other; but the currents in each section of every wire are opposed by the currents flowing in the surrounding wires. Thirdly, in the iron coil all the currents in the various spirals flow in the same direction, and form one strong current, which may be used by connecting the ends of the coil with any body to which we wish to apply its force. But in the common cores all the currents in the sections of each wire remain within the wires, and cannot be used. Fourthly, the effect of the condenser on the currents produced in the iron core can be ascertained when an iron coil is used, but not with the common cores. By using an iron coil as a core, it is found that the condenser increases the intensity of the currents induced in the core. Fifthly, the ends of the iron coil, used as a core, may be connected with the coatings of a Leyden jar, and then the sparks from the coil are diminished in length, but increased in brightness. By the use of cores consisting of coils of insulated iron wires, electrical currents of considerable quantity and intensity may be obtained. These currents of quantity and intensity may answer for working the Atlantic telegraph, and for producing the electric light. Besides the cores just described, and the common core, Professor Callan used three other kinds of cores: viz., a flat or elliptical bundle of wires; a core made by coiling uninsulated iron wire on an iron bar; and a core consisting partly of a bundle of iron wire, and partly of a coil of insulated iron wire. The fourth result of his experiments is a new mode of insulation, in which imperfect insulation is used when imperfect insulation is sufficient, and perfect insulation is employed where such insulation is required. The advantage of this mode of insulation is, that each spiral in the secondary coil is brought nearer to the other spirals, as well as to the primary coil and core, than it can be in the common method of insulation, without at all diminishing the efficiency of the insulation. A coil in which the secondary wire was iron, and insulated in the manner described, was shown to the meeting, which, with a single cell, six inches by four, gave sparks half an inch long without a condenser. The insulation of the large condensers made by Professor Callan, in which the acting metallic surface of each plate exceeded 600 square feet, gave way before the coil which he exhibited was made; and, therefore, he could not say what the length of the sparks would be with the aid of a condenser. But were a condenser of the proper size to have the effect of increasing the sparks in a thirty-fold ratio, as in M. Gassiot's great coil, the length of the sparks produced by Professor Callan's coil with a single cell should be fifteen inches. The outer diameter of the coil was about four inches, its length twenty inches, and the length of the secondary coil about 21,000 feet. The fifth result is, a contact-breaker in which the striking parts are copper, and which acts as well as if they were platina. The sixth result is a mere explanation of the condenser, which is confirmed by the effect of the condenser on the electrical currents produced in the core. The last result consists in the discovery of some new facts relating to the condenser, from some of which it follows, that the ordinary mode of making the condenser is defective; for condensers are generally made so that the entire surface of each of the metallic plates must act. But the condenser for every coil should be constructed in such a way that a small, or a considerable part, or the whole of the surface of each plate may be applied to the coil. For a large condenser which would make the effect of a coil excited by a single cell less than it would be without a condenser, will increase the effect of the same coil when it is connected with a battery of 10 or 12 cells.

Professor W. B. Rogers gave a brief account of the construction and effects of a very powerful induction apparatus, devised by Mr. E. S. Ritchie, of Boston, United States. In this the secondary coil is formed by winding the wire in such manner as to make a series of flat spirals, having each the thickness of a single wire, and thus building up the coil by thin transverse strata. The primary coil is covered by a gutta-percha tube, and this by a closely fitting bell glass, knobbed at the upper end, and having a widely expanded lip below. Over the whole is placed the secondary coil. By this arrangement the discharge between the core and the secondary coil is effectually prevented. Very perfect means are used for preventing any discharge within the secondary coil, between its different parts. With a secondary coil of 30,000 feet of wire, No. 34, and using one Bunsen cell, this apparatus gives a spark six inches in length. When the coil is increased to 50,000 or 60,000 feet and four cells are used, the spark is lengthened to upwards of ten inches, and has been passed continuously through an interval of 10⅝ inches. The primary coil is formed of No. 9 wire, and about eighty feet in length. The condenser, made of tin-foil separated by oiled silk, has a surface in this larger apparatus of about thirty feet. Professor Rogers referred to the very superb phenomena produced by the passage of the current through an exhausted tube of great length and diameter, and those exhibited by the beautiful arrangement known as Gassiot's Cascade, which, with other phenomena of electrical light, were developed by this apparatus with a splendour perhaps never before equalled.

On improvements in Grove's battery. By Professor G. J. Stoney.

In the ordinary Grove's battery, if any accident occur to any one cell or plate, it cannot be removed from the battery without taking down, cell by cell, the whole system that precedes it. Much inconvenience, also, is experienced from the fuming of the acids when the operator has finished his day's work, and in taking the plates in the ordinary manner each out of its place and dipping it into water. In the improvement which Professor Stoney has devised, stout iron wires are bent into the form $\mathcal{S}$ To 1 and 2 plates of zinc are soldered, and to 3 a plate ^{123} of platina, and so on with each of the rest of the elements. He had feared there would be much difficulty in sol-

dering the platina plate to the bend of the iron wire 3, but it was found not to be so, as upon dipping the iron into chloride of zinc and then laying the platina plate against it, it was found that the soldering iron, with a small globule of solder, made a perfect joint along the entire extent. To prevent any chance contact of the wire 3 with 1 or 2 of the next element, a little cylinder of gutta-percha was put over each of these wires 3 which carried the platina plate. In putting the elements of the battery together, the platina plate 3 of each element was simply inserted between 1 and 2 of the next element, and so on throughout, and each element was then perfectly distinct from every other, and could be taken out or put in, or the cells belonging to it re-arranged as to charge of acids or otherwise, as occasion might arise, without interfering with the rest. When it is desired to stop work, the whole of these S formed wires, with the zinc and platina plates attached to them, are lifted together out of their cells by an oblong mahogany frame, one side of which slides in a groove, so that the sides at first are at a sufficient distance to go over the entire system of S's, one side of the frame is then brought under one line of the bends of the wires, and the moveable side is then pushed in so as to come under the bends on the opposite side; the entire frame is then lifted with all the plates at once, and they are all plunged together into a trough of water placed near. Thus the fuming is almost entirely avoided.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Fox. On September 20th, at Berkeley Square, Bristol, the wife of *Edward Long Fox, M.D., of a daughter.

Hogg. On September 22nd, at 14, Finsbury Place South, the wife of Charles Hogg, Esq., Surgeon, of a son.

Izod. On September 21st, at Mortimer, near Reading, the wife of Freeman Izod, Esq., Surgeon, of a daughter.

Neale. On September 21st, at 18, Westbourne Terrace, Eaton Square, the wife of W. M. Neale, Esq., Surgeon, of a son.

Nichol. On September 18th, at Denmark Hill, Surrey, the wife of R. Nichol, M.D., of a son.

Valpy. On September 20th, at 9, Bedford Street, Bedford Square, the wife of William Henry Valpy, Esq., Surgeon, of a daughter.

MARRIAGES.

Bowen—Norris. Bowen, Simon Surman, M.D., of Tewkesbury, to Charlotte Mary, second daughter of Henry Norris, Esq., of Charmouth, on September 12th.

Fotherby—Ewen. Fotherby, Henry J., M.B., of Trinity Square, London, to Marie Jane, eldest daughter of *Henry Ewen, Esq., F.R.C.S., at Sutton St. Mary, Lincolnshire, on September 17th.

Hester—Morland. *Hester, James Torry, Esq., Surgeon to the Radcliffe Infirmary, Oxford, to Ellen, youngest daughter of the late Benjamin Morland, Esq., at Shebbington, Bucks, on September 22nd.

Humpage—Dickson. Humpage, Edward, Esq., Surgeon, of Well Street, Hackney, to Janet Emma, eldest daughter of the late James Dickson, Esq., of Hamilton Place, New Road, at Hackney, on September 22nd.

Jones—Meikleham. Jones, Richard Francis, Esq., of Liverpool, to Euphrasia Oriana, daughter of the late William Meikleham, M.D., of La Pique, Trinidad, at Dunfermline, on September 16th.

La Fargue—Cobb. La Fargue, George F. H., Esq., Surgeon, Husbands Bosworth, Leicestershire, to Gertrude, daughter of Thomas Cobb, Esq., of New Romney, Kent, at New Romney, on September 15th.

Lloyd—Williams. Lloyd, Edward, M.D., of Suffolk Place, Pall Mall, and Ty-yn-y-Rhyl, Flintshire, to Matilda Susanna, widow of the late W. Williams, Esq., of Aberpergurn, Glamorganshire, at St. George's, Hanover Square, on September 17th.

May—Lowe. May, Thomas, Esq., of Durdlam Down, Bristol, to Charlotte, widow of the late *Edward William Lowe, Esq., Surgeon, of Congleton, Cheshire, at Plymouth, on September 17th.

Walton—Walker. Walton, James Edwin, Esq., to Emma Elizabeth, only daughter of the late B. G. Walker, M.D., of Colchester, at Islington, on September 15th.

DEATHS.

Anderson. On September 20th, at Albion Street, Hyde Park, Jane, Lady Alderson, widow of the late Sir James E. Anderson, M.D., aged 62.

Bowling, John Pierce, Esq., Assistant-Surgeon 56th Regiment Bengal Native Infantry, youngest and last surviving son of the late *John Bowling, Esq., of Hammersmith, killed at Cawnpore, on June 27th: also, supposed to have fallen about the same time, Charlotte, wife of the above J. P. Bowling, Esq.; and William Kinsey, their infant son.

Carpenter. On September 19th, at Amersham, aged 7 weeks, Harry, infant son of W. G. Carpenter, Esq., F.R.C.S.

Garner, Heartwell, M.D., 12th Irregular Cavalry, massacred at Segowlie, on July 23rd: also, at same time and place, Susan, wife of the above Dr. Garner; and one of their children.

Hall. On September 16th, at Exeter, Charlotte Cotton, wife of William Hall, M.D.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, September 17th, 1857:—

Harris, Alfred Hunt, Butterfield
Smyth, David, Brighouse, Yorkshire

HEALTH OF LONDON:—WEEK ENDING SEPTEMBER 19TH, 1857.

[From the Registrar-General's Report.]

After the summer heat, and when the conditions that attend it, and that are so fatal to children, are to some extent removed, London begins to enjoy a period of health, in which the mortality is usually lower than at any other time of the year, except the months of May and June. In conformity with this rule, the deaths which were previously above 1000, and in July rose above 1200, fell in the week that ended on Saturday (September 19th) to 946. It is further to be observed, that though diarrhœa continues to exhibit more than its ordinary degree of prevalence, the health of the population generally appears to be better than it usually is in the third week of September, for if the weekly deaths from cholera at two epidemic seasons be withdrawn from the calculation, it will be found that nearly 200 persons survived last week, who would have died if the average rate of mortality, as derived from corresponding weeks in ten previous years, had prevailed.

The number of children born last week exceeded that of persons of all ages who died, by 776.

The fatal cases of diarrhœa now decline more rapidly, as will be seen from the numbers returned during the last five weeks, which were: 215, 198, 181, 144, and (last week) 111. Only three deaths, two of which were those of children, are referred to cholera; eight to dysentery. Small-pox was fatal to only two children; measles to 19, of whom 13 died in the central and east districts; scarlatina to 39, of whom 26 died in the same districts. The deaths from typhus and common fever are 53. Nineteen persons died of cancer, six of hernia, two of diabetes, ten women from diseases incidental to child-bearing, one of whom, a young woman of 18, died from puerperal convulsions, in consequence of excessive joy; a girl, of 2 years, died from mumps; a house painter from painter's colic; a girl who had lived ten years with spina bifida; one person from carbuncle; three from delirium tremens; and one from intemperance. Two widows died at the ages respectively of 91 and 92 years, the oldest persons in the return of the week.

Last week the births of 883 boys and 839 girls, in all 1722 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1445.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·041 in. The mean daily reading was above 30 in. on the last five days. The greatest barometric pressure was 30·24 in., on Saturday. The mean temperature of the week was 62·1°, which is 5·6° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean temperature was above the average on every day of the week, and on Wednesday and Thursday the excess was about 10°. On the latter day, the highest point of the thermometer in the shade was attained, viz., 80·7°; the

lowest point was 48·9°, and was obtained on Saturday. The whole range of the week was therefore 31·8°. The mean dew-point temperature was 57·9°; and the difference between this and the mean air temperature was 4·2°. On Thursday, the thermometer in the sun rose to 104·8°. The wind was nearly always in the south-west, till Friday afternoon, when it changed to north-east. There was rain to the depth of 0·25 in., on Monday; none on any other day.

Queen's College, Birmingham. The Examiners for honours in the respective departments of this College have declared the following awards:—The Degree of Bachelor of Civil Engineering (B.C.E.), which the Council, under Royal Charter, is empowered to confer—Tuxford, Boston. The Warneford Theological Scholarships, four in number, £10 each, to be conferred upon students "who have resided in College not less than three terms, and who shall, in the judgment of the Council, be most deserving"—Robinson, Godson, and Hill. The Warneford Medical Scholarships, "£10 each, to be held for two years, to be conferred upon students who have resided in the College at least twelve months, who have been distinguished for their diligence and good conduct, and who have been regular in their attendance on Divine service in the College Chapel"—Harris, Reading; and Abbey, Wellingborough. The Warneford Gold Medal, value £20, for an essay on an anatomical, physiological, or pathological subject, to be handled in a practical or professional manner, and according to those evidences of facts and phenomena which anatomy, physiology, and pathology, so abundantly supply, but always and especially with a view to exemplify or set forth by instance or example "the wisdom, power, and goodness of God," as revealed and declared in Holy Writ; subject, "The Anatomy and Physiology of the Kidney"—Mould, Tutbury. The Principal Booth's Prize, 10 guineas annually (books), to be adjudged to the best clinical, medical, student, alternately in the College, by the majority of the hospital physicians and surgeons, æquales—Mould, Tutbury, and Wilders, Birmingham. The Baron Webster Prize, 5 guineas annually (books), for proficiency in the French language—Holland. The Clay Prize, 5 guineas annually (books), for Prize Essay; subject, "The Anatomy, Physiology, and Pathology of the Placenta"—Lloyd, Birmingham.

The following prizes have also been awarded:—*Anatomy*—Bracey (medal); Dunn (certificate). *Physiology*—Senior Class—Mould (medal); Bracey (certificate); Junior Class—Lloyd (medal); Herbert (certificate). *Practical Anatomy*—Dunn (books); Bracey (certificate). *Chemistry*—Mould (medal); Bracey (certificate). *Materia Medica*—Herbert (medal); Lloyd) certificate). *Medicine*—Wilders (medal); Mould (certificate). *Surgery*—Mould (medal); Jordan (certificate). *Forensic Medicine*—Wilders (medal); Mould (certificate). *Midwifery*—Mould (medal); Lloyd (certificate). *Botany*—Cornbill (medal); White (certificate). *Heslop Stethoscopic Prize*—Wilders (books). *Clinical Prize*—Mould (medal); Wilders (certificate). The public distribution will take place in the College Theatre, by the Principal, Dr. Booth, on the 2nd of October next, when an address on "Middle Class Education" will be delivered by him.

Anæsthetic Substances. Our readers may recollect that a few months ago amylene was recommended as preferable to ether and chloroform in producing stupefaction or anæsthesia, on the special ground that its employment was unattended with danger to the patient, or nearly so. MM. Foucher and Bonnet have, however, in a recent communication, addressed to the Academy of Sciences, recorded facts leading to quite a contrary result. In twelve experiments performed on rabbits they have ascertained that the anæsthetic effect of amylene is produced within three and six minutes after its application. Before stupefaction is produced the animal utters piercing cries, and throws its head backwards; its breathing is accelerated, the globe of the eye is strongly injected and moves convulsively; a tracheal hoarseness always accompanying the above symptoms. The period of insensibility does not last long if the application of amylene be not continued; in the contrary case, however, a complete collapse takes place; the animal, stretched out without motion, obeys every impulse of the hand, and resembles a flabby mass, in which breathing is hardly perceptible. This state may last twenty minutes without causing death. The blood drawn from the arteries during this period still preserves its usual colour. Animals subjected to the action of amylene for a certain length of time continue after the operation in a state of stupor and imbecility, which sometimes lasts seven or eight hours; but in none of the cases observed by the authors of the communication has death followed the application of amylene. The conclusions resulting from their experiments are as follows:—1. Sulphuric ether, chloroform, and amylene are, of all volatile substances experimented on, the only ones that produce anæsthesia. 2. Amylene does not produce stupefaction unless the quantity of air with which it is diluted be very small; but then it acts upon the animal economy, and especially upon the respiratory organs in a manner which may produce dangerous effects. 3. Chloroform has all the advantages of amylene, without the evils which accompany the use of the latter. 4. None of the substances above mentioned produce anæsthesia, whether local or general, when applied to any peculiar part of the body by injection under the skin. (*Galignani's Messenger.*)

A New Food for Bees. Two agriculturists of the Department of the Var observed one day, in the month of May last, that all their bees had left their hives, although the latter were well filled and exceedingly heavy. Towards evening the fugitives returned heavily laden, but on the following morning set out again in a direction which was this time carefully noted by the farmers, who had been watching their doings. They immediately followed them, and soon arrived at a farm where cakes of tilseed, which had been previously subjected to the oil press, were being beaten up into a paste with water, to be used as manure for potatoes. There, to their surprise, they saw their bees clustering round the tubs containing the paste, evidently enjoying a luxury hitherto unknown to them. The lesson was not lost upon the agriculturists, who immediately procured their bees abundance of this food, and have now been rewarded with nearly ten times the usual quantity of produce, besides an immense increase in the reproduction of the insect.

Exploration of Africa. The exploring expedition to the river Niger and its tributaries, in charge of Dr. Baikie, R.N., left the Brass River for the Niger on the 10th of July, all well. The expedition is composed of fifty Kroomen, twenty-five natives of the countries bordering on the Niger and Chadda, and fourteen Europeans, including Dr. Baikie, Lieutenant Glover, Mr. May, and Dr. Davis of the Royal Navy, a naturalist and a botanist from Kew Gardens, with Captain Grant and engineers in the employ of the contractor, Mr. Macgregor Laird. It is said to be the intention of Mr. Laird to form trading posts on the banks of the river, at the most eligible situations for the collection of cotton, shea, butter, and other productions of the interior, provided the climate offers no insuperable obstacles. As by this contract with the Admiralty he is bound to convey deck passengers of the negro race who can read and write English from Fernando Po to all parts below the Niger and Chadda, it is hoped that a new element of civilisation will be introduced into the interior by the return of liberated Africans to their native country in considerable numbers.

Importation of Bones. We a few days ago stated that the brig *Leopoldine*, with a cargo of bones, had been restrained from discharging in consequence of an order in Council of the 27th ult. A reply to a memorial on the subject has since been received from the Privy Council, directing the Board of Customs "to permit the importation of all bones which were shipped, or in course of shipment, or ordered, or contracted for, previously to the said order in Council." The cargo in question has therefore been discharged. (*Northern Daily Express.*)

The Cholera. The *Daily News* states that the cholera has broken out at Hamburgh. Between the 29th of August and the 6th of September there were 239 cases, of which 136 proved fatal.

Army Hospital Corps. A warrant has just been issued from the Horse Guards for the formation of a new corps, to be designated "the army hospital corps"; and when sufficiently organised and in efficient working, it is expected the present "medical staff corps" will be broken up. It is to be formed of soldiers of the line—sergeant-majors, company sergeants, sergeants, and privates—whose pay, according to rank, will be 4*s*., 3*s*., 2*s*., and 1*s*. a-day, irrespective of rations and messing, which are to be supplied free of charge.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

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To CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—MR. H. EWEN; MR. H. TERRY, JUNR.; DR. COOKWORTHY; THE PRESIDENT AND TREASURER OF ST. THOMAS'S HOSPITAL; MR. SANDS COX; DR. T. HERBERT BARKER; DR. COCKLE; MR. T. HOLMES; DR. G. GODDARD ROGERS; DR. H. W. FULLER; MR. W. H. COOKE; DR. GIBB; DR. PRUEN (Penang); MR. H. W. R. DAVEY; MR. W. BRIGHAM; DR. J. R. BENNETT; MR. CUSACK; MR. R. WYNNE JONES; and DR. J. G. SWAYNE.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. The Science and Art of Surgery: being a Treatise on Surgical Injuries, Diseases, and Operations. By *John Erichsen, Esq., Professor of Surgery and Clinical Surgery in University College, and Surgeon to University College Hospital. Second Edition, enlarged and carefully revised. Illustrated by 400 engravings on wood. London: Walton and Maberly. 1857.
2. England and France before Sebastopol, looked at from a Medical Point of View. By Charles Bryce, M.D. London: John Churchill. 1857.
3. A Speech on Medical Reform, delivered by Lord Elcho, M.P., in the House of Commons, July 1, 1857, on the Second Reading of the Medical Profession Bill (No. 1). With Appendix. Pamphlet. London: T. Hatchard. 1857.
4. Observations on the Human Crania contained in the Museum of the Army Medical Department, Fort Pitt, Chatham. By George Williamson, M.D., Staff-Surgeon Second Class. Dublin: McGlashan and Gill. 1857.

ADVERTISEMENTS.

Sydenham Society.--Notice is hereby given, that a SPECIAL GENERAL MEETING of the Sydenham Society will be held at the Society's Rooms, 45, Frith Street, Soho, on Monday, the 5th day of October, at 8 o'clock, p.m., with a view of determining on the propriety of dissolving the Society, or of adopting such other measures as may appear most expedient.

By order of the Council.

Sept. 25, 1857. JAS. R. BENNETT, M.D., Secretary.

N.B. The first Volume of KÜCHENMEISTER on Animal and Vegetable Parasites is now in course of distribution.

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TO ADVERTISERS.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XL.] LONDON: SATURDAY, OCTOBER 3, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

REMOVAL OF A MALIGNANT TUMOUR FROM THE TIBIA: TETANUS: RECOVERY UNDER THE USE OF NARCOTICS AND PURGATIVES.

Under the care of W. FERGUSSON, Esq.

[*From Notes by* P. W. SWAIN, Esq., *House-Surgeon.*]

G. H., aged 20, an agricultural labourer, was admitted on July 24th, under the care of Mr. Fergusson, on account of a large tumour on the right tibia. This tumour was globular, of a firm consistence, and of considerable size, and was firmly attached to the subcutaneous surface of the bone, winding round towards its back part. It had been growing for nine months, without any obvious cause; it was not very painful, but was covered by a number of large veins.

On August 1st Mr. Fergusson proceeded to expose the tumour by an incision. Having continued the incision through it, and finding the tibia of its natural consistence, and the base of the growth accessible, he thought it fair to give the patient the chance of the minor operation of excision before resorting to amputation. The knife and bone-forceps were used to cut through the base of the growth; and on its removal a healthy surface of bone was exposed. The tumour was thought, both from its external appearance, and from a careful microscopic examination which was made by Mr. Hulke, to be of a medullary character: it had its origin in the periosteum.

The man went on without any alarming symptoms until August 20th, when he complained of stiff neck, and thought he had caught cold. He was ordered some Dover's powder, and mustard poultice. Next day the stiffness was not relieved, and he had great difficulty in opening his mouth.

℞ Pilulæ colocynthidis comp. gr. x; olei tiglii ♏ ij. M. Fiant pilulæ ij statim sumendæ.

℞ Pulveris opii gr. i; extracti hyoscyami gr. ij. M. Fiat pilula 6tis horis sumenda.

August 22nd. His manner was nervous and restless. Pulse 124. He could open his mouth only about a quarter of an inch; he bit his tongue once or twice during the night. The bowels had been opened by the croton oil. A liniment of soap and chloroform was ordered to the spine.

August 23rd. He had occasional spasms of the legs, and had great difficulty in swallowing.

For the next week the symptoms continued much the same; the chloroform liniment was applied so as to produce slight irritation of the skin, and the bowels were kept freely open with croton oil, colocynth, turpentine, etc. He slept well, but there was no improvement in the movement of the jaws or power of swallowing. The left leg was continually rigid; the right was flaccid. There were twitchings of the face, and great rigidity of the abdominal muscles.

August 30th. The left lower extremity was still very rigid, the rigidity commencing just below the groin; and the other symptoms continued unrelieved. He was ordered to have a liniment of equal parts of soap liniment and chloroform.

℞ Quinæ disulphatis gr. iij; acidi sulphurici dil. ♏ v.; liquoris morphiæ hydrochloratis ʒss*. M. Fiat haustus 6tis horis sumendus.

An enema of castor oil was also ordered.

He commenced to improve, and went on improving for the next three days.

September 4th. He could open his mouth one inch; his neck was not so stiff as before; there were no twitchings of the face; the muscles were not so rigid; those of the leg not at all so; and there was no recurrence of the spasms.

September 10th. The tetanus had entirely disappeared, leaving only a certain amount of weakness.

The morbid growth, however, is reappearing in the wound. To this Dr. Fell's paste is being applied.

REMARKS. We gave in a recent number (JOURNAL, p. 747) the notes of a case of tetanus, in which the patient lived so much beyond the usual time that it was hoped that he might recover. This was under the antiphlogistic treatment; viz., active purgatives and blood-letting. In that case, however, general symptoms of acute inflammation were present which were wanting in the one before us, and the indications to be followed were therefore quite different. In fact it seems unreasonable to talk, as is generally done, of tetanus as if it were really a substantive disease. Tetanus, on the contrary, is only one form of spinal convulsions, and may be symptomatic of as many different and opposite states of the spinal cord and the blood which supplies it, as cerebral convulsions are known to be in regard to the brain. Hence it seems unlikely, *à priori*, that one plan of treatment should be applicable to all cases; nor are we to wonder that patients recover under all plans. In this case, although purgatives were freely employed, the greatest reliance was placed on narcotics, opium, morphia, etc., and the local use of chloroform was thought to have produced benefit. There is all reasonable ground for attributing the recovery to the treatment, as the symptoms seemed always relieved by the use of the remedies; and the recovery went hand in hand with the establishment of their full action.

ST. GEORGE'S HOSPITAL.

EFFUSION OF BLOOD INTO THE CAVITY OF THE ARACHNOID: DIFFICULTY IN DETERMINING WHETHER THIS WAS THE RESULT OF VIOLENCE OR OF DISEASE.

Under the care of H. W. FULLER, M.D.

[*From the Hospital Case-book.*]

MARY M., a married woman, aged 32, was admitted on August 29th, under the care of Dr. Fuller. All that was ascertained at the time of her admission was that she had been ill about twelve days; that the illness commenced with "a fit" of some kind; and that, since "the fit", she had been almost entirely unconscious. It was, however, asserted that she had received a blow; but no history of this accident could be obtained. On admission, it was seen that the right arm was paralysed. The right pupil was much larger than the left. There were slight marks of ecchymosis on the right side of the face, near the eye. She was almost entirely unconscious, but could be made to put out her tongue by speaking loudly. She was purged with calomel and jalap; a large blister was put on the nape of the neck; and a mixture containing aloes, tincture of cantharides, nitre, and acetate of potash, was given three times a day. Next day the left arm was found to be paralysed, while it was stated that the patient could adjust the bedclothes with the right. Eight leeches were now applied around the right eye, and blisters behind the ears. The comatose condition continued, and she died in the evening.

On *post mortem* examination, fourteen hours after death, no marks of violence were observed externally. The skull-cup was thick and dense. On removing it, the dura mater was seen raised up on the right side by an enormous effusion of blood into the arachnoid cavity. This effusion was strictly

* One drachm of this solution contains gr. i of hydrochlor ate of morphia.

limited to that side of the head; it extended into the base, and covered the whole hemisphere. The blood was partly fluid, partly clotted, and adherent pretty firmly to the parietal arachnoid; but none was decolorised. The source of this hæmorrhage remained obscure. The vessels of the brain, both at the base and vertex, seemed quite healthy. Most of the branches, of any considerable size, were followed as far as possible; but no lesion was seen. The capillaries of the pia mater were examined microscopically, but were found quite healthy. The substance of the brain was healthy, and quite free from ecchymosis. The convolutions on the opposite (left) side were flattened, and the cerebral substance pale. On section, the left lateral ventricle was found much enlarged, and distended with clear serum. The right lateral ventricle was nearly obliterated by the pressure from without, the central bodies being brought nearly into contact with the septum. The latter also was displaced, and pushed considerably over beyond the middle line. The central parts of the brain were healthy. Some vascularity was noticed in the scalp on the right side, but no trace of injury to either the soft parts or bones was found, though carefully looked for.

Remarks. The above case is an extreme instance of the difficulty sometimes experienced in distinguishing cerebral hæmorrhage, the result of injury, from that which follows disease. Of this we gave an instance some time ago, in a case which occurred at St. Bartholomew's, where there were no external signs of injury, and (whether from accident or design) no history was forthcoming. There, however, the dissection clearly proved the nature of the case, inasmuch as it revealed the existence of a fracture of the skull lacerating the meningeal artery (Journal, p. 407). Here matters stood on a very different footing. The history given was very imperfect, and, there was good reason for believing, was intentionally false; for it seemed, from the report which was afterwards given at the Hospital by a gentleman who had been called in to attend the unfortunate woman at the first onset of the symptoms, and who appeared to have given great attention to the case, that the patient was seen quite well just before a quarrel which she had with her husband, in which the latter confessed that he had struck her, but asserted that she was drunk at the time. After this he went out, and left her locked up in her room, where she was found by some neighbours (whose suspicions were aroused, and who forced an entrance, many hours later) almost entirely insensible (in fact, much in the same state of semi-consciousness in which she remained up to the time of death), and with an extensive bruise on the right side of the face—the same side on which the paralysis was afterwards found to exist. All these facts were consonant with what was observed afterwards by the medical attendant, and rendered it highly probable, to say the least, that the appearances were due to violence. Assuming this to have been the case, the lesion was a very rare one, viz., the rupture of some considerable vessel in the pia mater (for there is little doubt that some large trunk must have been opened, from the entire absence of any sign of bruising), without any injury to the bones or to the cerebral substance. It is true that the other hypothesis—viz., that the effusion was the result of disease—presents almost as great difficulties, seeing that every artery which was seen was perfectly sound and healthy, that the brain was quite unaffected, and that there was no visceral disease in any part of the body which could have interfered with the cerebral circulation. No coroner's inquest was held at the time, as the suspicious circumstances did not come out till after the removal of the body from the Hospital; and, though the exhumation of the body was spoken of (for the case created much excitement in the neighbourhood in which it occurred), it seemed so little likely that this proceeding would throw any light upon the case, that the coroner declined to order it. In fact, the obscurities in the history were sufficient, as it would appear, to preclude all hope of arriving at any conclusion as to the cause of the lesion, even allowing that it could be proved to be of traumatic origin; for the man's confession that he gave her a slight blow could not be used to prove more than this against him. Now, no one could take upon him to say that such a blow would be likely to cause the injury above described; while, if the woman had been left by herself for some hours in a state of intoxication and excitement, she might easily have injured herself accidentally. As the case excited a good deal of attention, and is interesting in a medico-legal point of view, it seemed worth while to lay it before our readers at some length.

ST. MARY'S HOSPITAL.

COMPOUND FRACTURE OF THE FRONTAL BONE: LATENT PYÆMIA.

Under the care of S. Lane, Esq.

[*From Notes by* E. A. Hart, Esq., *House Surgeon.*]

Arthur J., aged 52, presented himself on August 19th, at the out-patients' room of St. Mary's Hospital, on account of an accident in which he had been kicked in the face by a horse, and suffered a compound fracture of the frontal bone forming the roof of the right orbit. He had been stunned for a few minutes. On examination, a small irregular wound was found near the root of the nose on that side, leading to a comminuted fracture at the inner side of the roof of the orbit. There were three loose portions of bone; two of which, as they were detached from all connexion with the deeper parts, were removed; but the third remained attached on its upper or deep surface, and was therefore left. The man appeared to suffer little inconvenience from the accident, was quite collected and cheerful, had walked into the Hospital, and insisted on walking home again to provide himself with the things necessary for his stay in the Hospital. It was impossible to prevent his doing this. In due course he returned, and for the first two days everything went on well. The wound, under simple treatment, quite healed, leaving only a little œdema over the seat of fracture; he complained of no pain in the head, and seemed to be almost recovered.

On the 8th day he began to complain of pain in the calf of the right leg, where however there was no external appearance of injury or inflammation. No symptoms had preceded this except wandering pains in the head and arm. He had been put on a very mild course of mercury, and had presented no head symptoms.

On the 11th day, pain was complained of in the right knee. He began to sink into a semicomatose state, and died rather suddenly in the morning of September 5th.

Post mortem examination showed the presence of pyæmia, pus being found both in the calf and knee-joint.

Remarks. The principal interest connected with this case was in the singular course which the blood disease followed. It used to be taught that the occurrence of pyæmia was indicated by a certain change in the granulations or secretions of the wound, which was to present a grayish colour, with receding granulations, imperfectly formed or suppressed discharge, etc. More extended observation has shown that this sign is little to be relied on; but it is rare to notice the occurrence of pyæmia attended with such very obscure and doubtful symptoms, and not pronounced until the wound has healed and suppuration from it has some time ceased.

ST. BARTHOLOMEW'S HOSPITAL.

SPONTANEOUS DISLOCATION OF BOTH HIPS AFTER FEVER, WITHOUT DISEASE OF THE BONES.

Under the care of W. Lawrence, Esq.

[*From Notes by* W. Chippendale, Esq., *House-Surgeon.*]

Martha M., a child, aged 12, was admitted on May 24th, under the care of Mr. Lawrence, in a very feeble state from fever. After six weeks stay in the Hospital, the head of the left femur was found to be dislocated. It was immediately reduced under chloroform without difficulty, and a straight splint was applied for one month; but on removing it, the head of the bone was found again on the dorsum ilii. It was again reduced, and the long splint applied. Six weeks after she left, the head of the right was found to have escaped from the acetabulum and to be on the dorsum ilii. This was treated in the same way, but the dislocations recurred, and both capita femoris remained dislocated on the dorsum of the bone.

Remarks. We adduce this case as an example of relaxation of the ligaments of a large joint, to such an extent as to permit the luxation of its articulating surfaces, from simple weakness, the result of exhausting disease, analogous to those displacements of the vertebræ which occur from a similar cause in persons of relaxed fibre. The case is the only one of the kind which we remember to have met with in the hip-joint, and may deserve a place as illustrating the pathology of affections of the joints.

Original Communications.

ON INTRAUTERINE FRACTURES: WITH AN ILLUSTRATIVE CASE.

By T. Herbert Barker, M.D., F.R.C.S., Bedford.

[*Read before the South Midland Branch, May 21st, 1857.*]

[*Concluded from page 809.*]

Cause of Intrauterine Fractures. It will have been remarked, that in the majority of the cases described in the preceding part of this paper, the fractured condition of the fœtal bones was attributed to some kind of injury inflicted on the abdomen of the mother in the latter months of pregnancy. This observation, while it deserves to be remembered, does not claim such serious consideration as a cause of the accident to the child, as might at first sight be supposed. When, as practitioners of midwifery, we recall the many instances in which labour occurs after such accidents; when we consider what an enormous and often irregular pressure is exerted on the fœtal bones with impunity during even natural labour; and when we further recollect the almost incredible force that may sometimes be employed in unnatural labour, without injury to the osseous framework of the infant, we must in a measure exclude the idea of fracture while the child is enclosed in the uterus and surrounded by the amniotic fluid. Yet that a blow on the abdomen may affect the child, has been argued for, on the ground that wounds of the skin of the fœtus have been met with, resulting apparently from a fall on the abdomen by the mother during the last weeks of pregnancy. In Dr. Richardson's MS. Fothergillian Essay, already referred to, there is the history of a case reported to the Royal Medical and Chirurgical Society by Mr. Jones. The labour in this instance was easy: the pelvis was large. The mother had fallen down a few weeks before delivery. On the back of the fœtus there existed an extensive wound, reaching from the third dorsal vertebra, across the scapula, and along the back of the humerus, to within an inch of the elbow. Part of this wound was cicatrised; the other half was granulating. Here the occurrence of the wound, antecedently to the birth of the child, was fully demonstrated; and its connexion with the fall, to which the mother had been subjected, was thus rendered probable.

Dr. R. U. West, of Alford, in writing to me on this subject, says he cannot at all see how the bones of the fœtus can be fractured before birth by a fall of the mother. I confess myself to the same difficulty. Whatever force should convey to the fœtus such a blow as would fracture its bones, must be conveyed through the uterus itself, and should consequently injure that organ primarily; yet, in the cases described, we have the most marked absence of all evidence which would indicate any uterine injury whatever. It seems feasible, however, that in some few cases the fractures occurred after extreme violence to the mother. The cases recorded by Dr. Montgomery, and before referred to, appear to have been of this kind.

Again, it must always be remembered that the bones are by natural composition less liable to fracture during fœtal life than at any other period. There is at this time less of earthy and more of organic matter. Hence, such bones are supple; they bend easily under the pressure incident to delivery; they scarcely admit of being broken. With these facts before us, we must, therefore, be exceedingly cautious in supposing that an accident to the pregnant mother can alone give rise to fracture of the fœtal bones. The accident of a fall on the abdomen may be a coincidence; it may be a favouring circumstance; but it can never account for the injury in full.

Some instances have been noted in which certain peculiar injuries have been inflicted on the limbs of the child by the umbilical cord. Dr. Montgomery *(op. cit.)* and Professor Simpson attribute amputation of the limbs *in utero*, to the pressure exerted on the limbs either by the cord or by plastic bands. In the case of fracture of a single limb with a band or a fold of the cord surrounding the fractured part, and giving evidence of pressure on the soft parts, it might be fair to attribute the division of bone to the local effect. But when many bones are broken, and the soft parts are entire, this view is excluded from the field of argument.

In speaking on the general question of fracture of the fœtal bones, Billard lays great stress on the statement, that a division of the long bones, which might easily be mistaken for fracture, may be in some cases nothing more than arrest of ossification of the ossifying cartilages. Dr. West, in his letter to me, suggests with great acuteness, that the case I have described was possibly of this character; and asks:—Are the fractures dependent on arrest of development and on the deficiency of animal matter at special points? The answer to this question suggests in part, and it may be altogether, the nature of the case before us.

On examining the bones of the fœtus, to which I have especially drawn attention, it was plain that while there was an absence of development in the superficial cranial bones, there was nothing in the condition of the long bones to lead to that view of Billard, which would attribute the divisions met with to a mere arrest of ossification in the cartilages. We cannot look at this bone structure, as displayed in the specimens before us, without seeing distinctly that the fractures are complete, and that at the part where the breakage occurs, the ossific development, in the form of earthy material, is even more strongly marked out than in the extremities of the bone, which are indeed solely cartilaginous. We must then set down the predisposing cause of fracture as connected with an irregular as well as an imperfect development of the osseous structure.

Now, the question arises, what is the form of bone-disease here present? Is it what is commonly called rachitis? Is it what is known under the name of fragilitas ossium? The first named disorder is the one common to infancy, and depends upon a supposed deficiency of earthy matter; the second is a disease of adult life, and depends on a supposed increase of earthy material. I say *supposed* decrease and *supposed* increased proportion of earthy materials; because these specific variations in the constitution of bone, as marking specific forms of disease, are based on most uncertain data. On these points I would direct the attention of the society to Mr. Porter's valuable paper on the Pathology of Bone, in Todd's *Cyclopædia of Anatomy;* and to the section on the osseous system, in Lehmann's *Pathological Chemistry.*

If I might offer a theory on the state of the bones in the case I have narrated, I should infer that the inequality in the deposition of earthy matters, and the disproportion in construction between the organic and the inorganic parts, was the main predisposing cause of the fractures. In the nodulated parts, there is an increase of earthy deposit; in the constricted parts, the bone was formed, but was too feeble to bear the pressure to which it was subjected. This is the only reasonable supposition; because, as I have shown, there was an abnormal proportion of organic matter in these bones, taken as a whole.

The connexion or disconnection of the fragility and abnormal development of bone with the health of the parents, is another matter of prime importance. In this case, I could not detect the slightest hereditary fault. Dr. Montgomery refers to an observation of Jörg's, in which it is argued that the bones of the fœtus may be fragile without any special cause.

But, waiving this important point, which can only be fully elucidated by the labours of many inquirers and the lapse of many long days, and proposing a supposition which admits of no denial, that the bones of this fœtus were in a condition so fragile that the merest force could break them,—we have to consider what force did break them, and when they were broken. From the fact that, in one instance, there was an attempt at reparation, it is clear that some of the fractures occurred long previously to labour. Were the fractures thus produced the result of the fall which the mother experienced? or were they the effect of muscular movements on the part of the child? I would answer this query by saying that, while the fall might, by some inexplicable reason, be the cause of the fractures, the muscular actions natural to the child were quite competent for the purpose; and that, as the fractures seem obviously to have occurred at various times, and as they are in the bones on which the muscles would exert most force, the latter cause is by far the most consistent with all the facts of the case.

Practical Deductions. From the consideration of the obscure and difficult topics named above, let me now proceed to

the facts of this case—first, with reference to labour; and secondly, with reference to medico-legal investigations. In these particulars, the case is of direct importance to the working practitioner.

The absence of bone in the superior part of the cranium rendered the nature of the presentation obscure for a short time. Fortunately, I found the membranes presenting in the first instance, and, having ruptured them, was aware that the next structure that met the touch was not the membranous bag containing the amniotic fluid. In a careless practice, or even without carelessness, one might, however, be led to mistake a soft fluid bag of this kind for the membranes, and to rupture it accordingly. Dr. Richardson, indeed, gives a case in point, where, either from a deficiency of bone, or from enlargement of the fontanelle, the tumour presenting was punctured with the finger, and a mass of fluid half-putrid brain-stuff escaped with the liquor amnii. He thus observes in a foot-note in his MS. Fothergillian essay:—

"The case described fixed itself particularly on my mind, from a circumstance connected with it in the course of the labour. When called to see the woman, the labour pains being violent, I felt the membranes in the vagina very much distended, and I proceeded to rupture them. The thickness of the supposed membranes surprised me; and the fluid that escaped was so thick and purulent looking, that my surprise was increased. After birth, I found that, in penetrating the membranes, I had also penetrated the head through a distended fontanelle, or a deficiently developed osseous covering. As the fœtus was and had long been dead in this case, the act was harmless; but it might have been otherwise, and the circumstance furnishes an obstetric lesson worthy of being recorded." (p. 76.)

There are other presentations, with which the one I have described might also be confounded. The breech could scarcely be mistaken for it; at all events, not for any length of time, or after very careful examination. It might, however, be confounded with placental presentation by an inexperienced accoucheur; for the sensation conveyed to the finger by a head without bones or fontanelles is not altogether unlike that produced by the placental organ. A skilful tactician would detect the difference in the roundness of the tumour formed by the head, in its elasticity, as well as by the connexion which would be traceable between the mass presenting and the orifice of the uterus, to say nothing of the signs of hæmorrhage which would be likely to manifest themselves in the case of placenta prævia, and not to manifest themselves in the other case.

It would be much more difficult to distinguish by vaginal examination a head without its bones, from a head having upon it a large soft tumour or a hernia cerebri. It might be very difficult to distinguish it at first from a hydrocephalic head where the fontanelles are largely distended. In all these cases, the progress of the labour would reveal the characteristic evidence.

The child I have described died soon after its birth. It had lived in the uterus with its fractured limbs; its viscera were all perfect; and other children have lived after delivery with fractured limbs. Two reasons occur to me why death took place so rapidly; and these reasons are disconnected with the fracture of the long bones. The most likely cause of death is the compression that must have been exerted on the unprotected brain during the parturition. The second is, that, from the condition of the ribs, and the fractured state of the bones into which some of the external chest-muscles are inserted, the act of respiration was never properly established. Whether, had life continued, the bones would have reunited, and the ossification would have become normal under a new food regimen, is a question only second in difficulty to that which relates to that physiological modification in the nourishment of the fœtus *in utero*, upon which the abnormal construction of the bones depended.

It is not very probable that cases of the description I have given would offer any marked difficulties in the progress of delivery. The non-resistance of the bones would, in fact, be favourable, rather than not, to the parturient act. But a case might occur, in the range of possibility, where the bones, being in a brittle condition, but not broken previously to labour, might, during a severe labour, and during the extraction of a child with instruments, become fractured, and cause the practitioner much anxiety and annoyance. It might, for instance, be urged against him that he had acted unskilfully, or had used too much force, and by so doing had inflicted injuries on the child sufficient to produce death. In such a dilemma the recollection of but one instance resembling the one I have related, will always be satisfactory, and will lead to the careful examination of the bones themselves, and the discovery of their condition.

But the great practical importance of these cases is to be found in a medico-legal point of view. Here they assume a position which cannot well be over estimated. A child is born; it has been heard to cry, or seen to breathe. The *post mortem* evidence is in proof of such child having breathed; the lungs show evidence of having been inflated; the circulatory apparatus gives signs that a free pulmonic circuit has been made. The thoracic and abdominal viscera are all perfect. The muscular structures are well nourished, but the bones *are fractured*. There are a variety of circumstances which might lead to the supposition that in such a case the mischief had occurred after birth, and had been due to violence intentionally applied. To the best of my knowledge, no such case has occurred; but in the event of the occurrence of an example of the kind, the possibility of intrauterine fracture should always be considered. It should be remembered, moreover, that the child may live a long time after birth, notwithstanding the existence of fracture; during this time modifications in the constitution of the bones might arise, so that the general brittleness of the bones might have become less, and might thus complicate the inquiry. However, with the facts now presented before the mind, it is clearly the duty of every medico-legal inquirer, in the event of injury to the bones of a still-born or living-born child, never to give a syllable of evidence until he has fully examined all the bones of the body; first, in reference to their physical strength; secondly, in regard to the osseous development and the union of bone and cartilage; thirdly, in respect to the presence or absence of certain bones; fourthly, in inquiry as to the existence of evidence, whether there had been fracture and reunion of bone; fifthly, as to the character of the fracture itself; sixthly, in relation to the presence or absence of external injury; and, seventhly, in relation to the contour of the bones and limbs generally. If in any given case it should be detected that the bones were preternaturally brittle,—or that there was arrest of osseous development,—or an absence of bone,—or sign of preexisting fracture,—or want of traces of external injury,—or, lastly, distinct twist or abnormal contour,—in the event of finding any of these peculiarities, I repeat, there would be strong grounds for assuming that the fracture had been intrauterine, and for considering it apart from the idea of the application of any external violence.

Again, a case might perchance arise in which, owing to congenital deficiency, a bone entire at the moment of birth should become fractured after birth from the merest and most unexpected accident. The muscular movements of the child itself, a sudden jerk, the putting on of its dress, a carelessness in nursing, a slight degree of pressure in bed, and so on, might lead to the accident of fracture. In such an example the child might not die, and the possibility of examining the condition of the bone would be, consequently, shut out. Here, therefore, such signs as are purely external would form the chief clue to the true condition of bone; viz., irregular contour, deficient development, and evidence of union by callus in other parts.

Once more, there might be the signs and the fact of fracture, with corresponding signs of external injury. And yet the injury might not stand in the same relation to the fracture as would at first sight be assumed. The mark from a fold of cord around the bone, a little extra pressure by the uterus during birth producing ecchymosis, a bruise from a fall, or a tightly fitting and hard article of clothing; these might all attend fracture, and be rather signs of secondary causes, or of coincidences, than veritable and efficient causes of the mischief.

Conclusion. I cannot conclude this paper without urging on my brethren engaged in obstetric practice, the fact, that they cannot be lending more valuable assistance to science than when they are engaged in tracing out the existence of fœtal diseases, the tranmission of such diseases from the parent to the offspring, the original development of diseased conditions *in utero* as depending on modifications of the placenta and the uterine appendages, and the influence of diseases contracted in intrauterine life on the health of the future woman or man. The subjects here involved are amongst the profoundest in medical science, and they lie the most freely open for inspection. We have not to go out of the path of our ordinary practical duties to seek for them, but we cannot perform the duties incident to practice without meeting with them perforce. Every still-born child presents a field for pathological inquiry; but for the dissector's knife to touch a still-born child is an exceptional fact. I regret myself having, on occasion after

occasion, let the opportunity go by for advancing uterine pathology, as though it were of no moment; and I must not, consequently, blame others, but rather try to improve myself, and ask my friends to move with me. As yet, the literature of medicine has not produced more than sixty-six contributions on fœtal diseases, and the majority of these are only stray, and often imperfectly reported cases. How important, then, that all cases of fœtal disease should be from henceforth recorded, that some central mind may group such diseases together in their respective classes, and elaborate a true and philosophical system of uterine pathology.

P.S.—It may be worthy of remark that the lady, Mrs. L., who in September, 1856, gave birth to the fœtus, the subject of the foregoing remarks, was yesterday (September 27th) delivered of a healthy and well formed female child at the full period.

T. H. B.

Bedford, September 28th, 1857

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

By H. Hannotte Vernon, M.D., Physician to the Great Northern Hospital; formerly Resident-Accoucheur to St. Mary's Hospital.

[*Continued from page* 642.]

Part II.—Pathology (*concluded*).

The next nervous centre which arrests attention is—

3. *The Spinal Cord.* The general effect of the exaggerated importance which has, I believe, been attached to the spinal cord, as far as the physiology of labour is concerned, has been to exalt also its pathological importance. There are doubtless many and very grave circumstances which arise out of morbid states of the spinal medulla, whether these consist of conditions existing in the tissues of the cord, or from states of the economy at large. But what appears to me necessary in relation to the influence of the spinal cord on morbid labour is, to divest the professional mind of the idea that all or nearly all aberrations of excito-motor action of the uterus are aberrations of spinal innervation. The anatomical fact of the extremely scanty supply of spinal nerves to the uterus itself, is evidence enough that the *primary* derangements of uterine nervi-motor action must spring from another source. What that source is I have been at some pains to show. The general physiological law as to the readiness of conduction or diffusion of impressions from one nervous centre to another, being in direct proportion to their intensity, is, moreover, another light by which to read the pathological importance of the spinal cord. The additional fact that organs in the immediate vicinity of the uterus, or in close sympathy with it, are (with the exception of the ovaries) well supplied with spinal nerves, points out that whatever influence the cord exerts upon labour must depend chiefly upon two things; first, upon excitations of other organs than the uterus, of considerable intensity; or, secondly, upon very marked morbid conditions of the spinal cord itself. The locality of eccentric excitations has been discussed before, and attention must now therefore be confined to conditions of the medulla itself. The period of labour at which morbid states of the spinal cord produce their effect upon the parturient act is when dilatation of the os uteri has been accomplished, or nearly so, and when the presenting part of the fœtus has begun to impinge upon and excite those organs and muscles which are supplied with spinal nerves. The exceptions as to the period at which the state of the cord begins to influence labour, arise out of the intensity of the morbid states; for it may be easily seen that extreme polarity of the centre in question will be diffused and conducted to the ganglia of the uterus proper, and thus modify the peristaltic or primary movements of labour from the very beginning. Morbid states of a minor degree do not declare themselves until the nerves of the cord itself are implicated, or until the voluntary and concomitant consensual movements of labour should exhibit themselves.

It is only necessary, in regard to the spinal cord, to resolve its various morbid modes of action into two conditions, which underlie them all; viz., (*a*) hyperæsthesia, and (*b*) hypæsthesia. These two ideas are simple enough, and under them I believe we can range all aberrations of nerve action in relation to uterine motor action. Protean as are the secondary causes of spasm on the one hand, or inertia on the other, they all, with the exception of structural changes in the uterus itself, end in exalted and diminished polarity of nervous centres, topical, or general, or induced by eccentric irritations.

a. Hyperæsthesia of the cord results in the first place from conditions of other parts of the nervous system. Emotions and energetic cerebration would appear in certain instances to throw the spinal cord into a state of undue polarity. When this is the case, the most trifling eccentric irritations will suffice to set up violent reflex actions. The first pains of labour, instead of remaining dependent almost entirely upon ganglionic action, are speedily linked with spinal action. Irritations arising in the uterus itself, which, under ordinary circumstances, would not have been diffused so far, are felt by the cord; and the actions normally peculiar to a more advanced stage of labour are provoked almost at the onset. It is thus that we meet, from time to time, with cases in which, whilst the os uteri is almost closed, there are strenuous efforts, not entirely, though partly, voluntary. Such cases are not instances of mere perversity of the patient; she may close her glottis, depress her diaphragm, and call into action all the muscular power she possesses at a time when such efforts can be of little avail; but the voluntary effort is only auxiliary to a more powerful spinal impulse, which would produce a part of the effort quite independently of volition. It is curious to observe how different this confused, transposed, and misplaced action of the nervous centres is from normal action. When labour progresses under strictly physiological conditions, the first step in the process is to open the mouth of the uterus; for this purpose the uterus suffices for itself, its own muscles, impelled by its own nervous centres, are allsufficient. No imaginable action of the diaphragm and abdominal muscles can affect the opening of the os uteri until it is very far advanced in dilatation; and hence we find that normally the spinal cord and the voluntary muscles are not called into play, until it is possible for them to produce their proper effect. This is a beautiful instance of the economy of nature in producing results. As soon as volition is efficient, it is utilised, and no sooner; and so with reflex action also.

Hyperæsthetic conditions of the uterine ganglia, and of nerve-terminations in all parts of the body, sometimes the result of perverted vascular actions in the tissues in which the nerve-terminations lie, are not unfrequent causes of undue polarity of the cord. This idea I am anxious to impress upon the minds of my readers; viz., that, owing to the close intercommunication between all parts of the nervous system, persistent or intense peripherical irritations, or centric excitability of any one centre, invariably results in exalted polarity of *all* nervous centres. This is a fundamental fact, which it is necessary to bear in mind as explanatory of numerous disorders of innervation, observable not merely in the department of obstetric pathology, but in pathology at large.

The general relation of spinal polarity to polarity of other ganglia or systems of ganglia having been indicated, it is quite unnecessary to go into mere anatomical details. These are readily supplied by the most ordinary anatomical knowledge.

Another form of spinal hyperæsthesia which must be familiar to every obstetrician is that which is at once idiopathic and idiosyncratic; that is to say, peculiar to the individual, and traceable to no anterior pathological condition. It is impossible to offer any further explanation of such a condition than one which shall resolve itself into a merely hypothetical mode of expressing the fact. Why certain individuals should generate a more abundant supply of nerve-impulses than others, is wholly unaccountable. We may hypothecate a greater proportion of grey matter, or more rapid molecular changes, or twenty other imaginary conditions or modes of action; but the thing still remains really unexplained. It appears to be an ultimate fact, that persons of different temperaments possess a vitality which manifests itself in different parts of their organisation. Some affect great vegetative tendencies, and grow into human mountains upon what others would almost starve upon. Others possess a vivacity of nervous constitution, which shows itself in rapid cerebration, rapid and agile adaptive movements, and susceptibility to all kinds of impressions, whether physical or emotional. It transcends the knowledge of the physiologist to say upon what this depends; the scalpel and the microscope are useless means of investigation here, and we are reluctantly compelled to suspend inquiry just where inquiry is the most inviting.

Certain kinds of toxæmia appear to throw not only the spinal cord but all nervous centres into a high state of excitability.

The particular instance of blood-poisoning with which we are most familiar, is that which occurs in connection with the albuminuria of pregnancy. In this disease, either urea or the derivatives of urea, viz., ammonia and carbonic acid, are retained in the blood in large quantities. But the retention of such effete matters indicates other abnormal states of the blood beyond such non-elimination. The presence of ammonia and carbonic acid is cotemporary with absence of a due proportion of oxygen in the blood. Whatever organisms or elements of organisms are present must also be deteriorated in vitality. We know that an undue proportion of carbonic acid in the blood augments the volume of the red corpuscles; that ammonia imparts an unnatural fluidity to the sanguigenous or azotised elements of the blood; and that in the disease in question, there is moreover a watery and cacoplastic state of the circulating fluid, which arises partly from loss of albumen, and partly from deficient aeration. The effect upon labour of this form of toxæmia is in all cases, so far as my experience will carry me, to augment the suffering of the patient; to forestall the spinal stage of labour, and engraft it on the peristaltic or ganglionic stage before it is due. The more extreme development of the spinal polarity which declares itself in the foregoing modes of action produces the ordinary puerperal convulsions. In many instances labour is actually set up in consequence of the superinduced spinal polarity; and there is something peculiar in the incessant and clonic action of the uterus in such cases, even although pregnancy should not be advanced beyond the fifth, sixth, or seventh month. We are acquainted, then, with three separate morbid parturient actions, arising out of this form of blood poisoning; viz., premature labour, painful labour attended with anticipation of the spinal stage, and labour complicated with convulsions. Other forms of toxæmia, such as consist of the blood poisoning attendant upon the eruptive fevers, act occasionally in a similar manner. There are, besides, cases in which unwholesome diet appears to produce a toxæmia, attended with similar results; but with these we are hardly concerned, as they do not so much come within the domain of pathology as of toxicology, and are, moreover, not known in this country.

With regard to abnormal vascular states of the cord and its membranes, and the influence of such states on the polarity of the spinal cord, we have no reliable information.

b. Hypæsthesia of the cord is a condition which comes under notice much oftener than the preceding state. In crowded populations, amongst whom diet is deficient both in quantity and quality, where ventilation is bad, and all hygienics neglected, nothing is commoner than stubborn immobility of the nervous system. The usual physiological stimuli are quite inadequate to their purpose in such cases; and, indeed, there are but few resources of art energetic enough here to rouse the uterus into action. This, then, is the first form of hypæsthesia; viz., one which is the consequence of long continued mal-nutrition and debility. Exactly similar, as far as the observable phenomena are concerned, is an idiosyncratic defect of irritability of the spinal medulla, dependent, like the idiosyncratic excess of irritability, upon no discoverable anterior pathological condition.

General plethora would appear to diminish the polarity of the cord to no small extent, and by no means unfrequently. This species of spinal inadequacy is chiefly found in women who have advanced to nearly forty years of age, and have become obese.

Fatigue, which is a transient form of debility, also lowers the polarity of the spinal cord. The way in which it commonly is brought about in actual practice is as follows. Owing to the officious suggestions of ignorant acquaintances, the patient paces up and down the lying-in room incessantly for hours together, and at every pain, however early in the labour, invites violent efforts in aid, as she supposes, of the parturient act. By these injudicious exertions, exhaustion is gradually brought on; and, when the spinal stage should follow upon the peristaltic, the uterine contractions remain feeble, the voluntary efforts are nugatory, and the reflex actions are halting and inefficient. Such cases are usually met with amongst the poorer class of patients; persons in different circumstances generally have competent advice at a very early stage of labour.

Extreme emotional mobility, the effect of which is propagated, as we believe, from the great cerebral ganglia, is another condition destructive of the polarity of the spinal cord—not always, but in many cases. There is something of caprice in the operation of emotions. Joy will sometimes accelerate and sometimes suspend uterine action, and so with other affections of an emotional kind. Fear operates in both ways. But, generally speaking, *excessive* emotion has more influence than the *character* of the affective condition. States of hemispherical cerebration, in like manner, extend their operations as far as the spinal cord, and still farther. Intense thought diverts as it were the *vis vitæ* from the medulla, and deprives it of its sensibility temporarily, and to a slight extent. The absence of voluntary consent to the reflex actions of the cord is by no means without influence. I entertain but little doubt that centric actions of the cord itself depend very much upon transferred acts of the cerebrum. To such action as this I would propose the term *indirect voluntary action*. It is in this way that organs not under the immediate control of the will are made so mediately. The nature of what takes place is transformation of the conscious cerebral act into an unconscious centric spinal impulse, propagated to the sympathetic system. The cord is not in such cases the mere conductor of the hemispheres, but is a transformer of one kind of impulse into another, and a utiliser of acts which would otherwise have no final cause.

From a consideration of the foregoing particulars, we easily arrive at the conclusion that a due performance of the functions of the cord is best conserved by an equable action of all parts of the nervous system.

4. *The Great Cerebral Ganglia.* In applying the terms hyperæsthesia and hypæsthesia to the various states of the cerebral ganglia, we are getting somewhat further into the region of hypothesis than when doing the same with regard to other nervous centres. By hyperæsthesia, in the present instance, I mean great affective mobility. It can hardly be said that a very definite pathology exists as regards the emotional centres. Debility, from whatever cause, would appear to be at the root of such a condition in many cases. Congenital susceptibility must explain many others. Some must be traceable to defective education and the unrestrained impulses of a wayward nature. A few may depend upon obscure structural conditions of the centres in question, such as undoubtedly lie at the root of various forms of insanity; but their nature and extent are beyond recognition at present. Hypæsthesia, in the present instance, means nothing but stupid indifference, and is perhaps the best thing, obstetrically speaking, that can befal a woman. It is undoubtedly congenital, and, whether of the "happy go lucky" or the stolid variety of affective immobility, tends very much to unembarrassed parturition. The nearer the approach to mere animality, the easier the act of labour.

5. *The Hemispheres of the Brain.* The influence of the hemispheres of the brain proper upon labour includes all that the organs of thought can effect upon the nervous system at large. The pathology of such conditions of the hemispheres as interfere with or in any way modify the actions of the uterus, is hardly a pathology so much of a physical as of a psychical nature; that is to say, that we are not concerned here with anæmia or hyperæmia, superpolarity or subpolarity, but with actions so linked with thought, individual character, and the *will*, that we are taken almost out of the domain of ordinary pathological investigation, and landed in the less definite region of psychology. To attempt to analyse the actions of the cerebral hemispheres, to assign to them the exact share and extent of their influence upon other nervous centres, and mediately upon the uterus, would be to enter upon ground of the most uncertain and shifting kind. Speaking in the most general terms, and confining attention to the broadest possible distinctions which can be drawn between the different cerebral phenomena of labour, it appears to me that they may be reduced to two elementary sets of actions: first, the exercise of such thought as we may call conceptive, reflective, or ratiocinative; and secondly, the exercise of that primary species of thought which we call the will, and declares itself in secondary thoughts and muscular action. With regard to the first of these sets of actions, it may be said that any possible modifications of them hardly belong to pathology, unless they are declaratory of insanity. We recognise the influence of tense thought in the suspension of uterine action; but this is not brain-pathology, though such suspension belongs to the pathology of labour. In this way it is seen how health, or the normal execution of functions, is not merely an absolute idea, but consists, in reality, of a due harmony and balance between the elements of functions. Thought of the ratiocinative type is not properly included in the idea of normal parturition, though hemispherical cerebration is. The fact is, that, when the mind is employed in appreciating facts, objects, ideas, or arguments, or in carrying on a process of reasoning, it is being engaged in such a manner as to preclude the energetic action

of the will. It is in the way of volition that the brain proper is concerned in labour. Whatever draws the mind away from these voluntary exertions, which properly belong to the latter period of labour, tends to retard it. In this way, ratiocinative thought acts simply by occupying the brain when it should be busy with something else, viz., energetic volition. Hope, fear, and other emotions, when they lead to the creation of numerous ideas and the carrying on of long trains of thought of an absorbing kind, act in a similar way, viz., by excluding volition. And thus we see how emotions not only have a positive effect, and depress the polarity of various nervous centres themselves, but we see also a negative influence at work, viz., their substitution, and the substitution of their offspring, for normal processes and elements of the parturient act. It naturally follows from the foregoing, then, that it is to the will we must look alone for any direct influence of the brain over labour. Whether volition is vigorous or the reverse, interests us as obstetricians.

Energetic volition, inasmuch as it produces increased voluntary muscular action, produces more vigorous consensual action. Directed at the right time it acts harmoniously. There is doubtless, too, a stimulation of other nervous centres effected by energetic volition, and cerebral action is transformed into spinal polarity, or still further into exalted polarity of the uterine ganglia.

Defective volition may result from physical debility of a permanent kind, from fatigue, from mental feebleness, from preoccupation, or from excessive pain. The effect is diminished consensual as well as voluntary muscular action; diminished centric action of the spinal cord and other ganglia, and diminished reflex action, as the result of defective polarity, propagated from the brain.

6. *The Cerebellum.* We are only acquainted with the little brain as the co-ordinator of voluntary and automatic movements. If we exclude the irregular actions of hysterical labour, there is perhaps no way in which we have any acquaintance with a morbid action of the cerebellum in labour.

FOURTH PHYSIOLOGICAL BASIS.

An arrangement of Nervous Fibres capable of conveying the Motor Impulses generated in the Nervous Centres to an Organ endowed with power of Motion, and to other Muscles.

FOURTH PATHOLOGICAL DEVELOPMENT.

I have merely introduced this element of parturition in order to keep up the correlation of the physiological and pathological sections of this communication. Practically, there are no causes which interfere with the due conduction of motor impulses from the various nervous centres to the muscles with which they are respectively in relation.

FIFTH PHYSIOLOGICAL BASIS.

A Muscular Apparatus responding to various Impulses, either generated in or reflected from various Nervous Centres; itself possessed like all other Muscular Tissues of an Irritability of its own, and of a given Tonicity and Cohesion.

FIFTH PATHOLOGICAL DEVELOPMENT.

However complete may be the harmony of all the other elements of parturition, however exact and natural the sensibility of peripheral nerve arrangements, and however normal the polarity or other action of the nervous centres, it will tend to no satisfactory result if the muscular tissues in relation with these various nerve arrangements are not of their natural quality; that is to say, of the ordinary powers of contraction, and endowed with the cohesion and tonicity which usually pertains to muscular structures. It might at first sight seem almost superfluous to dwell upon such a deteriorated condition of the muscular structure of the uterus as must necessarily be associated with some of the aberrations of the nervous elements of labour into which we have already inquired, and which might be supposed to overshadow such a local condition, and throw its importance into the shade, as well in a theoretical as in a practical sense. But a little consideration will show that a due appreciation of the sources from whence abnormal uterine actions, whether in the way of excess or deficit, may derive, will tend very much to modify the practice of the careful obstetrician. Thus, in a case of inertia uteri dependent upon great muscular flaccidity, as well as nervous immobility, and occurring in a person who has already borne many children, it would be extremely injudicious to lash the nervous centres into excessive action and endeavour to procure delivery by the energetic action of muscles deteriorated in quality by a long period of malnutrition, or by the premature occurrence of structural involution. Such treatment would probably end in rupture of the uterus. Instrumental assistance is indicated under such circumstances. Thus, it is evident that without duly taking into account the condition of the uterine textures, serious errors in practice may be committed.

The morbid states of uterine tissue which present an impediment to due contraction, are sufficiently easy of diagnosis—in a certain manner, and are not very recondite. It is not pretended that the recognition of such morbid states in the living body is or can ever be exact and absolute. But it is comparatively easy to infer their presence with certainty enough to guide us in practice, and even with more certainty than many morbid states of other organs and tissues are daily diagnosticated and treated, as if the subjects of exact and conclusive demonstration. There is, in the first place, a congenital flaccidity of the muscles in extremely fair lymphatic persons, which extends itself not unfrequently to the uterine muscle, when it becomes developed. Such persons should always be dealt with cautiously, and looked upon as suspected of having thin and flabby uteri. Insufficient diet, bad air, all the causes, in short, which lie at the root of malnutrition, produce an atonic condition of the muscular system which declares itself in the uterus as markedly as anywhere else. Women who have borne many children are liable to a double defect as regards the uterine structure; first, to an imperfect evolution; and, secondly, to a premature involution. Upon inspection, it will be found in such cases that the nuclei of embryonic muscular fibre are abundant where the uterus has not advanced to its proper stage of development; while in instances of premature involution, there is every appearance of fatty degeneration of the muscular fibre, an anticipation in short of the natural process. It is a curious circumstance, and one which is closely connected with these facts, that cases of rupture of the uterus divide themselves distinctly into two categories, which include nearly all cases of rupture which come under observation. The first class consists of cases of obstructed labour (I do not speak after the fashion of the text-books), such as first cases, small pelves, large heads, and rigid passages: the second class consists entirely of women who have already borne a numerous family, and the rupture in such cases is sudden, quite unexpected, and occurs during the progress of a labour otherwise altogether satisfactory. Against such cases as the latter class it is to a certain extent impossible to provide; but the fact that repeated parturition does in a measure tend to deteriorate the quality of the uterine muscular fibre, should guard us against the two free use of oxytocic remedies in multiparous cases. The drain which occurs in cases of albuminuria operates in the way of damaging the uterine structures, as well as in altering the quality and consistency of the blood. The dangers which attend such cases are by no means confined to convulsions; we must be prepared for floodings, for irregular and painful contractions of the uterus, and for rupture of the organ. Were it not so frequently the case that labour sets in prematurely during the existence of the albuminuria of pregnancy, the occurrence of rupture of the uterus would doubtless be familiar to us as a concomitant of the disorder in question, but even as it is, the tendency is sufficiently obvious to induce caution as to the manner of procuring speedy delivery where it is desirable on account of actual or threatening convulsions. The presence of fibrous tumours, of cancer, especially soft cancer, and of malignant ovarian disease, tends very much to the deterioration of the structures of the uterus. The same may be said of excessive discharges of all kinds, and more particularly of repeated antecedent floodings.

I have thus sketched the pathological states which affect the due performance of the motor functions of the uterus. Without having attempted to set before the profession anything like a complete account of the subject, I hope to have at any rate presented the pathological facts in an orderly and scientific form. In all text-books with which I am acquainted, the matter is treated of in the most disorderly manner; the causes of inertia uteri are *catalogued* without reference to any of the physiological properties and actions of which they are nothing more or less than developments; and the student of obstetricy is left floundering amongst an ill assorted set of facts which, as they bear no properly expressed relation either to each other or to any analogous facts, are either retained by dint of a powerful and tenacious memory, or, what is more frequent, forgotten just when they are most required.

CASES OF RESUSCITATION.

By Draper Mackinder, M.D., F.R.C.S.Edin., Gainsborough.

Of resuscitation by the plan of the late Dr. Marshall Hall, so many cases have now been recorded, that it seems almost necessary to apologise for reporting any more. Yet, on a matter of such importance, it were well that we should not entirely avoid its discussion until the public are fully acquainted with the scientific principles on which the "ready method" is founded, and every man and woman prepared to exercise the physician's function in the revivifying of an unfortunate fellow-creature who, from some inauspicious circumstance, may have fallen into a state of suspended animation.

Though the "ready method" will not always be attended with success, it may fairly be considered the best and simplest of all known means for rekindling the vital spark, and the facility of its application will render its adoption universal, when the public come to understand and appreciate the discovery.

It occurred to me the other day, while attending the third case, to be hereafter mentioned, to give a little clinic to the nurses in attendance; and if the like were done by our associates and medical brethren in general at every available opportunity, there would soon be a large section of the community competent to act in any emergency. Recently, a little child was drowned in a pond in this neighbourhood. Assistance was immediately sought; the body was recovered, and taken home as dead: and who will venture to assert that the pulsation of its heart might not have been re-established, its parents saved the mourning of so untimely and unnatural a death, and the coroner cheated of his fee, had the proper means been taken at the moment of the child's removal to the land?

Case i. Early in the morning of February 5th last, I was summoned to a Mrs. B., of this town, whom I delivered of seven month twins, male and female, the latter being the elder by ten minutes. The boy presented at the feet, and was pulseless when born; but being by far the finer child of the two, and the sex wished for by its father, I determined to resuscitate it if possible, and at once commenced the three-quarter rotation, as recommended by Dr. Marshall Hall. This I continued for fifteen minutes without the slightest appearance of vitality. Then, fearing more had been said about the "ready method" than was consistent with truth, or that I had misapprehended the directions of Marshall Hall, I proceeded to inflate with a piece of tobacco-pipe, an instrument well adapted by its suction property to keep the tongue from slipping backwards. The child grew deathly cold, and its extremities became quite livid; but after persevering for twenty minutes with the inflation, it gave a sudden double gasp for breath, which it repeated in five minutes more. This double gasping or sobbing continued at diminishing intervals for thirty minutes longer, during which period I occasionally forced in a little air. Breathing then, to the astonishment of the mother and attendants, became natural, and I committed the child to the custody of the nurse. It died twelve hours afterwards, and its sister in a few days, neither of them possessing sufficient physical power to sustain life.

Case ii. In the evening of the same day, my assistant, Mr. E. Capron, attended a woman at the workhouse. On his arrival, at half-past eight, he found a vertex presentation, with a loop of the funis, the pulsation of which had ceased. "I found it impossible," said Mr. Capron, "to replace the funis; and in half an hour the woman was delivered of a child apparently quite dead. The usual means failing to restore it, I at once commenced the 'ready method'." After ten minutes trial, the child gave a feeble gasp, and it continued to do so at every ten or twelve turns. The intervals between these respiratory movements soon became shorter and shorter, and in half an hour it breathed of its own accord. It appeared, however, in a semicomatose state for some time, and was three hours before it became warm and could move its limbs. Even then the heart beat very feebly, and at half its normal frequency at birth, and it did not entirely recover until six o'clock the following morning." The child went on well, much to the annoyance of its affectionate mother, who exclaimed, that "it was dead once, if that stupid doctor had but left it alone!" This case was communicated to Dr. Marshall Hall, who published it in the *Lancet* of April 25th.

Case iii. On September 12th, I was sent for to attend a woman of the name of Davey, in her second accouchement. On my arrival, I was informed that the infant had been born ten minutes, and that it had only breathed once. Leaving the mother to take care of herself, I immediately divided the funis, and began to resuscitate the cold and pulseless child by the "ready method". To the surprise of the nurse and a friend present, respiration was established in twenty minutes, and the child seems now in the enjoyment of vigorous health.

ON THE COMPARATIVE IMMUNITY FROM SMALL-POX OF THOSE WHO HAVE BEEN UNDER THE INFLUENCE OF COW-POX.

By G. Rigden, Esq., Surgeon to the Canterbury Dispensary.

[*Read before the East Kent and Canterbury Medical Society, Session* 1856-7.]

In the 36th volume of the *Transactions* of the Royal Medical and Chirurgical Society is published a very valuable paper on small-pox and vaccination, as observed by Mr. Marson at the Small-Pox and Vaccination Hospital, between the years 1836 and 1851 inclusive. From this report, it appears that rather more than half of the patients who came under treatment for small-pox during that period had been previously under the influence of vaccination. It shows, however, further that, while small-pox in the unvaccinated remains as violent and fatal as ever, about one-third of the patients dying, vaccination performed in infancy affords almost complete protection from small-pox until the age of puberty; and even in after ages, the mortality, where there are cicatrices of vaccination remaining, was but 5¼ per cent.; and where there was no cicatrix remaining—and in many of these the evidence of vaccination must have been doubtful—the mortality was but 21 per cent.

During the present year, a very valuable report on this subject has been published by order of the Board of Health, which proves beyond a doubt the very great advantages of vaccination in infancy; but it moreover proves that small-pox does in all parts of this kingdom, as well as in foreign countries, frequently attack those who from our previous knowledge were considered almost, if not quite, exempt from its influence.

The report I am now about to lay before the members comprises 113 cases of small-pox observed by me in the dwelling-houses of the city of Canterbury and its vicinity, between March 4th, 1855, and the end of February 1856. Of these cases, 4 occurred in March, 26 in April, 17 in May, 10 in June, 10 in July, 10 in August, 5 in September, 10 in October, 7 in November, 9 in December, 4 in January, and 1 in February 1856.

These cases occurred in 51 different houses or families. And there were also resident in the same houses 228 other persons who escaped. Of this number, 76 had gone through the disease previously, and 152 had no other apparent protection but that derived from vaccination; in no instance did a person resident in either of the houses escape, unless he or she had been under the influence of one or other form of the disease previously.

Of the total number of cases, 50 were confluent; 17 semi-confluent; and 46 distinct: 6 patients died.

Of the patients, 72 had never been vaccinated, and 41 had been vaccinated, mostly in infancy.

Of the 41 patients who had been vaccinated, 24 showed the cicatrices of vaccination, and 17 were more or less indistinct or not traceable. Of these 41 patients, 3 had the disease in a confluent form, 9 had it in a confluent form, but the pustules arrived at maturity at an earlier period, with little or no secondary fever, and are therefore termed modified; 2 were semi-confluent and modified; and 27 were distinct and modified.

Of these patients 14 were more than 20 years of age, 1 was 19 years, 2 were 17, 1 was 16 years, 3 were 15 years, 1 was 14 years, 2 were 13 years, 3 were 12 years, 1 was 11, 4 were 10, 1 was 9, 1 was 7, 3 were 6, 1 was 5 years, 1 was 4, 1 was 3, and 1 was 10 months.

Of these cases four, viz., aged respectively 10 months, 3 years, 4 years, and 7 years, were under the influence of cow-pox and small-pox combined; and one female, aged 15 years, was reported to have been vaccinated in infancy when afflicted also with itch.

Two of the vaccinated patients died, viz., the child aged 10 months, and the young woman aged 15 years, last alluded to.

The child aged 10 months had small and cow-pox coexisting, but it certainly had been exposed to the infection of the former several days previously to its vaccination for the latter, and neither of these diseases appeared to be modified by the exist-

ence of the other. The young woman aged 15 years had the disease in a very confluent form, and the only evidence of previous vaccination was the statement of the mother, who also reported the existence of another specific contagious disease at the time of vaccination; it is therefore more than probable, that although vaccinated, she had never had the benefit of cow-pock.

The third patient with the confluent form of the disease was a man, aged 47 years, who had evidently been vaccinated in infancy, and had the cicatrices, although imperfect, still existing upon his arm. Upon persuasion, he was revaccinated seven days previous to the appearance of the eruption of variola; it is evident, therefore, that the varioloid poison was maturing in the system previously to the introduction of the vaccine lymph. The pustules of variola in this case were unusually slow in reaching maturity, apparently owing to nervous prostration, and there was but little secondary fever, but the disease did not appear otherwise to be modified by the existence of the cow-pock.

The number of cases here reported upon is too small to render definite the relative frequency which each form of the variolous disease will assume in a great number of cases; but the number of persons exposed to the infection, and who escaped the disease, with the probable reason for their exemption, appears to me to sufficiently prove that without the previous existence of either variola or vaccinia, all persons so exposed would probably have been afflicted. And I am not aware that any previous report upon an epidemic of this disease has noted this circumstance.

INTRACTABLE PREGNANT SICKNESS, NECESSITATING PREMATURE DELIVERY, ON TWO OCCASIONS, IN THE SAME PATIENT: DEATH ON THE TENTH DAY AFTER THE LAST OPERATION.

By Edward Garraway, Esq., Faversham.

[*Read before the East Kent and Canterbury Medical Society, Session* 1856-7.]

Mrs. ——, aged 38, a tall, pale, exsanguined, and emaciated woman, had been attended by me in previous confinements. She was the wife of a tradesman, and mother of a large family, and had always suffered exceedingly from sickness during the latter period of pregnancy, so much so as to necessitate confinement to her bed for the last month or two. She consulted me in April 1854, when she was six months advanced, imploring me to do something for her sickness, or she should inevitably die. On former occasions I had exhausted remedies, and was therefore little hopeful of doing her good. It is true, the treatment might have been deemed empirical, but this was of necessity. Doing battle with a symptom in no way advances the removal of its cause; and, indeed, it is difficult to conceive how vomiting, sympathetic with an affection of a remote organ (whether it be an uterus occupied with its ovum, a gall-duct impacted with calculi, or an ureter distended with lithic acid concretions), can be controlled otherwise than by remedies specially directed to the primarily affected organ. Of these, so far as the womb is concerned, we may be said to possess none, save, of course, such as would produce contraction and expulsion of its contents.

The poor woman's state was truly pitiable; not a particle of food nor a drop of fluid would remain on the stomach, even for five minutes. So long as total abstinence was maintained, there was peace; but the smallest quantity of the blandest material was immediately rejected; and, what seemed astonishing to her friends, for every spoonful she swallowed, two were thrown up. I went through the form of administering purgatives by the mouth and rectum; sedatives, as carbonic acid, preparations of opium, hydrocyanic acid, calomel, and morphia; compound tincture of senna, in drachm doses (a remedy in which some old practitioners appear to put faith, but which seems to me of as doubtful efficacy as the rest); blisters over the pit of the stomach, the vesicated surfaces being dressed with morphia ointment; croton liniment over the spine. All was to no purpose; the vomiting persisted; the debility increased; the emaciation became extreme; the pulse remained permanently at 110, and a mere wave; and my poor patient insisted that she must die. The seventh month was now complete; and although, on previous occasions, I had always seen Mrs. —— accomplish her full term, notwithstanding the exhaustive drain to which she had been subjected, I now felt it could be so no more. To exist two months, or even two weeks longer, seemed clearly impossible. Death or delivery was the only alternative. I had been daily expecting that Nature herself, ere the woman's life was really imperilled, would have emptied the uterus of its contents; but Nature not seeming disposed to have anything to do with it, I determined, after consultation with my partner, upon immediately inducing premature labour. There was no reason to doubt that the fœtus was alive; but the case was too urgent for the question of its viability to be entertained. Examination *per vaginam* revealed the os uteri low down, patent to the finger, soft and dilatable, and the head presenting. Puncturing the membranes appeared the most facile and expeditious mode of inducing uterine contractions. Sir C. Clarke's trocar and canula were used; the liquor amnii drawn off. No pain immediately followed; but in twelve hours one forcible uterine effort expelled the child, which, small and feeble, survived but an hour or two. From this moment the sickness ceased, but my patient for some weeks appeared to be in a dying state, so great was her debility, and so little of any kind of nutriment was she able to take, on account of the extreme pain which this induced in the stomach. However, by slow degrees she rallied; and, after three or four months, was enabled to be carried down stairs, and I gradually withdrew my attendance.

In the spring of 1855 I was again sent for to Mrs. ——. It appeared that she had never gained sufficient strength to walk unaided across the room; yet little more than a year after her last accouchement she was again advanced upwards of six months in the family way. All her old symptoms had returned, if possible, in a more aggravated form; she had incessant sickness night and day, inability to take any kind of food or obtain sleep; great emaciation; pulse 120; and debility so extreme, that the poor creature could not turn in her bed without assistance. Again we punctured the membranes, and again a living child was expelled in about the same time. It breathed an hour or two, and expired. Mrs. T. now gradually ceased to vomit; but eating caused so much pain that she took but little food; the debility and emaciation increased, and ten days after delivery she sank. No *post mortem* examination was permitted.

It is not improbable that an autopsy might have revealed more or less of organic change in the stomach, since it is hardly conceivable that its morbid condition, persisting even unto death, could be solely attributable to the sympathetic irritation of a gravid uterus; still as the sickness invariably commenced with pregnancy, and subsided with delivery, we can but infer that whatever might have been the remote, the immediate cause of death was exhaustion from pregnant sickness.

I have employed Sir C. Clarke's trocar and canula but on three occasions, and have found it admirably adapted to its purpose. It may be used either without the trocar as a blunt tearing instrument; in which mode, having fairly entered the os uteri, it is scarcely possible to do mischief, and may be pushed with a considerable amount of freedom; or if the membranes do not yield under such pressure, the trocar may be projected to ever so minute an extent, rendering it a superficially scratching or lacerating instrument, so entangling and tearing the membranes; or, lastly, which is the least desirable mode of operating, the trocar may be projected with a plunge, in the same way as we tap a hydrocele; but this is a reckless proceeding, not to be adopted if it can be avoided. Both my partner and myself were considerably alarmed some time since when inducing premature labour in a lady with deformed pelvis. We had passed the canula fairly into the os, and felt a degree of yielding and undulation, which satisfied us we were pressing upon the bag of membranes; but as they would not readily give way, we projected the trocar slightly, at the same time giving the instrument a sudden jerk, and so entered the cavity of the uterus. A fluid immediately came rapidly trickling through the canula; but our consternation may be imagined, on placing napkins to absorb this, to find that it was pure blood. What we had done we could hardly conceive; the only conjecture to hazard was that we had gone through a presenting placenta. Happily, whilst debating whether we should plug the vagina, the hæmorrhage ceased, and did not recur. Dr. Robert Lee was immediately consulted; he adopted our view of the case, viz., placental presentation; counselled us to be ready to act at a moment's notice, and to meet circumstances as best we could. Labour did not supervene until four days; it was perfectly normal, and the placenta was attached somewhere at the fundus uteri. The source of the hæmorrhage it is difficult to explain, unless it might have been from some unusually dilated vessels of the amnion.

SUPPLEMENT TO OBSERVATIONS ON ELIMINATION IN FEVERS.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

I deny that an equal reaction takes place in all parts of the tube when filled with liquor sodæ chlorinatæ, added to a drachm of urine. The urine, as it descends and mixes with the lower fluid, undergoes decomposition rapidly; and very much more gas is generated in the upper than in the lower parts of the tube. If the urine is rich in urea, it would be better to operate on only half a drachm.

I was led to try the method I have employed, because I found so much inconvenience from the mercury being driven violently out and scattered about, in consequence of the energetic action which ensued very quickly after pouring in the decomposing liquid. As the mercury was to be replaced by the salt solution, I tried at first pouring the latter in immediately after the liquor sodæ chlorinatæ, and this answered pretty well; but I afterwards thought that the filling up the tube with liquor sodæ chlorinatæ alone would be more desirable. I used about eight times the volume of urine (Dr. Davy states five or six times to be sufficient), but diluted it with nearly an equal amount of water.

The amount of urea indicated in this way was generally so much above the highest figure mentioned in Dr. Davy's paper (5.472 grains per ounce), that I was less inclined to suspect there was any material loss. I never supposed, however, that the result was more than an approximation to the truth; I should not have laid stress on any small differences as affording evidence of increase or diminution in the daily urea amount. It is to be considered also that the daily amount of urine is not so fixed and constant as to make it certain that, even with the most accurate analysis, we can refer small variations in the urea or other constituents to causes whose operation we wish to ascertain. Large deviations from the normal mean, we may be pretty sure, are not accidental; the smaller may easily lead us astray.

I still maintain that a series of experiments performed in the same way yield results capable of being compared with each other, though they may be quite unfit to be compared with others.

I have made five careful comparative experiments since reading Dr. Thudichum's strictures, the results of which I will now state.

(1) Urine of light colour, specific gravity 1018; adult male. One drachm, with diluted liquor sodæ chlorinatæ, yielded 1.29 cubic inch of nitrogen; one drachm, with 1.6 cubic inch of mercury, yielded 1.52 cubic inch of nitrogen; one drachm, with undiluted liquor sodæ chlorinatæ, yielded 2.1 cubic inches.

(2) Urine of child, specific gravity 1018. One drachm, with 1.7 cubic inch of mercury, gave 1.64 cubic inch of nitrogen; one drachm, with liquor sodæ chlorinatæ alone, gave 1.60 cubic inch of nitrogen.

(3) Urine of deep reddish colour, specific gravity 1025; female; liver obstructed. One drachm, with 1.7 cubic inch of mercury, gave 1.8 cubic inch of nitrogen; one drachm, with liquor sodæ chlorinatæ alone, gave 1.9 cubic inch of nitrogen.

(4) Urine of lightish colour, specific gravity 1017; adult female. One drachm, with 1.7 cubic inch of mercury, gave 1.59 cubic inch of nitrogen; one drachm, with liquor sodæ chlorinatæ alone, gave 1.61 cubic inch of nitrogen.

(5) Urine of full colour; specific gravity 1022·5; adult male; One drachm, with 1·89 cubic inch of mercury, gave 1·65 cubic inch of nitrogen; one drachm, with liquor sodæ chlorinatæ alone, gave 2·3 cubic inches of nitrogen.

These results certainly show that when undiluted liquor sodæ chlorinatæ alone is employed, the amount of nitrogen disengaged is above or very nearly equal to that which is obtained, when mercury and liquor sodæ chlorinatæ are used in Dr. Davy's original way. (The amount of mercury used in the third experiment was rather too small.) The first experiment shows that with diluted liquor sodæ chlorinatæ, a less amount of gas is evolved than in the other cases; a like result was obtained in some other trials.

I ought to have written minims when estimating the degree of acidity of urine instead of drops. With this correction, I contend that the figures I have given furnish information of some value. They show, *e.g.*, that the remarkable deposition of uric acid in case 1 was not owing to hyperacidity of the urine. It would be very easy to express the acidity in the cases I published in terms of weight by evaporating sixty minims of the solution to dryness and weighing the residue. No boiling is necessary with the soda solution I have used to obtain a neutral condition.

Why my determinations of uric acid are "of no use" is not said. It may be so, but I can scarcely accept a simple oracular condemnation.

I will only say further that I made no claim in my paper to any originality, or great accuracy of chemical observation. I thought, and I still think, that the representations I gave of the condition of urine in these cases of fever were in the main correct, and were sufficient to illustrate the point I had in view, viz., that urinary elimination in fever is not in defect, but rather in excess.

I greatly regret the *animus* displayed by Dr. Thudichum. I almost think, on calmer reflection, he will feel that several of his expressions were neither seemly nor courteous.

London, September 29th, 1857.

Association Intelligence.

MEETING OF COMMITTEE OF COUNCIL.

A Meeting of the Committee of Council will be holden at the Queen's Hotel, in Birmingham, on Monday, the 12th October, at half-past three o'clock.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 28th, 1857.

[On the same day, the first annual meeting of the National Association for the Promotion of Social Science, will be holden in Birmingham. An address will be delivered by Lord Brougham.]

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]		Thursday, Oct. 8th.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, October 1857.

British Medical Journal.

SATURDAY, OCTOBER 3rd, 1857.

DEATH OF DR. JAMES ADEY OGLE, F.R.S.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

With great regret we announce the death of Dr. Ogle, Regius Professor of Medicine in the University of Oxford, and one of the Vice-Presidents of the British Medical Association. Dr. Ogle died at Old Shoreham, at the residence of his son-in-law, the Rev. J. B. Mozley, vicar of the parish, at 7 A.M. on September 25th, after an illness of thirty hours.

Dr. Ogle had for upwards of thirty years occupied a distinguished position in his University, and was the object of general respect among the profession. He presided over the memorable meeting of the Provincial Medical and Surgical Association held at Oxford in 1852. We hope to be able to give in an early number a sketch of his career: and, in that expectation, we leave his memory for the present to the respect and regret of our associates.

INDIA SAVED BY INCHES.

At a moment like the present, when the lives of thousands of Europeans hang by a thread, and the vast empire of the East has well nigh escaped from our grasp, it behoves every class of Her Majesty's subjects to do all in their power to support the British army. We find the *Times* calling upon the clergy and the great landowners to indoctrinate the stolid rustic with a love of arms. Volunteers of the better class are pressing forward. Graduates of Oxford are but too glad to offer their services even in the rank and file of some special corps of England's sons rushing to the rescue. Enthusiasm is beginning to swell the bosom of the generally immovable Briton, and the public mind is rising rapidly to the level of the great and momentous struggle in which this country is embarked with the revolted East. This enthusiasm was indeed looked for; continental nations, trained as a man to arms, sneer at our apathy, and wonder that troops of Englishmen do not rush to the tropics to avenge our murdered men and violated women. Alas! what use does the Government make of this ardent spirit? What sign do they put forth in correspondence with this uprising of the nation? They simply stick to their inches. Recruiting sergeants are scattered broadcast through the country, and the rustics are invited to arms, but they must not dare to rush to the rescue unless they are at least five feet five —the bone and muscle of the country is measured by the rule, and, according to regulation, a man cannot be a hero under that magic height.

We think that in this matter the medical profession ought to have some voice; and we accordingly call upon the leading men of our body who have influence with the Government, to show the fallacy of the height test, and thus aid in adding many thousands of able-bodied men to the small army of heroes at present holding at bay millions of infuriated savages. The folly of adopting the test of inches in order to prove the ability of a man to carry arms and bear fatigue, can be accounted for only by the fact that medical science has no voice whatever at the Horse Guards. If we were to select our beasts of burthen on the same principle as we select our soldiers, what would become of us? Imagine an agriculturist refusing Suffolk punches, and filling his stables with long backed animals, whose fore and hind quarters are so far distant from each other that the body can scarcely draw them along! We must be excused for thus drawing our illustration from the brute creation; but really we are obliged to put the thing strongly, in order to show its absurdity. That little men are quite capable of enduring fatigue and active exertion, no one will, we think, attempt to deny. *The capacity of the chest, cæteris paribus*, is the true measure of the power of the man, and not his length of legs. Now, a full chest is as often found in the man below the standard recruiting height of the British army, as in one above it—if not oftener. Put any regiment through the test of the spirometer, and we will venture to say that the little men will come quite as well out of the ordeal as the tall ones.

We need not, however, speculate as to the relative force and vigour of short and tall; every man must be aware, from his own experience, that the matter is not in any way settled by inches. Let the reader look around among his friends, and note the one that will do the longest day's shooting without being knocked up, walk the farthest without complaining of his back, or run the longest without being blown. If he finds that one to be a model for a grenadier, our argument is at an end; if, on the contrary, he is a short, compact, deep and broad chested man, we need say little more in favour of lowering the standard at least a couple of inches. The singular thing is, that at the moment whilst we are turning back thousands of much needed men because they are not up to the prescribed mark, we are fighting before Delhi with the little Goorkhas—a force that, for courage and pluck, is the admiration of the whole camp. During the late Crimean war, again, we enrolled the Anglo-Swiss Legion at the low standard of 5 feet 2½ inches—a height, be it remembered, that at least averages that of the splendid infantry of France, which rolled back from its soil the arms of a continent.

Away, then, with this stigma upon all able-bodied Englishmen below five feet five; let the strong arms and stout hearts of that population at present untouched and unheeded by the wheedling dispenser of Her Majesty's shilling have full play, and we will venture to say that 10,000 men would speedily be added to the regiments of the line. If, by and through the persistence of the Horse Guards in their absurd regulation respecting height, a check should be placed upon recruiting, the public and parliament will know where to lay the blame. At the present moment, we are in the position of a caravan perishing

of drought in the presence of abundance of water, because the chief will not allow any of it to be drawn as it does not rise to a certain height.

Absurd as this regulation is with respect to the infantry, there is a still more absurd arrangement by which men are recruited for the cavalry, of so heavy a weight that they cannot ride the country horses—the only ones that will stand the climate. At the present moment, the *light cavalry* going out to India to meet the splendid irregular horse of the mutineers, ride at least nineteen stone, and with their own forage, two and twenty stone! The carabineers at present before Delhi, smothered in their heavy accoutrements, are almost useless. Small active men, such as our grooms are made of, are the folk for the recruiting sergeant, and not giants, under whom their horses stagger, and who are totally unable to overtake the lighter squadrons of the mutineers. We are afraid that the Horse Guards have learned but few things since the late war, and forgotten nothing. The carabineers still wear brass helmets under a sun which strikes dead a large percentage of our troops. The condition of the camp, again, before Delhi is said to rival that at Balaclava in the early days of the siege—the ordure of the men is lying about in heaps together with offal of all kinds. No wonder that cholera sweeps away general after general, and is decimating the ranks of our little band of heroes.

THE WEEK.

The *Edinburgh Medical Journal* for the present month announces that Sir Charles Hastings has recently paid a visit to the northern metropolis, with the view of making arrangements for the next annual meeting of the British Medical Association, and also with the more immediate object of promoting the formation of an Edinburgh Branch. Our contemporary states that—

"It is proposed to form Branches in several districts in Scotland: the Edinburgh Branch to include the practitioners of the surrounding and southern counties. It is intended to hold soon a meeting of the profession in the city and neighbourhood, for the purpose of laying the foundation of the Edinburgh Branch; when an enrolment of members will take place, to be followed by the election of a president, council, and secretaries, for the Branch. Applications for membership in the Edinburgh Branch may be made to Dr. Black, 2 George Square" (formerly president of the Lancashire and Cheshire Branch), "or to Dr. John Struthers, Surgeon's Hall, who have consented to act as interim secretaries. The promoters hope that a respectable number of the profession in this quarter will aid and promote this desirable measure; so that a brotherly welcome may be given to the members of the General Association, when they next meet in this city, over and above the hearty reception that awaits them from our hospitable citizens."

We rejoice exceedingly to hear that an Edinburgh Branch is to be formed at once: and trust that, now the impulse has been given, our Association will increase and wax strong in Scotland. The friendly tone, also, which the medical press of Edinburgh assumes, is an encouraging repetition of the brotherly sentiments expressed in the letters from that city which were read at the last Annual Meeting of the Association. Altogether the prospects of the Association in Scotland appear very hopeful.

Whilst we are writing these lines, the Winter Session will once more have been opened by the delivery of the addresses to the students of the various medical schools, metropolitan and provincial. As the Journal of the Association is read by established practitioners, and falls into the hands of but few of the cadets of the profession, it never has been our custom to publish these addresses, or to make any special note of the return of a session, which is interesting chiefly to teachers and students. We may be allowed to remark, however, that it is understood that the entries in the metropolitan hospitals are, on the whole, good. St. Mary's Hospital has a much larger number than was anticipated, and thus the youngest of the metropolitan hospitals is growing so fast that we anticipate for it a brilliant future. Whilst, however, we refrain from any attempt to rival our contemporaries with respect to the publication of these addresses, we shall, if we see necessary, give room in our next to any particular addresses, or portions of addresses, which may be of interest to our readers.

Dr. Radclyffe Hall's correspondence with the Secretary of the Unity Life Office exhibits an example of pluck on the part of our associate, which ought to be followed whenever an occasion presents itself. The office tendered Dr. Hall the fee of *half-a-guinea* for making an hour's medical examination of a life proposed for assurance; and the Secretary defends this proceeding on the ground that the sum proposed to be assured was small, and that the ordinary scale of payment to medical referees is *half-a-guinea* when the assurance is for a less sum than £500. Here, then, is enunciated a principle, the absurdity and injustice of which are cuttingly exposed by Dr. Hall.

"You expect and have", he says, "the same care, exactness, and time, from your medical referee, whether the sum insured be £50 or £5,000. I expect you do not offer a fee of £5:5 when the sum to be insured is £2,000! Why, then, should you *diminish* your fee *below* the fair and customary honorarium when the sum insured is small, if you do not *raise* the fee *above* it when the sum insured is large?"

Of course, why diminish for one motive, and not increase for the converse reason? But the physical process of diminution is in many instances more easy than that of increase; and it seems very easy in the case of assurance office fees to medical referees. Dr. Hall has, as might be expected, refused to accept the paltry remuneration offered for an hour's conscientious work, but has handed it over to the Torbay Infirmary. The spirited conduct of Dr. Hall in this instance, though the occasion be trifling, will meet with the approbation of the profession.

We perceive from a printed document which has been forwarded to us, bearing the signature of Dr. John Charles Hall as secretary to a committee, that it is proposed to establish at Sheffield a hospital to contain fifty beds, in connection with the Dispensary of that town. This has been decided on by the governors of the Dispensary; who have appointed a committee to take the steps necessary for carrying out the object. The committee, in the address before us, make out certainly a good case in favour of a new hospital, in addition to the Infirmary of one hundred and thirty beds which Sheffield already possesses. There is not, they say, one town in England of the size of Sheffield, which has only one hospital: and they show by figures that the present hospital accommodation in that town is not one bed (the proportion is about ·8) to each thousand inhabitants. As, then, it is decided to build a new hospital, we may here give some advice to Dr. Hall and his colleagues, and to all similarly concerned. It is this: endeavour to improve on the old plans of hospital building: that is to say, let your patients have as pleasant and well ventilated an edifice as possible. Why not give them a "Bordeaux" hospital?

The *Times* informs us that the Marquis of Lansdowne has given a commission to Mr. Noble for a statue of Dr. Barrow, which is to be placed in the ante-chapel of Trinity College, Cambridge. It is intended, says the paragraph, "to be a companion to the statues of Bacon and Newton." Who, in the name of fortune, is Dr. Barrow, that he is to be placed in the company of two such philosophers?

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-SEVENTH ANNUAL MEETING.

[*Held in Dublin, August 26th, and following days*, 1857.]

[*Continued from page* 818.]

Section of Mathematical and Physical Science.

THE EFFECT OF WIND ON THE INTENSITY OF SOUND. BY PROFESSOR G. G. STOKES.

The remarkable diminution in the intensity of sound, which is produced when a strong wind blows in a direction from the observer towards the source of sound, is familiar to everybody, but has not hitherto been explained, so far as the author is aware. At first sight we might be disposed to attribute it merely to the increase in the radius of the sound-wave which reaches the observer. The whole mass of air being supposed to be carried uniformly along, the time which the sound would take to reach the observer, and consequently the radius of the sound-wave, would be increased by the wind in the ratio of the velocity of sound to the sum of the velocities of sound and of the wind, and the intensity would be diminished in the inverse duplicate ratio. But the effect is much too great to be attributable to this cause. It would be a strong wind whose velocity was a twenty-fourth part of that of sound; yet even in this case the intensity would be diminished by only about a twelfth part. The first volume of the *Annales de Chimie* (1816), contains a paper by M. Delaroche, giving the results of some experiments made on this subject. It appeared from the experiments,—first, that at small distances the wind has hardly any perceptible effect, the sound being propagated almost equally well in a direction contrary to the wind and in the direction of the wind; secondly, that the disparity between the intensity of the sound propagated in these two directions becomes proportionally greater and greater as the distance increases; thirdly, that sound is propagated rather better in a direction perpendicular to the wind than even in the direction of the wind. The explanation offered by the author of the present communication is as follows. If we imagine the whole mass of air in the neighbourhood of the source of disturbance divided into horizontal strata, these strata do not all move with the same velocity. The lower strata are retarded by friction against the earth, and by the various obstacles they meet with; the upper by friction against the lower, and so on. Hence the velocity increases from the ground upwards, conformably with observation. This difference of velocity disturbs the spherical form of the sound-wave, tending to make it somewhat of the form of an ellipsoid, the section of which by a vertical diametral plane parallel to the direction of the wind is an ellipse meeting the ground at an obtuse angle on the side towards which the wind is blowing, and an acute angle on the opposite side. Now, sound tends to propagate itself in a direction perpendicular to the sound-wave; and if a portion of the wave is intercepted by an obstacle of large size, the space behind is left in a sort of sound-shadow, and the only sound there heard is what diverges from the general wave after passing the obstacle. Hence, near the earth, in a direction contrary to the wind, the sound continually tends to be propagated upwards, and consequently there is a continual tendency for an observer in that direction to be left in a sort of sound shadow. Hence, at a sufficient distance, the sound ought to be very much enfeebled; but near the source of disturbance this cause has not yet had time to operate, and therefore the wind produces no sensible effect, except what arises from the augmentation in the radius of the sound-wave, and this is too small to be perceptible. In the contrary direction,—that is, in the direction towards which the wind is blowing,—the sound tends to propagate itself downwards, and to be reflected from the surface of the earth; and both the direct and reflected waves contribute to the effect perceived. The two waves assist each other so much the better as the angle between them is less, and this angle vanishes in a direction perpendicular to the wind. Hence, in the latter direction the sound ought to be propagated a little better than even in the direction of the wind, which agrees with the experiments of M. Delaroche. Thus the effect is referred to two known causes,—the increased velocity of the air in ascending, and the diffraction of sound.

ON THE COLOUR OF SALTS IN SOLUTION, EACH CONSTITUENT OF WHICH IS COLOURED. BY DR. GLADSTONE.

It is a general law that "all the compounds of a particular base, or acid, when in aqueous solution, absorb the same rays of light"; hence it may be deduced that when a coloured base and a coloured acid combine, the resulting salt will transmit only those rays which are not absorbed by either constituent,—or, in other words, only those rays which are transmitted by both. This was proved to be actually the case by a prismatic examination of compounds of chromic, permanganic, and carbazotic acids with copper, iron, nickel, uranium, and chromium. Though the compounds of chlorine, bromine, and iodine with hydrogen and most metals are colourless, the compounds of these halogens with gold, platinum, and palladium exhibit an absorption of light due to the halogen as well as that due to the metal. The same is true in respect to chlorides, bromides, and iodides of copper, iron, nickel, and cobalt, when these salts are dissolved in a minimum of water; but when more water is added the colour changes, and the absorption due to the halogen no longer exists. In one or two of the cases examined, a slight variation from the general law occurred; and ferrocyanide of iron forms a complete exception. The double chloride of platinum and copper shows the absorbent effect of all these constituents.

EFFECTS OF HEAT ON THE COLOUR OF DISSOLVED SALTS. BY DR. GLADSTONE.

If a coloured salt be dissolved in water, heating the solution does not usually affect the colour of it. In not a few cases, however, the colour is rendered more intense, and altered somewhat in its character. Among the examples mentioned were ferrid-cyanide of potassium, meconate of iron, chloride and bromide of palladium. In other cases, heating the solution produces apparently a total change of colour: for instance, chloride of copper passes, when heated, from blue to green; chloride of nickel, from a bluish to a yellowish green; sulphocyanide of cobalt, or chloride of cobalt dissolved in aqueous alcohol, from a pale red to a deep bluish purple. In all these instances, heat causes the absorption of a larger quantity of rays by the solution; but this appears to depend sometimes on some purely physical cause, at other times upon some chemical change. With ferrid-cyanide of potassium, and similar salts, a certain thickness of the heated solution produces precisely the same effect on the spectrum as an increased thickness of the same solution when cold. With chloride of copper, and similar salts, the somewhat dilute solution, when heated, produces the same effect on the spectrum as the same solution when concentrated and cold, these salts being all of that character which is altered in colour by the addition of water.

THE GRAND CURRENTS OF ATMOSPHERIC CIRCULATION. BY MR. J. THOMPSON.

It has been ascertained, as a matter of observation, that, in latitudes extending from about 30° to the poles, the winds, while prevailing from west to east, prevail also in directions from the equator towards the poles. Now this motion towards the poles appears not to have been hitherto satisfactorily explained. In fact, it is the contrary motion to what is naturally to be expected when the theory of Halley, which was given about the year 1686, and which appears to afford the true key to the explanation of the trade winds, is followed up with respect to the circulation of the air in other latitudes than those in which the trade winds occur. According to this theory so applied, it would naturally be expected that the air, having risen to the upper regions of the atmosphere in a hot zone at the equator, should float towards the north and south polar regions in two grand upper currents, retaining, as they pass to higher latitudes, some remains, not abstracted by friction and admixture with the currents below, of the rapid equatorial motion of about 1,000 miles per hour from west to east, which they had in moving with the earth's surface at the equator. Also, it would be expected that the air in the polar regions should have a prevailing tendency to sink towards the surface of the earth, in consequence of its increased density caused by cold; and that it should tend to flow from the polar regions along the surface of the earth, towards the equator, with a prevailing motion from west to east in advance of the earth, until, by friction and impulses of the earth's surface, the motion in advance of the earth, brought from above by the air in its descent, and communicated further to it by friction and admixture from above, as it passes to lower latitudes than its places of descent, is exhausted; or, in other words, until it

reaches the latitude in which the trade winds commence to blow from the east, and until it has communicated, in blowing from west to east on the earth's surface, a torsional force to the earth, just sufficient to balance the opposite torsional force communicated to the earth by the trade winds blowing from east to west. Now this theory, obvious as it appears in the form just adduced, is found, in one essential point, to be controverted by observations. This point is what was stated in the outset of the present article, namely, that the prevailing winds on the surface of the earth, in latitudes higher than 30°, are, while blowing from the west, as should be expected, found to blow more towards the poles than from the poles; and thus do not move as if impelled along the surface of the earth from polar to equatorial regions by an augmented pressure due to condensation by cold in polar regions, and a diminished pressure due to rarefaction in the equatorial regions. It appears, then, that, in temperate latitudes, there are three currents at different heights; that the uppermost moves towards the pole, and is part of a grand primary circulation between equatorial and polar regions; that the lowermost moves also towards the pole, but is only a thin stratum forming part of a secondary circulation; that the middle current moves from the pole, and constitutes the return current for both the preceding; and that all these three currents have a prevailing motion from west to east, in advance of the earth.

OUTLINE OF A THEORY OF THE STRUCTURE AND MAGNETIC PHENOMENA OF THE GLOBE. BY MR. J. DRUMMOND.

The author, from the admitted fact of our earth having cooled down from an original state of fluidity, and that it now is a solid crust inclosing a fluid mass of molten materials, held that there must be an action of the sun and moon on this fluid mass analogous to that which caused the tides of the ocean; that from thence an outward pressure on the crust most result, propagated along it, in a manner similar to the great tidal wave; and from this principle, in an elaborate essay, he deduced the ordinary magnetic phenomena, as well as volcanoes, earthquakes, and other violent actions; concluding by answering objections which may be urged against the foundation and details of this theory.

Section of Chemical Science.

A PROCESS FOR THE DETERMINATION OF THE NITRATES OF PLANTS. BY PROFESSOR W. K. SULLIVAN.

The author pointed out the importance of finding a process for the purpose, because, in determining the amount of nitrogen in plants by the usual processes, a part of the nitrogen of the nitric acid is included in the result, and consequently the true amount of assimilative azotic principles cannot be deduced from ultimate analysis, if nitrates be present. The chief feature of the process is the use of sulphovinate of silver to precipitate the vegetable acids, the silver salts of which are insoluble in absolute alcohol, while the nitrate of silver is soluble. He also pointed out a method of separating lactic and acetic acids from one another when present.

ON COLOURED CONFECTIONERY. BY DR. M'NAMARA.

The author drew the attention of the Section to the large quantity of highly poisonous colouring matters employed in the manfacture of confectionery. He referred to cases of deaths resulting from this practice. He alluded to the manner in which these substances are coloured by vegetable colouring materials of a harmless nature, and suggested that a list of such colours should be compiled by parties competent to the task, from which alone confectioners should be permitted to select their colours. He gave a sketch of such a list, and exhibited some beautifully coloured confectionery, in which such colouring matter had been detected. These confections he had for some time in his possession, and their colours did not appear to have faded. In conclusion, he cautioned the public against buying any confectionery in which green or blue colours exist, as such colours are probably produced by poisonous agencies.

The President said that, in his opinion, the subject of the foregoing paper was a most important one, and that suggestions such as these, as to the employment of innocent colours, were far more valuable than positive prohibitions against the use of poisonous colouring matters, as more likely to promote the object in view—the protection of the public health.

THE SPECIFIC GRAVITY OF CHLORIDE OF NITROGEN, WITH SOME REMARKS UPON ITS ACTION ON ALCOHOL. BY M. ALPHONSE GAGES.

M. Gages gave determinations which were extremely close to those given many years ago by Sir Humphry Davy. He also mentioned the fact that chloride of nitrogen dissolves in absolute alcohol without decomposition; but if the solution be allowed to stand for a few hours, it decomposes. He described an apparatus for introducing the chloride of nitrogen into the alcohol, and mentioned the character of the reaction which took place.

UREA AS A DIRECT SOURCE OF NITROGEN IN VEGETATION. BY PROFESSOR CAMERON.

The author showed that nitrogen was as available as food for plants, when a constituent for urea, as in its ammoniacal combination; or, in other words, that urea, without being converted into ammonia, may be taken up into the organisms of plants, and there supply the necessary quantity of nitrogen. He described the experiments which led him to this conclusion, which were very elaborate, and were made on barley plants in confined spaces supplied with air freed from ammonia. The following conclusions were deducible from the results of his experiments, viz.:—1. That the perfect development of barley can take place, under certain conditions, in soil and air destitute of ammonia and its compounds. 2. That urea in solution is capable of being taken unchanged into the organisms of plants. 3. That urea need not be converted into ammonia before its nitrogen becomes available for the purposes of vegetation. 4. That the fertilising effects of urea are little if at all inferior to the salts of ammonia. 5. That there exists no necessity for allowing drainings or other fertilizing substances containing urea to ferment; but that, on the contrary, greater benefits must be derived from their application in the recent or unfermented condition.

THE CHEMICAL PROPERTIES OF THE POTATO, AND ITS USES AS A GENERAL ARTICLE OF COMMERCE, IF PROPERLY MANIPULATED. BY MR. J. W. ROGERS.

The object of the paper was to show that the matter of the potato was in reality equal in nutritive value to the dry matter of wheat, whilst the quantum of food produced from a given quantity of land was nearly four times that produced from wheat. Mr. Rogers exhibited some interesting specimens of the production of the potato in meal, flour, etc.; and gave the following results of analysis:—

	Starch.	Gluten.	Oil.
Components of the potato per cwt.	84·077lb.	14·818lb.	1·104lb.
Do. of wheat	78·199	17·536	4·265

And he gave the following important fact as to the quantum of food from an acre of land:—

	Starch.	Gluten.	Oil.
Dry matter of potato	3,427lb.	604lb.	45lb.
Dry matter of wheat	825	185	45

Subsection of Physiological Science.

ON CERTAIN *à priori* PRINCIPLES OF BIOLOGY. BY PROFESSOR ALISON, M.D.

Professor Laycock read an abstract of the paper. The writer stated that there were certain principles which should be admitted, and that they formed the same basis for physiological science as the axioms of geometry did for that science, and as certain inductive principles for the science of morals. It might be said that the object of the paper was to apply the doctrine of the Scotch school of metaphysics to physiological science; but on account of the recent illness of the distinguished author the communication was incomplete.

Dr. W. T. Gairdner, as a pupil of Professor Alison, explained the nature and object of his distinguished preceptor's views, which he said were chiefly directed to oppose the modern tendency of medical investigation, which he regarded as likely to degrade the science to that of a subordinate department of chemistry on the one hand, and of mechanical science on the other, omitting all consideration of that high though less intelligible class of phenomena which were known to be vital.

CONNECTION OF ATMOSPHERIC VICISSITUDES WITH EPIDEMIC DISEASE. BY DR. F. POZNANSKI, OF WILNA, RUSSIA.

Starting from the principle that circulation and respiration diminish under the influence of condensed air, and that during the cholera epidemic there prevails an excess of atmospheric pressure with its consequences, Dr. Poznanski undertook, during the cholera epidemics of 1848 and 1853, two series of observations, in order to determine the signs of imminence of cholera, or rather of epidemic predisposition. He directed his attention especially to the change of the pulse. These observations, carried out on both occasions on three hundred healthy persons at Wilna in a prison, and at St. Petersburgh on a regiment of the imperial guards, were repeated daily for several

successive months, and furnished the following results:—1. During cholera epidemics, many individuals—although in the enjoyment of good health—are affected by a very striking diminution of the pulse, as low as 45, and even 42 pulsations in a minute. 2nd. This diminution is not accompanied generally by any morbid symptoms or indication. 3rd. In proportion to the diminution of the circulation, the blood becomes black and viscid, and, on the contrary, it remains normal during the epidemic, amongst those individuals who are not affected by the diminution in question. 4th. The cases of cholera occur only with individuals previously affected with diminution of the circulation. 5th. The slackening of the pulse, which often precedes the choleraic symptoms for several weeks, may be considered as a pathognomonic sign of the imminence of cholera. 6th. The individuals who manifested signs of this imminence have always avoided the attack of cholera, if they have accelerated the circulation of the blood by suitable treatment, regimen, etc. 7th. The slackening of the pulse, as well as predisposition and choleraic attacks, have in general been proportioned to the defect of energy in the circulation, and to the excess of atmospheric pressure. 8th. This slackening does not occur among the healthy when the epidemic has definitively ceased. The author grouped into the following sections the phenomena characterising the three periods of cholera:—(*a*) Stage of choleraic predisposition—Slackening of the circulation; (*b*) Collapse stage—Primary stagnation; (*c*) Typhoid stage produced by the consecutive stagnation. In considering attentively, on the one hand, the characteristic symptoms of cholera, and on the other the well-known signs presented by the organism when subjected to an excessive atmospherical pressure, we arrive at the conviction that these symptoms resemble each other to such a degree, that they may be regarded as completely identical. This identity, and the influence of the air in producing the epidemic, are amply confirmed by the following facts:—1. Cholera is endemic in countries exposed to an excessive atmospheric pressure, as the East Indies, South Carolina, and other countries of the same nature of atmosphere. 2. Cholera epidemics have always been preceded and accompanied by an excess of atmospheric pressure, and their intensity has always been in proportion to this excess—as would appear by the published diagrams attesting such a relation observed at London, Paris, and St. Petersburgh. 3. Cholera rages principally on the banks of rivers, the sea shores, in low grounds, valleys, etc. The constant relation between the strength of the cholera epidemic and the lowness of the ground has been proved by most careful observations made in England, and chiefly in London. The same relation has been equally evident at Paris, and in France generally. The departments and *arrondissements* in which the air was most confined always suffered most. It is known that the central departments of France, as also Switzerland, have always been almost entirely free from epidemics. In Russia, the countries which border the Caspian sea, the level of which is six hundred feet below that of the Mediterranean, have always been the cradle of cholera epidemics. 4. Cholera epidemics are always propagated in the direction of low grounds, banks of rivers, and other depressed localities. This is the origin of the popular opinion that this epidemic follows the watercourse. Besides, the great plain which extends from the Caspian Sea to Paris and London has been the path followed by the cholera in Europe. The constant proportion observed between the intensity of cholera epidemic, and the size of the harbours, confirms also the influence of the depression of the ground. For it is quite evident that the size and depth of the harbour depend chiefly on the lowness of the land, without which the water would have taken a totally different direction. 5. The mountain heights have hitherto been free from this epidemic, a circumstance which has induced people to take refuge there generally against this scourge. 6. The specific gravity of the air increases during the cholera epidemic, as has been proved by the observations made by Prout. 7. The cholera epidemic is generally preceded and accompanied by an extraordinary calm, which proves the condensation of the atmosphere; on the contrary, the epidemic ceases ordinarily or diminishes after the storm necessarily connected with the rarefication of the air. 8. If there is any wind during the reign of the epidemic, it is generally dry; and the epidemic extends in a direction contrary to the wind, because the air is condensed in that direction. This observation, while compromising the miasmatic theory, forcibly corroborates the present one. 9. The epidemic produces, in general, uneasiness and the deterioration of the blood; these effects can only be caused by an agent like the air universally diffused. 10. Occupations which demand an exercise adapted to augment the active force, such as those of blacksmith, coppersmith, etc., protect to a certain extent against attacks of cholera, whilst sedentary life predisposes to this disorder. This circumstance has led to the idea of copper preserving from cholera. 11. The agents recognised as pernicious during the cholera are precisely those which diminish the active force; whereas the influences which excite and increase it in a direction contrary to the epidemic. The bleeding employed in the first moments of stagnation, before the coagulation of the blood, cures the cholera at the very moment of operation, which proves that the cholera depends on a mechanical impediment. 12. According to observations of Dr. Caspar, cases of sudden death become, in general, more frequent as the barometric elevation increases. The same circumstance has been noticed during the prevalence of cholera. It must be concluded, from all those facts and observations, that cholera is no other than the result of an excess of atmospheric pressure. The intimate relation between atmospheric pressure and the cholera epidemic once firmly established, the mystery attending this disorder will disappear of itself. We shall then find perfectly natural and intelligible its endemic existence in some localities, and its entire absence from others,—the manner of its propagation and extension by the way of low localities, and in a direction opposed to the wind, at the same time sparing the elevated places,—the rapidity with which the cholera epidemic may be developed and may disappear,—the action of the different agents recognised as salutary or injurious in cholera.—the decided predisposition to the cholera exhibited by some individuals, and, on the contrary, the almost absolute exemption enjoyed by other persons—and in all cases according to the prevalence of their active force. The primary cause of epidemic cholera, consisting in an excess of atmospheric pressure, and the proximate cause being in a stagnation of the blood with its consequences, protection from this malady will be secured by recourse to those agents which sustain the energy of the circulation of the blood and respiration, as soon as there is observed the slackening of the pulse. These agents must, in this respect, be considered as preservatives.

THE ORIENTAL BATH. BY DR. HAUGHTON.

Some months ago, his attention being drawn to the Oriental Bath as a sanitary institution, Dr. Haughton was induced to undertake a journey to the East, for the express purpose of determining what were its claims to consideration; with this view he remained a month in Constantinople. This bath is best known to the western nations by the name of "The Turkish Bath;" but there is scarcely a nation in the East which does not possess a somewhat similar institution. There is a prevailing prejudice that the eastern bath is only suited for tropical climates, and could not be adopted in these latitudes without danger; but not only the ancient Greeks, but also the Romans, were acquainted with its virtues, and thought no expense too great to enable them to confer upon every citizen the luxury of cleanliness, the foundation of all sanitation. It was the custom of the Romans to build baths in the different countries which they conquered. Justin informs us that they introduced them into Spain, after the second Punic war, where they continued in operation long after their suppression in other parts of Europe. From thence they passed into Germany and France, and even into the British Islands; and there is reason to believe, that were antiquarian research directed to this point, remains would be found in these countries, not upon the same scale as those of France and Germany, but sufficiently perfect to show the principle upon which they were constructed. It is of great importance that this principle should be well understood, and especially that we should observe the difference between it and the Russian vapour bath, which it most resembles. It is simply that of an oven, large enough to walk about in, and lighted from the top. The medium by which the bather is surrounded is hot air, containing a little moisture, that the tissues may not experience too great desiccation from its contact, and that the softening of the loosened scales of epidermis, which is so essential, may be the sooner effected. In this bath, water is not absorbed by the skin, as in the Russian vapour baths, or the steam baths of this country; but it is, on the contrary, given out by both the pulmonary and cutaneous surfaces in great abundance. The first chamber which is entered serves as a dressing-room, where the clothes are deposited previous to entering the hot chambers, and where the bather remains to cool himself on leaving them. For this reason it was called

the *frigidarium* by the Romans, although the temperature is about 77° Fahr., or something over summer heat. The next room is about 95° Fahr., and is called the *tepidarium*, where the bather reclines, and drinks some hot coffee, or smokes, until he is in the proper condition for entering the third chamber. Dr. Haughton in no instance found the heat of the third chamber above 40° centigrade (104° Fahrenheit). Were it considered necessary, however, an enormous heat could be endured in the oriental bath. A French gentleman, who was nearly suffocated by the vapour of the baths of Nero, near Pozzuoli, in a temperature of 122° Fahrenheit, was able to bear a heat of 176° Fahrenheit in dry air, without inconvenience. The floor of the bath being the hottest part, the stratum of air next it ascends continually, carrying with it the superfluous vapour, which condenses upon the roof, and creates an imperceptible current, which suffices to purify the atmosphere. In the third or hot chamber, corresponding to the *laconicum* of the Spartans, and the *calidarium* of the Romans, the bather is shampooed—a kind of kneading of the muscles; and the dead skin, with its adherent impurities, is removed by means of the goat's-hair glove. The amount of extraneous matter which is thus collected from the most clean person, will excite some surprise in those only accustomed to the use of soap and water. After the use of the glove, the bather is next thoroughly washed with soap and hot water, performing part of the washing himself, as he is never naked during any part of the bath, the Turks especially being most scrupulous in this respect. When he gets up, he puts on a pair of wooden pattens, to keep his feet off the hot floor, and returns to the second chamber, where he is lightly wiped, and again clad with warm towels; the head being bound up, to avoid taking cold. The bath is now finished, but it would be imprudent to go out without remaining some time in the *frigidarium* to become cool. Here it is customary to lie down, well swathed in towels, and to drink some sherbet or coffee, and smoke. Nor does the bather require much persuasion to induce him to stop, as the sensations are so delicious that it is only necessary to lie still to enjoy a mental calm and exquisite consciousness of health that few of us have ever experienced. Here we have a pleasure which is not a vice—a luxury which does *not* tend to shorten life; and which only awaits a sufficient demand to give encouragement to capital, that it may become at once cheap and universally attainable. There is no drug in the Materia Medica at all comparable with it as a purifier of the blood; for even poisons are thus eliminated from the system; and it is well known that alcohol is frequently taken by the Turks in large quantities without producing inebriation. Besides which, they enjoy an immunity more or less complete from various diseases, which would be quite unaccountable were the influence of the bath to be denied. Gout is scarcely known; rheumatism is rare, and soon cured; workers in lead-paints seldom are affected by colica pictonum: chronic skin diseases are very rare, and pulmonary consumption much less common than with us. The Turks have always considered the public baths of Constantinople as supplying the place of a certain number of hospitals, which must otherwise be built. Of the former there are 300 open to the public, and every gentleman who can afford it has a private one in his own house; while there are only two or three public civil hospitals for a population of 900,000 souls; nor were these at all crowded when Dr. Haughton was in Constantinople. It may perhaps be said that the oriental bath has been discontinued in the West of Europe because it was found unsuited for the climate and the genius of the people; but history furnishes other reasons to account for its disappearance: luxury and depravity did indeed enter the sanctuary, and, in the endeavour to suppress them, the temple of cleanliness was destroyed. In the time of Constantine, a regular crusade was waged against them by the clergy; and, the civil power being placed in their hands almost without restriction, they destroyed at one fell swoop the two greatest bulwarks by which the physical energy of the people had been preserved—bodily exercise capable of acting upon the entire muscular system, and a habit of cleansing the entire body. Thus fell the baths and gymnasia of Europe. The ancient bath is worthy of restoration, both as a hygienic and remedial agent. A beginning has already been made, and a building of this kind has been lately opened in the neighbourhood of Cork.

ON THE MORTALITY OF CERTAIN DISEASES.

BY W. T. GAIRDNER, M.D.EDIN.

A few years since, with the assistance of a considerable number of medical friends, Dr. Gairdner made a collection of about 270 cases of fatal diseases, in proportions pretty equally derived from hospitals and from other sources, which series of cases might be regarded as exhibiting, not very unfairly, the ordinary mortality of Edinburgh, in a season free from remarkable epidemic disease. The returns received represented all classes of the population, and nearly all ages, in something like the normal proportion. The facts bearing on the fatal event were usually stated in some detail, and not, as in most returns of mortality, by merely attaching an arbitrary name to the symptoms. Thus it soon became apparent that any attempt to assign each death to one cause only, must be arbitrary in the extreme, and must lead to grave inaccuracy. In fact, it has been clearly shown that men rarely die of one single disease: almost always there are complex conditions which cannot be, and ought not to be, rendered into a single form of expression. No doubt, one morbid form often predominates, and gives a character to the rest; but not less frequently it is entirely a matter of reasoning, and, therefore, of some degree of doubt, what is the primary and what the secondary disease. The consideration of these circumstances induced Dr. Gairdner's associates and himself, in recording the results of their joint inquiries, to adopt a peculiar plan. Instead of registering one cause of death—one fatal disease—in each case, they determined to register as many as were clearly presented by the accounts of the morbid history. Thus, a result was obtained widely differing from that of the Registrar-General. First in importance, as in frequency, is tubercular disease, in the general sense, with its most frequent special form, *phthisis pulmonalis*. According to Dr. Gairdner's returns, the former is a cause of death to about one-fourth, the latter to rather more than one-fifth of the population included in these inquiries. According to the Registrar-General, the proportions in London were, in 1854, less than one-seventh of the whole mortality for tubercular disease, and less than one-tenth for phthisis pulmonalis. Diarrhœa is enormously underrated in the Registrar-General's returns. It is, in fact, entitled to be registered as a source of mortality in little less than one-fourth of the population of Edinburgh: in other words, of one hundred who die, not less than from twenty to twenty-five owe their death in some degree to diarrhœa. In the Registrar-General's returns, it is only in cholera years that the cypher of diarrhœa reaches anything like this proportion: the proportion being, in ordinary years, from 1-78th to 1-20th of the general mortality. It is obvious that the residual cases, or those merged and lost sight of by the Registrar-General, are cases of complicated, but not on that account less real or less fatal diarrhœa; such cases are, in fact, an immense majority of the cases of this disease. Disease of the heart, in one form or other, is the cause of death to not much less than one-eighth of the population. The returns for London in 1840, show this cause of death as only affecting one fiftieth of the population; since this period, however, the proportion has been gradually rising, evidently owing to the increased care of medical practitioners in reporting, and perhaps also of the Registrar-General in extracting from the reports, the cases to be placed under this head. Dr. Gairdner finds no reason for adopting the popular theory, that disease of the heart is in reality on the increase. Pneumonia was fatal to 1-11th; pleurisy (often combined with pneumonia) to 1-12th; bronchitis to 1-9th of the population under his observation. These causes of death, also, are considerably understated in the registrar's returns; and there is this additional anomaly, that while in the first of the reports of mortality in London the proportion of bronchitis was exceedingly small, it has now come to be for many years the preponderating form of chest disease, and counts its victims by hundreds, where it formerly counted them by tens. Next follows Bright's disease, including some of the allied diseases of the kidney. These morbid conditions he has found to be a source of mortality to about a tenth of the cases observed by himself and his associates. In the Registrar-General's reports for London, on the other hand, Bright's disease constitutes in general terms not more than 1-380th of the gross mortality.

ALTERNATION OF GENERATIONS AND PARTHENOGENESIS IN PLANTS AND ANIMALS. BY E. LANKESTER, M.D., F.R.S.

After alluding to the phenomena of alternation as described by Steenstrup in the Entozoa, Medusæ, and Sertularian polyps, and to the phenomena of Parthenogenesis, described by Owen and Von Siebold, the author concluded his paper as follows: "If we turn now to the vegetable kingdom, we find perfectly analogous phenomena presenting themselves. In fact, the modifications of the reproductive function, which have recently excited so much surprise in the animal kingdom, are

the normal forms of the function among plants. In the roots and branches of a tree we have a gigantic 'nurse,' and the buds are its progeny. Just as we find the same secondary products called 'gemmæ,' in animals either remaining adherent to their parent-stocks, as in the Sertularian and other zoophytes, or floating off, as in Hydra and many others, so we find the buds of plants remaining attached to the tree, or becoming separated from it. Just, too, as we find a different form assumed by the secondary offspring of the 'nurse,' as in the scolex-head of the cystic-worm, so we find in such cases as those presented by the 'bulbillus,' the 'bulb,' and the 'sporule,' different forms assumed by parts having the same relations in the plant as in the animal. So likewise in the plant we find a greater change of the secondary offspring taking place, when sexes are developed and flowers are produced, and the hermaphrodite flower, with its stamens and pistils, is the representative of the segments (proglottides) of the tape-worm, with its male and female apparatus in a common envelope. We may go yet further with our analogies in the vegetable kingdom. Here also we have numerous cases in which the germ-cell, the ovule, is produced, and developes within itself an embryo, quite independent of the influence of the sperm-cell, the pollen."

Professor Allman thought Dr. Lankester's nomenclature very clear and intelligible; and he believed by its aid inquiries into the curious and difficult subject he had brought before the Section would be facilitated.

Dr. Baird could confirm the statements made by Dr. Lankester with regard to the Entomostracous Crustacea. In the case of the ordinary *Daphnia pulex*, he had observed seven generations of young without the existence of males amongst them.

THE FLOW OF THE CHYLE IN THE LACTEAL SYSTEM. BY MR. LISTER.

The author had made a series of observations on the lacteals of mice under the influence of chloroform. He found the chyle flowing equably without contraction, and the chyle corpuscles very close to the origin of the vessels. He had in vain endeavoured to cause small particles of coloured matter, as indigo, etc., to pass into the lacteals.

ACTION OF THE AURICULO-VENTRICULAR VALVES OF THE HEART. BY W. T. GAIRDNER, M.D.

Dr. Gairdner had frequently found two auriculo-ventricular regurgitant murmurs, which were not fully explained by the *post mortem* appearances. He pointed out anatomical conditions of the valves at the time of their tension, which he believed have not been sufficiently attended to, and that these explained the occurrence in certain otherwise obscure cases of regurgitant murmurs without organic lesions of the valves or dilatation of the orifices.

CERTAIN PATHOLOGICAL CHARACTERS OF THE BLOOD-CORPUSCLES. BY MR. J. B. HENNESSY.

Mr. Hennessy stated the results of his microscopical observations on, first, healthy blood; and on, secondly, inflamed blood. The result to which he directed particular attention was, that in inflamed blood the corpuscles were smaller and darker than in healthy blood. In corroboration of his views, he quoted the remarks of M. Donné, of Mr. Wharton Jones, Mr. Gulliver, and many others, upon this change of size. Mr. Hennessy founded a theory of inflammation through increase of temperature, the occurrence of the buffy coat and the other phenomena being satisfactorily explained.

THE IMPORTANCE OF INTRODUCING A NEW AND UNIFORM STANDARD OF MICROMETRIC MEASUREMENT. BY PROFESSOR LYONS.

Dr. Lyons alluded to the great difficulties experienced by observers in enumerating, rendering, and even remembering, the various kinds of measures now in use in these countries and on the Continent, portions of the English, Irish, and French inch and line, and decimal parts of the French millimètre. The high figure in the denominator and the number of decimal places were exceedingly cumbrous. He (Dr. Lyons) would propose that some definite micrometric integer should be assumed, being a determinate part of unity. He proposed that this measure should be denominated a *microline*. He did not mean definitively to bind himself to the adoption of any standard, but would propose provisionally that the one ten-thousandth part of the English inch should be assumed and denominated the standard microline *pro tem*. He would, however, have his hearers bear in mind the present tendency of scientific men towards a decimal system. For his own part, he would prefer the French decimal scale.

Editor's Letter Box.

FEES FROM ASSURANCE OFFICES.

Letter from C. Radclyffe Hall, M.D.

Sir,—As the inclosed correspondence touches upon a matter in which an imposition is not uncommonly attempted to be practised upon the profession in general, you may consider it worth publication. The half-guinea was given to the Torbay Infirmary. I am, etc.,

C. Radclyffe Hall.

Torquay, September 26th, 1857.

"Torquay, September 16th, 1857.

"Sir,—I return the post-office order for 10*s.* 6*d.* tendered me as my medical fee for examining Mr. —— for insuring his life in your office. My fee is the usual one of a guinea. If you decline paying this, I must make you a present of my services on this occasion.

"The plan of offering half the usual fee is neither just nor (I think) politic. You expect and have the same care, exactness, and time, from your medical referee, whether the sum insured be £50 or £5,000. I expect you do not offer a fee of £5:5 when the sum to be insured is £2,000! Why then should you *diminish* your fee *below* the fair and customary honorarium when the sum insured is small, if you do not *raise* the fee *above* it when the sum insured is large? I was occupied for one hour in making a conscientious examination, for your benefit, in this instance. Had I received any intimation from you beforehand that you should not pay me the usual fee, I need not say I should have preferred a more remunerative occupation of my time. It is nothing to me that, after receiving my certificate, you decide upon so small an insurance as £100; that is your concern. My concern is to act conscientiously in forming and communicating to you my opinion, and to be adequately remunerated.

"The plan is impolitic. Members of the medical profession will naturally oppose offices which treat them illiberally, and support offices which have always dealt justly towards them. It might even tempt the examiner to make the most favourable report he possibly could: and, although you may safely trust that the members of the medical profession will give an honest opinion if they give an opinion at all, whether adequately or inadequately paid, still you have no right to trade upon their integrity. "I am, sir, your obedient servant,

"C. Radclyffe Hall.

"To the Secretary of the Unity Life Office."

"Unity General Assurance Association, Chief Offices, Unity Buildings, Cannon Street, City, London, E. C., Sept. 17th, 1857.

"Sir,—I beg to acknowledge the receipt of your letter of yesterday's date, and am much concerned at its contents.

"I do not wish for a moment to regard the fee of half a guinea as an equivalent for the services you have performed. It is regulated, not by that comparison, but by a fixed scale, which has been acted upon by this and most respectable offices during the last seven years; viz., half a guinea when the assurance is for a less sum than £500, and a guinea in all other cases. You are mistaken also in supposing that the sum of £100 was fixed upon by us. It was the applicant's original proposal; and *our decision*, after carefully considering your report, was *to decline the proposal altogether.*

"Will you allow me to thank you for your report, and trust you will regard the disproportion of the fee, not as a sign of illiberality on the part of the office, but as arising from the fact that the addition (for expenses) to the mathematical premium charged by the office is very small. I return the post-office order, and am, sir, "Yours respectfully,

"Thomas Gray, *Manager's Secretary*,

"*Per* F. L. H. Collins.

"C. Radclyffe Hall, Esq., Torquay."

"Plymswood, Torquay, September 19th, 1857.

"Sir,—I beg to acknowledge your last. I see nothing in what you state to qualify my opinion that an insurance office has no right to expect services from the medical profession at less than a fair and usual rate of remuneration. I have personal reasons for knowing that very many offices manage to transact a large amount of business without attempting to *half-pay* their medical referees; and I have little doubt that, at this moment, your own office gives 5 per cent. per annum on the premium paid to any solicitor who recommends an appli-

cant. That it should attempt to save half a guinea at the expense of the time and mind of a medical man when the sum insured is less than £500, is surely illiberal dealing, to which the profession, if they be wise, will decline, as I now do, to submit.

"I re-enclose the post-office order. It is at your option whether you send me a just fee or nothing. Should the present sum be returned to me, to put an end to the mere sending of it to and fro, I shall hand it over to the Infirmary here, as a half-payment of a medical fee by the Unity Life Office, which the physician refused to accept!

"I remain your obedient servant, "C. R. Hall.

"To the Secretary of the Unity Life Office."

"Unity General Assurance Association, Chief Offices, Unity Buildings, Cannon Street, City, London, E. C., Sept. 21st, 1857:

"Sir,—I beg to acknowledge the receipt of your letter of the 19th instant, and am sorry that you still decline to receive the fee of 10*s.* 6*d.*

"Will you do me the favour to sign the inclosed post-office order, and forward it either to the Secretary of the Infirmary or to the collector of subscriptions for the relief of Indian sufferers, as you may select?

"I am, sir, your obedient servant,
"Thomas Gray, *Manager's Secretary*,
"*Per* F. L. H. Collins.

"C. Radclyffe Hall, Esq., Torquay."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Birkett. On September 27th, at 59, Green Street, Grosvenor Square, the wife of *John Birkett, Esq., Surgeon, of a daughter.

Braid. On September 16th, at Springfield, Neston, Cheshire, the wife of James Braid, M.D., of a daughter.

Canton. On September 28th, at 17, Great Marlborough Street, the wife of Alfred Canton, Esq., Surgeon, of a son.

Fairless. On September 25th, at Hexham, Northumberland, the wife of William Dean Fairless, M.D., of a son.

Findlay. On June 30th, at Portland, Victoria, the wife of John Findlay, M.D., Surgeon R.N., of a daughter.

Nicol. On September 28th, at Swansea, the wife of *D. Nicol, M.D., of a daughter.

Partridge. On September 26th, at New Street, Spring Gardens, the wife of Richard Partridge, Esq., Surgeon, of a son.

Prance. On August 27th, at Heath Mount, Hampstead, the wife of *Robert R. Prance, M.D., of a daughter.

MARRIAGES.

Holland—M'Donald. Holland, John Yate, Esq., Lieutenant and Adjutant of the Portsmouth Division Royal Marines Light Infantry, to Fanny, second daughter of Thomas Wallis M'Donald, Esq., Deputy-Inspector of Hospitals and Fleets, at Great Yarmouth, on September 23rd.

Hutchinson—Hutchinson. Hutchinson, Thomas S., Esq., Surgeon, Sutton, Surrey, to Jane Smith, only surviving daughter of William Hutchinson, Esq., of Kilclogh, county Cork, at Kilworth, on September 23rd.

Newman—Newton. *Newman, William, Esq., Surgeon, Fulbeck, near Grantham, to Sarah Tinley, eldest daughter of the late William Newton, Esq., of Ewerby Thorpe and Sudbrooke Heath, Lincolnshire, at Ancaster, on September 10th.

DEATHS.

Becher. On August 2nd, at Barrackpore, Calcutta, of cholera, Elizabeth Miller, wife of Richard A. Becher, Esq., 43rd Bengal Native Infantry, and second daughter of *Philip C. De la Garde, Esq., of Exeter; also, on July 21st, Millie Harriet, her infant daughter.

Blathwayt. On September 20th, at Manby, near Louth, Lincolnshire, Judith, wife of W. Blathwayt, M.D., aged 40.

Drayton, George Box, Esq., Surgeon, formerly of Gloucester, at Islington, aged 73, on September 19th.

Fairless. On September 23rd, at Hexham, Northumberland, Joseph James Douglas, second son of William Dean Fairless, M.D., aged 14 months.

Home, George, Esq., Staff-Surgeon, at York, on Sept. 28th.

*Ogle, James Adey, M.D., F.R.S., at Old Shoreham, aged 64, on September 25th, after an illness of thirty hours. Dr. Ogle was a member of Trinity College, Oxford. In 1820 he became a doctor of Medicine; and in 1824, on the resignation of Dr. Bourne, he was elected by Convocation to fill the Aldrichian Professorship of Medicine. In 1825 he was for one term Mathematical Examiner. In 1830, on the death of Dr. Bourne, he was elected by Convocation Clinical Professor; and in 1851, on the decease of Dr. Kidd, he was appointed by the Crown to the Regius Professorship of Medicine, to which were then attached the Aldrichian Professorship and the Tomline Readership in Anatomy. Dr. Ogle also held the office for two years of Examiner in the School of Natural Science, established in 1854. In 1851, he was chosen President-elect of the then Provincial Medical and Surgical Association, and presided over the annual meeting held in Oxford in 1852.

Semple, William, Esq., Surgeon, at 38, Upper Street, Islington, on September 26th.

Sweeny, Charles Stewart, M.D., at Lancing, aged 43, on September 25th.

APPOINTMENTS.

Barnes, Robert, M.D., elected Physician to the Royal Maternity Charity.

HEALTH OF LONDON:—WEEK ENDING SEPTEMBER 26th, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London in the week that ended on Saturday (September 26th) is 1002, and exhibits an increase on that of the previous week, which was 946. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1239. But the deaths of last week occurred in an increased population, and if for the purpose of comparison the average is raised in proportion to the increase, it will become 1363. The difference between the deaths now returned and the corrected average is 361, which, though it arises in part from the high rate of mortality at two periods when cholera was epidemic, is to be attributed in a much greater degree to the improved state of health which London enjoys at the present time, and to that reduction of the mortality which is its necessary result.

Under the influence of a falling temperature, the mortality from diarrhœa is now fast subsiding to its ordinary weekly amount. In the two previous weeks, the deaths from it were 144 and 111; last week they were 83. Its rise and fall have been extended over a period of thirteen weeks; and in that time the mean weekly temperature has declined from 68° to 59°. In addition to the 83 deaths from diarrhœa, dysentery was fatal to seven persons, and cholera to three persons (all the latter being adults). Amongst the cholera cases, a seaman is reported, who died at Horsleydown of "cholera Asiatica", after nineteen hours illness, on board of a ship which in its voyage to London had touched for nearly a day at Gluckstadt (on the Elbe, thirty miles below Hamburg), where the disease has lately prevailed. Next to diarrhœa, the most fatal in the zymotic class of diseases is typhus (with common fever), which carried off 52 persons; then scarlatina, of which 34 children died; four of these in the Belgrave sub-district, and four in Mile End Old Town Upper. Thirteen children died of inanition and want of breast-milk; two persons of intemperance; five widows had attained the age of 90 years and upwards, viz., three who were 90 years old, one 93, and one who died near Tottenham Court Road at the age of 94 years.

Last week the births of 886 boys and 820 girls, in all 1706 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1524.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·935 in. On the first three days, the mean daily reading was above 30 in. The highest barometrical pressure occurred on Sunday (the 20th), and was 30·24 in. The mean temperature of the week was 59·1°, which is 3·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout, except on Monday. The highest temperature in the shade occurred on Thursday, and

was 73·6°; the lowest occurred on Monday, and was 41·5°. The entire thermometrical range of the week was therefore 32·1°. The mean dew-point temperature was 53·4°, and the difference between this and the mean air temperature was 5·7°. The wind was generally in the north-east, till Tuesday afternoon, it then changed to south-east, and on the last two days was for the most part in the south-west. Rain fell to the depth of 0·46 in., of which 0·28 in. fell on Friday.

Summer Mourning for Females. Dr. F. J. Brown, of Chatham, writing in the *Sanitary Review* for the present month, says:—"The higher temperature of dark-coloured than of light-coloured clothes, when exposed to the rays of the sun, is a fact well known to the public. It is in consequence of the appreciation of this difference in effects of colour, that we see so many persons dressed in light-coloured garments during the summer months. It is desirable that change of colour in articles of dress, according to season, should become the custom with men as well as with women, instead of being exceptional as it is at present. The black hat, with the black cloth clothes, cause men to experience distress that is wholly unnecessary. The unwritten laws of society are binding upon civilised men, but they must not be carried out to the extent of inflicting useless suffering. Men living in communities, however, do rightly submit to rules of conduct, and also to rules relating to dress. It is proper, therefore, to change the public customs rather than to liberate men from the control of public opinion. It is common for the observation to be made by those that have returned from warm climates, that the heat in England, in the summer, is less patiently borne than it is in hot countries. This circumstance is due to the insufficient difference that is made betwixt winter and summer clothing, particularly as regards colour. The natives of hot countries commonly wear white or light-coloured articles of dress in the hot season, and they practise every method that is available to nullify the effects of solar heat upon their bodies; and Europeans on the continent follow their example to some extent. In England, on the contrary, great pains are taken to guard against the effects of cold; and the hot weather is considered by the public as something good because it is opposed to "cold." The proper course to follow is to moderate the effects of cold in the winter, and of heat in the summer. It is well known that both cold and heat in excess are injurious to health. The tables of mortality show an increase in the number of deaths from pulmonary affections when the thermometer falls in winter, and an augmentation in the mortality of diarrhœa when the temperature rises high in summer; and the increase corresponds accurately, allowing for disturbing causes, with the fall or rise of the thermometer respectively. Women readily exchange their winter garments for those suitable for summer; but, under circumstances of mourning, they are cruelly compelled by custom to move about under a load of black crape. It is to liberate them from this misery that the present article is written. Many widows suffer from nervous headache in consequence of night-watching, anxiety, and grief; and this form of headache is converted into congestion of the bloodvessels of the head by exposure to the sun in black bonnets and dresses. There are numerous instances of widows remaining within doors for months together, to the great injury of their health, rather than endure the misery of sun broiling. The remedy is very simple. Let summer mourning become customary. Let light-coloured clothing be worn, trimmed with thin black edging. There is such an article as white crape; but it indicates slight mourning. Either white crape should be worn as summer mourning, or small-sized black edging to light-coloured dresses; and bonnets should be introduced into general use for the purpose. The milliners can best manage the details: it is for physicians to point out the propriety of the change in custom."

Preservation of Food. Dr. Spence, of Lerwick, has communicated to the *Sanitary Review* for the present month the following interesting note respecting the preservation of animal food:—"In October 1823, when Parry returned from his second Arctic expedition to Lerwick Harbour, he presented to my father, the late William Spence, Esq., Surgeon to the Forces, two tins of preserved soup, with a request that they might be kept unopened as long as the contents could be reasonably expected to continue sound and fit for use. They were put aside and almost forgotten, until the 14th of July of the current year; when, having read the article on the Preservation of Food in No. VIII of the *Sanitary Review*, I was reminded of their existence, and determined on opening them. The inSides of the tins were white and untarnished, and the contents were free from any unpleasant odour or flavour. One of them contained concentrated meat soup, and the other vegetable soup. I submitted them to various individuals, who, though at first rather chary of tasting them, declared them to be perfectly fresh. I had the contents of the two tins mixed and warmed for dinner, and I certainly never tasted better soup. The expedition sailed from England on the 29th of April, 1821, so that the soups must have been rather more than thirty-six years old, and must have passed two winters in the Arctic regions. In the published account of the expedition, it appears that these soups were prepared by Messrs. Gamble and Co."

Cholera. We are informed by our correspondent Dr. Webster, who has just returned from an extensive tour in Scandinavia, that epidemic cholera prevails with much virulence throughout the northern districts of Europe. At Upsala and Stockholm, especially at the former city, the malady has proved unusually severe and fatal. At Christiansand in Norway, in Copenhagen, and at Corsœr, on the west coast of Zealand, it has also proved very violent. We trust these outbreaks are not the forerunners of the disease in these islands. (*Sanitary Review.*)

The Wandsworth Sanitary District. The Medical Officers of Health for the Wandsworth district, after labouring for the sanitary improvement of their respective parishes, and producing a series of very able reports, have come under the ban of their penny-wise-and-pound-foolish Board. Their salaries are to be reduced to an absurd minimum; and even their motives are questioned by the narrow sighted politicians whose servants they unfortunately are. We recommend these political gentlemen to learn the motto on our title-page—"National Health is National Wealth." (*Sanitary Review*, October 1857.)

Clinical Teaching. We have to congratulate the students of Edinburgh on the recent enlargement of their opportunities of clinical study. After considerable agitation of the question, and several failures, it was at length arranged last session, that the medical and surgical clinical instructions should be delivered at different hours, so that the same students might attend both; the surgical at twelve, the medical at one o'clock. Some little personal inconveniences to several of the teachers, which stood in the way, were at last overcome, for these were not to be weighed in the balance against so vast an improvement to our clinical department; and it is, of course, impossible that every teacher should have the hour of lecture which most suits his convenience or pleasure. We confess we would rather see some of our courses of lectures suppressed altogether, or blotted from the curriculum, than that this improvement should not be carried fully out. At any rate, some of our winter courses might with advantage be transferred to the summer session. We trust that no new obstacles will be thrown in the way. The managers of the hospital have sanctioned the change; the dispensaries have changed their visit hour to two o'clock; and the College of Surgeons have cancelled a bye-law which had the appearance of requiring that clinical surgery and clinical medicine be not attended during the same session. Nothing further is required than that the anatomy lectures be delivered at two o'clock, instead of, as hitherto, at one. We know of no good reason why it should not be so. It was supposed that this would interfere with the Natural History class, which formerly met at two o'clock; but as we are happy to see the Natural History class advertised for one o'clock, this obstacle is now removed. We trust, therefore, that the teachers of anatomy will not allow any secondary or personal considerations to stand in the way. It is the opinion of some among us that our hospital visit should take place in the early morning, as in the Parisian hospitals. Much may be said on both sides of this question, which, however, is quite a separate one from that of the increase of time, and having the medical and surgical visits at separate hours. It is for the students, and for those who have the general interest of the school at heart, to see that, irrespective of the period of the day, two hours shall be kept clear for hospital visit and clinical lectures. (*Edinburgh Medical Journal*, October 1857.)

Royal Society of Edinburgh. The Royal Society of Edinburgh announces the following subjects of competition for the award of 1858-59. The Keith Prize, a gold medal and from £40 to £50 in money, will be given for the best communication on a scientific subject. Brewster, Forbes, and other distinguished natural philosophers, have been the gainers of the Keith medal on former occasions. The Macdougall Brisbane

Prize, a gold medal and money, will be awarded to the best biographical notice of an eminent Scotchman, including an estimate of the influence and importance of his writings and discoveries. The Neill Prize, a gold medal and money, will be given for the best paper on a subject of natural history, by a Scotch naturalist; or, failing any paper thus communicated, to the best work or treatise published within the five years preceding the time of award.

Sanitary Customs of the Jews. It is noticeable that in poor neighbourhoods which have been attacked by cholera, fever, small-pox, and similar diseases, the Jews living there have in an extraordinary manner escaped visitation. The apparent causes of this sanitary fact are worthy of attention. 1. As regards food, it seems that even the poorer Jews are most particular in the food they eat. In obedience to the law of Moses, they use none of the blood or offal of animals; they are also particular in the choice of fish, and avoid both animals and fowls which are grossly or unwholesomely fed. 2. Intemperance in drink is rare amongst them; and even the very poor Jews are remarkable for their attention to moral family ties. There are, of course exceptions, but this general characteristic is certain. 3. Their religion directs them to use great personal cleanliness. Ablutions are made before visiting the synagogues, and on other occasions. Their houses are also thoroughly cleaned at certain periods from top to bottom. All the above acts are important to health, and the good effect of attention to them is evident. The rules are so simple, that they might be readily observed by the chief parts of the masses of people in the large towns amongst whom this ancient race are scattered. (*The Builder.*)

Salaries of Poor-Law Medical Officers: Case of Dr. McCarthy, of Kenmare. In reference to the case of Dr. McCarthy (see Journal, p. 801) a special meeting of the Council of the Irish Medical Association was held on September 25th. Dr. Quinan, the honorary secretary, stated that he had received several communications relative to the movement made by the Cork Association for the purpose of presenting a testimonial to Dr. McCarthy, and read letters from Drs. Armstrong, Kingsley, and others, calling upon the Council to assist in carrying out this object. The following resolution was unanimously adopted:—"We, the undersigned, viewing with apprehension the principle involved in the recent reduction of the salaries of the medical officers of the Kenmare Union, are of opinion that the efficiency and stability of such institutions are imperilled by the efforts so frequently and, in this instance, successfully, made to lower the salaries of the medical officers of dispensaries. We can conceive no proceeding more harassing, vexatious, or ungrateful, to a dispensary officer than a constant menace to deprive him of his bread, or one more detrimental to the true honour or interests of the profession to which he belongs. We beg, therefore, our professional brethren to join with us in endeavouring to secure an arrangement by which £100 per annum shall be fixed as the minimum salary to be paid to each medical officer connected with Poor-law medical relief in Ireland. We further desire to record our sympathy with Dr. McCarthy of the Kenmare Dispensary, who, after thirty years faithful service, has had his salary reduced, notwithstanding that his labours have confessedly been increased by the requirements of the Poor-law Commissioners, in writing up books, making returns, etc., and at the same time to present him with a testimonial of our admiration and respect for his able and manly defence in behalf of the dispensary surgeons of Ireland, as well as of the medical profession at large." Resolved—"That every medical gentleman in this city be called upon to attach his name to the foregoing resolution, and to join in this testimonial about being presented to Dr. McCarthy." A sub-committee was then appointed to carry out the foregoing resolution.

Meetings have also been held, and resolutions passed in disapproval of such treatment as has been received by Dr. McCarthy, by the medical officers of the Dispensary Districts of the principal unions in the South of Ireland, and the County and City of Limerick Medical Protective Association. A meeting of medical men was also held at Cork on September 25th, on the subject of presenting a testimonial to Dr. McCarthy. Numerous letters were read, approving of the object; among them was one from Mr. Griffin, the Chairman of the Poor-Law Medical Reform Association in England, inclosing a subscription. The spirit which the Poor-Law medical officers, and the profession in general in Ireland, have manifested in defence of their oppressed brethren at Kenmare, is most worthy of praise and of imitation.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

East York and North Lincoln Branch. The Report, with Dr. Sandwith's Address, will be published next week.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Dr. Hannotte Vernon; Dr. Herbert Barker; Dr. John R. Nicholson; Dr. J. Sloane; Dr. C. B. Garrett; Mr. D. Kent Jones; Dr. P. H. Williams; Dr. H. Sandwith; Dr. S. Palmer; Dr. Noble; Dr. Radclyffe Hall; Mr. George Rigden; Mr. E. Garraway; Dr. Mackinder; Mr. T. Holmes; Mr. G. B. Masfen; Dr. C. Handfield Jones; Dr. D. Nicol; Mr. Mitchell Henry; Dr. J. C. Hall; Dr. Fairless; Dr. Barnes; Mr. J. A. Locking; Dr. J. G. Croker; Mr. J. Craig; Mr. F. Spurrell; Dr. Bryden; Dr. A. Anderson; and Mr. T. P. M. O'Donovan.

ADVERTISEMENTS.

Testimonial to Dr. Hodgkin.—Dr. Hodgkin having expressed his desire that the proceeds of the Subscription, in place of being expended on a Portrait, as was determined at the Meeting of the Subscribers held on the 24th July, should be applied to found a Prize in connexion with the School of the Royal Benevolent College; it has been resolved by the Committee, with a view more effectually to carry out so desirable an object, to keep open the Subscription, which at present exceeds £230, until the end of November, when a final Meeting of the Subscribers will be held.

Subscriptions, no longer limited in amount, will be received by the Honorary Secretary, 40, Brook Street.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XLI.] LONDON: SATURDAY, OCTOBER 10, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

MORTIFICATION OF RIGHT FOREFINGER, CONSEQUENT UPON THE BITE OF A CAT: PHLEGMONOUS ERYSIPELAS OF THE WHOLE ARM: TRISMUS: DEATH.

Under the care of W. LAWRENCE, Esq.

[*From Notes by* W. CHIPPENDALE, Esq., *House-Surgeon.*]

WE have to lay before our readers, as a companion to the cases of tetanus which we have previously reported, and of which we shall soon have another instance to bring forward, the following curious case, which occurred some time since at this Hospital. The case was one which at first seemed to present the features of hydrophobia. This condition, however, did not appear ever to be fully established; and the difficulty of or repugnance to swallowing seemed to be due to the tetanic spasms which this action induced, as so many other irritations of the surface will in that mysterious disease.

S. R., a shoemaker, aged 46, whose previous health had been good and habits temperate, was admitted into Rahere Ward on December 13th, 1856. He stated that he had been severely bitten in the forefinger six days previously by a kitten, which, up to that time, had never exhibited any signs of ill temper. He immediately placed the finger in warm water, in order to encourage the bleeding, which was considerable, considering the small size of the wound. No caustic had at any time been applied. The same evening he felt very chilly and unwell, the pain in the wound being so severe as to quite prevent him from sleeping. This continued for three days, the part having become very inflamed, when he was relieved by an incision, which was followed by the escape of some pus. The following day, the finger commenced to change colour, and its temperature and sensibility to diminish. He then applied to the Islington Dispensary, where some dead skin was removed by the surgeon in attendance, who recommended him to come to this hospital, for the purpose of having his finger at once amputated. On admission, the finger was seen to be shrivelled and black as far as the first phalanx; but at that point the mortification had ceased, and a healthy line of separation was established. The part was cold and moist, yet not totally deprived of sensation. The integuments covering the first joint and back of the hand were very inflamed, and the whole limb was swollen and œdematous. There was a dusky line along the whole track of the cephalic vein, but no tenderness: the glands in the axilla were, however, slightly enlarged and painful. The man's countenance was anxious; his skin rather hot; pulse 108, of moderate volume; the tongue was moist, but furred. The urine was particularly high coloured. He complained of great pain throughout the whole arm.

Applicentur hirudines xxiv.

Sumat haustum sodæ tartratis cum potassæ nitratis gr. x sextis horis.

Habeat tincturæ opii ℥xl horâ somni.

Dec. 13th. The leeches gave considerable relief to the back of the hand, but there is a great increase of pain, swelling, and tension, in the upper and fore arm. The integuments are hard and brawny in the upper portion of the limb. He has passed the most comfortable night since the receipt of the injury. Mr. Lawrence to-day made a long incision into the upper and fore arm along the inner side, from which sixteen ounces of blood flowed. This was followed by considerable relief to the pain, the cellular tissue being infiltrated with pus. He was ordered to have forty minims of laudanum at bedtime, and six ounces of wine daily.

Dec. 14th. The man passed a quiet night, but to-day his manner is very strange and excited. He talks incoherently, and wishes to go home. It was supposed that delirium tremens was coming on. The condition of the arm is certainly improved.

℞ Spiritûs ætheris compos. ʒss; tincturæ opii ℥xxx; mist. camphoræ ʒiss. M. Fiat haustus 6tis horis sumendus.

He was ordered to have six ounces of wine and a quart of porter daily.

Dec. 15th. The strangeness of manner still continues, and at times he is rather more excited. He is constantly and recklessly moving the arm about, and consequently there is an increase of inflammation in the limb. Three more incisions were made in the forearm to-day, and a ring of nitrate of silver was made around the upper arm. The medicine was continued; and he was directed to have eight ounces of brandy.

Dec. 16th. The man had a severe rigor last night, attended with considerable depression. This was relieved by the administration of a full dose of laudanum and brandy and water. This morning, symptoms of trismus came on. He complains of a feeling of stiffness about the jaws, of inability to open the mouth to the full extent, and of considerable difficulty in swallowing. The muscles of the neck are slightly rigid, but there is no spasm in any other part of the body; those of the abdomen are quite lax. There is no pain or tenderness on percussion over the cervical vertebra. With the exception of the region of the jaw, he is entirely free from pain. The skin is rather cold and very clammy; bowels confined. He is much more composed and calm than he was yesterday.

℞ Hydrargyri chloridi gr. x; olei crotonis gtt. ij. M. Fiant pilulæ ij.

Dec. 17th. The pills did not produce any effect. He obtained one or two hours consecutive sleep last night. There is now scarcely any rigidity about the muscles of the neck, but the jaw is still firmly closed. The difficulty in swallowing even fluids has also much increased, and he now refuses to make the attempt, not from any feeling of dread, but only on account of the pain and spasm with which the attempt is attended. He states that he has had some occasional cramps in the muscles of the calf during the night, but they are now perfectly lax, as well as those of the abdomen. To-day he has become quite rational, and is quite aware of the nature of the disease from which he is suffering, and of its hopeless character. Towards the evening he became more restless, throwing himself wildly about. Later he had several attacks of well marked opisthotonos, in one of which he died.

No examination of the body was allowed by the friends.

WESTMINSTER HOSPITAL.

I. ACUTE PERICARDITIS: ALBUMINURIA: TREATMENT BY STIMULANTS.

Under the care of G. T. FINCHAM, M.D.

[*From Notes by* M. PERREAU, Esq., *Clinical Assistant.*]

ELLEN C., aged 22, a woman of dissipated habits, was admitted on September 10th, complaining of pain in the chest, difficulty of breathing, and cough, without expectoration. The respiration was frequent; the face anxious and pale; pulse 120; tongue furred. The ankles had been œdematous for the last three weeks. The area of the cardiac dulness was somewhat increased. A rough friction sound was audible over the whole of the heart's surface. The sounds of respiration were natural. The urine was high coloured, and loaded with albumen.

A blister was ordered to be applied to the chest; a pill of camphor and hyoscyamus to be taken at bedtime; and a draught containing chloric æther and ammonia every four hours.

She continued in much the same state till September 20th,

when she became much worse. The respiration was much embarassed; the lungs were loaded with fluid; the pulse was weak and fluttering. It was necessary to give her a small quantity of wine (ʒss) every hour; and this was increased to half an ounce every half-hour next day, with much relief. A small quantity of hydrocyanic acid was also given; and a turpentine stupe was put between the shoulders.

Next day an emetic of sulphate of zinc was given. The expectoration had become more free; the friction sound still continued, but much masked by bronchial sounds. The ammonia and æther draught was continued.

Sept. 22nd. The murmur was still audible, but less rough. There was a good deal of bronchitis in front; but behind, the chest was resonant. The pulse was 120, steady; less dyspnœa. She was now allowed to take fish, and four ounces of gin daily.

Sept. 25th. The aspect was much improved; but the pericardial sound was still audible. She was taking a mixture containing paregoric, sulphuric æther, and bicarbonate of soda; and the spirit was still allowed.

Since this note she has been gradually improving. The murmur, which was decreasing steadily, had disappeared entirely on October 2nd. The diet was gradually improved, and an increased quantity of stimulants ordered. The quantity of albumen in the urine also diminished; and, when last heard of, she was complaining only of some remains of anasarca about the ankles.

Remarks. This case is a good example of the way in which treatment must be varied to suit the cases of different persons in the same disease; and how the measures which are necessary in combating inflammation in the robust and otherwise healthy, differ from those which are indicated in many of the inhabitants of great cities, broken down by a long course of vice, and suffering the various ailments which such a course entails. The poor girl whose case we have given, was one of the large class whose existence is the great blot upon our civilisation, and whose trade condemns them to a life of disease, and a premature death. Accustomed as such persons are to indulge in ardent spirits, they cannot bear the antiphlogistic regimen, of which we hear so much in the text-books, but see comparatively little in modern hospital practice, at least in London. A routine practice, which associates pericarditis by a necessary connexion with mercury and depletion, would in all probability have hastened the fatal result. As it was, this case may stand as an instance of the propriety of occasionally treating acute inflammation by stimulants.

The pathology of the disease is not without its interest, occurring as it did in a person free from any rheumatic taint, but in whom the kidneys were in a diseased condition. That albuminuria is frequently associated with serous inflammation is no new observation; and this seems often to occur in a chronic form in the arachnoid without obvious cause, merely as a consequence of vitiated blood. In the present instance, the exciting cause was apparently exposure to cold; but it seems likely that the diseased condition of the blood determined the irritation to the serous envelope of the heart.

The rest and care which the poor creature found in the Hospital appeared also be acting beneficially on the original disease of the kidneys; and it may perhaps be hoped that the latter is not in so advanced a state as to be incapable of cure.

We subjoin notes of another case of cardiac inflammation, also treated without antiphlogistic remedies, by the alkaline method, which has become, we believe, rather a favourite at the Westminster Hospital, and has appeared on the whole as successful as any of the other numerous plans of treating acute rheumatism. The principle of this method is to neutralise the acid, whose presence in the blood appears to be the cause of the complaint; while opium is employed to allay the pain as an auxiliary merely to the principal remedies. There are other physicians who rely mainly or entirely on the action of opium; and certainly patients appear to manifest a wonderful tolerance of this drug in acute rheumatism; but here the opium seems to have acted a subordinate part only, and the recovery was due mainly to the alkaline medicine. The beneficial effect of quinine after the disease had been got under control is not to be overlooked.

II. ACUTE RHEUMATISM: ENDOCARDITIS.

Under the care of G. T. Fincham, M.D.

[*From Notes by* M. Perreau, Esq., *Clinical Assistant.*]

Ann D., aged 27, a single woman, was admitted on Sept. 1st, on account of acute rheumatism of only a few days duration. She was complaining of pain, swelling and redness of almost all the joints, especially those of the hands. She had had hardly any sleep for four days; the urine was high-coloured; the pulse rapid (98) and jerking; tongue coated; face anxious; no præcordial pain. The following medicines were prescribed.

℞ Potassæ bicarbonatis ʒij; aquæ ʒij. M. Fiat haustus 4tis horis sumendus.

Horâ somni sumat pulveris ipecacuan. co. gr. xv.

Regioni cordis applicetur cataplasma lini.

The symptoms did not undergo any material change till Sept. 3rd, when she was complaining of so much pain that she was ordered to have a grain of powdered opium every eight hours. The bicarbonate of potash was still continued.

Sept. 4th. She complains of much pain in the shoulders and hands. There is no murmur. The urine is still high-coloured, but is now alkaline. The pulse has increased in frequency to 112.

During the next three days she improved somewhat as to the pain. The opium seemed to confine the bowels.

Sept. 7th. A distinct systolic murmur was heard at the base of the heart; and next day there was a very loud murmur at the base of the heart, masking the second sound, and heard under the clavicles. Rhonchus was heard also occasionally over the front of the chest. The perspiration was acid, but the urine still alkaline. She was ordered a blister to the præcordial region, and the same general treatment continued.

Sept. 10th. The symptoms continued much as before, the heart's action being still accompanied by a double murmur. The pain in all the other joints was much relieved, but the ankles continued very painful. The mixture was given every six hours.

Sept. 12th. A slight relapse occurred of the pain, which lasted for the next three days. She experienced then an improvement: the face became more cheerful, she slept better. There was profuse acid perspiration.

Sept. 15th. She was ordered three grains of disulphate of quinine every six hours, and the alkali continued. The double murmur still continued, but much more faint; it was heard at the upper end of the sternum, below the clavicles, but very faintly at the heart's apex.

Sept. 19th. The pain having become very much less, and the murmur less rough, she was ordered merely an ounce of quinine mixture three times daily.

For the next few days the pain continued to decrease, and the murmur waxed gradually fainter and fainter. The quinine was still continued, and on the 25th it was found advisable to order her some wine.

There was little more to note in this case. The murmur lasted a few days longer, but on Oct. 2nd, it is noted that it had disappeared, leaving only a little prolongation of the first sound.

Oct. 5th. No morbid symptoms remained except slightly increased impulse of the heart, and she was reported convalescent.

Original Communications.

INFLAMMATION OF THE SHEATHS OF TENDONS.

By James Probert, Esq., Plymouth Iron Works, Merthyr Tydvil.

Inflammation of the sheaths of the tendons of the extensor muscles of the thumb, attended with a creaking noise somewhat resembling the crepitus of a fractured bone, is not of unfrequent occurrence among the miners and colliers of this district.

In reference to three cases of this kind noticed in the Periscope of the Journal for September, I observe it is stated that the cure was rather tedious under the treatment adopted by Dr. Thompson of Tyrone, namely, by "rest, leeches, cold washes, etc." No mention is made of the application of a blister. The latter has proved by far the most efficient remedy in all such cases that have come under my observation. The blister should be from two to three inches wide, and of sufficient length to completely encircle the limb over the part affected.

Very frequently the painful condition of the tendons is removed in twenty-four hours, and complete recovery generally takes place in a few days.

CONSIDERATIONS RESPECTING THE VARIOUS FORMS OF MALARIOUS AND MALARIOID DISEASE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

No one can question that we gain much in every step we make towards fuller and clearer ideas of the nature of the great morbid actions with which, variously combined, we have constantly to deal. This knowledge, it seems to me, is what we want more than any other at the present time. Our diagnosis is not very often at fault; we can name a disease well enough, but we lack a full inspection into the nature of the process we observe, which alone could enable us to oppose it by a truly rational treatment. How much we need to know what it is that *makes* tuberculosis, rheumatism, pyrexia, inflammation, etc., so that we might be able, on recognising these morbid changes, to perceive with the mental eye the fundamental state from which they originated! The following review of one group of diseases may perchance aid some in obtaining a clearer view of their pathology, of the meaning of the various morbid phenomena they present, and of the mode of treatment that should be adopted in unusual and perplexing conditions.

It may be well to premise the following.

(1) The sympathetic plexuses are given off from special ganglionic centres, having communications chiefly of the nature of commissural connections with the cerebro-spinal system. The ultimate ramifications of the plexuses are almost wholly made up of the special sympathetic fibres, mingled with very few of the tubular kind. There can be no doubt that the sympathetic centres are capable of a distinct and independent action, apart from the cerebro-spinal.

(2) The sympathetic plexuses are distributed on the arteries of the abdominal organs, the thoracic, and the cranial.

(3) Paralysis of these plexuses dilates the arteries they accompany, and increases heat and tissue change in the locality where they are distributed; it establishes active hyperæmia, which in states of debility may pass into inflammation.

(4) The arteries of the rest of the body probably receive vaso-motor nerves from the cerebro-spinal which accompany them; the former are of the same structure as the sympathetic, and it may be considered probable that a lesion of them would produce similar effects. I have found these vaso-motor nerves on careful microscopic examination, most distinctly, in the skin of the fingers and dorsum of the foot. There can scarcely be any doubt of their existence in other parts, but the search for them is very difficult on account of the subcutaneous fat and fibrous tissue.

(5) The action of malarious poison is sometimes paralysing, at others irritating. Neuralgic pain, rigors, or convulsions, must be regarded as signs of irritation; numbness, coma, or loss of muscular power, as signs of paralysing influence. These two effects may be produced at the same time in different nervous structures of the same body.

(6) It is probable that the nervous system is specially affected by malarious poison; (*a*) because certain diseases of the head (otitis) produce paroxysms exactly resembling those of ague; (*b*) because neuralgia is a common result of its action and paralysis not unfrequent; (*c*) because means which arouse and invigorate the nervous system, such as cheerful excitement, ward off the disease, while all depressing emotions induce it; (*d*) because quinine, the best remedy for malarious disorders, acts on the brain, producing in over doses deafness and sometimes convulsions;* and opium, a drug of positive cerebral action, is also efficient in some conditions of malarious disease; (*e*) because confirmed malarious disease especially prostrates and stupefies the nervous power, and because this is also often the effect of an incipient attack.

(7) The greater prevalence of malarious disease at some periods than at others seems to be ascribable to the medical constitution of the year rather than to a greater production of poison. If the tendency is to high (sthenic) inflammatory disorder, there will be little of ague and kindred affections; if the tendency is to cause a lowered state of *vis nervosa*, if nervous affections predominate, then malarious diseases, or those that resemble them, will be common also. It is probable that the heat of tropical countries renders the endemic disorders so severe as they are, not only by its generating more and more powerful malarious poison, but by enfeebling the nervous system, diminishing its equilibrium and tone, and so rendering it more liable to *bouleversement*.

(8) There seems reason to think that other poisons besides the marsh miasm may act on the nervous system in a very similar manner, producing phenomena almost or quite identical with those of true malarious disease. The poison of influenza certainly seems capable of doing this.

(9) The type of disease which prevails at present appears to be very favourable to the occurrence of phenomena of nerve-disorder, either of a prostrating or irritating kind, and of such disorders of the vascular system as are in great measure referable to a debilitated condition of its own special nerves.

The phenomena of the first stage of a complete ague paroxysm are depressed action of the heart, contracted and pale skin, neuralgic pains, irritation of motor nerves (rigors), arrest of secretions, short and laboured respiration, cerebral debility. The temperature of the blood is rising, and congestion is taking place in internal organs. The vitality of the various organs is partially prostrated, as by a shock, and this has no small share in promoting the occurrence of congestions.

This stage may be replaced by an attack of convulsions, or by a profound sleep from which the patient awakes in violent fever.

All the above phenomena may be regarded as the results of a poisonous influence operating on the cerebro-spinal and sympathetic nervous systems. This acts eminently on the solar plexus, occasioning a sense of debility and distress about the epigastrium, paralyses the various plexuses which are offshoots from the solar, as well as others which are formed by the abdominal sympathetic, from which result dilatation of arteries, increased heat of blood, and local hyperæmia. At the same time the cerebro-spinal system is affected, in some parts debilitated, in others irritated. The hemispheres of the brain are evidently weakened and enfeebled in their actings. The sensory nerves are irritated, giving rise to neuralgic pains, and the motor, being similarly affected, produce the rigors. The shrinking of the skin is produced by the contraction of some organic muscular fibres in its corium, as well as by the occlusion of its arterioles. The arrest of the secretions shows that the vital power of the organs producing them is impaired, or in abeyance. The action of the heart is in most cases directly enfeebled, just as the contractile coat of the arteries is; sometimes however, as described by Dr. Bell in cholera, and as I have seen in cardiac neuralgia associated with ague, it is rather enchained and embarrassed in its working by an abnormal, irritating stimulus. If death occurred during the latter state (which seems to be characterised by a distressing sense of cardiac oppression), I should expect to find the heart firmly contracted, as was observed in those dying of cholera by Virchow, and by Reinhardt and Leubuscher. The two latter observers mention that their examinations were made on those who died in the algide stage. The short and laboured respiration depends in part on congestion taking place in the lungs, but still more, I expect, on disordered innervation of the phrenic and other respiratory nerves. When the voluntary muscles and heart are deranged from their healthy action by disorder of their nerves as we have seen, it is only to be expected that the respiratory muscles should suffer in a like way. In the case of the cold stage being replaced by an attack of convulsions, or one of coma, it may be supposed that the morbid influence has operated with unusual force on the principal nervous centres devoted to voluntary motion in the first instance, and on the cortical substance of the hemispheres in the second.

The phenomena of the second stage are increased action of the heart, relaxation of the cutaneous arteries, paralysis of their vaso-motor nerves, the condition of other parts remaining about the same. The congestions commenced in the first stage are now apt to be increased as the blood stream is driven with force through relaxed arteries by a powerfully acting heart. Epistaxis, apoplectic effusion, intestinal hæmorrhage, rupture of the spleen, may thus be produced. The relaxation of the superficial arteries is only an extension of the condition of the rest of the arterial system, but the increased action of the heart is the reverse. What is its explanation? What cause shall we assign for the central organ of the circulation being in so different a state from all the more peripheral? It is to be remembered that the occurrence of reaction is a step in the direction of recovery, it indicates as is well known an effort of the vital powers against the depressing morbific cause. With reference to this, it may be suggested as probable, that the

* In a case recently under my care it produced blindness and some deafness.

cause of the heart's acting vigorously, while the arterial system still remains relaxed and dilated, may lie in part in the difference of its contractile tissue, which certainly has a stronger and more vigorous life than the non-striated fibre of the arterial coats, and is therefore capable of recovering and resuming its activity sooner than they do. A still more efficient cause of the exaggerated action of the heart may be found, I think, in the elevated temperature of the blood, which acts upon it in the way of a stimulus. Exposure to moist heat, when cooling by evaporation is impossible, accelerates the pulse remarkably. M. James mentions that his own rose from 70 to 120 while he was immersed in an atmosphere charged with hot vapour, the temperature in the lower strata being 111·4°, and in the upper 118·4° Fahr. The same experimenter endured with little inconvenience a temperature of 176° Fahr., when the air was dry. One cannot aver positively that the increased heat of the blood in the former instance caused the rapid movement of the heart, but it is certainly very probable that it was so. It is very intelligible that the heart would not obey the stimulus of the hotter blood, until it began to recover from its primary state of enfeeblement and depression. On this view, we can see in reaction one of those beautiful compensating efforts which are often exhibited by nature in disease. The very agent which weakens and depresses the chief organ of the circulation, sets up a condition in the blood which counteracts the original mischief, or at least greatly tends to do so. In some persons, severe fatigue is followed by very marked pyrexia. This may be well accounted for on the view proposed. The expenditure of nervous force leaves the sympathetic in a semi-paralysed state; hence comes increased heat of blood, and from this again results increased cardiac movement.

The character and degree of reaction (speaking of it for a moment generally) will vary very much according to the nature of the poisonous influence, and the vital endowments of the system. In fevers of a low type, the muscular tissue of the heart may become so impaired in its quality that it answers but languidly to the stimulus of the hot blood. In the ardent inflammatory fever of tropical countries, especially when it affects new comers, the highly irritable contractile fibre responds energetically to the stimulus. Bloodletting is well borne in the latter, is injurious in the former.

Authors mention the occurrence of paroxysms consisting of a cold or a hot stage only. In the former case, it may be considered that the poison has operated chiefly on the cerebro-spinal system; no febrile reaction takes place, because the temperature of the blood has not been increased by paralysis of the sympathetic. In the latter, the poison operates exclusively on the vaso-motor nerves, and therefore pyrexial phenomena alone are produced. That the poison should thus restrict its action in some cases to a certain department of the nervous system cannot be considered improbable, when we think how decidedly this is the case in various neuralgiæ.

Virchow attributes the reactionary excitement of the heart to paralysis of the vagus nerve; but, though this might very possibly increase the rapidity of its action, it would not, I conceive, augment its energy, which is certainly the most important feature of reaction. Moreover, careful experiments on the effects of dividing the vagi (Reid's) do not show any very positive result in accelerating the heart's contractions.

In the third stage, the tissues regain their power generally, secretions are poured out by the glands which have hitherto been inactive, the abnormal heat diminishes as the sympathetic nerves recover their tone, and the action of the heart becomes tranquil gradually.

In the *algide* fevers, the prominent phenomena which we have to explain are the icy cold of the surface, the elevation of the temperature after death, the smallness or suppression of the pulse, the peculiar cerebral torpor, but without coma or loss of consciousness, and the debility and depression. The same results of hyperæmic afflux and congestion in the cranial and abdominal viscera are found as in the other forms of ague fever. The skin is not always pale, but sometimes of natural colour, sometimes livid, or covered with livid spots. One may read these cases as the results of a morbid influence, which operates more after an irritating than a paralysing manner. The brain is evidently greatly enfeebled, but rather, it would seem, in the same way as a sensory nerve, when it becomes numbed during an attack of neuralgia, a condition which Romberg denominates anæsthesia dolorosa. This cerebral numbing appears more like the result of a peculiar irritation, than simple loss of power. It is carried to a still greater degree in certain soporose fevers, where it produces absolute coma, which may be relieved by opium. A similar state prevails in the vaso-motor nerves of the limbs and surface; they are irritated and excited, instead of being paralysed, as during pyrexia. It is reasonable to suppose that the icy cold may, at least in part, be the result of this state; as it was found in Bernard's experiments that, when the upper end of the divided sympathetic was galvanised, the temperature fell below the normal figure. The elevation of the temperature after death seems necessarily to imply that some cause was acting during life to depress the heat that should have been normally developed. This cause is probably the irritated state of the vaso-motor nerves. The livid colour of the surface, like the leaden hue of cholera, is to be regarded, I believe, as the result of tissue paralysis; in consequence of which, and of arterial occlusion, stagnation occurs in the capillaries and small veins. A remarkable case recently fell under my notice, in which the nose and hands became cold and of a dull livid red on exposure to the open air, even in the middle of June. The other symptoms were extreme nerve-debility, tremors, and sweats.

It does not appear to me possible to account for such phenomena solely on the ground of arterial contraction. I may quote the following observations from my note-book, in further illustration of this state: "Frog's web, arteries of the part rather contracted, the blood in numerous capillaries stagnant, filling them up with an uniform red mass; the application of warmth dilates the arteries, and induces free flow in the capillaries." Wharton Jones records similar observations. This condition, which has some analogy to that existing in some algide fevers and in cholera, is widely different from that which is commonly observed as the result of cold operating upon a quite healthy part, which it renders exsanguine and pale. To quote again: "The effect of warmth and cold upon the circulation is very striking; by cooling the web with cold water, some arteries are brought to be completely contracted and empty, and the transit of red and white globules through the capillaries ceases, so that they appear empty; but as soon as the web is dried and warmed, the artery is found expanded and transmitting a full current, and the capillaries at the same time become filled with red corpuscles." It seems clear that, in these instances, the vital condition of the tissue alone makes all the difference, whether the capillaries are filled with corpuscles or not. If the tissue be quite healthy, the capillaries, during arterial occlusion by cold or other causes, will be traversed only by plasma, and will be empty, or nearly so; if the vital power of the tissue be weakened, the blood congests and fills up the capillaries, but does not adhere to their walls, and the congestion is dissipated by free flow; if the nutrition force be perverted, as in sthenic inflammation, creating local attraction of a morbid kind between the blood and tissue, then stasis occurs, which is not removed, but only aggravated, by dilatation of the arteries and free blood flow. The existence of arterial contraction, amounting sometimes to occlusion, would account for the smallness or obliteration of the pulse, supposing it to extend to the radial and arteries of the same size.

The state of the heart probably varies, being in some cases directly enfeebled, in others enchained or embarrassed in its acting by morbid stimulus. Its movement does not seem to be accelerated into reactionary excitement, or only partially, even during the decline of the paroxysm. This is to be accounted for, partly by the cerebro-spinal system being more affected than the sympathetic, partly by the depressing influence being too intense to be overcome by the somewhat heated blood. It seems reasonable to think that in cases of this kind, on the view that hyperirritation of the vaso-motor nerves was chiefly concerned in causing the peculiar symptoms, the administration of opium with some diffusible stimulus would be beneficial.

In the *comatose* fevers, the coma may result from the palsying or enchaining action of the malarious poison telling upon the cerebral hemispheres, in which case it will occur in the earlier period of the attack, and will be relieved by opium. Or it may proceed from increased flow of blood to the brain, and excessive congestion tending to effusion, when it will occur in the reaction period, and will be relieved by blood-letting, local and general, cold to the head, and quinine.

In *syncopic* fevers (*terciera syncopal* of Pera), the heart is paralysed more or less completely by the malarious influence acting on its nerves, just as a voluntary muscle, or set of muscles, may be. The syncope occurs, as far as I am aware, at the commencement of the cold stage. It may be difficult to distinguish these cases from others approximating more to the algide group, in which there is complete suppression of the pulse; but the heart, so far from being paralysed, is heard on auscultation acting violently, as if striving to overcome some obstacle, which is probably the occluded state of the arteries,

The character of the impulse and sounds of the heart will generally enable us to make a diagnosis. The distinction is of great moment; for in the first case stimulants would of course be necessary, in the second sedative measures.

Local palsies of any motor or sensory nerve, or local neuralgiæ or convulsions, may occur, the affected nerves being either irritated or enfeebled.

If *jaundice*, co-existing with free bile flow, or any other *secretion flux* occur, it indicates that the vaso-motor nerves of the part are palsied, whence comes dilatation of blood-vessels, hyperæmia, and over-activity of the gland tissue.

The formation of a *splenic tumour* results from excessive flow of blood to the part, and increased formation of splenic tissue, *i.e.* increased nutrition. It is therefore quite analogous to a gland flux. Both occurrences illustrate well the development of increased activity in the affected tissue as the result of paralysis of its vaso-motor nerves.

The common occurrence of *dysentery*, either primarily from exposure to malaria, or as a sequel or complication of malarious fever, is evidently a localisation of the morbid action, or it may be a concentration. The vaso-motor nerves of the large intestine are paralysed, and the usual results take place. It is to be mentioned, that the condition of a part, as to vital power, has much to do in determining the occurrence of inflammation after hyperæmia has been set up in the way supposed. If the vital power be tolerably sound, the part may remain unaltered, or may exhibit greater activity, as in the case of the gland flux; but, if the vital power be depressed, severe inflammation may result, *e.g.* purulent ophthalmia after section of the sympathetic in the neck. Though we can by no means see thoroughly into the matter, yet it does appear that there is a relation between the tissue power, the functional energy of a part, and its blood supply. In the healthy working of the apparatus, the former takes the initiative; and the hyperæmic afflux is subordinate, and ministers to the calls of the tissue in its increased nutrition. In inflammatory disorder, the vital power, which can use the blood for normal purposes, is depressed, and the hyperæmic afflux predominates, issuing in wasteful effusions of corpusculating fluids, mucus, or pus. Nay, it seems highly probable that in conditions of depressed vitality, as in frostbite, the scorbutic dysentery of the Crimea and elsewhere, the existence of hyperæmia, even in moderate amount, acts as a morbid and destructive stimulus to the weakened part.

Having thus endeavoured to view some of the multifold manifestations of malarious disorder in the light of recent neuropathological research, it may be well to consider shortly what bearing these views have on other kinds of fever. It will be sufficient to take for examination two types, to one or other of which all approximate; viz., first, the severe inflammatory fever of tropical countries; second, the ordinary low fever, typhus, or typhoid, of our own. The phenomena of the first are, as described by Dr. Copland, slight chills only at the onset, subsequently "strong, full, hard, accelerated pulse", great heat, headache, and sometimes violent delirium, or maniacal excitement. Free venesection (to three or six pounds) is necessary. If in such fevers, on the above view, we admit the pyrexial condition to depend essentially on paralysis of the sympathetic, still it seems absolutely necessary to assume that the other tissues are in a state differing greatly from that which they manifest in many malarious, and all low fevers. The poison which has paralysed the sympathetic, has in no degree weakened the heart or the other organs. Hence the heated blood, acting on structures vigorous and prompt to respond to the stimulus, excites reactionary phenomena of great violence. It is the task of the physician to moderate these, as, if allowed to run their course unchecked, they induce a period of dangerous or fatal exhaustion.

How very apposite to this is all that we observe in the second type—the low fevers! Here every part alike bears the stamp of depression and debility. The sympathetic system is palsied, and hence the febrile heat, and the proneness to hyperæmia in various parts. The heart is enfeebled, and often needs stimulus to keep its action from failing; its very fibre often tends to soften and degenerate. The brain is enfeebled, and hence the low delirious wandering or the sopor. The voluntary muscles declare their atony by the down-sunk posture of the patient.

The lesson of this seems to be, that while we incline, as we may reasonably do, towards the theory of the nerve origin of pyrexial phenomena, we must not lose sight of the fact that the other corporeal systems are also affected to a greater or less degree by the fever poison, and that the event of the disease may in great measure depend on the amount of vital resistance and energy which they retain. In malarious fevers the nervous system (cerebro-spinal and sympathetic) is certainly far more affected than the others. In low fevers all the systems alike seem to be paralysed and depressed. In sthenic fevers no system, except the sympathetic, seems to have suffered depression, but perhaps to be rather in a state of abnormal irritability. Thus one physician may choose for his motto, "He fed fevers"; another, "He toned or soothed fevers"; a third, "He bled fevers"; each according to the kind he had most to deal with.

DEFICIENCY OF FINGERS TRANSMITTED THROUGH SIX GENERATIONS.

By Draper Mackinder, M.D., Gainsborough.

Under the title of "Hereditary Formations", a letter from Mr. Willis, of Plumstead, appeared in the *Lancet* for Sep. 5th, wherein the writer mentions a repetition of an abnormal parental type through six generations. Believing with Mr. Willis that so decided a manifestation of a peculiarity in the progenitor is rarely extended through so many links in the descending family chain, I beg to forward, for the edification of the curious in such matters, an account of an equally interesting case, where there has been a deficiency instead of a redundancy of parts through several generations.

A Mrs. Thomas Chapman, of this town, on the 31st of March last, was attended in her confinement by my assistant, Mr. Capron. In consequence of an absence of certain useful members of the body, to be particularised hereafter, the mother was very naturally anxious to know if her babe had been modelled more in accordance with the Paradisian prototype than with her imperfectly sculptured self; and we can well imagine the parental joy on hearing that, to non-professional observers, her firstborn daughter would readily pass muster as a fair specimen of the daughters of England.

In the presence of Mr. Capron's successor, Mr. Smallman, and three generations of the family in question, I obtained the following particulars, which I will endeavour to give in an intelligible form, tracing the generations backwards.

Generation i. *The Infant.* The middle phalanges of the eight fingers are wanting, the last phalanges articulating with the first, and giving a peculiar short and tapering appearance. The nails of both little fingers are absent, and that of the right ring finger is abortive. The toes are all nearly of the same length, and well suited for the square-toed boots.

Generation ii. *The Mother.* The middle phalanges of eight fingers and all the nails are absent. The first phalanges articulate with the last, which are much shorter than common, and have the exact appearance of having undergone amputation at the middle of each third phalanx by a transverse flap. The fourth toe of each foot has only the first phalanx.

Mrs. Chapman is the youngest of a family of nine, the seven elder of whom and their children were of legitimate conformation.

Her brother, the eighth child, who was drowned at sea, had the ring and little fingers of both hands *minus* the second and third phalanges and nails; and the fourth and fifth toes of each foot were united by a web.

Generation iii. *The Grandfather* possessed only the first phalanges of the eight fingers, the thumbs being flattened, and the phalangeal articulations very imperfect.

He had two brothers and ten sisters, of whom

One sister had the eight middle phalanges and the nails wanting.

A second sister had the third middle phalanges and nails wanting.

Another sister had the right index normal, and seven fingers *minus* the second and third phalanges and nails.

A brother had the same malformations as the last mentioned sister.

All the four had an irregularity about the toes. The other brother and sister were all right.

One of his brothers married, and had four daughters. The first was properly formed; the other three wanted the second phalanges and nails to all the fingers. Of the families of the other brother and his sisters nothing accurately is known.

Generation iv. *The Grandfather's Mother* and *three of his sisters*, like himself, were all *minus* the second and third phalanges and nails of eight fingers, and the second phalanges of the fourth toes.

Generation v. *His Maternal Grandmother*, and

Generation vi. *His Maternal Great Grandmother*, had the same parts deficient as himself.

Generation vii. *Her Mother* was the soil which gave such vigorous root to the unfortunate weed.

There were other branches, but of the nature of their deviation from the regular form no reliable information is at hand.

Whatever may be the theory of learned physiologists and profound philosophers with reference to such "hereditary formations", their abstract speculations will at once be diffused into vapour by the *rationale* of the infant's grandmother. According to this venerable lady, the foolish patriarch of the six generations had in his garden a tree which bore a single apple. For this he entertained the most profound respect, and forbade any one to pluck it. In a weak and evil moment, beguiled by some unhallowed power, his spouse put forth her hand and stole the solitary prize. Mighty was the anger of her lord and master when he beheld the fruitless tree; and, in language unselect, he cursed the thief, and prayed, for so heinous an offence, that the fingers which touched the apple might all be chopped off. His wife, *enceinte*, feared much, and in solitude poured out her mournful regrets, but dared not confess the crime. Alas! time passed by; her hour of pain drew near; the fearful prayer, too truly, had been heard; a child was born; but, sad to tell, the fingers which its father had wished to be amputated had strangely forgotten to grow. Since the visitation of the sins of the fathers on the children to the third and fourth generation has been more than accomplished here, we will now hope that the full penalty of the misdeed has been paid, and this hereditary formation will henceforth be discussed as a thing witnessed in time past.

Introductory Lectures.

GROSVENOR PLACE SCHOOL OF MEDICINE.

The Introductory Lecture at this School was delivered by Dr. Richardson, who chose as his subject *The Medical Pilgrim's Progress*. After some preliminary remarks, the lecturer said that he had undertaken to point out the path of pilgrimage. He assumed that his hearers were anxious that the result of their journeyings should be true success; and they must start fairly, knowing the worst, and striving for the best. He then proceeded to sketch out two paths trodden by medical pilgrims; one a broad and easy path, and the other narrow and difficult, but the only true one. The broad and easy path is followed by many; among whom are the mean with means, waiting for something to turn up, and place them in positions which they cannot sustain—the "young ladies" in physic; those who try to advance by paying homage to the vanity of their superiors—the "toadies"; and again, the drowsy, helpless, care-for-nothings, who drawl on, deriding a progress which they cannot follow—the "old women". None of the auditors, the lecturer was sure, wished to rank as either of these. He would, then, enter with them on the difficult path, rendered sacred by the foot-prints which indented it—the way trodden by Hippocrates, Vesalius, Harvey, and Hunter. In this path every one must walk who would follow the medical pilgrim's progress to its ultimate greatness. Let no one fear the labour. It is not genius which is required; it is the combination of *force*, *fearlessness*, and *fact*. These are inherent in man; and he who cultivates them persistently will be the representative of genius. Dr. Richardson then went on to show the importance of physical as well as mental training. One maxim, important to be followed, was, "live abstemiously"; and the labours of Franklin and Morgagni were adduced as proofs of what can be thus done. He then proceeded:—

"Connected with the physical training of the body, I recommend to you strongly the continued and systematic strengthening of the muscular power. Our profession lending itself too readily to the old wife's stereotype of a doctor, makes a grand and universal mistake in this respect. A doctor may pipe a sentimental song in an elegant carbonic acid *depôt* called a drawing-room. Yes; that is allowable: but a hearty laugh, the most healthy exercise in nature, is forbidden in prim society. The doctor may play a rubber at whist, with a whining old maid for a partner; that is excusable, unavoidable sometimes. He may mildly go through a dance, but he must not romp or polka: certainly not. He may drink wine after dinner till his head swims—that is essential. He may, in fact, do everything of the kind that is effeminate and enervating: but heaven protect the man if he ventures to play tennis, cricket, or any other game that shall call into unwonted play his elegant, half-useless, mute-at-a-funeral clad limbs.

"Gentlemen, without encouraging you to any injurious pursuits, I call upon you, as the coming representatives of medicine, to disobey the old woman oracle who dictates these absurd conventionalities. Innocent active pleasures are the salt of life; and the more vigorous the man, the more vigorous the mind. I take it that much of the namby-pambyism, vapidity, and anæmic conceit, which too much characterise all the learned professions, are due to this slow process of effemination, this undermining of the soul. Go to the British Association for the Advancement of Science—that parliament of intellect—and observe those who are the science-Hercules. You will find them amongst the men who are most genial, best body-built, least conventional."

Proceeding then to the mental labour of the medical pilgrim, the lecturer took occasion to observe that the science and practice of medicine is passing through a silent but rapid revolution. And this transition belongs to all things human.

The lecturer then went on to show how the student must keep up with the progress of medical knowledge—not by books, but by a natural course of study of objects. For this, in every department of medical science, there is every facility.

"Need I say—yes, I must say—that there is no excuse, either in morals or in knowledge, for that student of medicine who, in these days, is content to take his knowledge of natural things from pastors and masters, when he might take it from the Great Master over all. It is the worship of idols, such work, in the presence of the God of the universe.

"Thus it is that I warn you to go always to the originals for your information, and both now and hereafter to be very suspicious about other authorities. And, while you are thus yourselves learners from the realities of science, take care, as you advance into intellectual manhood, not to mislead others, by constituting yourselves the authorities of Nature. Gentlemen, believe me, there is not a greater quack extant, than he who claims for himself, and sticks himself up to, this distinction. There can be but one authority in science. It is true, a man may discover a natural law or fact, and make it known; but, in the very acts of his discovery and publication, he resigns all claims to authority, by calling, as he does, on every passer by to see the fact for himself. Such a man is the greatest of men; but he would as soon claim to himself the authorship of the natural fact itself, as of its mode of operation."

Dr. Richardson then went on to deprecate a reliance on the many so-called "authorities" to be found in the broad and easy way of medicine: "members of a Cockney family, who, walking to the foot of Ben Lomond, pump the guide with note-book in hand, straightway return home satisfied with their intimate knowledge of the mountain, and write an authority-description of the prospect from the mountain summit."

Dr. Richardson then went on to point out, since it was necessary to follow the changes in medical science, how the steps of the modern student should be directed differently from those of the ancients. He contrasted with the old method (not now thoroughly expunged) of arriving at general laws by the enumeration of all particulars, the true Baconian method of induction by exclusion. In past time, he was thought greatest who could most elaborately split up symptoms into diseases *per se*. Now, men are advancing by true induction back from symptoms to causes—and to few causes. In olden time, the manifestations of disease were held to originate in the body itself: now, we have traced the causes of diseases out of the body, and have proved that ninety-nine out of a hundred maladies are from the external world. And, in accordance with this change in the views regarding the origin of disease, has been the change in treatment—in some instances carried to an extreme. In the treatment of disease according to modern knowledge, there are three things to be learnt:—1. How to remove external causes; 2. How far to trust to the spontaneous evolution or removal of causes which have taken effect on the body; 3. How to meet those extreme results which sometimes succeed the natural or spontaneous attempts at removal. In studying the action of medicines, the student must learn to isolate the results produced by medicaments from those which would follow naturally, were no medicaments used at all. Practitioners vary in their practice; and each thinks himself the most successful. Hence the success is dependent on external or internal natural agencies, not universally seen nor comprehended. The

lecturer then glanced at the modern system of surgery as contrasted with the ancient. Hitherto "the surgeon not only supplemented Nature, but dubbed her quack, and took her business from her ruthlessly." Now "Nature, instead of being snubbed, is permitted to stand on the card of all intelligent sawbones as the senior partner in their concern."

Dr. Richardson would sum up the points of instruction which he had noticed in the following sentences:

"Work from Nature—she is your only authority.

"Work by induction—that is your charter.

"If on the mind of but one student here to day I could imprint these simple lessons, I know not what benefit I may not have bestowed on him, on his profession, on the world. All the good things which lie in store for medicine are indeed embodied in the progress of medical philosophy. You young men, going forth into medical life, ignore not, mistake not where the citadel of your strength is founded. Be led away by no bigotry, by no professional intolerance. When you would dictate, think how you can prove. When you blame the world for not recognising the full measure of your services, think you how you can convince the world that your services are worth what you presume. When you abuse the quack for his impudent shallow conceit, call to mind that the quack flourishes on your weakness. Recall the truth that in astronomy there are no quacks; that in mathematics there are no quacks; that even in simple mechanics—even among the artisans who form the lowest strata of your patients—there are no quacks. And why? Because the men of these occupations, great or little, work to a demonstration, and are paid or penaltied according to their competency."

ST. BARTHOLOMEW'S HOSPITAL.

The Introductory Lecture was delivered by Dr. Kirkes. The lecturer addressed his observations to the students, who formed the great bulk of his audience. The science of Medicine and Surgery, which they had chosen as the object of their study, was well worthy to engage the highest intellectual abilities; for it was a science which, by Divine assistance, enabled man to mitigate and remove human suffering, to avert the withering hand of death, and to restore health to the sick and dying. It was a profession in which the greatest intellectual powers were brought into action, for the objects to be studied were: 1. The structure and functions of man, the masterpiece of God's works; 2. The relation of chemical and physical forces to the mysterious principle of vitality, which forms living, sentient beings, out of the dust of the earth; and 3. The nature and treatment of disease. The subjects were inexhaustible, there being scarcely a disease of which the true nature and essence were known, although, from the continual and rapid progress of science, it might be expected that much which was dark would soon be made clear. But moral as well as intellectual enjoyment was afforded by the science of Medicine; for, in the alleviation of suffering and cure of disease, there would be felt great inward satisfaction and happiness. The lecturer next offered some advice as to the best way of becoming accomplished members of this honourable profession; he pointed out the great facilities for study afforded by St. Bartholomew's Hospital, but at the same time urged upon his hearers the necessity of working for themselves —of cultivating the habit of industry and unwearied perseverance, since talents without sheer hard work would avail nothing; whereas industry, even in the absence of great talents, would accomplish nearly anything. Work should yield pleasure, and "Labor ipse voluptas" should be among the students' mottoes. He instanced the pleasure received by a sportsman in the pursuit of game, which made him regardless alike of weariness, or cold, or hunger, as being the kind of pleasure which results from the steady pursuit of one object; comparing it with the indefatigable labours of John Hunter in the pursuit of scientific truth, rising with pleasure at six in the morning, and working till midnight at his favourite pursuits, and taking delight in the exercise of his intellectual powers. The lecturer next advised the students to keep a watchful eye over the expenditure of their time, to gather up the fragments, the occasional spare ten minutes, and press them into the service of study. Relaxation, however, was necessary both for body and mind, to preserve them in vigour; he exhorted the students, therefore, to beware how they employed their leisure hours, to use them as restoratives, and not waste them in idleness or frivolity. Respecting the three principal sources from which their knowledge was to be drawn, viz. lectures, reading, and observation, the lecturer urged upon his hearers the duty of giving an equal share of their attention to all—not to make exclusive use of any to the neglect of the rest. Among the numerous obstacles to professional advancement, the lecturer alluded to the supposed hindrances of imperfect education and scanty means, pointing out that these, far from being bars to success, were frequently means towards obtaining it, by stimulating to more powerful exertions. He instanced Hunter, Watt, and Stephenson, as proofs that men whose early youth was beset with difficulties, and whose education was neglected, yet have fought their way through all obstacles, and risen to the summit of the hill of fame, leaving many behind whose extraneous advantages had been greater.

ST. THOMAS'S HOSPITAL.

Dr. Brinton addressed himself to the new students, with the intention of pointing out the chief peculiarities of their future studies. First and foremost was the magnitude of the task they undertook. Four preparatory sciences—Anatomy, Physiology, Chemistry, Botany; two mechanical arts—Dissection, Practical Chemistry; a full and technical knowledge of Medicine in its subdivisions of Physic, Surgery, Midwifery, as well as its fragments, Materia Medica, Forensic Medicine—all these branches of knowledge they had to acquire in about twenty-seven months of actual study, in a period less than sufficient completely to train a soldier. He then inquired into the appliances they brought to this task. Assuming their liberal education, still he could not also assume that they were already disciplined for study; or if so, probably the mere bookmen required just as much training in respect to observation, as did the less literate student in respect of reading. In short, with less general preparation than would generally have been accorded to a student preparing for the Church or the Bar, they had to begin a series of technical studies, far more extensive than any required by these or other professions in this or any period of the world's history. He then drew a picture of a student, beginning with the best intentions, but bewildered into an undue cultivation of one or two studies on the one hand, or into general idleness on the other. It was extremely important to warn the student that the subjects prescribed for him by the examining bodies were to be attended to, at first, to the exclusion of every speciality, every accomplishment, forced upon his notice; and that any reversal of this rule might endanger not only his future usefulness, but even his integrity and self-respect. Dissection, however repulsive at first sight, required little enforcement. The common sense analogy between the practitioner of medicine and the artisan who has to mend a machine, was indeed less than the truth; anatomy being the general as well as specific knowledge, and the implement as well as the information necessary. The object of dissection was threefold: as to Physic, it taught the situation and land-marks of the internal organs; as to surgery, it taught the structures concerned in the science, and the operative skill necessary to the art. Lectures, again, required some explanation, not only from their large claims on the student's time, but from their influence on his education, and the misunderstandings sometimes promulgated respecting them. They appealed to larger numbers, and influenced these more completely than books; they gained access to the mind by a readier and more natural channel, and their effects were heightened by the circumstances of their delivery; they were valuable as a counterpoise to bookish habits, such as would invariably warp that healthy concord of all faculties so essential to the study of Medicine; they taught a medical student what was most necessary in after life—how to receive, and analyse, and reconstruct a continuous oral narrative; they guided the student, who would otherwise be very likely to select unfit books from a teeming professional press; they methodised his study, and arranged it to a suitable rate of progress: and lastly, if properly conducted, they shared some of the chief advantages of the tutorial system, in permitting illustration, demonstration, and repetition, according to the needs of the existing class. Assuming these statements, it followed that the full value of lectures was only to be reaped by careful and co-ordinate exertion on the student's part. He must consider himself his own tutor, as regarded lectures; and, as one part of his duties in this capacity, he was earnestly counselled to take thorough and complete notes. The lecturer passed on to the subject of reading. He inculcated the intense study, the mastering, of a single good book in each subject. It was only by such thorough study that the student acquired the facility so indispensable to him in his future life, where it would be his duty rather to select from a variety of books and journals, than to read or study any of them professedly. The absolute amount of reading, however, the lecturer regarded as to be determined by each student's

idiosyncrasy. In alluding to Clinical Medicine, the lecturer confessed its imperfections, as at present taught in London, claiming only for St. Thomas's a full equality with other institutions. Indeed, after glancing at his own subordinate duties in the school, and at his complete want of all opportunity of assisting in the instruction given in the Hospital, he went on to say that his casual (and, he feared, but temporary) connexion with the institution entitled him to rank as a comparatively unbiassed judge of its merits. After asserting these in general terms, he pointed out some details characterising St. Thomas's Hospital.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, OCTOBER 10th, 1857.

THE CHOLERA.

In the midst of war, there is a rumour of pestilence. The hottest summer within the memory of the greater part of the present generation has passed, and there has been no breath of cholera; an Indian summer has passed over us, and our mortuary table is unstained with the record of this, *par excellence*, Asiatic disease. A very large amount of fatal diarrhœa was undoubtedly prevalent in the very height of the summer, when the thermometer was at 90° in the shade; but this complaint faded away as the mercury fell, without ripening into the more deadly epidemic. Nevertheless, now that comparatively cold weather has set in, and we have almost forgotten to take note of foul smells and to avert our footsteps from open sewers, now that even the Thames has lost its putrescent odour, there is a rumour of pestilence; nay, more than a rumour—a certain report that the destroyer has returned to his old frequented haunt in the Baltic, making Hamburgh his head-quarters. The *Daily News* informs us that, between the 29th of August and the 6th of September, 239 cases of cholera had occurred in that town, of which 136 had proved fatal. If this statement is correct, it proves that the visitation this time has put on more than its usual virulent features. We have been so accustomed of late years to associate cholera with summer and early autumn, that, having tided over this dangerous season without its having made its appearance, we are but too apt to consider ourselves safe for the year at least. And yet, when we consider the history of the epidemic, we see at once how fallacious is the idea that it belongs to any season or time—that cold weather, in short, prevents its approach or stops it short in its career. In northern Russia, some of the severest outbreaks have taken place in the very depth of winter; and the very first epidemic of cholera in this country broke out towards the latter end of October, and continued through the winter of 1831-32. That outbreak was supposed to have had its origin in infection, and Hamburgh was the foreign port from which this infection was reported to have been brought. The Board of Health have long laboured to destroy the infection theory; without, we think, sufficient proof, they have denied that the cholera is imported, and their denial has led to the disuse of all precautions as directed against the importation of the disease.

We do not think, as we have before said, that they are warranted in this denial—we do not know enough yet of this terrible disease, to feel certain at all as to its origin or method of propagation. This, however, we do know, that it observes certain laws: it, for instance, travels in certain directions and haunts peculiar places. Most of the outbreaks in England have followed outbreaks in the Baltic, and especially those at Hamburgh. It may be that certain conditions of the atmosphere and certain states of the wind are necessary for its arrival thence in this country—that an east wind is necessary to bring the morbific influence hither; if so one of those conditions is present, and this being the case, the outbreak in Hamburgh has caused the General Board of Health to start into sudden life, and to spread abroad to local Boards the rumours of pestilence. We have given in another column the official document issued by the General Board, and the advice it gives to those having sanitary authority throughout the country.

As to the value of these recommendations of precautionary measures, whatever the value of the opinions as to the non-contagious character of cholera, there can be no manner of doubt. That animal and vegetable impurities, whether contained in air or in water, are the allies, if not the cause (with others) of cholera, no one has ever attempted to deny. We earnestly hope, therefore, that local Boards of Health will, without further delay, put in full force these powers of defence against the possibly pending attack of this most malignant of modern diseases. There is something in its sudden and tiger-like spring akin to the great sepoy revolt; and, as in the sepoy revolt, a determined preparation, even by a few energetic men, will often save a town.

There are other preparations, however, of vast importance which cannot be thus suddenly made; such, for instance, as the public water supply of large cities. There can be no manner of doubt that the condition of the drinking water has been at the bottom of much of the cholera in this country. Let us quote from the official document of the Board of Health, as an illustration of this position, the following account of the effects upon different portions Lambeth of good and bad water:—

"The southern districts of London (comprising nearly a fifth of the entire population of the metropolis) have presented a complete proof of the importance of a pure water supply in relation to the ravages of cholera. For throughout those districts, during the epidemic of 1853-4, there were distributed two different qualities of water, so that one large population was drinking a tolerably good water, another large population an exceedingly foul water; while in all other respects these two populations (being intermixed in the same districts, and even the same streets of these districts) were living under precisely similar social and sanitary circumstances. And when, at the end of the epidemic period, the death rates of these populations were compared, it was found that the cholera mortality in the houses supplied by the bad water had been 3½ times as great as in the houses supplied by the better water. This proof of the fatal influence of foul water was rendered still stronger by reference to what had occurred in the epidemic of

1848-9; for on that occasion, one of these companies (which soon afterwards improved its supply) was giving even a worse water than its rival; and the population supplied by it had at that time suffered a proportionate cholera mortality. So that the consequence of the improvement made by this water company in the interval between the two epidemics was, that whereas in the epidemic of 1848-9 there had died 1,925 of their tenants, there died in the epidemic of 1853-4 only 611; while among the tenants of the rival company (whose supply between the two epidemics had become worse instead of better) the deaths, which in 1848-9 were 2,880, had in 1853-4 increased to 3,476. And when these numbers are made proportionate to the populations or tenantries concerned in the two periods respectively, it is found that the cholera death-rates per 10,000 tenants of the companies were about as follows:—For those who in 1848-9 drank the worse water, 125; for their neighbours, who in the same epidemic drank a water somewhat less impure, 118; for those who in 1853-4 drank the worst water which had been supplied, 130; for those who in this epidemic drank a comparatively clean water, 37. The quality of water which (as is illustrated in the first three of these numbers) has produced such fatal results in the metropolis—causing two-thirds of the cholera deaths in those parts of London which have most severely suffered from the disease—has been river water polluted by town-drainage; but in other instances there is reason to believe that some of the most destructive outbreaks of cholera which have occurred in particular groups of houses have depended on the use of wellwater into which impurities had either been carelessly thrown, or had drained or leaked through the adjoining soil."

Against the danger lurking in the defective water thus supplied by large companies, no sudden defence can be adopted. If towns have not set their houses in order during healthy seasons in this respect, they can do nothing in the hour of danger; but there are innumerable other aids to pestilence which can be set to rights at any times. Among these are bad drains and cesspools. It has often been observed that the handsomest houses, situated in the most salubrious air, whose possessors have no want unsatisfied that wealth can minister to, suddenly become the abode of fever and cholera. On inquiry, the grim visitant is proved to have made good his entry through some untrapped drain, or to have been called into life in some newly disturbed cesspool. In country houses, and even in some large mansions, dozens of these hiding holes of disease are concealed in the basement floor, often unknown to the occupants themselves. The luxury, the comfort, the amount of air and space to be found in such habitations, form no protection against the one tainted spot; for we should understand it as a maxim in sanitary matters, as it is in the science of fortifications, that no place is stronger than its weakest point. If, then, we have shown that there is pure death lurking at times of epidemics even within the walls of the best houses, what might we not expect to find lurking in the wretched tenements of the poor? To clear away such impurities as therein gather is the bounden duty of all local boards, and we trust they will not delay the duty. It has been well said by Mr. F. O. Ward, that circulation *versus* stagnation, in the refuse matter of cities, is the one great necessity both for the health of towns and the fertility of the country. This circulation the invention of pipe-drains is calculated to carry out; and we firmly believe that we shall never effectually remove cholera from among us until it is flushed out by means of their agency. Meanwhile, very much can be done by the mere removal of present refuse; and we trust that the warning of the General Board of Health will not be lost upon local Boards.

THE WEEK.

A very painful case of accidental poisoning has just occurred at Durham, in which the victim was the wife of Dr. Trotter, a much respected physician of that city. The most distressing feature of this unhappy mistake is that the poison was unfortunately administered by her own husband, to whom it had been given by a brother practitioner. The particulars of the case will be found in another column; it will therefore be sufficient here to state that the unfortunate lady, suffering from tic douloureux, her husband proceeded to the residence of Mr. Robson, surgeon, to procure a liniment, in which the tincture of aconite was an ingredient. This application not proving efficacious, he again called upon Mr. Robson, and asked, as he most positively asserts, for some tincture of henbane; but, according to Mr. Robson's account, for tincture of aconite, with which he was furnished. This the unhappy husband unfortunately administered to the extent of thirty drops, the first time, singularly enough, without much ill effect, but the second time with a fatal one. At first sight it does seem rather singular that Mr. Robson should have given the aconite, without one word of remark, knowing that it was for Mrs Trotter, and that an accident had formerly happened to her from having taken it; but when we recollect that the gentleman to whom it was given was a professional man, well acquainted with its effects, and that tincture of aconite was an ingredient of the original liniment, the wonder in some measure ceases. This unfortunate occurrence is an instance of those accidental poisoning cases which may be looked for under any system of precaution and registration. The utmost precaution was indeed taken against the accidental use of this very aconite; it was placed in a peculiar bottle behind the others, was tightly fastened down, and had not been disturbed for a long time. Notwithstanding all this care, however, the accident happened. The verdict in the case was, of course, accidental death.

We beg to warn our metropolitan associates against the arts of a dark, short, shabbily dressed woman, who is at the present moment going from house to house, victimising members of our profession. This person called on Tuesday, about five o'clock in the evening, in a state of great seeming excitement, at the residence of the Editor of this Journal, and, presenting the card of a lady at Hammersmith, requested that he would immediately proceed to her residence, as she was suffering under a sudden seizure of delirium. In the absence of Dr. Wynter, she was for a few minutes shown into the dining-room, where she probably expected to find some stray prandial spoons; but, in the absence of those articles, she appropriated a surgical case, some scientific instruments, and a table-cloth, with which she got away without exciting any suspicions. At her departure, however, she begged for a card, "to show her mistress that she had called at the right place". From this circumstance, there can be no doubt that she makes one medical man the unknowing instrument in victimising his professional brethren, the presentation of an address card being so well calculated to lull all suspicion.

Association Intelligence.

MEETING OF COMMITTEE OF COUNCIL.

A Meeting of the Committee of Council will be holden at the Queen's Hotel, in Birmingham, on Monday, the 12th October, at half-past three o'clock.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 28th, 1857.

[On the same day, the first annual meeting of the National Association for the Promotion of Social Science, will be holden in Birmingham. An address will be delivered by Lord Brougham.]

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

EAST YORK AND NORTH LINCOLN BRANCH: ORDINARY MEETING.

A General Meeting of the East York and North Lincoln Branch was held at the Yarborough Hotel, Grimsby, on Thursday, September 24th; Humphry Sandwith, M.D., of Hull, President, in the Chair. The following gentlemen were present: John Bell, Esq. (Grimsby); John P. Bell, M.D. (Hull); Owen Daly, M.B. (Hull); W. H. Eddie, Esq. (Barton-on-Humber); J. F. Holden, Esq. (Hull); K. King, M.D. (Hull); H. M. Leppington, Esq. (Grimsby); and J. A. Locking, Esq. (Hull); also as visitors, W. T. Bell, Esq. (Grimsby); John Gallagher, M.D. (H.M.S. *Cornwallis*); H. George, Esq. (North Thoresby); G. Holland, Esq.; T. B. Keetley, Esq.; J. Lambeden, Esq. (Grimsby); and C. B. Moody, Esq. (Mayor of Grimsby). Several gentlemen were prevented from fulfilling their intention of being present.

The President delivered an elaborate address, exposing the statements advanced in Dr. Horner's pamphlet on Homœopathy, and advocating the claims of legitimate medicine.

Mr. Eddie (Barton) proposed, and Mr. Leppington (Grimsby) seconded—

"That the thanks of the meeting be presented to Dr. Sandwith for his address, and that he be requested to publish it."

The motion was carried unanimously.

A VINDICATION OF LEGITIMATE MEDICINE.
BY HUMPHRY SANDWITH, M.D.

Gentlemen,—I trust you will exercise a generous forbearance towards me, if I trespass on your patience at greater length than is usual on occasions like the present. You will shrewdly guess the cause; and you will agree with me in censuring Dr. Horner less on account of his advocating a fashionable folly, than because he has branded legitimate medicine with unmerited reproaches. One thing must strike the professional reader of his pamphlet as passing strange; and that is the professed confidence of the writer, that the homœopathic millennium is on the eve of its development, and that the old system of medicine is rapidly dying out. No man could write so disparagingly of the latter, whose mind had been deeply imbued with its philosophic teachings; for such a man would be in no mood to be carried away headlong with an enthusiastic admiration of novelties, which are utterly opposed to every conclusion drawn from accurate observation and cautious induction. Dr. Horner has even made the honours, which have been generously awarded him, the very instruments of degrading legitimate medicine in public esteem.

The observations I am about to make are not meant, like those of Dr. King and Mr. Dix, to disabuse the non-medical public of certain mischievous impressions left by the perusal of Dr. Horner's pamphlet; my object is rather, by a vindication of the maligned principles and practices of our profession, and by conducting you through an ideal gallery of the portraits of a few of the illustrious founders and promoters of medicine as a science, to excite in your minds increased admiration and fresh zeal in its defence, as well as a spirit of lofty emulation in promoting its triumphs. Dr. Horner's attempt to popularise his newly adopted system by a plausible array of cases and ingenious special pleadings addressed to non-professional readers, I hold to be a mockery and mischief to society; because, so far as it wins confidence, it disparages a sounder system, and substitutes an injurious delusion in its place. My appeal in favour of legitimate medicine is to men accustomed to medical reasoning; to whom, therefore, it will be easy to show that we have a just ground for glorying in our profession, even though all the rest of the world should combine to vilify and degrade it.

"Homœopathy", we are told by Dr. Mure, and in no mere figure of speech, "is not a science merely, but also, for those who comprehend it, a sublime devotion, a form of religion, a rainbow of divine union, holding out to mankind the promise of speedy regeneration." And he refers to those *infinitesimal* doses which elude the grasp of human conception, as impressing upon the science the stamp and character of the Infinite! Hence a sublimation of matter by trituration or dilution is supposed to *spiritualise* it, and arm it with tremendous potency. No wonder that Hahnemann himself, dwelling with rapture on this grand discovery, thought it more consonant with so sublime a science to exchange the gross swallowing of globules for the refinement of smelling their ethereal virtues! But a truce to such visionary speculations, so akin to madness; and "war to the knife" with dogmas which defy alike mathematical demonstration, moral probability, and common sense! Meanwhile, unabashed by such a constellation of illustrious men as have immortalised legitimate medicine, Dr. Horner contemptuously declaims against the antiquated prejudices of the old school. "The profession", he remarks, is at present so prejudiced, so tied and bound—yea, 'so cabin'd, cribb'd, confin'd' by the old doctrines of colleges and schools—doctrines which they have imbibed from 'their youth up'—that even the powerful wand of truth itself, though armed with conviction at its point, cannot as yet penetrate the dark armour of this prejudice and self-interest in which they have encased themselves." Then, boasting of the inward satisfaction of an approving conscience, as of right belonging only to the homœopathist, because "he has not weakened or injured the powers of the constitution", he coolly asserts that "the energetic practitioner of the old system, the man who fully acts up to its teachings, has no rightful claim to such a satisfaction as this"! While the homœopathist thus lays the flattering unction to his soul, I scruple not to denounce his system as too often chargeable, from its fatal inactivity in acute diseases, with the death or damaged organs of the poor deluded patients; for, much as the homœopathist affects to dread the lancet, he has far greater cause to shrink from the revelations of the scalpel. Let me advise Dr. Horner and his homœopathic brethren, if they would "most stringently, zealously, and, I may add, jealously, conduct a lengthened and practical inquiry" into the merits of the new system, to cultivate the morbid anatomy of the subject; for, if I am not greatly mistaken, the grave has thrown a veil of oblivion over the spoiled organs and damaged structures of many unhappy victims of this most dangerous and destructive empiricism. I myself have seen, after death, the ravages of an unsubdued inflammation, which homœopathy, by the inactivity of its measures, had allowed to disorganise the heart and its investing membrane; and I have twice met with the stethoscopic signs of the cardiac valves spoiled and thickened, as the result of an unchecked endocarditis. I need not dilate, before such an audience as this, on the value of morbid anatomy, as alike demonstrating the changes effected by disease in vital organs, and guiding us to a right method of cure. Hahnemann, however, disparages this mode of studying diseases, and "maintains that the physician may entirely neglect the internal condition or pathological state producing the symptoms, as both an useless and imaginary study." It was more cunning than wise in the founder of homœopathy thus to caution his disciples against exposing its principles to so searching a test; for he well knew that a system based on abstract principles and vague analogies would be exploded by an appeal to the scalpel. Meanwhile, as homœopathists estimate complaints by symptoms only, the temporary suspension of them often leads them to regard patients as cured when latent organic disease is untouched by the remedies; for patients with damaged organs do not always die, but sometimes linger on with enfeebled health and continued liability to relapses.

There is another statement of Dr. Horner's, which demands more than a passing comment; namely, "that it is especially in acute inflammation of the vital organs of the body (as the brain, the lungs, the stomach, and bowels, etc.) that the cura-

tive action of homœopathic remedies is so decided and rapid." Such a statement as this, unless borne out by the weightiest and most unimpeachable evidence, is all the more culpable from "the emphatic manner" of its announcement. But the cases of croup and bronchitis adduced in support of it are so vaguely reported, so wanting in all the genuine marks of a cautious and minute observation, and so entirely rest on the unsupported testimony of an interested observer, as not to weigh a feather in the scale which has to overbalance upheaped improbabilities. The priestly impostor, who feigns to perform miracles by laying claim to a supernatural influence, has the merit of assigning an adequate power for the performance of his vaunted cures—a merit denied to any man, who dares to speak of "having proved the remarkable efficacy of homœopathic remedies" in acute inflammation of the vital organs, as well as in consumption. Fleischmann, the homœopathic physician of Vienna, more prudent than Dr. Horner, "has publicly declared that he does not believe that homœopathy has any drug or drugs which can cure this disease (consumption), or even perhaps succeed in retarding its progress." Meanwhile, the hapless abandonment of patients with inflamed vital organs to the tender mercies of the homœopathist is sneeringly spoken of by Dr. Horner as "a happy abandonment! yea, and fortunate escape from the lancet and leeches, from blisters and cupping-glasses, and from all those other appliances, which, by destroying vital energy, paralyse restorative power!" Evidence, however, is not wanting to prove the distrust of homœopathists themselves in infinitesimal doses. Such was Dr. Quin's, when he recommended Mr. Liston to prescribe belladonna and aconite in tangible and *allopathic* doses; as also when, as Dr. Cormack tells us, he (Dr. Quin) "openly advised very large doses of camphor in cholera". These recommendations of Dr. Quin are a manifest deviation from his professed principles, and illustrate the readiness with which others of his fraternity also are wont to pass the frontier line of homœopathy, and practise in the spirit and with the doses of allopathy. Language would fail to censure as it deserves the conduct of those, whose elastic consciences will allow them to practise either homœopathically or allopathically, or who, when there is a strain on their reputation, will secretly borrow their remedies from a system which they openly repudiate.

As Dr. Horner has shown great antipathy to the lancet, which he would fain discard from the appliances of rational medicine with no better plea than the mushroom experience of homœopathy, I shall attempt a vindication of its paramount value. But it is necessary first to dispose of Dr. Horner's culpable management of the argument derived from medical statistics in favour of the homœopathic treatment of pneumonia. You well know what a most exceptionable use he has made of Dr. Routh's "*Fallacies of Homœopathy*, and the imperfect statistical inquiries, on which the results of that practice are estimated." One is scarcely warranted even in attributing the suppression of the latter half of the title of the book to mere carelessness. He also wraps up the whole of Dr. Routh's evidence against homœopathy in a short compendious table, extracted from a mass of documents of the highest value, and then apologises for the manifest injustice of such a course by the flippant remark—"I am sorry that I cannot, in the compass of a letter like this, present you with the various statistical tables, including all the chief diseases of the body; and which have been drawn up with *the utmost precision*, under the supervision of physicians both of the new and of the old school: in some cases, as in Russia and Bavaria, by command of government; *without any exception*, the results are very greatly in favour of the homœopathic treatment." The following is his short tabular view of the contrasted mortality of the two systems:—

Deaths Per Cent.

	Homœopathy.	The Old System.
Inflammation of the lungs	5	28
Pleuritis	3	13
Enteritis	4	13
Dysentery	3	22
All Diseases	4	10

Thus, on Dr. Horner's showing, the non-professional reader is shut up to the conclusion, not only that all the homœopathic statistics given by Dr. Routh "have been drawn up with *the utmost precision*," but also that, "*without any exception*, the results are very greatly in favour of the homœopathic treatment." And as if to set the seal of infallibility on this statement, he assures his readers, that Dr. Routh confesses the efficacy of homœopathic remedies in the most severe cases of inflammation, "wisely adopts in his own practice the homœopathic cure for inflammation of the lungs, and urgently recommends it to the rest of the old school." In other words, Dr. Routh has been so foolish as to write a book to prove the fallacy of a system, which he nevertheless cordially approves and recommends to others! It is true, indeed, that Dr. Routh states, that he has seen pneumonia do well under homœopathic treatment, as well as under "scarcely more energetic" allopathic treatment. But as if to shield himself against any gross misconception of so candid a statement, he subjoins this remark: "I think we may therefore conclude, that nature, or very simple emollient drinks, quiet, rest, a warm atmosphere, will *often* cure pneumonia, apart from any drugging whatever. But I do not wish to infer from this conclusion, that the expectant method is preferable to proper medical allopathic treatment." Who could dream, from Dr. Horner's representation of Dr. Routh's pamphlet, that it teems with objections to the conclusion, to which, by studiously keeping them out of sight, the reader is most unfairly conducted? I purpose therefore to supply the culpable defect of Dr. Horner's representation, not merely because I shall thereby turn the tables upon him, but also and chiefly because so philosophical a view of the causes, which modify medical statistics, is in the highest degree instructive.

Dr. Routh adverts to two classes of modifying causes, *general* and *special*. His enumeration of *general* causes embraces the following: difference of locality—climate—the constitutional type of prevailing diseases—the mildness or severity of epidemic maladies at different seasons and at different periods of the same season—modes of living—and peculiar mental and moral epidemic influences, such as a revolutionary spirit, the dejection of defeated armies, and national habits of intemperance. He shows us, how extensive is the power of these *general* causes in influencing the mortality of different diseases, and how much the disregard of them, in a comparative estimate of the effect of different modes of treatment, must vitiate any medical statistics. But it is his enumeration of the *special* causes, which bears with crushing effect on the statistics of homœopathy. These are: 1. The exclusion of moribund cases from homœopathic hospitals, which are admitted into allopathic ones, occasioning a difference of four per cent. in one disease; 2. A selection of mild cases by the homœopathists, which so interferes with the identity of the disease in the two kinds of hospitals, as to make the comparison greatly to the disadvantage of legitimate medicine; 3. There is no trustworthy check on diagnosis in homœopathic establishments, bronchitis being confounded with pneumonia, cerebral congestion with cerebritis, pleurodynia with pleuritis, etc. Hence a vicious and misleading nomenclature; 4. Homœopathic hospitals often enjoy a healthier site and locality than allopathic ones, which for the most part are built in the heart of crowded cities; 5. The ventilation, accommodation, nursing, etc., are often very superior in homœopathic hospitals; 6. A better class of patients is selected by the homœopathists, while the most wretched outcasts of society are admitted into allopathic hospitals; 7. Patients are not admitted at the most dangerous ages—childhood and old age—in any fair proportion into homœopathic establishments,—age being an item which materially affects the cypher of mortality; 8. The complication of Bright's disease with pneumonia, which in England greatly aggravates its mortality, is rarely met with in the continental homœopathic hospitals. On a review of all these *general* and *special* causes, we are warranted in affirming with Dr. Routh, that "the disparity in the mortality is not due to the better homœopathic treatment, but to a selection of cases, a younger age, and probably in very many cases incorrect diagnosis." And we may confidently ask with him,—"when due allowance is thus made for all these sources of fallacy, how many cures remain, which can be attributed to pure homœopathic remedies?"

Professor Simpson of Edinburgh has ably confirmed Dr. Routh's assertion of the studied selection of cases by the homœopathists, in the following tabular contrasted view of dangerous and harmless cases in the Edinburgh Allopathic Hospital with its 6,369 patients, and in the Vienna Homœopathic one with its 6,501 patients:—

	Edinburgh Allopathic Hospital.	Vienna Homœopathic Hospital.
Consumptive cases	276	98
Palsies	103	5
Organic disease of the heart	159	15
Organic disease of the liver	33	1
Bright's disease of the kidneys	82	0

Diabetes mellitus	17		0
Internal aneurisms	18		1
Cancerous tumours	55		0

The statistics of harmless cases, such as chicken-pox, tetter, chlorosis, headache, and influenza, are much in the same relative proportion, but in this case the excess is on the side of Homœopathy.

But I will not leave Dr. Horner in possession of the slightest appearance even of any advantage from statistics. For though the above exposure must shake all confidence in his boasted figures, I will decide the question, not by argument only, but also by arithmetic. To make good his case, Dr. Horner should not have confined his view to the statistics of the Homœopathic Hospital at Vienna. For we have only to examine those of other hospitals of the same class, to demolish the boast of a 5 per cent. mortality in pneumonia under the infinitesimal treatment. Thus the Homœopathic Hospital returns from Leipsic and Kremzier give a higher mortality in pneumonia than these from Vienna, and show a larger mortality, viz., a mortality of 13 per cent. at Leipsic, and 15 per cent. at Kremzier, instead of the 5 per cent. of Fleischmann at Vienna." But if we were to admit the mortality of pneumonia under homœopathic treatment as not more than 5 per cent., what would follow? Why, that the advantage is triumphantly in favour of allopathy. For it appears from the official Army returns, that the mortality of pneumonia under allopathic treatment has been reduced to 3 and even 2 per cent. This fact is all the more decisive, from the light which it throws upon the disadvantages of allopathy in city hospitals,—disadvantages which account for the larger mortality in them so much paraded by the homœopathists. For when the two systems stand on even ground, even assuming for the sake of argument the accuracy and truthfulness of homœopathic statistics, the verdict is clearly in favour of allopathy.

Our case is so strong, that we can afford to admit the occasional abuse of the lancet, though as a matter of profound regret. What then? It by no means follows, that we should plunge headlong into the deeper abuse of discarding it altogether. I shall therefore attempt to vindicate its use both in insulated cases of inflammation of vital organs, and in certain epidemic diseases. I lay claim, of course, to a few well known medicinal auxiliaries; but I repudiate the boasted globule as mischievously, if not murderously, inert. For that dilution adds to the power of a drug, is an intolerable insult to commonsense. Before I proceed, however, with my illustrations of the value of the lancet, let me shield myself against the possible charge of an indiscriminate advocacy of an agency, which is a good or an evil according to the discretion which regulates it. The man, who blindly disregards the circumstances, which sometimes demand, at other times forbid, and, when it is employed, modify the use of the lancet, errs quite as culpably as the homœopathist, who scouts it altogether. For while homœopathy acts as if medicine was governed by laws as definite as those which obtain in the physical sciences, allopathy bends to varying circumstances, "because it has to deal, not with the simple relations of matter, but with organisation ever varying and governed, in its innumerable changes, by a subtle principle, of the laws of action of which we are entirely ignorant; nay, the very existence of which we recognise by its effects." Overpowering as is the evidence in favour of bloodletting, generally or locally, in the pages of our best medical observers, from Sydenham downwards, I by no means contend for its *universal* application. No fact is better established, than the varying mortality, at different seasons, of the eruptive and other fevers, as the result sometimes of inflammatory determinations of blood to some vital organ, and at other times of depressed vital power, produced either by a deadly specific poison, or by the hostile agency of the seasons, or by both. The use or avoidance of the lancet is, of course, regulated by a regard to these circumstances. Observation is our only guide in ascertaining the existence of this or that condition. Of the fact of such variations there can be no reasonable doubt in the minds of any conversant with medical literature, or familiar with the diseases of the last half-century. And every careful medical observer has, for many years past, felt himself occasionally compelled to withhold the lancet, from some inexplicable change in those circumstances which thirty or forty years ago would have vindicated its utility.

It may be said, and I believe with truth, that *sthenic* pneumonias are much rarer now than formerly. "Of late years," says Professor Alison, "the general result of my observation has been, that hardly any cases of pneumonia, with regular inflammatory fever, show themselves." Most of Dr. Inman's cases, in the Northern Hospital, Liverpool, as reported in the British Medical Journal, seem to have been of this character,—cases, in fact, of *typhoid* pneumonia, bearing even wine in conjunction with alteratives. Still there are occasional exceptions to this low type of pneumonia beyond the pale of hospital or city practice, and especially among an agricultural population. In such exceptional cases, the vigorous nervous system of a bygone age is not so weakened by some unknown atmospheric or telluric influence as to forbid the use of the lancet, but only to limit its employment, or to suggest a preference of cupping-glasses or leeches. Besides, what has once been will assuredly be again met with from the normal revolution of ever-changing seasons. Nor am I singular in thinking, that there are already signs of a gradual approach of those invigorating influences, which marked the beginning of the century. Cases ever and anon recur, demanding, and by their success vindicating, a more decided use of the lancet. Within the last two years, I have known sporadic puerperal peritonitis successfully combated by one general bleeding, two leechings, and other auxiliaries, and with a rapid and satisfactory recovery. Are we, then, to ignore those faculties which dignify human nature, and resign the characteristics of a retrospective and foreseeing sagacity, at the beck of a purblind homœopathy, and limit our views to the present moment? Let it be granted, that we modify our treatment by the existing constitution of man, as affected by the air we breathe, or the food we eat, that is no reason why we should abandon venesection in those cases in which vital energy with its tense pulse and other signs of pure *synocha* evinces its superiority to prevailing influences, as for example in the sturdy nervous fabric of ruddy rustics in hilly regions, as opposed to the pallid and it may be intemperate artisans of our large towns. But if sthenic pneumonias are much rarer now than formerly, such a fact explains why so many patients recover with less bleeding or under the expectant method, the inflammation being less destructive to life because of its less intensity, and it suggests a refutation of Dr. Bennett's opinion, who refers the diminished mortality, not to a change of type, but to more moderate depletion. But another consideration tends to disprove Dr. Bennett's opinion of the diminished mortality of pneumonia, as judged of by comparative statistics; namely, that as the appreciation of symptoms by the stethoscope was formerly unknown, the milder cases would not be recorded as pneumonias.

But to proceed with my illustrations of the value of the lancet. In the cure of pneumonia, the true principle, as asserted by Dr. Stokes, "seems to be, that general bleeding is to be considered only as a preparative for other treatment, and not the chief means of removing the disease." Hence the advantage of its *early* employment. For the lancet, if trusted to alone, would rather conceal than remove the latent sources of danger. But used early, and as a preparative, with a vigour or moderation proportioned to circumstances, it facilitates the curative action both of antimony and mercury, thus hastening the removal of local congestions and deposited lymph. There is ample proof on record, that the characteristic expectoration, the pain in the side, the accompanying fever, and the auscultatory phenomena, all yield sooner in cases submitted to bleeding and antiphlogistic auxiliaries, than when either left to nature under the expectant method, or treated by medicine only. There will be less chance also of a hepatised lung, or a dislocated heart, or a wasting empyema. Moreover, the slower convalescence under the homœopathic regime, as attested by statistics, shows that the vital powers, owing probably to latent congestions, are more impaired than by allopathic treatment. I do not believe, with Dr. Bennett, that the processes of inflammation in a vital organ are in any sense salutary, as in the case of a fractured bone, and therefore not to be interfered with. For the local determination of blood, and the exudation of its elements, if not checked, soon impair its functions, as in the parallel case of iritis; but with this important difference, that in pneumonia they invade life at its source, by spoiling the purity of the circulating mass of blood, in addition to the exhausting irritative fever. For the vitalising function of the lungs, by means of the decarbonisation of the blood, is suspended in proportion to the inroad on the structure of the air-cells.

The value of the lancet in other local inflammations is too wide a field to be now entered upon. It would be a superfluous task, indeed, after the very able remarks of Professor Alison, Mr. Augustin Prichard, and others, on the same subject. Nevertheless, a passing remark or two may revive many instructive reminiscences in your own experience. For every

practical man must retain vivid impressions on his imagination of the successful management of certain critical cases, in the course of a lengthened practice. A few such I will just hint at. I have seen a patient, in danger of suffocation from hæmoptysis, rescued from impending death by abstracting blood enough from a vein in the arm just to make the heart falter, and thus arrest the deluge of blood into the air-cells. I have subdued cerebritis, suddenly supervening in the course of fever, by a moderate venesection and effective doses of tartar emetic. I have seen a severe inflammatory diarrhœa, in the puerperal state, which had resisted other measures, yield at once to the lancet, with the mildest adjuvants. I have seen severe rheumatic iritis promptly relieved by a free bleeding from the temporal artery, assisted by calomel. I have seen a child, blue with dyspnœa from suppressed measles, relieved, and soon covered with the florid rash of rubeola, after taking blood from jugular vein, and then quickly immersing the child in the warm bath. I owe my own life to copious bleeding in a severe attack of pneumonia, followed by tartar emetic in free doses after Laennec's method. Lastly, the life of one of my own sons, when only eight years of age, was saved by energetic depletion, both by the lancet and leeches, when in the utmost peril from an acute attack of inflammation of the membranes of the brain, supervening on scarlet fever. I am not aware that I ever saw a more decided case of meningitis.

But the mention of scarlet fever reminds me of the value of bleeding in certain epidemic diseases. I trust I shall be forgiven in slightly alluding to two published reports of my own, in which I have described both ordinary fever and scarlet fever in an epidemic form, and of an inflammatory type, successfully treated by the lancet, or leeches, or by both conjointly. This happened nearly thirty years ago; and I need scarcely add, that I have since encountered the same maladies, of a widely different type, which neither demanded nor would bear the same active treatment. My "Report of the Epidemic Scarlet Fever" (that in which my son's case occurred) was published in the *Edinburgh Medical and Surgical Journal* for 1833. Nor is this the first time in which it has been alluded to in the homœopathic controversy. For, ten years after its publication, the editor of that Journal referred to it in evidence of the value of active treatment in that disease, in refutation of Dr. Maunsell, who had said, "that practitioners, who follow the treatment recommended by Dr. Armstrong in scarlet fever, should at least peruse the sixth commandment". In reply to which, the editor further remarks, that "we scarcely know any class or order of practitioners, who have more need to have this commandment constantly before their eyes, than the gentlemen of the homœopathic school. For it should be remembered, that it is quite as possible to break this commandment by omission and neglect, as by commission and activity."

I shall conclude these illustrations of the value of the lancet by citing two well known examples of epidemic disease in which success crowned the heroic use of the lancet, after other methods had been tried and failed. There is a dramatic grandeur about both these medical histories, which enchains our admiration, as much as the appeal of their overpowering evidence in favour of depletion takes captive the judgment. The first is the example of a puerperal epidemic fever, which prevailed at Leeds from the year 1809 to 1812. That venerable man whom the French call the patriarch of English surgery, William Hey, was then alive, and, with his son, the father of the existing surgeons of that name, witnessed the devastations of this dire disease in his own populous district. Taught by Clarke, Kirkland, Leake, and the writers of the old school, who probably had to contend with a depressing condition of the atmosphere, such as that which has revisited these islands during the last twenty years, the two Heys had an almost homœopathic dread of the lancet in that disease. But their conservative caution availed them not; for some unintelligible change had invested the complaint with an activity which defied half-measures. They "were alarmed by the extreme rapidity with which the disease ran its course, and by its constant fatality, unlike anything which had ever been known in Leeds." Mr. Hey's instructive narrative of the speedy revolution in their views, with its important practical results, ought to be graven "as with a pen of iron, on the rock for ever". "It has been stated," says he, "that before the plan of bleeding was adopted, of fourteen patients who were attacked with the disease, only three recovered; and I have now to add that, after the ninth case (the fifteenth in my practice), in consequence of which I determined *to use bleeding in addition to purging*, of thirty-three patients whom we attended, only three died, the last twenty-six having recovered in uninterrupted succession." The history of this puerperal epidemic is full of interest. Such was the mortality under the non-bleeding system, that the two Heys were thrown into a panic. At this critical moment, the son stumbled upon a pamphlet written by Dr. Gordon of Aberdeen, in which he recorded his successful treatment of a similar puerperal epidemic by bleeding. The patriarch of English surgery was too sagacious a man to allow the prejudices of his medical education to close his eyes to the evidence of facts. They determined at once on a change of system, and pushed the use of the lancet to its utmost limit, with what results I have already told you. Mark the vigour of their treatment. "When I was called at an early period," says Mr. Hey, jun., "I seldom took away less than twenty-four ounces of blood at first, unless some peculiar delicacy of constitution, or an excess of the previous evacuations, forbad it. And if the delay was protracted to eight or ten hours, or the symptoms were unusually severe, a larger quantity, to the extent of thirty, forty, and in one instance more than fifty ounces, in proportion to the urgency of the symptoms and the loss of time." "Gordon and Hey", says Dr. Murphy, "relieved the accumulation of poisoned blood at the central vessels at once by taking twenty or thirty ounces of blood, and succeeded in a sufficient number of cases to prove the correctness of their practice and the nature of the disease. Depletion to such a large extent could not be explained on the principle of combating peritonitis, but is intelligible as relieving the liver, spleen, and central organs, from the mass of poisoned blood." For, while the puerperal poison selects the serous membranes as the seat of its specific action, it would seem to disintegrate also the blood itself. But, whatever view we take of the disease, whether as essentially a poisoning of the blood, or an inflammation of the serous tissues implicated, or both combined, experience proves that bleeding was largely crowned with success in disarming the poison of its virulence, or mitigating its inflammatory results.

Allow me, in conclusion, to refer to Dr. Rush's thrilling "*Account of the Bilious Remitting Fever, as it appeared in the City of Philadelphia in the year* 1793." So fatal was the pestilence, and so heart-rending were the deaths of senators, citizens, relatives, and pupils, that he observes, "The hearse and the grave mingled themselves with every view I took of human affairs. Under these impressions, I recollect being as much struck with observing a number of men employed in digging the cellar of a large house, as I should have been at any other time in seeing preparations for building a palace upon a cake of ice." "Baffled in every attempt to stop the ravages of this fever, I anticipated all the numerous and complicated distresses which pestilential diseases have so often produced in other countries. The fever had a malignity and an obstinacy which I had never before observed in any disease, and it spread with a rapidity and a mortality far beyond what it did in the year 1762. Heaven alone bore witness to the anguish of my soul in this awful situation. But I did not abandon a hope that the disease might yet be cured. I had long believed that good was commensurate with evil, and that there does not exist a disease for which the goodness of Providence has not provided a remedy. Under the impression of this belief, I applied myself with fresh ardour to the investigation of the disease before me." The whole case has many features in common with the Leeds puerperal epidemic; for Dr. Rush tells us that he ransacked his library, and pored over every book that treated of the yellow fever. In his researches, he recollected that there was among some old papers a manuscript account of the disease as it prevailed in Virginia in 1741, which Franklin had put into his hands a short time before his death. Cholagogue purges were recommended by the author. He had now found a clue to the right treatment, and further reflection induced him to bleed; for "an indomitable pulse, which threatened all the viscera, and especially the brain, with effusions of blood," was characteristic of the epidemic. "The appearance of the blood, and its effects upon the system," he continues, "satisfied me of its safety and efficacy. Never before did I experience such sublime joy as I now felt in contemplating the success of my remedies; it repaid me for all the toils and studies of my life. The conquest of this formidable disease was not the effect of accident, nor of the application of a single remedy; but it was the triumph of a principle in medicine. The reader will not wonder at this joyful state of my mind when I add a short extract from my note-book, dated the 10th of September: 'Thank God! out of one hundred patients whom I have visited or prescribed for this day, I have lost none.'" We are told, in the course of this exciting narrative, that "it was said the bleeding was unneces-

sarily copious, and that many had been destroyed by it." In reply to this charge, Dr. Rush asserts: "I did not lose a single patient whom I bled seven times or more in this fever. As a further proof that I did not draw an ounce of blood too much, it will only be necessary to add, that hæmorrhages frequently occurred after a third, a fourth, and in one instance after a sixth bleeding, had been used; and further, that not a single death occurred from natural hæmorrhages in the first stage of the disorder."

But, while those who practise legitimate medicine lay claim to a commanding medical philosophy, they are not wholly innocent of the blame of the partial lapse of society into empirical practices. It cannot be honestly denied, that over-bloodletting, and other analogous blunders, have furnished too many materials for such books as Dick's "*Fallacies of the Faculty*"—blunders which, when magnified by the lens of a malignant satire, have revolted common sense and provoked public indignation. Too many of the old school must plead guilty also of a routine employment of blue pill and the black draught, until the incessant bullying of a patient's liver and intestines has exhausted vital power, and spoiled the secretory function of the liver. Hence the emphatic protest of the late Dr. Mackintosh against a routine employment of the lancet, and of the late Dr. Prout against the indiscriminate use of calomel and black doses, which are to the liver what dram-drinking is to the stomach, and so impair its functions as at last to induce irreparable malassimilation and inveterate urinary complaints. I have frankly noticed these abuses of legitimate medicine, for this reason among others, that I may expose the miserable expedient to which the homœopathists are reduced, when they parade these errors (of which all educated allopathic practitioners complain quite as loudly as they do) as fair examples of the practice of legitimate medicine.

But, despite the occasional blunders of those who practise legitimate medicine, its professors lay claim, I repeat, to a commanding medical philosophy—a philosophy which is at once experimental and inductive. Waiving all allusion to the records of antiquity, some of which are of great value, the revival of medical knowledge was coeval with the Reformation, and, like it, received its highest impulse from bursting the fetters of its Latinised literature, and employing the vernacular languages of Europe. This grand innovation we owe mainly to the eccentric Paracelsus, who was Luther's contemporary. It was not, however, till 1628 that the immortal Harvey discovered the circulation of the blood. This discovery overturned all the systems which had subsisted prior to that time; for it explains on more solid and rational grounds the phenomena of the animal body, both in health and disease. At a still later period of the seventeenth century, Sydenham, the father of English medicine, flourished, and bequeathed to posterity writings which vindicate the priority and supremacy of *direct observation;* for "less than most of his contemporaries, less perhaps than any, did he permit preconceived notions of disease or treatment, and still less merely authoritative opinions, to step in between the disease and the observation." Oblivion gladly throws her veil over the names of certain theoretic doctors of medicine, whose antagonist systems long contended for the prize of public favour at the expense of humanity's damaged interests. But, with this exception, the disciples of the school of observation gradually multiplied, and its dominion is now universal. You will anticipate me in citing, as some the most distinguished ornaments of this school, the names of Andral, Laennec, Ricord, Abercrombie, Alison, Simpson, Jenner, Bright, Watson, Latham, Prout, Budd, Stokes, Graves, Hope, and Golding Bird. Nor is Louis, the author of the numerical method, an exception. But it would be unpardonable to pass by one illustrious name, whose single labours laid a basis for most other discoveries in physiology and pathology—I mean the great John Hunter. Physiology owes, indeed, much for its later advances to Sir Charles Bell and Dr. Marshall Hall; and, as aided by chemistry and the microscope, to Carpenter, Simon, Liebig, and others. Pathological anatomy, on the other hand, has been ably cultivated by Morgagni, Carswell, Rokitansky, John Hughes Bennett, Carl Wedl, Kölliker, Hasse, and others. Finally, to Pinel, Esquirol, Feuchtersleben, Conolly, and other explorers in the field of the pathology of mind, we owe a large debt of gratitude. The masterly pencil of Dr. John Hughes Bennett has ably sketched the extraordinary advances which have been made during the present century in the different departments or medical science. "Every where we see natural philosophy advancing; enthusiastic chemists pushing forward organic analyses; anatomists unwearied in their researches concerning development and the structure of tissues; physiologists experimenting and concentrating all the resources of modern science, in order to elucidate organic laws; and pathologists busy in connecting the symptoms observed in the living with alterations in the minutest tissues and atoms of the dead." Nor can we overlook, in this retrospect of the advances of the healing art by means of observation and science, the immense blessings conferred on society by an improved general and military surgery, by a humanised treatment of the insane, by the sanitary efforts of an enlightened hygiene, and by the exaltation of the value of human life generally, as attested by Mr. M'Culloch, who has demonstrated by statistics the decrease of mortality in the whole population of Great Britain. Who, that surveys the magnificent temple of medicine reared by the combined genius and labours of such architects as those we have mentioned—and many others of equal eminence might be named—will not hasten to pay his most fervent devotions at its hallowed shrine?

But the times are out of joint; and, if anything can give the profession its right standing in society, it is the institution of such an agency as the British Medical Association, which secures political influence by combining vast numbers in an unbroken phalanx, elicits the spirit of discovery by free discussion alike on the annual platform and by the weekly press, and wins the confidence and respect of discerning and educated men by the improved culture alike of medical ethics and scientific medicine. But it is a singular coincidence that the frowns of the world, as shown by the browbeating of medical witnesses by self complacent barristers, by the indignities put upon naval and military medical men, by the maltreatment of medical officers by Poor-Law Boards, and, above all, in the frequent preference, by all classes, of empirics of the most absurd pretensions, should have been lavished upon us at a time when, beyond all others, the profession is asserting its claims to an honourable recognition by the improvement of its members in general education, and by the enforcement of a comprehensive curriculum of studies, which embrace all the modern discoveries in science. Moreover, "by the force of professional opinion, the bestowal of public appointments is becoming almost equivalent, as a testimonial, to an established order of merit; and the medical department of our armies is now recruited by a competitive examination devised and conducted by men themselves holding the first rank in their several branches of knowledge." The standard of professional honour, too, has been so raised as largely to supplant a trade in drugs by introducing a more compendious mode of practice, aided by the suggestions of an enlightened hygiene. But how have the public met this wise concession to the demands of the age? Alas! for humanity, by the abandonment of its highest interests to the mercenary gripe of homœopathic, hydropathic, Mesmeric, and other empirics. In allusion to this phase of society, it has been too truly said: "The honest practitioner will gnaw his crust in obscurity, while the mendacious impostor, more wise in his generation, shall dazzle the world with the magnificence of his dwelling and the sumptuousness of his equipage." But the public patronage of different sects of empirics, and of different modes of healing, is the sign of a distempered age; nor is an unsettled state of public opinion restricted in its vagaries to our own profession. It is the freak and evidence of an immature civilisation, which unconsciously copies the very practices of barbarism; for ages of ignorance constitute the congenial soil in which empiricism in all its varieties luxuriates. Thus Alpinus reports to us, from personal observation, that the art of medicine was so practised in Egypt that there was found an individual healer for each individual distemper; and Herodotus long ago recorded the very same fact. In Japan also, at this day, everything belonging to medicine is empirical, and the art is split into a thousand departments. The remoter periods of English history are no exception to this law of barbarism; and it is humiliating to reflect that, in our own age and country, the proofs of a retrograde tendency to a disgraceful empiricism abound even in the higher walks of society.

I have finished the pleasant task I assigned to myself, in converting Dr. Horner's eccentric career into an occasion for confirming our own attachment to legitimate medicine. I will not suppose it possible that any other member of our Association can sit so loose to the moral obligations which bind him to his profession, as to be in danger of copying Dr. Horner's example, be the temptations of popular favour ever so alluring. It is surprising that any man, moderately conversant with the principles of his profession, should be carried away by the infinitesimal inanities of homœopathy. But such a defection I hold to be morally impossible, providing we cherish fidelity to

our professional convictions, by making ourselves deeply acquainted with those facts and principles in medical science, on a full knowledge of which those convictions will securely repose.

SOUTH MIDLAND BRANCH: ORDINARY MEETING.

An ordinary meeting of this Branch was held at the Harpur Charity Board Room, Bedford, on Tuesday, September 29th, H. Terry, Esq., Sen., President in the chair. The following members attended: J. G. Appleton Esq. (Luton); T. H. Barker, M.D. (Bedford); W. Birdsall, Esq. (Northampton); W. Blower, Esq. (Bedford); E. Daniell, Esq. (Newport Pagnell); B. Dulley, Esq. (Wellingborough); J. J. Godfrey, Esq. (Great Barford); F. H. Marshall, Esq. (Moulton); R. R. Morris, Esq. (Brixworth); Samuel Mault, M.D. (Fenny Stratford); W. Percival, Esq. (Northampton); T. Prichard, M.D. (Abington Abbey); W. S. Slinn, Esq. (Ampthill); R. S. Stedman, Esq. (Sharnbrook); C. P. Stevens, Esq. (Biggleswade); H. Terry, Jun., Esq. (Northampton); W. Thurnall, Esq. (Bedford); R. W. Watkins, Esq. (Towcester); J. H. Webster, M.D. (Northampton); Jas. Williams, M.D. (Aspley); J. F. Williams, Esq. (Cranfield); W. S. Wyman, Esq. (Kettering).

The following gentlemen were also present as visitors: G. R. Skene, Esq. (Bedford); H. Raynes, Esq. (Potton); P. Benson, Esq. (Luton); J. H. Hemming, Esq. (Kimbolton); H. W. Sharpin, Esq. (Bedford); and H. Bucknill, Esq. (Bedford).

NEW MEMBERS.

The following gentlemen were proposed and elected as members of the Branch: G. Ashdown, Esq. (Northampton); W. A. Barr, M.D. (Northampton); P. Benson, Esq. (Luton); F. W. Dix, Esq. (Long Buckby); Joseph Farr, Esq. (Dunstable); W. H. Gatty, Esq. (Market Harborough); W. Gibbon, Esq. (Kettering); J. H. Hemming, Esq. (Kimbolton); W. C. Johnson, Esq. (Bedford); and H. Raynes, Esq. (Potton).

Letters of apology were also read from several gentlemen whose engagements prevented their attendance.

CASES AND COMMUNICATIONS.

The following papers were then read to the meeting.

1. Contributions to the Medical Topography of Bedford and its Neighbourhood. By W. Blower, Esq.
2. On the Treatment of Joints contracted by Rheumatic Gout. By J. H. Hemming, Esq.
3. A Case of Hysterical Coma. By J. Williams, M.D.
4. A Case of Cut-throat. By W. Thurnall, Esq.
5. A Case of Abscess of the Brain. By W. G. Johnson, Esq.
6. A Case of Rupture of the Bladder. By H. Terry, sen., esq.

The reading of these papers was followed by interesting and useful discussions; and some of them will be published in the Journal.

The following preparations and instruments were also exhibited.

1. A Cast of an extreme form of double Hare-lip; and
2. Cysts from the Human Kidney, and Microscopic Preparations of the contained Echinococci and Crystals. By T. H. Barker, M.D.
3. Two Specimens of Fœtal Hydrocephalus. By W. Blower, Esq.
4. A Specimen of Encysted Abscess of the Brain, occurring after Compound Fracture of the Cranium. By W. G. Johnson, Esq.
5. A Series of Anatomical and Pathological Microscopic Objects; and
6. Two Persons with Congenital Staphyloma. By R. S. Stedman, Esq.
7. The Ecraseur. By H. Terry, sen., Esq.

One of the most interesting features of the meeting was the exhibition, by Mr. Stedman, of several very beautiful microscopic objects; that gentleman selected the choicest specimens from his own cabinet, and showed them by means of half-a-dozen fine microscopes, kindly contributed by himself and friends.

Votes of thanks were unanimously passed to the Trustees of the Harpur Charity, for the use of their Board Room; to the authors of the papers, with a request that they might be published in the Journal; and to the President, for his able services in the chair.

The members and visitors, honoured by the presence of the Mayor of Bedford, afterwards dined together at the Swan Hotel; the usual loyal and professional toasts having been given, the Mayor proposed "Success to the South Midland Branch," which was responded to by Mr. Blower, an ex-mayor. The healths of Sir Charles Hastings, and the Editor of the Journal, and the Benevolent Fund, were also given, after which the meeting separated.

The annual meeting of this Branch will be held at Bedford in May next.

Editor's Letter Box.

FEES FROM ASSURANCE OFFICES.

Letter from Samuel Wood, Esq.

Sir,—The letter of Dr. Radclyffe Hall in your last fully exposes one of the numerous ways in which the assurance offices impose upon our profession. There is another by which they obtain to them most valuable information without paying the practitioner giving it. I mean the custom of offices requiring the insurers to furnish the name of their medical attendant, to whom the office write, requesting a long list of questions to be answered as they say "confidentially," so as to induce the medical attendant to report any little weakness or tendency to disease his patient may have; and all this without fee.

A few days ago, a patient of mine applied to a solicitor here to effect for him an insurance in the Gresham Life Office, and a long list of questions was forwarded to me to reply to; perceiving that my answers were only for the protection of the office (their secretary kindly stating that "all I should say would be considered *strictly confidential*"), I wrote to ask if it was the intention of the Office to pay me the usual fee. I received an answer to the following effect:—

"Sir,—I regret that you should hold the opinions you do with respect to life offices; but, finding you do so, I have no alternative but to request Mr. Hughes to appoint another referee. Your obedient servant."

I replied:—

"Sir,—I regret that you hold the opinion you do with respect to the medical profession; but, finding you do so, I have no alternative but to recommend my patient to insure in another office, which I have done. Your ob't servant, S. W."

I explained to my patient the position I was placed in by the Gresham, and I therefore hoped he would select some more liberal office. He did so, and also induced his son to insure in the Crown office.

I have troubled you with this letter, because I hold that a life office places the medical attendant of the insurer in a situation of some difficulty when his opinion is required. If he gives an honest one—which he would—he may offend a good patient to advantage a shabby office, which office actually refuses to pay his well earned fee. The directors, if they knew their own interest, would, when they require an opinion besides that of their own referee, seek to relieve our profession from a collision with the patient, which the present system frequently causes. I hope, now this question is brought before the profession, other members of it may be induced to stand up for our rights by meeting all attempts to cheat us of our fees as has been done by Dr. Radclyffe Hall.

I am, etc., Samuel Wood.

The Abbey, Shrewsbury, Oct. 6th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Briscoe. On September 29th, at Brompton, Chatham, the wife of Henry Briscoe, M.D., Surgeon Royal Artillery, of a son.

Donald. On September 26th, at Glasgow, the wife of James Donald, Esq., Surgeon, of a son.

Duka. On October 4th, at Ebury Street, Eaton Square, the wife of Theodore Duka, M.D., H.E.I.C.S., Monghyr, Bengal, of a son.

Ellis. On October 2nd, at Crowle, the wife of *Henry W. T. Ellis, Esq., Surgeon, of a daughter.

Godrich. On October 2nd, at Sydney Place, Brompton, the wife of Francis Godrich, jun., Esq., Surgeon, of a daughter.

Greaves. On September 26th, at Stretford Road, Manchester, the wife of *George Greaves, Esq., Surgeon, of a daughter.

Jackson. On October 4th, at Market Weighton, the wife of *Matthew Jackson, Esq., Surgeon, of a son.

Powell. On September 30th, at Coventry, the wife of Henry Powell, M.D., of a son.

Spackman. On September 30th, at Harpenden, Herts, the wife of Frederick R. Spackman, M.D.Lond., of a daughter.

Stephens. On October 3rd, at Gothic Lodge, Twickenham, the wife of — Stephens, M.D., of a son.

Taylor. On September 27th, at Paisley, the wife of David Taylor, M.D., of a daughter.

MARRIAGES.

Gale—Wyman. Gale, John Hepburn, Esq., of Stockwell, Surrey, to Annie, eldest daughter, of *W. S. Wyman, Esq., Surgeon, of Kettering, at St. Mary's, Stoke Newington, on October 3rd.

Lilburne—Honburgh. Lilburne, James, Esq., Surgeon R.N., to Charlotte, youngest daughter of the late James Honburgh, Esq., of Firth, Roxburghshire, at Pittenween, on September 29th.

Mackenzie—Murray. Mackenzie, Thomas, Esq., to Alexandrina Findlay, daughter of the late Peter Daly Murray, Esq., Staff-Surgeon, at the Catholic Church, Reading, and at the Holy Trinity Church, Lambswood Hill, on October 1st.

Piper—Taylor. Piper, C. D., Esq., Her Majesty's Royal Arsenal, Woolwich, to Emily Louisa, third daughter of J. Taylor, Esq., Surgeon, Old Kent Road, at St. George's, Southwark, on October 1st.

Smith—Sillery. Smith, Frederick Moore, Esq., late of Her Majesty's 4th Regiment, to Maria Margaret, youngest daughter of Robert Sillery, M.D., of Dover, at Charlton next Dover, on October 1st.

Watkins—Aris. Watkins, Edwin Thomas, Esq., Surgeon (late R.N.), of Towcester, Northamptonshire, to Sarah, eldest daughter of John Aris, Esq., of Lois Weedon House, at Lois Weedon, on October 1st.

DEATHS.

Anderton, Charles, Esq., Surgeon, of Stalybridge, aged 44, on September 29th.

Bradshaw, Henry, Esq., Surgeon, of Liverpool, aged 50, on September 18th.

Harper, Charles Harris, Esq., Assistant-Surgeon H.E.I.C.S., Madras Establishment, drowned at Sitang, Moulmein, on on July 1st.

Hay, John Macdouall, M.D., Civil Surgeon, Bareilly Station, East Indies, killed at Bareilly, on May 31st.

Heathcote, T. Godfrey, Esq., Surgeon 10th Regiment Bengal Native Infantry, massacred at Cawnpore, on July 15th: also, Gertrude, his wife, and their two youngest children.

Johnston, Alexander, Esq., Surgeon, at Stirling, on September 25th.

Keate, Robert, Esq., Sergeant-Surgeon to Her Majesty, at 11, Hertford Street, May Fair, aged 80, on October 2nd.

*Lomas, Thomas, Esq., Surgeon, of Belper, after a long illness, aged 54, on September 10th.

Nicholson. On September 22nd, at Redditch, aged 13 months, Alan, son of *J. R. Nicholson, M.D.

Norval. On September 9th, at New York, James Alexander, only son of James Norval, M.D., late of Glasgow.

Sawkins. At Taunton, aged 30, Isabella, wife of James Sawkins, M.D.

Wilson, James, M.D., at Hope Street, Glasgow, aged 74, on September 20th. Dr. Wilson was a native of Douglas, in the Upper Ward of Lanarkshire, where he was born on the 30th of June, 1783; and after having received a medical education at the Glasgow University, he settled in Carluke as a surgeon. Having practised there for several years, he removed to Glasgow, under the patronage of the late Dr. Jeffrey, Professor of Anatomy in the College, who entertained a high respect for his abilities, and whose friendship he enjoyed during the remainder of the life of that venerable individual. In the earlier part of his professional career, he was associated with the late Mr. John Grieve, with whose family he afterwards formed a more endearing connexion; and on Mr. Grieve's death, he succeeded to a small but well established family practice, which laid the foundation of his future success in life. For at least forty-two years he followed his profession in Glasgow, and gradually acquired a well deserved and an extensive reputation as a physician-accoucheur. The confidence reposed in his skill and judgment by his professional brethren was so great, that he was much consulted by them in cases of difficulty; and for many years he taught obstetrics in the Portland School of Medicine, and for one session he supplied the place in the College of the late Dr. William Cumin. As a lecturer, he was plain and practical, and his pupils felt that he was thoroughly master of his subject; while in the private exercise of his professional duties he commanded and obtained the confidence and esteem of his numerous patients, whose counsellor and friend he became as much as their medical attendant. At the time of his death, Dr. Wilson's reputation had been long and firmly established; and though, from his unobtrusive manners, he was little heard of beyond the circle of his profession, no name stood higher within it. Personally, Dr. Wilson was a just and righteous man; and we have never known any one who at all times and under all circumstances, exhibited so completely the triumph of principle over impulse. His equanimity never forsook him even in the midst of distress and suffering; and when sorrow weighed upon the hearts of others, no sympathy was more freely and unaffectedly given than his. Dr. Wilson, at the time of his death, had been an elder of the Church for fifty years. He was a member of the Free Church; but his benevolent nature was incapable of harshness of any kind, and his intimacy with his old friends of the establishment was never interrupted for one moment by the disruption. (Abridged from *Glasgow Courier.*)

Young. On October 3rd, at Hawkhurst, Kent, aged 31, Marianne, wife of *F. A. Young, Esq., Surgeon.

PASS LISTS.

Royal College of Physicians. At the Quarterly Comitia Majora, held on Wednesday, September 30th, the following gentlemen having undergone the necessary examinations, were admitted members of the College:—

Dr. A. Smith, Thurlow Square

Dr. James L. Siordet, Holles Street, Cavendish Square

Also, as Extra Licentiates:—

Dr. Fred. J. Burgess, Bishop's Waltham

Dr. Wm. Francis Nootт, Portsmouth

Dr. William Tidmas, Nottingham

At the same Comitia Majora:—

Dr. Cape, Curzon Street, May Fair, was admitted a Fellow of the College.

University of London. M.B. First Examination, 1857. Examination for Honours.

Anatomy and Physiology.

Kempster, F. H. (Exhibition and Gold Medal), University College

Crowfoot, William Miller (Gold Medal), St. Bartholomew's Hospital

Ringer, Sydney, University College

Moxon, Walter, Guy's Hospital

Harley, John, King's College

Durham, Arthur Edward, Guy's Hospital

Carter, Robert, University College } Equal.

Cayley, William, King's College }

Chemistry.

Kempster, F. H. (Exhibition and Gold Medal), University College

Moxon, Walter (Gold Medal), Guy's Hospital

Durham, Arthur Edward, Guy's Hospital

Rivington, Walter, London Hospital

Harley, John, King's College

Materia Medica and Pharmaceutical Chemistry.

Moxon, Walter (Exhibition and Gold Medal), Guy's Hospital

Rivington, Walter (Gold Medal), London Hospital

Durham, Arthur Edward, Guy's Hospital

Harley, John, King's College

Kempster, Felix Henry, University College

Adams, Samuel Hoppus, University College

Pile, William, University College

Structural and Physiological Botany.

Adams, Samuel Hoppus (Gold Medal), University College

Crowfoot, W. Miller, St. Bartholomew's Hospital } Equal.

Harley, John, King's College }

Durham, Arthur Edward, Guy's Hospital
Thompson, Edmund Symes, King's College
Jeffcoat, James Henry, St. Mary's Hospital

Apothecaries' Hall. Members admitted on Thursday, September 24th, 1857:—

Baker, Thomas Stephen, Moreton-in-Marsh
Ellis, James, Landport, Portsea
Fleischman, Alfred, Leeds, Yorkshire
Johnson, Burdett, Somersham, Hants.
Mason, Thomas, Leominster, Hereford
Norton, Selby, West Malling, Kent
Prytherch, John, Llanerchymedd, Anglesea
Siccama, Rinso Robert, Royal Navy
Turney, Thomas Henry, Halifax, Yorkshire
Williams, William Rumsey, Carnarvon, N.W.

HEALTH OF LONDON:—WEEK ENDING OCTOBER 3rd, 1857.

[From the Registrar-General's Report.]

In the week that ended on Saturday (October 3d) the number of deaths registered in London was 1,087. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1,136, which, if raised in proportion to increase of population, becomes 1,250. The deaths from diarrhœa last week were 79, being nearly the same as in the previous week, when they were 83. There were no deaths from cholera among adults; but two cases of infants who died of choleraic diarrhœa are referred to this head. A potman, aged 34 years, died in the Hackney Workhouse on September 28th of "natural decay accelerated by want." On the 3rd July the wife of a serjeant committed suicide with cyanide of potassium; on 15th July a woman committed suicide with the same substance; and on 29th August, the son of a serjeant, aged 6 years, was poisoned by it, the bottle which held it having been left within his reach. Cyanide of potassium is used by soldiers for cleaning their lace. Of six nonagenarians whose deaths are returned, the oldest are two men, aged respectively 94 and 95 years, and a woman who died in the workhouse, Newington, at the age (as stated) of 105 years.

Last week the births of 916 boys and 849 girls, in all 1765 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1441.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·868 in. The mean temperature was 58·4°, which is 4·6° above the average. The mean daily temperature was more or less above the average throughout the week. The wind was generally in the south-west. No rain fell except on Monday, when the amount was 0·17 in.

EPIDEMIC CHOLERA.

The following precautionary advice to local boards of health with reference to epidemic cholera has been issued by the General Board of Health, Whitehall:—

"General Board of Health, Whitehall, Sept. 29th.

"Cholera has again become epidemic in several of the Baltic ports, and at Hamburgh. On each of the three former occasions, when the disease has visited England, its first appearance in our eastern seaports followed closely on its epidemic outbreak in the last-named city. During the past three months there has been observed in London, and in some other parts of England, a very unusual fatality from diarrhœa; and this derangement of the public health is such as, on the previous occasions referred to, preceded the commencement of the epidemic periods of cholera. The General Board of Health deems it expedient to call the attention of local boards of health to these facts, and most earnestly recommends that the powers vested in such boards for the protection of the public health be exercised from the present time with especial vigilance. As regards the exercise of these powers with particular reference to the prevention of cholera, the most important security for the public health is to be found in the fulfilment of two conditions:—First, that the air within and about dwelling-places be not contaminated with offensive organic effluvia, such as arise when the houses themselves are ill ventilated, overcrowded, and unclean, or when their refuse is not properly removed from them by drainage or otherwise, or when any filthy accumulations exist in their neighbourhood, or when the local sewerage is defective. Secondly, that the public supply of water be, as far as possible, unpolluted by any kind of animal or vegetable impurity; for where cholera is present or impending no house can be considered safe for habitation in which there is any offensive smell of animal refuse, or of other putrefactive animal or vegetable matter; and no water can be considered safe for drinking into which there flows (as is often the case with rivers and with wells in the neighbourhood of houses) any habitual discharge of town refuse or any accidental soakage or leakage from drains or cesspools. An abstract is subjoined of those more important provisions of the Public Health Act, the Nuisance Removal Act, and the Common Lodginghouses Acts, under which local boards of health are able to provide for the sanitary improvement of their respective districts in the various matters referred to. In proceeding to the exercise of these powers at the present juncture, it is desirable that early and special attention should be given to those parts of each district which have hitherto been unhealthiest, particularly to those where cholera has prevailed on previous occasions, or where diarrhœa has been most frequent; also, that the local board should be kept well informed as to the amount of bowel complaint prevailing from time to time within their district, and that intelligence should be given to the General Board in case of any notable increase in the prevalence of such disorder. It is to be expected that the officer of health (where one has been appointed) will inquire with more than ordinary minuteness into the state of premises, and into the quality of the different sources of water-supply, within his district; and that sanitary inspectors and inspectors of nuisances will use the utmost vigilance in every department of their duty—especially in reference to public scavenging, to the state of sewers, to the removal of house-refuse, to the keeping of slaughterhouses and cattle sheds, and to the fulfilment of such orders for sanitary work as the local board may find it requisite to issue. Two cases—furnished by the experience of the last epidemic—peculiarly deserve the consideration of local boards, as illustrating what may reasonably be expected from sanitary improvement in averting the ravages of cholera.

[The cases alluded to are the outbreak of cholera at Newcastle-on-Tyne and Gateshead, related by Dr. Greenhow in a paper read before the Epidemiological Society on February 5th, 1855, and the comparative mortality from cholera in relation to the water supply in the southern districts of London.]

"The General Board of Heath would earnestly direct the attention of local boards to these cases. They (with many similar facts) support the conclusion which, at the close of the last epidemic, was adopted by the Medical Council of the General Board, to express the present state of scientific knowledge as to the causes of cholera:—'The doctrine of epidemic cholera which has gained almost universal acceptance does not affect to explain what may be that power—the exciting cause of the epidemic manifestation, which at intervals of time has forayed from place to place about our globe, sometimes vaguely spreading over a widened area, sometimes seeming to move in more defined procession, and which now for the third time has shed its fatal influence on our land. But, with this mystery still unsolved, there has grown more and more into shape a doctrine which is both intelligible and practical,—that the undiscovered power, in its wanderings, acts after the manner of a ferment; that it therefore takes effect only amid congenial circumstances, and that the stuff out of which it brews poison must be air or water abounding with organic impurity.' It is possible that no human efforts may suffice to avert the course of that epidemic ferment which thus, at certain intervals of time, comes, as it were, to test the sufficiency of our sanitary defences. But public authorities, armed with the existing powers of the law, can do almost everything to render the mysterious influence innocuous by removing those local conditions through which alone it is enabled to destroy life in this climate. Local boards may be well assured that, if any precautions adopted by them against cholera should hereafter seem to have been superfluous in relation to that epidemic—if the suggested possibility of a fourth visitation should happily not now be realised—the pains and cost which may have been given to sanitary improvement will in no degree have been wasted; since undoubtedly such exertions will have borne fruit in preventing other disease, and in lessening both the misery and the expense, the waste of life and the waste of money, which are now the consequence of defective sanitary arrangements. "W. Cowper, *President.*"

THE OPHTHALMOLOGICAL CONGRESS AT BRUSSELS.

The Congress of Ophthalmologists was held in Brussels, on September 13th, under the presidency of M. Fallot. Its objects were the examination and analysis of collected observations, the exposition of new theories, the comparison of the results obtained by different practical processes, and the determination of the actual state of ophthalmological science in various countries. In the published programme, the committee of organisation addressed to the members the following series of questions.

Section I. *a.* The transmissibility of purulent ophthalmia being demonstrated, can its mode of transmission be exactly determined? *b.* What part, in the transmission of ophthalmia, can be assigned to granulations? And what is the nature of these? *c.* Is there any one formula of which experience has sanctioned the superiority in the treatment of military ophthalmia? *d.* What measures are best to take for preventing the appearance and spread of ophthalmia?

Section II. *e.* What has been the influence of the discovery of the ophthalmoscope on the diagnosis and treatment of diseases of the eye? *f.* What agents concur in or preside over the accommodation of the eye to distances? *g.* Does the present state of science authorise the admission of specific ophthalmiæ? If so, what is to be understood by this term, and to how many species of ophthalmia is it applicable? *h.* Is the specificity capable of being recognised by the anatomical and physiological characters of the eye? *i.* Can a radical cure be obtained by simple local applications? Or is general treatment always demanded?

Section III. *k.* Has experience established that certain forms of cataract may be cured without operation? If so, what are these forms? And what are the means that may be substituted for surgical treatment? *l.* Of what utility is closure of the eyelids in the treatment of diseases of the eye? What are the affections which demand its employment: and what is the best method of effecting it? *m.* Is there an advantage in special establishments for the treatment of diseases of the eye? If so, what are the conditions which they ought to realise?

Most of the European governments sent to the congress delegates, both civil and military; the latter being especially charged with the duty of investigating the important subject of granular or military ophthalmia, which some years since made great ravages in the armies, from which it has not yet completely disappeared.

The following are the names of the delegated members. *France:* MM. Laveran and Lustreman. *England:* S. Roberts, Esq. (Staff Surgeon Royal Army). *Austria:* MM. Arlt, Gulz, Jäger, Johan Siegl, and Stelwag von Carion. *Prussia and various German States:* MM. Löffler, Müller, von Ammon, Gunther, Plattner, Ch. Müller, and Stromeyer. *Denmark:* MM. Bendz, Esmarch, Grademann, Melchior, Nue, and Thüne. *Sweden:* M. Rosander. *Russia:* MM. Borodine, Fröbelius, and Kabalt. *Spain:* M. Cervera. *Sardinia:* MM. Bima, Borelli, and Sperino. *Portugal:* M. Marguès. *Greece:* M. Anagnostakis. There were also present at the Congress: Messrs. W. Bowman and J. Dixon, and Dr. Little, of London; Windsor of Manchester; Gräfe of Berlin; Sichel, Desmarres, and Guépin, of Nantes; Caffe, Vauquelin, and Leport, of Rouen; Gros of Boulogne; Serre of Uzès; Testelin of Lille; Donders of Utrecht; Gobel of Amsterdam; Vanzetti of Padua; Quadri of Naples; Pelikan of St. Petersburg; Riberi of Turin; Cornaz of Neuchâtel; Jacques of Ancona; Ortiz of Venezuela; De Souza of Brazil; besides MM. Fallot (the President), Bosch, Hairion, Van Roosbroeck, Warlomont, and many members resident in Belgium.

On many of the questions given above, interesting discussions followed, of which we hope to be able to give an abstract when the official report of the Congress is published.

QUEEN'S COLLEGE, BIRMINGHAM.

The opening of the winter session took place on Friday, October 2nd; the Principal, J. K. Booth, M.D., presided. The Dean, Mr. Sands Cox, read a report. The progress of the medical department continued to be highly satisfactory, and its prospects very encouraging; the number of students in attendance on the several classes was larger than at any former period. The following return had been made to the council by the professors:—Descriptive anatomy, 58; general anatomy and physiology, 54; practical anatomy, 58; chemistry, 19; practical chemistry, 19; principles and practice of medicine, 35; principles and practice of surgery, 38; materia medica and therapeutics, 23; principles and practice of midwifery, 42; forensic medicine, 17; botany and vegetable physiology, 23. The names of those students who gained prizes in each department have already been announced. During the past year twelve students had passed their examination at the Royal College of Surgeons, and twelve before the College of Surgeons and the Societies of Apothecaries, and had received their diplomas and licences to practise. Several of the students have obtained hospital appointments. Professor David Bolton, one of the earliest students of the college, had been elected surgeon of the General Hospital; and others have distinguished themselves in the public services of the country. The council could not pass over the name of your student Hale, without recording that he had received the Victoria Cross for "bravery" in the trenches before the walls of Sebastopol. Mr. Francis Bond had been unanimously elected, out of eight candidates, resident medical tutor. The report also made reference to the Queen's Hospital; to the erection of Dr. A. Fleming as physician and professor of materia medica; and to the death of Mr. Josephus Williams, a distinguished pupil at the college, and assistant house-surgeon to the Queen's Hospital. The council had also protested against the change proposed by the senate of the University of London, to admit persons to degrees who had not passed through a regular collegiate course of education. It appeared from the return annually made to the accredited authorities, that since October 1848, sixty-seven students had been articled to the Dean of the Faculty without premium; by which the sum of £7,035 had been given up by him to the sons of the clergy, to the sons of members of the profession, and the sons of officers of her Majesty's service with limited incomes in that short period. The several professors, tutors, and masters continued to deserve the warmest thanks of the college by the zealous discharge of their duties. The records of the attendance of the classes at lecture had been placed on the council table at the monthly and quarterly Boards; and nothing can be more gratifying than the account uniformly given of the diligence, good conduct, and regularity of the students. The reverend Chancellor Law referred to the proposed testimonial to Mr. Sands Cox; and read a letter from that gentleman, suggesting that a part of the fund might be devoted to the foundation of medical scholarships, and the remainder towards the completion of the College Museums; under the stipulation that the council of the college undertake to grant free admissions to the industrious classes once a week, under such regulations as may be deemed necessary and proper. It had therefore been resolved, "That, in accordance with Mr. Sands Cox's communication, the best efforts of the committee be devoted to secure a sufficient sum to enable him to complete the College Museums, and to found medical scholarships, tenable for two or more years. The scholarships to bear the name of the founder of Queen's College and the Queen's Hospital." A subscription list had been commenced, and above £1000 had been soon raised. The prizes were then distributed by the principal, the warden, the mayor, Sir Charles Hastings, Mr. Clay, and other gentlemen, amidst loud applause. An address was then delivered by the principal, on middle class education, in which the question of an application to the Crown for extended powers, and affiliation with our ancient universities, Oxford and Cambridge, was at some length entered into.

Sydenham College, Birmingham. On Thursday October 1st, the inauguration of the seventh academical year of this institution took place in the theatre of the college. The introductory address was delivered by Mr. John Bassett, lecturer on Materia Medica. The lecture was listened to with great attention, and a request was made that it should be published. At the conclusion of the lecture the prizes were distributed to the meritorious students of the past year, and the election of members of the council proceeded with. Dr. Hill, the secretary, read the report. Amongst the former students, several were engaged in the military medical service; and others were now filling appointments in an important institution in the town. Since the council last met three of their number, Mr. T. Thursfield, Mr. F. Ryland, and Mr. Simons have been removed by death. Dr. Wrightson had undertaken the duties of the chair of theoretical chemistry, and Mr. Johnson, formerly resident surgeon of the General Hospital, had been associated with the lectures on anatomy. A considerable and valuable addition had been made to the number of illustrative diagrams, particularly in the pathological and physiological departments, and the stock of chemical apparatus had been augmented.

New Dispensary at Carlisle. The first stone of a new Dispensary at Carlisle was laid on September 17th. The ground floor will comprise patients' waiting-room, consulting-room, drug-room, entrance and staircase to the apothecary's house, yard behind the building, and the requisite appurtenances. The upper floor will be occupied by the apothecary's apartments, and committee-room, complete. The exterior character of the building will be Italian. The edifice is to be built of Prudham stone. Previously to lowering the stone, copies of each of the local papers, with a number of coins, were wrapped in lead and placed within a square aperture in the centre, and enclosed within a metal plate bearing the following inscription:

"Carlisle Dispensary. This foundation stone was laid by John Waldie, late treasurer and secretary to the institution, September 17th, 1857, George Mounsey, Esq., being mayor of Carlisle, and the Very Rev. Francis Close, D.D., dean; Thomas Barns, M.D., Gustavus Evans, M.D., Matthew John Rae, M.D., and the Rev. William Rees, A.M., constituting the building committee; John Laver, secretary and treasurer; George Johnstone Langsford, surgeon and apothecary; John Hodgson, architect; Richard Wright, builder; Cameron and Briggs, carpenters."

Mr. Waldie gave an interesting history of the progress of the Carlisle Dispensary since its original foundation in 1782.

Poisoning by Aconite in Mistake for Henbane. A case of accidental poisoning occurred last week, which resulted in the death of the wife of Dr. Trotter, a physician residing in Old Elvet, Durham. It appears that Mrs. Trotter, for some time past, had been suffering from tic douloureux; and during some conversation Dr. Trotter had upon the subject with Mr. Robson, a surgeon of the same city, the latter recommended a liniment containing tincture of aconite. At the time, Dr. Trotter mentioned the repugnance or dislike he had to aconite, in consequence of his wife some years ago having nearly taken it through mistake for some other medicine. He, however, got the liniment made up and applied it to the face of Mrs. Trotter; but its beneficial effects not being apparent, he went to Mr. Robson's surgery to get some tincture of henbane for her. Mr. Robson was in the surgery at the time, and states positively that Dr. Trotter asked for tincture of aconite, which he took from a bottle containing the tincture, which was securely fastened and corked; while, on the other hand, Dr. Trotter asserts as positively that he asked for tincture of henbane. The tincture was administered during the day to the deceased by Dr. Trotter, under the firm impression that it was henbane; and after taking it she complained of sickness, and vomited. She, however, fell asleep, and at night, feeling somewhat better, Dr. Trotter administered another dose of the tincture, which speedily brought on increased sickness, and led the deceased to remark that she wondered if any mistake had arisen on the part of Mr. Robson. Dr. Trotter went and called up Mr. Robson during the night, and on asking what he had given him during the morning, the melancholy truth was elicited, Mr. Robson replying that he gave him aconite as asked for. On Dr. Trotter returning home, the deceased was suffering from all the symptoms concomitant to poison, and in a short time afterwards she expired. An inquest was held on the body on October 1st, and the following verdict was returned: "That the deceased came to her death by a dose of aconite administered by mistake; but how the mistake occurred there is no evidence to show."

TO CORRESPONDENTS.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

A correspondent, referring to our remarks upon Dr. Barrow, informs us that every schoolboy ought to know that he was "the most profound thinker of the age." Of course we did not require to be informed who Dr. Barrow was: our remarks merely pointed out the absurdity of placing him as the companion of Bacon and Newton. Dr. Barrow was undoubtedly a profound thinker; but even profound thinking is comparative, and we still think that he was not *quite* worthy to stand between two of the most illustrious men England has produced.

The Report of the Meeting of the Bath and Bristol Branch is in type, and will be inserted next week.

Communications have been received from:—Mr. J. Seaton Smyth; Dr. Woodforde; Mr. W. Cross; Mr. H. W. T. Ellis; Mr. John Watson; Mr. T. Holmes; Dr. Richardson; Dr. Bader; Mr. H. Terry, Jun.; Dr. Davey; Dr. Acland; Mr. Southam; Dr. Handfield Jones; Mr. Griffin; Mr. Bartrum; Mr. G. May, Jun.; Mr. J. J. Terry; Mr. James Probert; Mr. John Thomas; Dr. D. Mackinder; Dr. Humphry Sandwith; Mr. M. Jackson; Dr. A. Hill; Dr. P. H. Williams; Mr. J. Maurice; Mr. G. C. B. Murray; Mr. Mitchell Henry; Mr. Southam; Dr. R. U. West; and Dr. Herbert Barker.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. The Anatomist's Vade-Mecum: A System of Human Anatomy. By *Erasmus Wilson, F.R.S. Seventh Edition. London: John Churchill. 1857.
2. Medical Anatomy. By *Francis Sibson, M.D., F.R.S. Fasciculus V. London: John Churchill. 1857.
3. Life: its Relations Animal and Mental. An Inaugural Dissertation. By J. Dickson Bruns, A.M., M.D. Charleston: 1857.
4. Human Osteology: comprising a Description of the Bones: with Delineations of the Attachments of the Muscles: the General and Microscopic Structure of Bone and its Development. To which is added, a Brief Notice of the Unity of Type in the Construction of the Vertebrate Skeleton. By Luther Holden, F.R.C S. London: Churchill. 1857.
5. Report of the Surgical Staff of the Middlesex Hospital to the Weekly Board and Governors, upon the Treatment of Cancerous Disease in the Hospital, on the Plan introduced by Dr. Fell. London: John Churchill. 1857.
6. The Grasses of Great Britain: illustrated by John E. Sowerby. Described, with Observations on their Natural History and Uses, by Charles Johnson, Esq. London: J. E. Sowerby. 1857.

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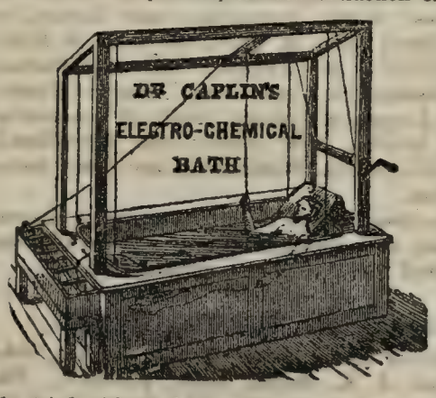
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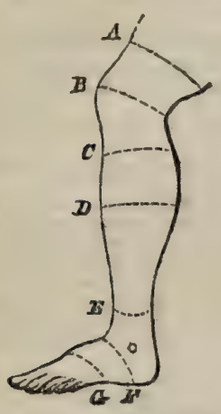
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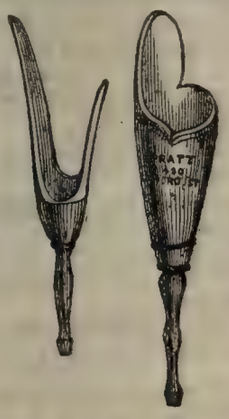


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Under the care of H. BUDD, Esq.

[*Reported by* ERLIN CLARKE, M.B., *House-Surgeon.*]

W. W., aged 40, a chimney-sweeper, was admitted into the Worcester Infirmary September 5th, 1855, having received a severe contusion of the lower part of the right side of the abdomen, and of the right groin. The result of this was extensive sloughing of the cellular tissue of these parts, with considerable destruction of skin, extending as high as the level of the umbilicus; eventually all healed firmly without much contraction, and he was discharged January 25th, 1856. A small warty growth was observed on the scrotum; but as it gave him no inconvenience, and was quite inactive, he refused to have anything done for it, and returned to his occupation. Twelve months afterwards (January 3rd, 1857) he was re-admitted under Mr. Budd; he stated that the cicatrix of the old wound had been tender, and had ulcerated in parts on one or two occasions, but had readily healed under the use of simple applications till three months ago, when ulceration again attacked it, and has been spreading since. The wart on the scrotum is much larger than when last observed, and discharges a fœtid sanies. There is an ulcer in the right groin some three inches long by one and a half broad, with sharp and jagged edges, in some parts covered by an ash-coloured slough, and in others discharging sanies of very offensive smell; the femoral glands, much enlarged by morbid deposit, project as a large mass into the sore. During the next five months the ulcer continued to spread, giving him a good deal of pain, and frequently bleeding freely on slight motion of the parts, till it implicated the whole cicatrix of the former injury, with the upper part of Scarpa's triangle, laying bare the sheath of the femoral vessels, and cleanly dissecting the crural ring; the testes were nearly laid bare, and the left groin even took on the ulcerated action. On two occasions one of the superficial arteries gave way, when the hæmorrhage was restrained by pressure. The chlorides of lime and zinc, liquor arsenicalis, chlorate of potash, the mineral acids, and tannic acid, with opiates, were used either externally, internally, or both; and at one time the following lotion seemed very beneficial:

℞ Liquoris potassæ arsenitis ʒi; liquoris zinci chloridi (Burnett.) ʒi: infusi matico Oj. M.

The sore cleaned and even cicatrised at its outer edge for a short distance, but the improvement was but temporary.

June 3rd. The femoral sheath gave way, and the bare artery was seen pulsating; it was of an ashy hue, and the coats were softening, and it was apparent that in a few hours it must give way. It was now determined to tie the vessel, as a means of prolonging life, though the case was evidently hopeless. In spite of obvious objections, it was thought most desirable to secure the artery external to the abdomen; the scalpel was not required; the vessel was separated from surrounding tissues by a spatula passed under it, in doing which the softened coats were ruptured, and the profuse hæmorrhage being with much difficulty controlled by firm pressure on the bleeding points, two ligatures were applied; the leg was wrapped in cotton wool, and a full opiate given with brandy.

On June 7th, four days after the operation, the foot was cold and sphacelating, and on the following day the mischief had extended nearly to the knee; but by the 12th the temperature was nearly restored, and mortification was limited to the foot and quite the lower part of the leg. On this day there was some bleeding from the lower end of the artery, which was controlled by the tourniquet. On June 16th he died.

POST MORTEM EXAMINATION. The ligature had separated from the lower end of the artery, and very nearly so from the upper, the clot in which was soft and loose. The pelvic glands were quite free from any trace of disease, which was limited to the parts mentioned above, no secondary deposits being found in any region examined.

ST. MARY'S HOSPITAL.

TWO CASES OF CEREBRAL AFFECTION SIMULATING APOPLEXY IN FATTY DISEASE OF THE HEART.

Under the care of F. SIBSON, M.D., F.R.S.

[*Reported by* E. A. HART, ESQ., *late House-Surgeon.*]

CASE I. J. R., aged 46, an omnibus conductor, large and squarely built, with dark hair and complexion, having a dull and stupid aspect and general manner, was admitted into this Hospital. His speech was slow and somewhat thick, his sentences ill arranged, and his account of himself marked by a want of connection and lapsing forgetfulness. The story of himself and his wife showed that during the last few months he had greatly declined in cheerfulness, lost his appetite, diminished in weight, grown subject to melancholy, loss of memory, and become indisposed to make any physical exertion. He was inordinately drowsy, and tended constantly to fall into heavy sleep. He complained of occasional headache. On testing his power of speech more narrowly, it appeared that he could not pronounce the letter v without an effort, transformed n into d, and occasionally p into b. In all these instances, by recalling his attention to the pronunciation of the word, he could after a few efforts remedy the error. He was quite indisposed to any kind of physical exertion, and incapable of mental effort. The bowels were constipated. Other functions appeared tolerably normal. His treatment consisted in the application of the cold douche to the head frequently, enforced abstinence from excessive sleep, salt water friction, combined with the exhibition of small doses of sulphate of iron and the forty eighth of a grain of strychnia. This treatment was persisted in for nearly one month with good effect. He became stronger and more active, in manner brisker, and in speech more neat. His articulation was not quite normal, but nearly so. There was a slight dragging of the left arm and leg on walking. He was apparently progressing favourably, when some misconduct became the cause of his leaving the Hospital. For a short time he continued as an out-patient, and appeared still to be doing well, the slight manifestations of disease last mentioned, however, continuing. At the end of a fortnight he was again admitted as in-patient, having fallen insensible in a fit in the morning, and remained comatose since its occurrence. Soon after admission, a second seizure occurred. It was of an apoplectic and convulsive character; the features were distorted, the respiration was laboured, jerking and irregular, and accompanied with clonic and general muscular spasm. A succession of these fits occurred during the following twenty-four hours, and at the end of that time he died.

The *post mortem* examination showed a very weak and flabby heart, fattily degenerated and affected with muscular atrophy; the brain had not suffered any evident pathological lesion, and the other organs of the body were equally free from apparent disease.

CASE II. J. B., a labourer, married, steady, not addicted to drinking, in very reduced circumstances, thin, haggard, with wild and restless expression, had presented nothing remarkable as to his health until about three weeks before admission. He ap-

peared to have been plunged into a state of debility and semi-starvation for some years; but this was chronic with him, and did not form a feature which his wife thought so unusual as to deserve a special mention. During the last three weeks he had appeared to be in a state of unusual depression and causeless excitement. He ate but little, felt very low and ill, was constantly restless, moody, and utterly sleepless. During the last week his wife said that his mind had occasionally wandered; and during the nights, never sleeping, he wandered objectless about the room. His manner was depressed and rather duller when admitted. He was placed in bed with warm bottles, ordered to take bark and ammonia, and ten grains of Dover's powder at bedtime. The nurse reported that he slept during a part of the night. The next morning he was suddenly observed to fall back when sitting up in bed; he became immediately senseless, deeply congested in the face; respiration appeared almost entirely to cease. On the arrival of the house-surgeon, at the end of about two minutes, the face was of a deep and livid purple hue, the veins in the neck turgid, the pulse imperceptible, respirations about six to the minute, sobbing and convulsive, as by a great involuntary effort. The jugular vein was immediately opened, but very little blood, of black colour, escaped. Marshall Hall's ready method was applied, but without avail.

In this case, also, at the *post mortem* examination there was no appearance of disease about any part of the brain. The heart was extremely small, fatty and atrophied; and the kidneys were granular.

Remarks. We incline to believe that such cases as these are not very uncommon. But they have not yet perhaps assumed the important place which they deserve in our pathological records of disease. They are cases of "brain seizure," dependent not upon disease of the brain, but on derangement of the circulation. The first case is particularly interesting, because the symptoms were throughout the case nearly identical with those of *ramollissement* of the brain, at first in the earlier and then in the latest stages of the disease. But the *post mortem* examination satisfactorily demonstrated that all the symptoms were due to functional disorder of the brain, dependent upon derangement of the circulating force, and probably to deterioration of the circulating fluid. The cardiac affection was not one of those marked organic changes of which the physical signs so easily recognised forcibly arrest the attention, but belonged to the class of atrophic diseases, of which the semeiology is very imperfectly made out, but of which the consequences are more fatal than in any others. The second case was equally an instance of cerebral affection, simulating apoplexy, the result of disease of the blood and weakness of the heart. Ill nourished and ill lodged—the qualities of the blood perverted, and the substance of the heart's wall atrophied—the cerebral circulation had evidently become deranged for some time before his admission. The ill nourished brain failed in its functions for weeks. At last the mischief, generated by a fault in the circulation, reacted in its turn upon the heart. Suddenly the heart lost its power of sending the blood through the lungs; the respirations became unfrequent; the blood sent to the brain remained unarterialised and black with poisonous carbon; and the end was a quasi-apoplectic death. This, at least, is the only interpretation which the comparison of the history with the records of the *post mortem* appearances suggested.

KING'S COLLEGE HOSPITAL:

TWO CASES OF APOPLEXY, WITH RECENT AND OLD CLOTS IN THE BRAIN.

[*From Notes by* A. Meadows, Esq., *House-Physician.*]

In contrast to the cases given above, we proceed to cite two others, in which the symptoms and history pointed to the presence of old coagulum in the brain, and to the disintegration of the cerebral substance so frequently associated therewith, as well as to a renewal of the effusion just before admission, and in which that diagnosis was confirmed by the appearances on dissection. It will be interesting to our readers to compare the symptoms in these very opposite conditions of the brain. The cases which follow are also of interest, from their close resemblance in general features, and in *post mortem* appearances, and from the well marked correspondence between the successive effusions of blood and the repeated seizures; the symptoms gradually improving as the clot contracted in size, but the patient never quite returning to the condition of health, in consequence, as it seemed from the dissection, of the morbid action going on around the clot. The functions interfered with indicated in either case pretty accurately the seat of the deposit. It will be seen that both cases also exhibited the visceral diseases so generally associated with apoplexy; viz., hypertrophy of the heart and granular disease of the kidneys.

Case I. Elizabeth M., aged 55, was admitted into the Hospital on October 30th, 1856, under the care of Dr. Todd. It seemed that, two months before, she was in a weak state of health, and suffering from headache. One night she was much frightened in the street, and, on reaching her home, fell into a fit, in which she lost all power of voluntary motion. There was not complete loss of consciousness, though her answers to questions were incoherent. From this fit she recovered perfectly, except that she had a feeling of numbness and occasional twitches in her legs. A month before admission, she began to complain of pain on the left side of the face and head. About this time, one day, while standing up, she staggered and fell heavily into a chair, and could not get up again. She did not lose consciousness, but found that the left side of the body was paralysed. She felt numbness and "pins and needles" on the same side. The power of motion began to return on the day after the attack, and gradually improved; so that, on the day before admission, she had been able to walk about the room and read. In the evening, however, she had another fit, in which she quite lost consciousness and power of motion. The pupils were equal, sluggish; the pulse 96. The legs occasionally started. There was some resistance to extension in the muscles of the left arm and leg.

Next day the rigidity of the left arm had disappeared. She moaned continually, but her breathing was not stertorous. The heart's action was tumultuous, but without murmur; the pulse was rapid and incompressible. She died in the afternoon.

Post mortem examination, made fifty-one hours after death, showed the convolutions flattened. There was a clot on the right side, involving the corpus striatum and optic thalamus. The cerebral substance was much softened around the clot. There was also a small patch of softening in the corpus striatum. In the left hemisphere, a much larger and more recent clot was found encroaching on the optic thalamus, and stretching nearly to the sulci. The arteries of the brain were studded with irregular patches of atheromatous deposit. Upon microscopic examination of the softened cerebral substance, a large number of cells, filled with a highly refracting substance, were found lying in rows among the capillaries, which were also slightly full of fatty particles, but were not diseased to such an extent as the arteries. The heart was hypertrophied, and its valves affected with atheromatous deposit. The kidneys were small, and their cortical substance was diminished in quantity.

Case II. James L., aged 45, a man of intemperate habits, was admitted on July 9th, 1857, under the care of Dr. G. Johnson. It seemed that, a fortnight before Christmas, he had come home one day complaining of giddiness and inability to walk, which had obliged him to leave off work. He sent for a medical man, and in the interval had an epileptoid seizure, in which all the limbs were spasmodically affected, especially on the left side. The face was not observed to be drawn. The fit was very severe, and lasted an hour and a half. He was bled, while in the fit, to sixteen ounces, and remained ill for about six weeks, being occasionally insensible during the time. After this he recovered sufficiently to follow his occupation—that of a carpenter.

Four months before admission, he had another attack of sudden insensibility, said to have been slighter than the last, but followed by an illness which lasted for about nine weeks, with much disturbance to consciousness, and left him with partial paralysis of the whole of the left side of the body. The right eye became inflamed during his illness, and has been similarly affected on all subsequent occasions when he has been excited or irritated. He began work again, but on July 7th was brought home insensible. No fit (epileptic) occurred during the progress of this attack. From this time till that of admission, he remained in a semi-conscious state. The motions and urine were passed unconsciously. He took little notice of what was going on, but would answer questions, though with much reluctance. The face was drawn to the right side, and the left arm and leg were paralysed. The muscles, however, of these limbs resisted extension. There was slight reflex action; no wasting of the muscles. The pupils were natural, and sensible to light; the bowels were obstinately constipated. The urine was albuminous, and contained small waxy casts; the pulse was

108, small. He was ordered to have ten grains of compound gamboge pill night and morning, and a senna draught every four hours.

He went on in the same way for the next three days. It was still necessary to give a purge every morning.

July 12th. It was noticed that the features were more drawn; the tongue was furred; the pulse full. The state of the back required the use of a water bed.

July 14th. About 7 P.M., he became quite insensible, with profuse perspiration, and yawning occasionally. The left pupil was contracted to about the size of a pin's head; the right natural. The pulse was not perceptible. There were no convulsions or distortion of the features. In this condition he remained for about an hour, and then died.

Post mortem examination, twenty hours after death, showed the muscles well developed and firm. The substance of the right hemisphere was much disorganised; upwards of twenty ounces of blood was found in this lateral ventricle. A clot was also found at the base of the brain, corresponding to the floor of the third ventricle. The convolutions were soft and pulpy. In the left hemisphere were remains of an apoplectic cyst, just external to the optic thalamus. The brain-substance around it had a yellowish tinge. The heart was somewhat hypertrophied. The kidneys were small and flabby; their surface was granular; the cortical portion was diminished in thickness.

ST. BARTHOLOMEW'S HOSPITAL.

PULSATING TUMOUR IN THE RIGHT THIGH—PROBABLY ANEURISM BY ANASTOMOSIS: TREATMENT BY REPEATED LIGATURE: RECOVERY.

Under the care of W. Lawrence, Esq.

[*From Notes by* W. Chippendale, Esq., *House-Surgeon.*]

C. A., aged 51, was admitted into Henry Ward on July 30th, 1856, having a pulsating tumour situated on the inner aspect of the right thigh, about two inches below Poupart's ligament.

He stated that the tumour appeared first about Christmas time, and that his attention was directed to it by hæmorrhage, which took place suddenly when walking. The tumour increased steadily in size, up to the time of his admission. There has been also a return of the hæmorrhage since he came into the Hospital.

He is an innkeeper, of temperate habits, and always enjoyed good health, till within the last nine months. He has purpurous spots about his body at various times. The conjunctivæ are slightly tinged, of a yellowish colour, and there is also a very perceptible enlargement of the liver. He has also had frequent hæmorrhage from his gums during the past twelve months.

October 18th. A ligature was placed tightly round the base of the tumour to-day, which it was necessary to draw with the greatest force that could be applied, in order to stop the pulsation which returned; very little hæmorrhage ensued.

October 25th. The ligature has cut its way around the base of the tumour to the depth of the third of an inch. The vitality of the centre is unimpaired. Mr. Lawrence applied another ligature to-day.

November 3rd. The supply of blood which appeared to have been wholly stopped by the last ligature, was not so, however. Two thirds of the tumour have separated all round, but the centre is still alive. Another ligature was applied.

November 8th. The tumour has now come away, leaving a healthy surface, which is closing in fast. The patient's general health is very much improved.

Original Communications.

ENCEPHALOID CANCER: REMOVAL BY OPERATION: LIGATURE OF THE CAROTID: RECOVERY.

By J. Seaton Smyth, Esq., Liverpool.

William Peacock, aged 48, presented himself at my public consultations about the close of July last, with a large, irregular, spherical tumour on the right side of the neck, extending from the lobe of the ear to within one and a half inch of the clavicle, projecting about three inches, of a dusky red colour, movable, and constantly attended with pain. His general appearance was cachectic, with the waxy-yellow, anæmic complexion, and other peculiarities of the cancerous diathesis; the arcus senilis was very distinct; his general health was good, and his appetite unimpaired. His antecedent history may be epitomised as follows. Whilst young, his mother died of cancer. He is not aware of having had any serious illness before puberty. He married at twenty, and had been the father of twenty-one children. He is a ship-carpenter by trade, and had always led an active, temperate life. At the age of twenty-five he became subject to epileptic fits, which continued with more or less frequency and severity for thirteen years, and were then superseded by a violent pain in the frontal region and otorrhœa. These symptoms all disappeared in November 1856, when he met with an accident; viz., a blow from the shaft of a car, to which he refers the origin of the tumour. The swelling was at first very gradual, but had latterly increased very rapidly. Before seeking my advice, he had acted upon that of many intelligent practitioners; poultices and strong embrocations were alternately recommended. When under my care in August last, iodide and bromide of potassium, arsenic, etc., were employed in turns; and *sanguinaria*, so much praised of late, had also a fair trial, and proved itself, as in all cases where I have used it, inefficacious. Iodine ointment, though only smeared over the surface with no friction, seemed to favour its growth. The tumour steadily increased in prominence and circumference, without losing its primitive rounded form. Pain became so urgent that he was almost worn out for want of sleep, and earnestly requested an operation. The neighbouring glands were not increased in size, nor apparently contaminated. Nothing but the depth and extent of the tumour contraindicated its removal, especially as general prostration of the system had become more apparent for some days.

On August 29th the operation was performed under the influence of chloroform. The first incision extended from behind the ear to the clavicle, and the second transversely. The separation of the skin, with its subjacent tissue, from the mass, was then proceeded with as rapidly and carefully as possible. But the surrounding and deep-lying structures were so involved that, before completing the dissection, and in order to save the patient's life from excessive hæmorrhage, I was obliged to ligature the carotid close to its bifurcation with the subclavian. The difficulties of this proceeding were amply compensated for by the very trifling subsequent hæmorrhage.

However inviting, I shall not dwell longer upon the operation, but proceed rather to describe the position and appearance of the tumour. It rested upon the splenius, the sterno-hyoid, the omo-hyoid, and the scaleni muscles, bounded behind by the trapezius, above by the sterno-mastoid, which was implicated for a great part of its extent, and required removal.

The tumour—a beautiful specimen of encephaloid—weighed about two pounds: was of a dark mottled purple colour, placenta-like, spongy, and easily torn. Infusion of arnica was used internally and externally after the operation.

The patient progressed favourably until the fifth day, when there was a slight attack of paralysis, followed by a difficulty of deglutition, speech, and hearing. These, however, yielded, after a few days, to belladonna. He was able to sit up on the tenth day, to go out on the fourteenth, and to walk a distance of half a mile on the twenty-first, since then his recovery has been uninterrupted.

Remarks. In my description of this case I have studied brevity, having scarcely glanced at the various steps of the operation; its difficulties must be experienced to be fully understood; but there are some points worth noticing; as, *e.g.*, the origin, primary and exciting, and other peculiarities. The exhibition of cancer wholly depends on preexisting diathesis, this being always hereditary. I have rarely met with a case which could not be traced back on either the maternal or paternal side. Some few, certainly, have denied its existence through transmission. But in such cases I have found that the death of the parents had taken place when the patients interrogated were too young to have any recollection of the circumstance, or the cause of death was involved in obscurity and doubt. Mechanical injury, it may be observed, is almost invariably the *exciting* cause. Out of a very large number afflicted with this disease who have come under my notice, I do not know one to whom this remark does not apply. The age of this patient corresponds with that generally noticed as the most favourable for the exhibition of cancer, and the preference which it shews to the *right* side, as observed by Walshe and others, is confirmed in my experience. The presence of the arcus senilis has been noticed by me repeatedly in this

disease, as being very distinctly marked in very many of my patients. Whether future observation will warrant its being ranked as a diagnostic in cancer, remains to be seen.

CHOLERA, AND THE WATER SUPPLY IN THE SOUTH DISTRICTS OF LONDON.

By John Snow, M.D.

A passage, respecting the effect of water supply on cholera, in the recent document published by the General Board of Health, having been brought prominently before the British Medical Association, in a leading article of the Journal of October 10th, I think it highly desirable to point out that this passage does not by any means convey the whole truth, as regards the effect of the water supply on the epidemic of 1854. Instead of the cholera mortality in the houses supplied by the bad water being 3½ times as great as in the houses supplied by the better water (the statement of the Board of Health), it was in reality six times as great.

It may perhaps be asked, of what consequence are the exact proportions, so long as the principle is admitted? If the report were merely intended to produce in public authorities and private individuals a certain amount of scrupulosity with regard to the supply of drinking water, the exact numbers would perhaps not matter much; but, when the facts are laid before medical men, it is of the utmost importance that they should be correctly stated. Science cannot be advanced by incorrect quantities and numbers; and, in the present instance, the real facts have an important bearing on the question as to the nature of the material in the impure water which induces cholera, and the manner in which the same morbid material causes the disease in other cases, without the aid of water as a medium.

My attention had been closely applied to the particulars of the water supply of London for upwards of five years before the epidemic of cholera of 1854; and I had, from various sources, became acquainted with a number of circumstances which made it possible for a very conclusive personal inquiry to be made, in respect to that kind of influence of water supply on cholera which I had published in 1849. These circumstances were necessarily known to a number of workmen and several official persons, but probably not in their collective form to any other person interested in the mode of propagation of cholera, except myself. The particular circumstances of the water supply, and its adaptation to the kind of personal inquiry which I conceived and undertook, were first published by me in the *Medical Times and Gazette* of September 2nd, 1854, p. 247, and were alluded to in a leading article in the Association Medical Journal for October 27th of the same year.

I called myself at every house from which a cholera death had been registered, in the first seven weeks of the epidemic of 1854, in all the districts in which the supply of the two Water Companies in question was intermixed; and, if the illness had not commenced in the house in which the death took place, I then sought the real place of attack, and in either case I ascertained the water supply of the house. I did not rest satisfied with a mere verbal reply; but obtained, in all cases, such corroborative evidence as could leave no doubt on the point, and I have the notes of my results. As a proof of their general correctness, I may mention that Mr. Greenwood, the very intelligent registrar of Christchurch, Southwark, made an inquiry on the same point for the same seven weeks, in his district, and, on our comparing notes, our results were exactly the same in every instance, although our respective inquiries had been conducted in a different manner.

The result of my inquiry was that, in the first four weeks of the epidemic, the cholera was between thirteen and fourteen times as fatal in the population having the impure water supply of the Southwark and Vauxhall Water Company, as in the population having the improved supply of the Lambeth Company, taking into account the number of the population supplied respectively by each company. In the next three weeks of the epidemic, the mortality was nearly eight times as great in the one population as in the other.

Dr. Farr having been much struck with the results which I communicated to him of my inquiries, the Registrar-General, at the end of these seven weeks, directed the district registrars in the south districts of London, to furnish the water supply of each house in which a fatal attack of cholera might occur during the rest of the epidemic.

During this part of the epidemic, comprising ten weeks, and including its most severe period, the mortality was still more than five times as great in the population supplied by the first of the above mentioned companies as in that supplied by the other; so that the result of that part of the inquiry conducted through the office of the Registrar-General, afforded a strong corroboration of the correctness of the previous part. I have, moreover, shown in an article in the *Journal of Public Health* for October 1856, that the whole of the inquiry agrees with the relative mortality of the different districts and sub-districts supplied in varying proportions by the two Water Companies, both at different periods of the epidemic, and for the whole epidemic, in such a manner as could not happen unless the results of the inquiry were substantially correct. I have already stated that the relative mortality of the two populations differently supplied with water was six to one, when the whole epidemic is considered.

The results of the above inquiry having been canvassed by the Scientific Committee of the General Board of Health, a further inquiry was instituted, and was carried out within the eighteen months following the epidemic, and furnished the numbers quoted in the Journal of the Association. This further or supplemental inquiry was conducted as follows. Lists of the houses supplied by each Water Company were obtained from the two companies, and these lists were compared with the lists of deaths from cholera at the General Register Office. There are several reasons, however, why an inquiry thus conducted could only supply an approximation to the truth, and could bear no comparison, in point of accuracy, with a personal inquiry made on the spot, at the time of the epidemic.

1. The inquiry of the Board of Health is into the water supply of the house where the death took place, and not, like the previous inquiry, into that in which the fatal attack occurred; but many persons attacked with cholera in houses supplied by the Southwark and Vauxhall Company were removed to workhouses supplied by the Lambeth Company, whilst hardly any persons were attacked in houses supplied by the latter company, and then removed to a workhouse having the opposite supply, as I know from my personal inquiries in the first seven weeks of the epidemic.

2. Throughout the greater part of Lambeth, Newington, and the Borough, the houses were either without numbers, or numbered very irregularly; and the numbers were liable to frequent change, especially where new houses are constantly being added: therefore, numerous errors were liable to be made in comparing the lists. There were often two or three houses of the same number in the same street; thus it happened that, in the first fatal case I inquired about, the death did not occur at the first No. 6 I called at, but at the No. 6 down the other side of the way; and the water supplies of the two houses were different. Now this is particularly important; for, as the deaths were six times as numerous in the houses supplied with impure water as in those with the better supply, the result would be that, out of every six mistakes, five would transfer a death from the former houses to the latter, and only one would transfer a death from the latter houses to the former.

3. It so happened that the lists supplied by the Lambeth Water Company (that with the purer water) are so arranged and explained that every place might be made out, unless when the above mentioned difficulty about numbers occurs; but the lists supplied by the Southwark and Vauxhall Company are made out in such a manner as to be of only very partial service. They have a kind of alphabetical arrangement, but it is of no use. For instance, to put down such names as Albert Terrace and Providence Place, with no other information than that they are somewhere in a district which extends over ten or fifteen square miles, is to give very little information. Consequently, whilst all the deaths occurring in houses supplied by the Lambeth Company could be identified in the list, and others attributed to these houses from the sources of error above mentioned, it would necessarily happen that a great number of deaths occurring in houses supplied by the Southwark and Vauxhall Company could not be identified; and, in the Report of the Board of Health on Cholera, as affected by Impure Water, as many as 1,436 deaths, in the epidemic of 1853-54, are returned as occurring in houses supplied from unknown sources, although there were comparatively few houses which were not supplied by one company or the other.

The deaths in the epidemic of 1853 are included, with those of 1854, in the Report by the Board of Health which is quoted in the Journal of the Association; but this circumstance could not much affect the result, and certainly not in the direction in which it deviates from the original inquiry; for in 1853 there

was but a small number of deaths, especially in the districts to which the water supply of the Lambeth Company extends.

For the various reasons stated above, we may conclude that the supplemental inquiry of the General Board of Health into the influence of water supply on cholera is of some value, and corroborates the original investigation, but ought by no means to be quoted as an exact exposition of facts, or be allowed to set aside the previous inquiry.

CASE OF INTRAUTERINE FRACTURE.

By Francis Davies, Esq., Pershore.

The following case is of no practical value. But as it corroborates some of Dr. Barker's cases, possibly it may be thought interesting.

I was requested to see a woman who had been confined two days. She had been walking down a footpath through a wood of my father's, some six weeks previous to her delivery, when, in crossing a stile, her foot slipped. She fell heavily on her abdomen on the stile. She felt as if a penknife was pricking her for several days. She got quite well, and was confined at her full period.

On examination of the child, I found that the thigh had suffered a compound fracture, and that the bones overlapped nearly an inch. The child has grown up to be a man; but his fractured leg is only now about a foot in length. He is now a schoolmaster in the parish of Llanpumpsaint near Carmarthen.

INTRAUTERINE FRACTURES.

By Gustavus C. P. Murray, Esq., M.R.C.S.E.

This subject of medical science having been recently and ably brought before the notice of those who are especially engaged in obstetric practice, by Dr. Barker, of Bedford, I am induced to narrate the following case, which occurred last year during my attendance at the Vienna General Lying-in Hospital. I must state that my notes were taken for private use, and not for publication; and hence their brevity and imperfectness.

Case. Francisca Raplan, a native of Telluris, aged 26, of a sallow and unhealthy complexion, and in a great state of debility, was delivered of her first child at the end of the seventh month of gestation. The fœtus at birth presented the following appearances:—The left side seemed soft, and as if consisting of nothing but loose and unhealthy fat; whereas the right side exhibited a very remarkable contrast in its rigidity. Upon further and closer examination, the left humerus was found to be broken at its centre, the ulnar and radius of the same arm being perfect; but the fingers, which were longer than usual, and also in proportion to the rest of the body, were greatly curved backwards, especially at their extremities. The right arm was rigid and shrivelled, with the bones unbroken, and the thumb and fingers closely drawn together. The left femur was fractured in its upper third, the tibia and fibula being perfect. The right leg was as rigid and firm as the right arm, and the bones were also entire, but the foot was, to a very great extent, curved inwards, forming a perfect arc. The scrotum and penis were œdematous, and of a slightly greenish yellow colour. The length of the fœtus was from twelve and a half to thirteen inches, and the circumference of its head, measured above the ears, was eleven inches. It survived a few days, and died on the morning I left Vienna. I was therefore, unfortunately, unable to attend the *post mortem* examination.

Through the kind assistance of a German friend, I learnt from the mother that she had met with no accident or unusual circumstance during her pregnancy; but she admitted that about the fourth week after conception a syphylitic eruption appeared over her whole body, and for this she consulted a homœopath, who administered minute doses of corrosive sublimate. After pursuing this treatment for two months the eruption entirely ceased, and she remained perfectly well up to a week before her confinement, when condylomata appeared on the labia, the inner part of the thighs, and around the anus.

Remarks. With the above positive evidence of syphilis existing at an early period of gestation, and presuming, from the character and habits of the mother, that she had been no doubt infected with the syphilitic poison long before conception, we have, I think, some good grounds for supposing that the fœtus became affected through the diseased condition of its parent. The fœtus had evidently not arrived at maturity; and as it was not dead, and the mother had received no external or internal injury, either of which might have brought on labour, we are left to seek for some reason why the fœtus should have been born before its time, and when born why we should find one half of its body in a state of rigidity and atrophy, whilst the other half was pulpy, and contained two fractures.

I hope, in conclusion, that the history of this case may throw some light on the possibility of certain diseases, such as syphilis, when attacking the mother, being transmitted to the offspring, and causing either the fracture of its bones, or the arrest of its development.

Green Street, Grosvenor Square, October 1857.

Introductory Lectures.

ST. GEORGE'S HOSPITAL.

Dr. Fuller began his address by recalling to the senior part of his audience the difficulties and temptations they had had to encounter at the outset of their professional career, and made this a ground for addressing the remainder of his remarks to those who are now about to commence their studies in London. He first pointed out the nature of their adopted calling, and the motives with which it ought to be pursued. "If," he said, "it be true that a profession, which has for its object the saving of human life and the prevention of human suffering; which calls forth the noblest qualities of the mind, enlarges its sympathies, and tends to clear it of prejudice or error; which brings us in direct and intimate relation with our suffering fellow-creatures, and by giving us an insight into human nature under every form and every aspect, enables us to learn wisdom from the dearly bought experience of others,—if such a profession be worthy of your desire, you may be truly thankful for the selection you have made. A life of honourable usefulness lies before you, such as does not fall to the lot of every one. The profession of medicine, if worthily pursued, is a noble and beneficent vocation, softening and humanising those who follow it, leading them to regard with leniency the weaknesses of their fellow-creatures, and prompting them to spare no effort to relieve their mental anguish or assuage their bodily suffering." He urged them to take a high view of their profession, and to follow it steadily and consistently, in the hope that, whilst it may one day yield them an honourable subsistence, it may also enable them to cultivate those qualities which serve to distinguish a Christian gentleman. He then proceeded to offer them advice respecting the choice of friends and companions, and warned them not only against the idle and the dissolute, but against the good natured, well meaning, but thoughtless, whose inexperience leads them to imagine that there can be no harm in a little temporary self-indulgence, a little time devoted to the so called pleasures of a London life. He urged them to begin as they intended to go on, to be regular and constant in attendance at lectures, diligent in the dissecting-room, earnest in their private studies, zealous in the pursuit of that practical knowledge which is only to be acquired in the wards of the hospital. "The study you have embraced," he said, "is one to engross your whole attention, even if it had no relation to your future career through life. But forming, as it does, the groundwork of that profession which you have deliberately chosen, you are bound to devote your whole energies to its prosecution. You are bound to do so for the sake of your own reputation and future happiness, for the sake of those friends who have given you your education, and who are still assisting you, and for the sake of those poor suffering fellow-creatures who will one day look to you for relief; above all, you are bound to do so as the servants of an all-wise Providence, who has been pleased to enrol you among the number of those whom He employs as the channels of His mercy and the ministers of His earthly blessings, and who one day will require at your hands an account of the talents committed to your charge." He then proceeded to point out the necessity for learning to regulate the feelings and behaviour, to discipline the mind, and to follow strictly in the path of moral rectitude. "You must learn," he said, "to cultivate habits of order, method, and punctuality, so as to be able to economise your time; you must acquire the habit of directing your whole attention to the subject before you, so as to analyse

and reason on it correctly; you must learn to be exact in observation, and scrupulously accurate in your record of facts, to discriminate between the important and the unimportant, and so to arrange and classify your knowledge as to have it always available in practice. But, beyond all this, if you would succeed in your career, and occupy an honourable position in the world, you must learn to cherish self-respect and honesty of purpose—feelings inconsistent with mean or dishonourable actions; you must evince integrity of conduct, generosity of character, and kindliness of feeling towards your professional brethren; you must acquire a habit of self-restraint which shall enable you to bear with the waywardness of your patients, and a gentleness of manner and cheerfulness of disposition which shall render you a welcome visitor to them; you must learn to sympathise with them in their afflictions, to counsel them in their distress, and in every way so to regulate your feelings as to make yourselves their friends, as well as their advisers." "There is no walk of life," he continued, "in which persevering industry and good moral conduct meet with a surer or more lasting reward, or in which a life of idleness and misconduct more certainly leads to misery and ruin."

Dr. Fuller discussed the difficulties they would have to encounter, and assured them that they would meet with none which may not be readily overcome. "Believe me," he said, "the path which you are about to tread is not beset by any obstacles which may not be overcome by steady industry and application. It has its own, its special difficulties, but so has every walk through life; and he who would be useful, happy, and contented, must meet them in a proper spirit, and make the exertion which is necessary to overcome them." After referring to the multiplicity of new and isolated facts which will be brought before them in their different lectures, and to the difficulty they will experience in arranging and classifying them, Dr. Fuller urged them to take every opportunity of verifying these facts for themselves, by observations in the dissecting-rooms and in the wards of the hospitals. "The most valuable knowledge we possess," he said, "is that which we have acquired for ourselves by long continued observation and experience. It cannot, to any great extent, be communicated to others either orally or by writing; and therefore the utmost that can be said of books and lectures is, that they are faithful outlines, simplified and adapted for your instruction, and intended to be filled up by your personal observation. Go, then, to the source whence you may obtain the knowledge necessary to enable you to fill them up. Go to the bedside with a notebook in your hand; preserve a record of the cases which come before you; illustrate these, if you are able, by sketches and drawings; and in the evening arrange them methodically, study their details, compare them with one another, and discuss them with your fellow-students. Whilst so doing, you will find that many things occur to you which had previously escaped your notice; you will be led to view symptoms in a different light, or to trace some unobserved connexion between them; and, if you steadily follow out this system of note-taking, you will be surprised, when you leave this scene of great labours, to find how large a store of facts you will have accumulated,—facts, moreover, of a practical nature, which will serve as references in after years, and prove most valuable guides to you through life."

Dr. Fuller then proceeded to offer a few suggestions relative to their conduct and personal demeanour, and begged them to let it be quiet, thoughtful, and becoming in the dissecting-room; kind and considerate in the wards of the hospital. He advised them to select some rational and elevating pursuit as a recreation in their leisure hours; and warned them that, if they fail to do so, they will not only lose much valuable time, but fall into idle, careless habits, and surely expose themselves to the inroads of vice.

Dr. Fuller concluded by an appeal to a crowded audience, who repeatedly expressed their gratification, urging them to follow the examples of the Great and Good. "Let me beg of you," he said, "to be zealous in your studies; tread in the footsteps of those great men whose names adorn the bead-roll of our profession, and emulate their virtues, their industry, and attainments. If you cannot rival their glorious achievements, at least let it be obvious that you are doing your very best; that you are conscious of your privileges and mindful of your responsibilities. There is much here around you to cheer you on. The very ground you tread is hallowed by the memory of men who have earned a glorious, undying reputation. It was here, at St. George's Hospital, that Jenner studied; it was here that Cheselden operated for stone; here, too, the indefatigable Baillie worked, and Hunter won his way to fame. Nor are these the only men whose names deserve to be chronicled for your encouragement. Heberden, Young, and Wollaston, Pemberton, Hope, Chambers, and Mansfield Clarke. These, and a host of others who now are numbered with the illustrious dead, passed their early days within these walls, and many of them were medical officers of the Hospital. Even now there remains among us one who has earned a deservedly world-wide reputation, a man to whom we are largely indebted, and to whom we would all do honour. Yes, gentlemen, with Brodie for a living exemplar, and with the memory of those great and good men who have preceded him, to stimulate you in the pursuit of knowledge, you have no excuse for apathy or indolence. Go forward, then, manfully in the path which they have trodden; follow their footsteps honestly, earnestly, hopefully; strive to the utmost to become skilful practitioners, and to do justice to your patients, whether rich or poor; but, above all, be true to yourselves, and let it be your chief endeavour to deserve the good opinion of mankind as men of feeling, integrity, and honour. So, towards the close of your earthly career, you will be able to look back with honest pride upon the course you have been permitted to run, and will feel gratified by the reflection that, as far as in you lay, you have been useful in your generation, and have done your duty to God and man."

WESTMINSTER HOSPITAL.

The Introductory Lecture was delivered by Dr. Radcliffe. "When," says Archbishop Whately, "complaints are made, often not altogether without reason, of the prevailing ignorance of facts on such and such subjects, it will often be found that the parties censured, though possessing less knowledge than is desirable, yet possess more than they know what to do with. Their deficiency in arranging and applying their knowledge, in combining facts, and correctly deducing and rightly employing general principles, will be, perhaps, greater than their ignorance of facts. Now to attempt remedying this defect by imparting to them additional knowledge, to confer the advantage of wider experience on those who have not skill in profiting by experience—is to attempt enlarging the prospect of a short-sighted man by bringing him to the top of a hill, since he could not on the plains see distinctly the objects before him; the wider horizon from the hill-top is utterly lost upon him."

Up to the time of Bacon the prevailing fault among philosophers was, hasty, careless, and scanty observation, and the want of copious and patient experiment. On supposed facts not carefully ascertained, and often on baseless conjecture, men proceeded to reason, often very closely and ingeniously, forgetting that no architectural skill will give firmness to a building if the foundation be insecure. In other words, they reasoned on fancies instead of facts. Since the days of Bacon there has been an ever increasing tendency to disparage the reasoning process, and to substitute "the mere accumulated knowledge of a multitude of facts," and trust to what is often called *experience*—meaning by that an extensive, but crude and undigested observation. Dr. Radcliffe would appeal to the consciousness of all around him, and ask whether their present difficulties are not rather in arranging and supplying their knowledge, in combining facts and correctly deducing and rightly employing general principles, than in any ignorance of facts. Is not the multitude of facts crowded into the different subjects with which the students of medicine have specially to do, more than they know what to do with? and, in mastering these facts (if any one may hope to master them), is there not much danger of being bewildered, or, at best, of leaving little or no time for the deduction and right employment of general principles?

What, then, is to be done? Is it possible to deduce any general principle—any general principle which will be of practical use from this multitude of facts? In the opinion of the lecturer, it is. At any rate, there need be no difficulty in pointing out the path which must be pursued in searching after such a principle.

After these introductory remarks, Dr. Radcliffe proceeded to glance at the arguments which show that there is a connexion between heat, light, electricity, magnetism, chemical power, and some kinds of motion, which is only to be understood upon the supposition that these phenomena are signs of *one and the same action*, and not distinct and independent agents. In the next place, he dwelt at some length on the connexion existing between vital and physical phenomena, and cited many

arguments which serve to show that this connexion is not to be understood except upon the assumption that there is some ground, some fundamental principle or law, to which all phenomena, vital and physical, are alike obedient.

The lecturer then proceeded to deduce certain practical consequences from this doctrine of unity of principle or law. If there be such a principle, it is no question of theory, it is one of practice; and this conclusion must become self-evident, just in proportion to the degree in which medicine is raised to the rank of the exact sciences. If there be this unity of principle in law, it is evident that all natural phenomena must be interpreted by it, if they are to be interpreted at all. As well might we attempt to understand the falling of a stone towards the earth, or of the earth towards the sun, without the law of gravitation, as attempt to unravel any mystery of life without this principle. Turning to the subject of disease, and adducing cholera and consumption as special illustrations, he argued that disease is a *natural* consequence of the violation of law or principle, and not something *unnatural*—something *in order*, and not something *out of order*—even something as purely physiological, when properly understood, as health itself.

Dr. Radcliffe maintained that the grandest generalisation of all—that which explains the mystery of life—will not be established simply and solely by an appeal to nature. If we appeal to nature, and ask what is life and conscience, and will and intelligence, with its wondrous powers of memory and anticipation, what is the answer? The oracle is as dumb as that of ancient Delphi; for it boots nothing to be told to ransack the convolutions of the brain; and it avails as little to pore over the pages of the metaphysician; and yet the physician must set himself to learn all he can respecting them, or he will not have much chance of relieving the most important maladies to which the human frame is subject.

But these faculties are only unintelligible, if information respecting them be sought solely in the oracle of nature; but they are not unintelligible if information be sought first at a higher oracle—that of revelation. What is that nature in which these high faculties of life, and conscience, and will, and intelligence, are lodged? The oracle of nature is dumb; the higher oracle answers, that man was created in the image of God himself. There is no obscurity, and the answer cannot be misunderstood, except from sheer wilfulness or inattention. And is it then a wonder that man, whose nature is thus god-like, should be endowed with life, and conscience, and will, and intelligence? Assuredly not. The wonder is, not that man should live, but that he should be shorn of the life of Him who is from everlasting to everlasting. The wonder is, not that man should be endowed with a conscience, but that that record which tells of the holiness of man's august original should be so steeped in evil. The wonder is, not that man should have a will, but that the image of the Omnipotent God should be so impotent and helpless. The wonder is, not that man should know a little, and remember a little, and anticipate a little, but that he should retain so little of the intelligence of Him to whom past, present, and future, are at once open. The wonder is, that man is so "lapsed in time and passion": but why talk of wonder? for if we listen to the same oracle, which tells us that man was created in the image of God, we shall soon learn that man has fallen from his high estate.

Dr. Radcliffe believed that it is in this way only that we can hope to comprehend the higher mysteries of the life of man; and that without this key it will be impossible to comprehend any vital phenomena whatever. Man is not altogether severed from the lower forms of life. There is a common type, a common law, which binds him to them in an indissoluble alliance; and hence, it may be expected that the image of man will be reflected upon them, as the divine image is reflected upon him. And, if so, then it is no wonder that there should be manifold evidences of life and intelligence around and beneath man, and that these evidences should be perfect in their degree, because the lower forms of creation are not revealed to us as having partaken in the fall of man, or, at any rate, they are not revealed to us as having fallen in the same manner; and, if the lower forms of creation have not fallen as man has fallen, it is to be expected that the several vital phenomena which belong to these forms should be perfectly adapted to the condition in which these forms are placed, and that any intellectual phenomena should partake of the character of instinctive acts. Indeed, every vital phenomenon, high or low, must take place with perfect regularity under the same circumstances, because there is no perverted will to mask the manifestations of that perfect law, of which the vital phenomena are the signs.

The lecturer believed not only that there is no discrepancy between the teachings of Holy Writ and the teachings of nature; but also that the mystery of nature will remain a mystery until philosophers will consent to listen to the teachings of Holy Writ. It is not enough to seek after a common law in the way in which it may be sought after in nature alone; but it is necessary, even as a scientific question, to pursue the subject far beyond; and to do this with a view to know the lawgiver as well as to comprehend the law. "A little philosophy," says Bacon, "inclineth man's mind to atheism; but depth in philosophy bringeth man's mind about to religion." It is not possible, indeed, to ignore religion in scientific inquiry; and to attempt to do so is to forego the possibility of attaining to the highest generalisation—a generalisation which gathers into one principle all phenomena, vital and physical, and which connects that principle with a superintending Deity, in whom we live, and move, and have our being.

Reviews and Notices.

An Expository Lexicon of the Terms, ancient and modern, in Medical and General Science; including a complete Medical and Medico-Legal Vocabulary, and presenting the correct Pronunciation, Derivation, Definition, and Application of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German) connected with Medicine. By R. G. Mayne, M.D. Part vi. London: John Churchill, New Burlington Street. 1857.

A sixth part of Dr. Mayne's useful Lexicon lies before us. It has now reached to part of the way through the letter P; and we trust to see another portion of the work before long. As to its execution, we can only speak of it in the same terms of praise as on previous occasions.

Report of the Trial of Madeleine Smith before the High Court of Justiciary at Edinburgh, June 30th to July 9th, 1857, for the alleged poisoning of Pierre Emile l'Angelier. By Alexander Forbes Irvine, Advocate, pp. 307. Edinburgh: T. and T. Clarke, 1857.

This is a full report of the proceedings at the recent celebrated trial in Edinburgh. Every care, we are assured, has been taken to produce accuracy; and the Lord Justice-Clerk, the Lord Advocate, and the Dean of Faculty, have each revised their charges to the jury. To medical jurists, therefore, who wish for a correct account of this extraordinary case, the present volume will be valuable.

British Medical Journal.

SATURDAY, OCTOBER 17th, 1857.

THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

The present week will be long remarkable in the annals of our history, for the inauguration of a society, having for its object the investigation of problems affecting at once our individual welfare and our national prosperity. The Association for the Promotion of Social Science was inaugurated at Birmingham on Monday last, by a speech from the President, Lord Brougham. Of his Lordship's address, we give some extracts in another page, selecting principally those portions of it which have a bearing on the practical utility of combined action: but recognising at the same time the great importance to us all, as members of the state, of all the subjects which were ably

touched upon. After the delivery of the President's speech, an address on his special subject was given by the president of each of the sections into which the Association is divided: viz., in the section of Jurisprudence and the Amendment of the Law, by Lord John Russell; in the section of Education, by Sir John Pakington; in the section of Punishment and Reformation, by Mr. M. D. Hill, Recorder of Birmingham; in the section of Public Health, by Lord Stanley; and in that of Social Economy, by Sir B. Brodie. Abstracts of the addresses of Lord Stanley and Sir B. Brodie will be found in a following page.

En passant, in these last two addresses we have a practical abnegation of the old maxim, *Ne sutor ultrà crepidam.* The statesman takes in hand the problem of preservation of health, as if invading the province of the medical man; while the veteran surgeon gives the impetus to discussions on a branch of knowledge regarded more as the property of the state philosopher. But this is not otherwise than as it should be. The health of the people, in common with everything that concerns the good of the nation, falls rightly under the observation of the statesman: and the consideration how the social well-being of the people may be best promoted, is one of the most legitimate objects of the practical energies of the true medical scholar.

This great and important association has then been inaugurated. Let us reflect how it has begun. It is not a mere mushroom growth, a hasty calling together of men unprovided with facts on which to reason, and unprepared with ideas to which to give utterance. For years and years past, facts have been accumulating to show the necessity of social progress, and to point out—sometimes, indeed, rather vaguely—the direction in which progress should be made. For years and years past the subjects of the various sections have been reflected on, talked on, written on, by men of theory and men of practice; by men of one idea, and by men of comprehensive mind; by the votaries of sudden and radical change, and by the advocates of gradual reform. In regard to many of the special topics, the existing facts of the case, the necessity for action, and even the general direction which that action should take, have long enough been matters of common agreement; but when men have come to consider the details of action, their unanimity has ceased, many a one, in his fondness for his own scheme, has become an obstructive in that path which he would professedly have his fellow men to follow.

This is somewhat as if, for example, it were possible that no road existed between London and Birmingham. The necessity for such an aid to travelling would be plain to all: *a road* must be formed. But shall it be a highway or a railway? shall the means of conveyance be a "fast coach" or a railway train? Each of these plans has its supporters; and while the claims of each are being supported with all the energy and eloquence which man can call to his aid, no road is made, and unfortunate travellers must get on as they best can, or not at all.

This last illustration is somewhat extreme, and, it may be, a little ridiculous: we think, however, that it conveys our meaning. But while we write, an example occurs to us in a matter of real occurrence. The Metropolitan Board of Works and the Commissioner of Works and Public Buildings agree that London ought to be properly drained, and that the sewerage matter ought to be carried clean out of the city. So far, so good; and these points have been agreed on, we may say, for years; but London sewerage still pollutes the river as it flows through the metropolis. And why is this? Very much because favourite schemes are pertinaciously maintained by the one party, and rejected by the other. And while plans and resolutions are being bandied about, King Cholera may again and again invade our land, and find at each visit an active ally in our dirty river.

It is to bring together men of different views, to compare, to contrast, to combine, and to neutralise various opinions, so as to elicit that which is most practicable, that is a great object of the Social Science Association. This was well insisted on by the noble president:—

"There is a peculiar expediency," he said, "it may rather be said necessity—for such a common or united action where a great variety of opinion is likely to exist upon many matters, possibly no universal concurrence upon all the particulars of any one. Assuming every person to be inspired with the pure and single desire of performing his duty towards the community, it is still unavoidable that men should view the same subject in different lights, and that the absence of such standards from demonstration or experiment as the reasoners on other sciences can appeal to should create doubts and introduce diversities of opinion. In some cases these differences may yield to full discussion, but in not a few instances they will remain, and here is precisely the inestimable advantage of such an union as ours. That discussion and explanation may often remove the grounds of dissent is undeniable. We may affirm that there is less diversity of opinion than might have been supposed even upon general subjects; and that ignorance or misinformation, or inattentive and therefore inaccurate observation, or careless reflection and hasty declaration, is the cause of most of those differences. However that may, we summon those who honestly differ in opinions, because they regard the same subject from different points of view, to look at both sides; when possibly they may be found to agree, and because it is of incalculable importance that those points on which they are agreed should be separated from the rest, and the measures approved regarding which no material difference exists."

It is to be noticed, that Lord Brougham does not sanguinely expect that the discussions at Birmingham will bring about absolute unanimity on all disputed points; nor does any reasonable man, we trust, entertain so preposterous an idea. But there may be some, who will hold the Association as a failure, because its results may not be at once so magnificent as to strike even the mentally short-sighted in the world with admiration. To such we would merely say, that in all probability it will not be possible for us of the present day to judge of the effects produced by the striking together of intellects, which has been brought about under the auspices of Lord Brougham. It is not in the lifetime of any one of the members of the Association, from the veteran president to the youngest of them all, that the positive or the negative character of its workings will be fully comprehended. What we rather expect from it is, that from the collection and comparison of facts, and the collision and combination of opinions, some results of magnitude may indeed shortly follow: but rather, that the members will gather up and carry home with them sound notions, to which a vigorous practical development may be given by patient fostering for even a series of years. In this way, the historian of forty or fifty years hence, looking at the social improvements with which the British nation may have been blessed, and tracing them to their sources, will no doubt find the germs of

not a few in the discussions at the meetings of the Association for the Promotion of Social Science.

Before we conclude our remarks, we must not omit to record our admiration of the philosophical sentiments uttered by the President of the Section of Public Health. Recognising the fact that it is not merely in the deaths, but in the impaired constitution of the people, that the evils of sanitary neglect are shown, he expresses a belief to which all sanitary reformers will give their adhesion:—

"I believe that, whatever exceptions may be found in individual instances, when you come to deal with men in the mass, physical and moral decay necessarily go together: and it would be small satisfaction to know that we had through a series of ages successfully resisted every external agency, if we learnt too late that that vigour and energy for which ours stands confessedly preeminent among the races of the world were being undermined by a secret but irresistible agency, the offspring of our own neglect, against which science and humanity had warned us in vain."

Sir Benjamin Brodie, too, in his address in the section of Social Economy, touched on a subject which has for a long time engaged the attention of the medical profession: and we trust that some practicable suggestions may emanate from the Association as to the management of our so-called public charities, the abuses attendant on which are matter of notoriety.

In the section of Sanitary Science, we have noticed with satisfaction that several of the members of our Association have been taking an active part. Mr. Michael of Swansea has read a paper on "The Influence of Habitation on the Community;" and Mr. Rumsey of Cheltenham one on "Density of Population and Localisation of Dwellings." But we must leave an account of these and of the further proceedings of the Association to a subsequent number.

THE WEEK.

Mr. Griffin's letter in this day's Journal illustrates another of the annoyances to which the Poor-law medical officer is liable; or rather, we should say, it illustrates *two* grievances. First, his average salary per case is one shilling and threepence three farthings, while that of one of his colleagues is fourteen shillings and seven pence—rather more than eleven times the amount of Mr. Griffin's. Secondly, for the said average of fifteen pence three farthings he is expected to provide and pay for the necessary professional aid in performing amputations and other "capital" operations. On these points he remonstrates once more with the Poor-law Board; and in the course of his letter he alludes to the circumstance that "while his colleagues have not performed any operations of importance during the last two years and a half (except in one instance tapping a woman), he has had to amputate a limb above the knee, remove part of a hand, a tumour of importance from a child's side, resect an elbow-joint, and operate for strangulated hernia." Surely the labourer in such cases is worthy of more than fifteen pence for his hire?

The London police are having their ingenuity employed in endeavouring to discover the victim and detect the perpetrators of a most remarkable murder. On the morning of yesterday (Friday) week, two young men, while in a boat on the Thames, found a carpet-bag resting on one of the abutments of Waterloo Bridge. It contained the remains of what appeared to be a middle aged man. They consisted of a number of bones, forming nearly a complete skeleton, but wanting the head, hands, and feet. The greatest portion of the flesh had been removed, but a considerable part of the breast and the portion of the side under the armpit still remained attached to the ribs. The whole had evidently been soaking in brine for several days, and a portion was in perfect preservation; but some parts, where the salt had not taken effect, were somewhat decomposed. The bones had been divided with a very fine saw, which, however, had been used unskilfully, as by a person not accustomed to use such instruments. There was a deep gash in the breast, as if from a stab with a knife. The bag also contained a suit of clothes, of good quality. The clothes were pierced, both before and behind, in several places, as from stabs—seven being about the region of the heart. As yet, all efforts to discover who the victim was have failed. From the clothes being of foreign make, it is supposed that he was a stranger in this country.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, October 1857.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An Ordinary Meeting of this Branch was held at the York House, Bath, on September 24th, at 7 P.M.; A. Prichard, Esq., President, in the Chair. There were also present: J. S. Bartrum, Esq. (Bath); W. H. Brace, Esq. (Bath); W. Bush, Esq. (Bath); W. J. Church, Esq. (Bath); E. Cockey, Esq. (Frome); J. Crang, Esq. (Timsbury); N. Crisp, Esq. (Bristol); W. Davies, M.D. (Bath); J. G. Davey, M.D. (Northwoods); C. Edwards, Esq. (Batheaston); F. Flower, Esq. (Chilcompton); E. L. Fox, M.D. (Bristol); Jas. Godfrey, Esq. (Bristol); W. Henderson, M.D. (Bristol); W. B. Herapath, M.D. (Bristol); R. C. Holland, Esq. (Bath); J. C. Jennings, Esq. (Malmsbury); G. King, Esq. (Bath); J. Lancaster, Esq. (Bristol); C. Leonard, Esq. (Bristol); F. Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); J. Metford, Esq. (Bristol); G. Norman, Esq. (Bath); J. Parsons, Esq. (Beckington); G. Skinner, Esq. (Bath); J. K. Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); S. H. Swayne, Esq. (Bristol); J. A. Symonds, M.D. (Bristol); G. Terry, Esq. (Mells); J. Tunstall, M.D. (Bath). Mr. White of Frome attended as a visitor.

The minutes of the last ordinary meeting were read and confirmed.

NEW MEMBERS.

E. L. Fox, M.D., and W. Henderson, M.D., of Bristol, were balloted for, and unanimously elected members of the Branch.

SUGAR AS AN ARTICLE OF DIET IN DIABETES.
BY W. BUDD, M.D.

[In the absence of Dr. Budd, the paper was read by Dr. Herapath. It will be published in the Journal.]

Dr. Symonds, after remarking on the highly interesting and valuable character of Dr. Budd's communication, said that the case, if it proved nothing else, proved the advantage of an entire change of diet. Whether the ingestion of sugar can be good as a chemical element, would have to be proved by a collection of several cases. It must not be forgotten that a like improvement has been observed in a vast number of cases in which a change had been made from a mixed diet to one that excluded saccharine and farinaceous articles. Dr. Symonds alluded to cases, in which all the characteristic symptoms and chemical evidences of diabetes returned when the patients had deviated from the strict rules of diet. He thought that M. Bernard had proved by experiments that diabetes consisted essentially in excess of the *glycogenic* function of the liver; that is, in its making sugar in excess, and at the expense of the albuminoid constituents of the blood. If the use of sugar in food should be found to restrain this morbid increase of function on the part of the liver, it would be a remedy. Dr. Symonds alluded to the advantage derived for a time from medicines, such as nitric acid, carbonate of ammonia, and particularly creasote and opium, tonics, cod-liver oil, etc.; and said that, as it has been found by M. Bernard and others, that the production of sugar in the blood was very much influenced by impressions made on distant organs, as the brain and even the lungs, and reflected on the liver, it was probable that our various remedial measures and plans of diet were successful or not in diabetes according as they improved the functions of the stomach, duodenum, and intestines, calmed the nervous system, and directly or indirectly amended the action of the liver. Perhaps it would be proved that the exclusion of saccharine food, in the established system of treatment of this disease, had done good by its influence on the digestive functions, rather than by its chemical restrictions; and, on the other hand, that, when a patient was getting worse under such a diet, and craving for something different, the change even to a saccharine aliment might, for a time at least, improve his condition, as in the case just detailed.

Dr. Davies said that the great object in the treatment of diabetes was to improve, by every means, the powers of digestion. The proof by Bernard of the formation of sugar in the liver from nitrogenous food takes from the received treatment its chief support, and renders it less incumbent to exclude the saccharine and amylaceous elements from the diabetic diet.

Dr. Herapath would call the attention of the meeting to the following points in Dr. Budd's case:—1. The patient was only 18 years of age, and an agricultural labourer. It was, therefore, one of those evanescent and more easily manageable cases, and not of that confirmed chronic character which are usually so troublesome to cure. 2. Although no cause had been assigned for the onset of the disease, the probability is that exposure to the inclemency of the weather was the exciting cause. 3. In reference to the treatment, although sugar, treacle, and honey, had been employed freely, yet these must be considered more as articles of dietary than as curative remedies. 4. Dr. Budd did not say that the sugar had wholly disappeared. The history of the case clearly showed a most striking improvement after the adoption of this dietary; and, at first sight, the results, which were so contrary to all experience, appeared startling. Every one accustomed to diabetic patients must have seen the ill effects resulting from indulgence in fruit or even starchy food, which, by the agency of the saliva and pancreatic fluids, are convertible into glucose. But glucose was not cane-sugar; and here was the grand distinguishing point in the case. Three varieties of sugar were given by Dr. Budd—sugar candy, treacle or molasses, and honey. The first two were cane-sugar, fermentible with very great difficulty, and only capable of undergoing fermentation after conversion into glucose by the assimilation of the elements of water. There was no evidence to prove that the stomach can convert cane-sugar into grape-sugar or glucose. The stomach, or the salivary or pancreatic fluid, do not possess any such converting action, so far as is known. Cane-sugar consists of $C^{12} H^9 O^9 + 2HO$; and glucose, of $C^{12} H^{14} O^{14}$; so that, to convert cane into grape sugar, three equivalents of water must be added to, or rather *combined with* the sugar. Now, to accomplish this, the chemist employs prolonged digestion in dilute sulphuric acid, and aids the conversion by heat. Generally, a solution of sugar in an acid of 3 per cent. requires about forty-six or forty-eight hours digestion, at a temperature of 130° or 150° Fahr. (Hydrochloric acid, or even prolonged digestion with alkalies, will do the same.) It is well known that starch, $C^{12} H^{10} O^{10}$, will, in the stomach, assimilate water, and become glucose, $C^{12} H^{14} O^{14}$. A parallel action appears to occur here; but still it is not identical, the starting points being different. Although the gastric juice, and the pancreatic and salivary fluids, are all acid, yet they are much weaker than 3 per cent.; and no one will presume to say that a temperature of more than 98° Fahr. can be attained in the stomach, or that this chemical action can be kept up during forty-eight hours; and this even exclusive of the acid being different from that requisite for the change. The probability is, therefore, that the cane-sugar is not converted into grape-sugar or glucose by the stomach during the process of digestion. But, even in Dr. Budd's case, there was ground lost when honey was given, the quantity of urine increasing, and the specific gravity rising. Honey is a variety of grape-sugar. All the crystals in honey are glucose; this, if taken as a dietary by diabetic patients, appears in the urine, as all know. Dr. Herapath could not, therefore, on these grounds, agree with Dr. Budd in permitting grape-sugar to be partaken of by diabetic patients, or consider it advisable that any large amount of starchy food should be given; but he was quite prepared to allow cane-sugar, or any of its varieties, as an addition to a full allowance of nitrogenous diet to such patients. It was erroneous to consider that the experiments of M. Bernard prove that the liver, and not the stomach, is the cause of diabetes. The probability is, that both causes are in action—the power which the stomach has of producing grape-sugar from starch, and also the power which the liver possesses of extracting sugar (inosite?) from decomposed or effete tissue; and, until we determine which organ is in fault in any particular case, or can treat both organs satisfactorily and simultaneously, we shall be unable to cure diabetes. The peculiarity with respect to this disease is the great want of animal heat which all diabetic patients possess; and Dr. Herapath had noticed that, if we can persuade our patients to take more exercise, the quantity of sugar decreases, and the animal heat improves. There is some grand connexion between respiration and diabetes. Improve respiration, and sugar disappears from the urine. Is it oxidised in the system or lungs, and converted into carbonic acid, thus contributing to increase the temperature of the body? Probably it is so. This led him to another point which he had noticed, viz., the occurrence of diabetes in patients who have been long exposed to the inhalation of an atmosphere containing sulphurous and hydrochloric acids in large proportion. Two cases had come under his notice in which the manager of a large alkali and vitriol works, and the secretary of a large gas works closely adjoining, both laboured under diabetes at the same time, and died from the disease, each having spent many hours every day for several years in such a vile atmosphere that no one with ordinary respiratory organs could pass through it without suffering from the irritation. Sulphurous acid interferes greatly with endosmosis; it also acts as an antiferment. Its presence in the atmosphere may

occasion, therefore, very serious consequences to the system. It would be well, therefore, for the society to inquire whether diabetes is one of the consequences of such action by prolonged exposure. The ordinary relation of the digestion of starch and sugar to the production of fat is well known; every agriculturist gives large proportions of these ingredients to his oxen, etc., in order to fatten them. The probability is, therefore, that starch is converted into fat, first passing through sugar in the system; and we learn from Liebig that, if we add albuminous matter to the dietary, we have all the ingredients necessary for producing choleic and cholic acids, urea, carbonic acid, water, and margarine or human fat. Thus, 4 albumen + 40 water + 32 oxygen + 20 equivalents sugar, would give us 4 choleic acid; 8 equivalents choleic acid, 12 urea + 36 atoms carbonic acid + 6 atoms margarine, and 12 water. (See Gregory's *Handbook of Chemistry*, 3rd edit., p. 491.) In diabetes, the conversion appears to stop at sugar; the necessary fat is not produced, all the fat-elements running off in the urine; and the sugar produced does not appear to be as capable of oxidation and conversion as in ordinary physiological secondary assimilation.

The President did not think that the meeting had given sufficient importance to the suggestion of Dr. Budd that diabetic patients should make sugar part of their diet. When a patient was voiding albuminous urine, we did not therefore restrain him from taking albuminous materials; nor, in the same way, should sugar be so rigidly excluded from the diet, as, discreetly administered, it would help to make up for the constant drain from the system of that which appears to be an essential element in our food and nutriment.

Treatment of Cholera by Purgatives. By J. G. Davey, M.D.

[This paper will be published in the Journal.]

Mr. Flower observed, that the treatment of cholera by calomel, which was almost universal at the first epidemic, was nearly the same as that advocated by Dr. Davey; the addition of colocynth and turpentine being the only difference. From a large experience, he could say that, in his district, calomel was the practitioner's sheet-anchor.

Mr. Edwards, in 1832, had a large district under his charge, where cholera made great ravages. Treatment had then no influence. In 1849, he tried purgatives, jalap, and scammony, with calomel, associated with sinapisms and stimulants. This plan he found so successful as to lead him to publish a pamphlet on the treatment of cholera by calomel. This treatment he had found most serviceable in all subsequent cases.

Mr. Norman commented on the varying character of the epidemics. The cholera of late years has been much modified, and much more manageable than was the first epidemic. There could be no question that cholera and diarrhœa were not identical. Diarrhœa might be present at the same time; but, in severe attacks, the patient was struck down by cholera often without any previous warning. Talk of purgatives or stimulants as a line of treatment! why, too often there was neither time nor opportunity for any treatment; the pulse never rose, and the collapse ended only in death. Since the first epidemic, the proportion of deaths had not been so great, nor the cases so virulent; but, in severe cases, it was idle to talk of treatment by purgatives, when the whole was over within twelve hours.

Dr. Tunstall had the care of a cholera district in 1832. At that time calomel, with or without opium, was the favourite treatment; but the patients got well, or died, do what one would; all treatment appeared to be equally unavailing; so that one could not lay down any line of treatment. Though calomel was preferred, phosphorus, assafœtida, and many other remedies were tried, and all were alike without effect. In 1849, purgatives were extensively tried—indeed, were generally adopted. The mortality of that epidemic was not so great, but a very large proportion of the cases attacked ended fatally.

Dr. Symonds observed, that there was a marked difference in the results of treatment in the sporadic and epidemic cases of cholera. Almost all the sporadic cases terminated favourably. He then gave the history of a member present (Mr. Mayor), who recently went to bed quite well, but was suddenly seized with choleraic symptoms of the most decided character. In his case, he had found the combination of camphor with aromatic confection of the greatest use in allaying the vomiting and purging.

Mr. Crisp remarked on the character of the various epidemics of this disease. In 1849, few cases lived over twelve hours of collapse; three or four hours was the more usual duration. In this state, few substances had any effect. Ammonia had been injected by the pump into the stomach, with the hope of stimulating the functions. The solution was so strong that he feared he should have injured the tissues of the stomach; but, on *post mortem* examination, the lining membrane was found quite free from injection or other evidence of its having felt the stimulus of the ammonia. The protracted cases had a larger proportion of recoveries; in severe ones, the restlessness was often uncontrollable; and it was impossible to adopt efficient remedial measures, their course was so rapid.

Dr. Davey, in reply, stated that he had not tried purgatives uncombined with calomel, having found the combination of such essential service. His experience of the disease had been very large and varied, having had the care of a district in the Borough during the epidemic of 1832; subsequently he had seen hundreds of cases in India, China, and Ceylon. In all climates, the principles of the treatment were the same, the chief indications being stimulants combined with purgatives; but every case must be treated on its own merits. Except during an epidemic, cases of genuine Asiatic cholera were rare in England; but everywhere and always the principles of treatment were the same. He believed that calomel, when useful, acted as a purgative, and helped to restore the bilious motions, the reappearance of which was a marked sign of the patient's improvement.

Case of Impassable Obstruction of the Bowels. By J. C. S. Jennings, Esq.

[This case will be published in the Journal.]

Dr. Davies advocated the treatment of such cases by the use of opium, to the exclusion of purgatives, and almost irrespective of the cause of the symptoms. If the sickness was great, nothing but pieces of ice, or ice-cold water, were to be swallowed, while the patient was supported by enemata of beef-tea. With few exceptions, the cause of the obstruction was not to be overcome by anything that excited the action of the bowels. Under this sedative treatment, the progress of the cases was more free from suffering, so that his rule was almost wholly to abstain from purgatives.

Mr. Bush, since he had the advantage of Dr. Billing's teaching, had always used opium freely in these cases. In colic, he gave doses from half a grain to two grains frequently, till the pain subsided. Brandy was taken, and warm applications were appled to the abdomen, till the spasms and other symptoms had passed off. The vomiting in colic was caused by the spasmodic action of the intestines inclosing a portion of flatus, the retention of which, with the disordered action of the bowels, reacted on the stomach. When these spasms have subsided, castor oil will probably act; but it was needful that the pain and spasm should have ceased before even gentle purgatives were given. If the pains arise from irritation caused by food, severe purgatives relight the irritation, and so renew the cause of the pain.

Observations on the Ready Method in Asphyxia. By J. C. S. Jennings, Esq.

Mr. Jennings drew the attention of the meeting to some points in the directions for the restoration of drowned persons, called "the ready method". He said that he had, long before the publication of Dr. Marshall Hall's pamphlet on *Asphyxia*, shown the injury done by the warm bath in cases of drowning, and the close resemblance the laying the patient on the side, and then alternating the position, bore to the old treatment of rolling the drowned person in a cask.

Dr. Edward Fox, in the winter of 1855-56, had made the experiments quoted by Dr. Hall in page 31 of his pamphlet on *Asphyxia*. They were only a few out of a large number, the result of which was similar. He was most firmly convinced of the efficacy as well as of the simplicity of the method, which conviction was strengthened by the numerous instances of success recorded in the medical journals during the present and the past year. Dr. Hall first spoke to Dr. Fox on the subject in November 1855, and experiments were repeatedly made till May 1856. After having proved the fact to their own satisfaction, that natural respiration might be produced, they (Drs. Hall and Fox) proceeded to determine the amount of air expired and inspired. In severe cases, they found it to amount to thirty cubic inches—far more than is necessary to support life. These results were obtained on *dead* bodies, often with the drawback of considerable *rigor mortis*. Much more might the plan be expected to be efficacious when tried on the living subject, in whom animation has been temporarily suspended. As regarded the priority of claim to the discovery of the ill effect of the warm bath, Dr. Fox spoke from knowledge when he said that Dr. Hall's attention was turned to it whilst at Boulogne, in the summer of 1855. That he was unaware of the

views of Mr. Jennings, Dr. Fox was assured with the utmost certainty; his own views being based on the experiments of Edwards and Brown-Séquard, and also on some of his own. Dr. Hall did not claim any merit to himself as the discoverer of the ill effects of the warm bath.

Reports of Societies.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

The meetings of the National Association for the Promotion of Social Science commenced at Birmingham on Monday last. We shall give an abstract of the proceedings as far as they may be of interest to the medical profession.

First Day.—Monday, October 12th.

The Association was inaugurated at 7 P.M., in the Town-Hall, Birmingham, by an address from the President, Lord Brougham, The body of the hall was crowded; and on the platform were, with others, Lord Brougham, Lord John Russell, Lord Stanley, the Mayor of Birmingham, Lord Hatherton, Lord Talbot, Sir Fitzroy Kelly, M.P., Sir J. Pakington, M.P., Major Talbot, Mr. Monckton Milnes, M.P., Right Honourable W. Cowper, M.P., Mr. C. B. Adderley, M.P., Mr. W. Scholefield, M.P., Colonel Gordon, M.P., Sir T. Winnington, M.P., Sir B. Brodie, Mr. W. H. Foster, M.P., Mr. W. Beale, M.P., Mr. R. Slaney, M.P., Sir J. Forbes, Mr. E. Akroyd, M.P., Mr. M. D. Hill, Recorder of Birmingham, Professor Pillans, Mr. Jelynger Symonds, Mr. W. Matthews, Rev. Dr. Badham, Rev. C. Kingsley, Mr. Robert Owen, Dr. Humphreys, Rev. S. Gedge, Mr. A. Hill, Rev. J. Turner, Rev. J. C. Miller, Mr. J. Sturge, Mr. Melville, Mr. A. Helps, Mr. Robert Chambers, Edinburgh, Rev. J. J. Field, Mr. D. Fleming, Rev. S. Carter, Rev. Mr. Collis, Sir Charles Hastings, Mr. R. W. Winfield, Mr. T. Bunce, etc.

In the course of the proceedings Mr. G. W. Hastings, the general secretary, read letters apologising for unavoidable absence from the Earl of Carlisle, the Bishop of Oxford, the Bishop of London, the Earl of Shaftesbury, the Solicitor-General, Mr. John Bright, Dr. Sutherland, Sir J. Kay Shuttleworth, the Rev. F. D. Maurice, Sir E. Wilmot, and Alderman Salomons.

INTRODUCTORY ADDRESS.

Lord Brougham commenced his address by contrasting the two great branches into which human knowledge might be divided; the science which deals with abstract truths—metaphysical philosophy; and the science which treats of real existences. The latter is eminently deserving of attentive study. It deals with practical objects—the laws which govern men's habits and the principles of human nature, upon which the structure of society and its movements depend, and respecting which safe conclusions can with certain limits be drawn. His lordship then went on to demonstrate how the study of political philosophy was facilitated by its facts being plain and tangible. It had struck observers as extraordinary, that the course should not have been taken in regard to moral and political science which has proved so advantageous for assisting the progress of inquiry in natural philosophy; and they have strongly recommended the plan of assembling together occasionally, perhaps periodically, the various individuals and bodies whose attention is devoted to the ascertainment, illustration, and general exposition of moral and political doctrines. It is very possible that in the end this object may be obtained, and that this Association may bear as wide a relation to moral and political science as the British Association, which has now been in successful action for more than a quarter of a century, does to mathematical and physical science. At present, however, a more limited view is taken. It is proposed that five of the most important branches of moral and political inquiry should be singled out—those which especially form the practical portions of social science—comprehending the plans, both in their details and in the principles that should govern them, for furthering the improvement and securing the stability of the social system; correcting the faults and supplying the defects of our institutions upon sound, rational, and temperate views; and rendering desperate all attempts either to check the progress of improvement or to gratify the wild desires of those who would destroy rather than amend; in a word, steering the middle course between those who regard all change as pernicious, and those whom no change will satisfy. But if the subjects are in some measure limited, the scope of deliberations is anything but narrow. It embraces the greatest temporal interests of mankind. He then proceeded to point out the advantages of bringing together those who devoted themselves to promote the inquiries and the measures connected with social improvement; both in the way of mutual help, and of comparing apparently different opinions, and separating and acting on those points on which agreement is found to exist. The beneficial effects of united action had been well illustrated by the operations of the Society for Diffusing Useful Knowledge, and of the Society for Promoting the Amendment of the Law. After some comments relating to legal and political matters, the President continued: Nor let the importance be lightly considered of diffusing among the various classes of the community the knowledge of the subjects to which our inquiries will be directed, and which, though all are alike interested in them, yet are by no means sufficiently understood or estimated at their just value by the bulk of mankind. The slowness with which the humbler classes of our fellow-citizens improve themselves in different branches of science, and, indeed, their reluctance to undergo the labour of studying them, has been often lamented, but without exciting the least surprise in those who duly considered the circumstances of the case. In the attempts that have been made for so many years to overcome such obstacles, and effect the more general diffusion of knowledge, the necessity has been too much overlooked of beginning with the upper classes. When these are well imbued with the taste for acquiring knowledge, they have a natural tendency to make those in other ranks partake of the same great benefits. It is not that the whole or even the greater part of one class will become educators; but some will be inspired with the desire, not more benevolent than wise, of bearing the torch to the regions still without those lights which they themselves enjoy. Thus is sound and useful instruction propagated by a sure and natural process. Knowledge thus diffused, but especially knowledge of social interests and rights and duties, even more than the firm and temperate distribution of justice itself, possesses the great, the cardinal virtue of insuring the stability of the social system. But this diffusion leads also to the improvement of the system, because it inspires all classes with the desire of promoting measures shown to be safe as well as effectual, in a word, wholesome reforms. Nor can anything be more groundless than the fears of progress entertained by some—affected by more. It is, in truth, ignorance continued, not knowledge advanced, which they have to fear—nay, which, when we come to an explanation with them, they really do fear. Knowledge is power; but its natural ally is the friendly power of virtue, with which its dominion is willingiy shared. This is, above all, true of the knowledge which we shall seek to improve and to impart.

His Lordship sat down amidst loud and prolonged cheering.

Lord J. Russell, who was enthusiastically received, proposed the following resolution:—

"That the National Association for the Promotion of Social Science be inaugurated, and that the warmest thanks of this meeting be given to Lord Brougham for his excellent address."

His lordship expressed great gratification at seeing his noble friend in the enjoyment of so much health and strength, and now coming here to promote the welfare of his countrymen. Particularising the exertions which Lord Brougham had made throughout a long and laborious life to promote the diffusion of knowledge, his lordship said he was rejoiced now to hear that same voice which more than thirty years ago fulminated over Europe against unjust oppression, now exerted in promotion of the cause of social science. The task was a difficult one, but he trusted that the efforts of the association would tend alike to the advancement of knowledge, the benefit of the people, and the further extension of freedom.

The resolution was seconded by the Right Honourable Mr. Cowper, M.P., and supported by Mr. Recorder Hill.

After a few words of acknowledgment from Lord Brougham,

Sir Fitzroy Kelly moved that a committee be appointed to report to the general meeting on Friday the constitution and future action of the National Association.

The resolution was seconded by Sir Charles Hastings, and supported by Mr. Akroyd, M.P.

Second Day.—Tuesday, October 13th.

This morning, at 11, the inaugural addresses of the five presidents of departments were delivered in succession in the Town-hall, before the whole of the members and their friends.

PUBLIC HEALTH.

Lord Stanley, president of this department, observed that, having met to discuss the present state and future prospects of sanitary science in England, the first thing for them to do was to define accurately what was meant by the term "sanitary science," and he apprehended that it meant that science which dealt with the preservation of health and prevention of disease in reference to the entire community, or to classes within that community, as contradistinguished from medical science in the ordinary acceptation of the term, which latter study had for its aim the restoration of health when lost, and dealt with the case of each individual separately. Or, to put it in another form, he would say that all physical evils to which human beings were liable might be classed under three heads: 1. Those which, whether limited to isolated cases or widely diffused, were not preventible beforehand by any means at present known, and could only be dealt with remedially when they arose. 2. Those which affecting individuals only, were preventible as regarded those individuals, but were not due to any general or wide-spreading cause. 3. Those which affected entire districts or entire classes of men, of which the cause lay in some known external noxious agency, whether connected with occupation or locality, and which could therefore be removed altogether by the removal of such agency. Of these three classes sanitary science, as he understood the term (the study of the public health), dealt not at all with the first, but partially with the second, and mainly, though not quite exclusively, confined itself to the third. After observing that the fundamental axiom which sanitarists laid down was, that of epidemic diseases some might be made, by proper appliances, to disappear altogether, while those that remained would exhibit a milder and less distinctive type; while a knowledge of physical laws would tend to a greatly improved state of the public health in respect to diseases not epidemic, he proceeded to enforce the necessity of a more general diffusion of knowledge upon these subjects, and to argue that our destiny in these matters was very much in our own hands. He then adduced a variety of facts to prove that sanitary neglect caused disease, and in order to show how vast a sacrifice of human life went on unchecked and almost unnoticed, though plainly within the power of society to abate, he instanced the case of the British army; not of regiments employed in foreign service or quartered in unhealthy climates, but the case of troops at home under the direct control of the executive. Taking the deaths which occurred among men within the ages of military service, we had a yearly average of civilians resident in towns of 11·9 per 1,000; while for the same ages among soldiers of the line there was an average of 17·8 per 1,000; and among the Guards of 20·4 per 1,000. He need not stop to inquire to what extent deficient ventilation, intemperate habits, or such causes, contributed to this result; but he proceeded to statistics to show how far mortality varied according to the salubrity or insalubrity of the district inhabited. Taking the same ages—namely, 20 to 35—we had an average of deaths per 1,000 as follows:—In the least healthy urban districts, 12·4; in the whole population of England and Wales, 9·2; in the rural population exclusively, 7·7. From a popular summary of facts which had been drawn up by the Manchester Sanitary Association, comparing deaths from pestilence with deaths from war, he found that during the Revolutionary war, in 22 years, from 1793 to 1815, there were killed 19,800 men, while in the single year 1848 49 there died of cholera and other epidemics 72,180. In those 22 years of war the wounded were 79,700, while in the one year of cholera those attacked were 144,860. The same authority added that the annual average of deaths in England and Wales due to preventible causes might be estimated at 115,000.

The noble lord proceeded to trace with great minuteness of detail the various causes of disease, showing at the same time how one breach of the natural law led to another. He then touched upon the law of density or aggregation, and the law of altitude as affecting disease, and upon the industrial pathology of trades, contending that the remedy was very much in the hands of individuals rather than in those of the government. He showed the necessity for remedial measures generally, but he urged that legislation was useless unless it met with the support of public opinion. Enlarging upon the importance of enforcing proper regulations for the management of lodging-houses, he recommended the construction of model dwellings, contending that they ought to be remunerative to those who erected them. He then advanced to the sewage question, with respect to which he said so much of late years had been spoken, and so little, comparatively speaking, done. It was better, however, of two evils to do nothing, than to do that which would have to be again undone. It seemed to him that any plans for improving our sewage system were very imperfect until we had ascertained what to do with the sewage when collected. [*Hear.*] That was a question which had not yet been satisfactorily solved. Mr. Austin, in his able report last year, gave the results of various experiments which had been tried in this direction, of which it might be said that several appeared promising, but that none had so decidedly succeeded as to justify its general adoption. It was clear, however, that neither the law nor public convenience nor public health would allow the poisoning of rivers and brooks, such as was now becoming common wherever in a large or moderate-sized town a complete system of drainage was established. Deodorisation by some means had become a necessity. If it could be combined with agricultural utility, so much the better; but this at least was certain, that whether the process paid or not, every local Board of Health, or other governing body, ought to be just as much bound to purify its sewage as to remove it. [*Hear, hear.*] No person and no community had the right merely to transfer a nuisance to their neighbours. [*Cheers.*] It was probable that in every case, by the payment of no very large sum, private speculators might be induced to undertake the work of deodorisation, and if this should be so, and if the experiments now going on in various places should be even moderately successful, we should probably find something better to do with the metropolitan drainage than to carry it into the sea at a cost of many millions without the prospect of the slightest return. [*Hear.*] Although great good had already been done by calling the notice of local bodies to nuisances within their jurisdiction, the further lesson remained to be taught that it was not enough to send those nuisances to a distance, and that the public was only benefited when they were put an end to altogether. The noble lord then touched upon questions affecting the sale of poison, adulterations, compulsory vaccination, State medicine and medical relief, and concluded an able address in the following terms:—

"There are other topics on which I wished to touch. I regret to leave unnoticed the legislation of successive Parliaments in regard to the Board of Health, the perpetually repeated conflict between central and local authority, the struggles, failures, and successes of the last few years; but time would fail. Brevity on such questions could not but lead to misunderstanding; fulness of treatment would be impossible; and to those whom I see around me I already owe a double apology; for, while lamenting the length to which these remarks of mine have extended, I lament still more that, compelled to touch as it were on the surface of many topics, I have been unable, both from limited space and limited knowledge, to do justice to any one. Only take with you this last word. Dry and unattractive as sanitary studies may appear, they belong to the patriot no less than the philanthropist; they touch very nearly the future prosperity and the national greatness of England. [*Hear, hear,*] Don't fancy that the mischief done by disease speeding through the community is to be measured by the number of deaths which ensue. That is the least part of the result. As in a battle, the killed bear but a small proportion to the wounded. It is not merely by the crowded hospitals, the frequent funerals, the destitution of families, or the increased pressure of public burdens, that you may test the suffering of a nation over which sickness has passed. The real and lasting injury lies in the deterioration of race, in the seeds of disease transmitted to future generations, in the degeneracy and decay which are never detected till the evil is irreparable, and of which, even then, the cause remains often undiscovered. It concerns us if the work of England be that of colonisation and of dominion abroad, if wild hordes and savage races are to be brought by our agency under the influence of civilised man, if we are to maintain peace, to extend commerce, to hold our own among many rivals, alike by arts and arms—it concerns us, I say, that strong hands shall be forthcoming to wield either sword or spade—that vigorous constitutions be not wanting to endure the vicissitudes of climate and the labours of a settler in a new country. I believe that, whatever exceptions may be found in individual instances, when you come to deal with men in the mass, physical and moral decay necessarily go together; and it would be small satisfaction to know that we had through a series of ages successfully resisted every external agency, if we learnt too late that that vigour and energy for which ours stands confessedly pre-eminent among the races of the world were being undermined by a secret but irresistible agency, the offspring of our own neglect, against which science and humanity had warned us in vain."

SOCIAL ECONOMY.

Sir B. Brodie, who has undertaken the presidency of the fifth department in the unavoidable absence of Lord Lyttelton owing to a domestic affliction, was next introduced to the meeting. In briefly reviewing the reforms which it was necessary to undertake in order to the advancement of the principles of social economy, he urged the necessity of looking below the surface, and taking a far more comprehensive view of these matters than persons were usually apt to do. For example, in considering the social evils to which the poorer portions of the public were more particularly liable, it would not be enough merely to endeavour to prevent drunkenness, but to take into view the whole question of the effect of drinking habits generally; they should then go to the educational section and ask for information as to the means provided for the intellectual instruction and amusement of the poor, and thence they should proceed to the sanitary section, and ascertain what measures were being adopted to secure the healthy and comfortable condition of the home of the working man. [*Hear, hear.*] The subjects which came within the purview of the social economy department were of a miscellaneous and almost a heterogeneous description; but having regard to that economy of time which was essential, he left these various subjects to be discussed more in detail in the section over which he was about to preside. Touching upon the question of public charities, Sir Benjamin observed that many of these institutions were open to the serious charge of paralysing that spirit of independence and self-reliance which was more valuable to a man than any amount of charity that could be given them. As an instance of this, he cited the case of a London parish, to which, within his own knowledge, persons removed for the express reason that large sums of money were given away there; while he knew that in other cases the existence of almshouses attracted to the parish numbers of the idle, dissolute, and worthless. He remarked, also, upon the large amount of money which was expended by many public charities in "establishment charges" before any of it was distributed to deserving objects; and in other cases upon the cost which poor persons had to incur before they could avail themselves of the benefits which the charities were calculated to confer. In conclusion, Sir Benjamin expressed a hope that the subject of our great public charities would ere long engage the attention of those who were competent to deal with them, and to propose a remedy for the existing evils.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

Sir,—I shall feel obliged by your inserting the following letter, which has many points of importance to the Poor-Law Medical Officer. During the last Session of Parliament, Lord Elcho, at my solicitation, kindly moved for certain returns. The queries are now in the course of circulation.

I trust my brethren will see that they are correctly answered, as upon the replies will depend the success or failure of our agitation for redress of grievances.

The precise wording of the questions has been slightly altered from the original, the half year's list substituted for the year's, and "the entries on the permanent list not to be reckoned" have been added, etc. The mode of filling up the answers 13 and 14 requires explanation, as many gentlemen have written to me on the subject. For each half year take all the cases under treatment at its commencement, and add to them all the fresh cases attended during the half year. For the calculation of the duration of illness, count up all the cases returned each week in the medical relief book for one year, and add them together, divide them by the number attended each half year, added together, which will give the number of weeks, multiply the remainder by 7 and divide again and it will give the days, say 4 weeks 5 days, or 33 days duration of illness. The returns formerly calculated by me averaged 28 days 1 hour.

I hope my medical friends will not forget their mite towards the testimonial now raising for our Irish brother, Dr. McCarthy, of Kenmare. I shall be happy to send a copy of his eloquent address to any gentleman who may desire to have one. Subscriptions of 5*s.* may be forwarded to Charles Hewitt, M.D., Patrick's Hill, Cork. I am, etc.

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, October 5th, 1857.

"12, Royal Terrace, Weymouth, 29th September, 1857.

"My Lords and Gentlemen,—During many months, I have been attending a poor woman named Puckett, who had ulcerations of the integuments of the knee: and, latterly, dropsical swelling of the joint. A few weeks since, the sores having all healed, except one, she felt able to visit a relative in the country, and went thither in a waggon on a wet day, and caught cold, which induced inflammation of the joint, and subsequently the bursting of the dropsical swelling through the ulcerated opening; constitutional disturbance, threatening her life, was immediately set up, which rendered it necessary to be prepared at any moment to perform an operation. I therefore, under the head 'observations', made the following request in the district medical relief book:—

"'August 24th. An operation may be required; shall therefore feel obliged by an order for three medical men to assist; but it will not be used unless actually necessary.'

"The Board of Guardians thereupon ordered the relieving officer to furnish the required assistance when desired.

"On September 21st, Mr. Inspector Gulson attended the Board, and appended the following note to my request:—

"'Art. 178 of the regulations provides that the medical officer shall, at his own cost, obtain the advice of some surgeon or physician before performing an amputation; and the fee provided by art. 177, is understood to cover and provide for such assistance as the medical officer may require in the performance of the operation, in respect of which the fee is made payable. "'C. Gulson.'

"In consequence of this note, I am deprived of the requisite assistance to perform an operation, should one be necessary, which I much fear will be the case before long, though I am doing my utmost to save the limb.

"Art. 178 says, that 'except in cases of sudden accident immediately threatening life, no medical officer shall be entitled to receive such remuneration for any amputation, unless he shall have obtained, at his own cost, the advice of some member of the Royal College of Surgeons of London, or some fellow or licentiate of the Royal College of Physicians of London, before performing such amputation; and unless he shall also produce to the guardians a certificate from such member, or fellow, or licentiate, stating that in his opinion it was right and proper that such amputation should be then performed.'

"This article was evidently intended to prevent a limb being removed without due consideration—and nothing further. Your own instructional letter declares what the fee is for.

"'The payments for operations are limited to operations on out-door poor, and do not include those performed in the workhouse. It appears to the commissioners that the constant attendance at the house of the patient in severe surgical cases usually forms the most burthensome part of the extra services of the medical man; whereas the constant visits of the medical officer to the workhouse enable him to attend a patient in the workhouse without always making a visit for that express purpose.'

"Art. 179 corroborates the foregoing: 'Provided always that if in any case the patient has not survived the operation more than thirty-six hours, and has not required and received several attendances after the operation by the medical officer who has performed the same, such medical officer shall be entitled only to *one half* of the payments respectively prescribed above.'

"These quotations evidently prove that the extra remuneration for amputations is not for the performance of them, but for the advice and certificate of another medical man *before* the operation, and for the 'constant and burthensome attendance' *afterwards*. I therefore entreat your Honourable Board to allow me the assistance actually required to enable me to perform the operation, should it still be deemed necessary.

"Art. 177 distinctly says: 'No salary of any district medical officer shall include the remuneration for operations and services of the following classes performed by such medical officer in that capacity for any out-door pauper, but such operations and services shall be paid for by the guardians, according to the rates specified in the article.'

"Notwithstanding this article, which is of the most positive description, I am not allowed the fees mentioned therein—the guardians insisting that my miserable salary of 1*s.* 3½*d.* per case shall include the performance of operations; and Mr. Gulson now says it shall pay for assistance also: because, forsooth, former medical officers consented to commute the extras for a fixed salary, when they were annually elected, and were afraid of dismissal at the end of the year if they refused to do anything, and did not comply with everything, the guardians desired of them. I respectfully submit that this com-

mutation should never have been sanctioned by your Honourable Board, and ought now to be reversed—in the case of those officers, at least, who were not parties to it. See the result of it in my own case. Here is a poor woman who has been under my care from July 25th, 1856, up to this day, September 29th, 1857. I have already paid one hundred and nine visits to her house, causing me to walk more than one hundred and nine miles. I have given her seventy-two bottles of medicine, forty-two bottles of lotion, one bottle of liniment, three boxes of ointment, four boxes of pills, and a quantity of adhesive plaister; and if Mr. Inspector Gulson's views are correct, I am now called upon to pay one guinea each to three medical men, at least, to assist me to amputate or resect the joint, as may ultimately be determined; as my colleagues are not bound to give their valuable time gratuitously out of their district: in addition, I shall have to attend the patient some months afterwards. The world would probably fix a remuneration for these important services at not less than £50, and think it a reasonable amount; but you, my lords and gentlemen, have allowed the guardians to decree that I am to have no extra pay—that skill, labour, and expense, are all to be included in the munificent sum of one shilling and three-pence three-farthings, the proportion my niggardly salary allows for each case I am called upon to attend.

"The terms of the advertisement on which I was elected, are as follows: 'The above mentioned salaries to include the supply of all medicines and medical and surgical appliances, together with the extra fees for midwifery cases, fractures, etc.'

"As this paragraph says nothing about assistance, allow me to quote your letter to the guardians, January 28th, 1857, as it bears on the point. It alludes to a case of consultation, rendered necessary by the district medical officer, stating that he 'could do no more for his patient'.

"'On referring to Art. 215, No. 3, of the general Consolidated Order of the 24th July, 1847, the guardians will observe that it is the duty of the relieving officer, in any case of sickness or accident requiring relief by medical attendance, to procure such attendance, by giving an order on the district medical officer, or such other means as the urgency of the case may require. The board think that, looking to the duties of the relieving officer as prescribed by this article, it was competent to him to adopt the course which he pursued. The Board therefore direct me to inform the guardians, they are of opinion that he (Mr. Griffin) is entitled to be remunerated for the professional services which, by the authority of the relieving officer, acting on behalf of the guardians, he was called upon to render in this case.'

"In this letter you recognise the principle that where the district medical officer requires assistance, the relieving officer is justified in providing it. I cannot do impossibilities. I cannot administer chloroform, attend to the tourniquet, hold the limb and amputate at the same time, and subsequently take up the arteries and tie them. I require assistance, otherwise the life of my patient must be sacrificed. I therefore pray you will, without delay, instruct the guardians to direct their relieving officer to furnish me with the aid required.

"Since June 1855 I have addressed many letters to your Honourable Board, complaining of the inadequacy of my salary to the duties I am required to perform. You have generally promised that they shall receive your attention or consideration, but in your last reply a simple acknowledgment of my letter was alone vouchsafed. With your extensive correspondence, the complaints of a poor union medical officer are probably little heeded at the time and are soon forgotten. I will therefore just reiterate that I was elected one of your officers in March 1855, that my predecessor during the last year of his office recorded six hundred and forty-two cases, for which he received £110, or 3*s.* 5*d.* per case; when I accepted my appointment, I expected a remuneration per case to the same amount as that paid to him: judge then my surprise on discovering that my average payment for two years realised only 1*s.* 4½*d.* per case: during the last half year it has been rather less, as in that time I have attended three hundred and four orders, for which I shall receive only £17: 10: 0, whilst my predecessor had for the same number £52: 2: 1. I have also performed an operation of some importance—resection of the elbow joint of a woman aged 29, thereby saving the arm, which is every day becoming more useful to her, instead of removing the limb and rendering her chargeable to the parish for life. The trouble and expense of this case has been considerable, and it has been under treatment many months, indeed, all the sores are not yet healed; for this case I get nothing more than the 304th part of £17: 10: 0, or 1*s.* 1¼*d.* Compare this with the payments made to my colleagues, who have not performed any operations of importance during the last two years and a half (excepting in one instance, tapping a woman), whilst I have had to amputate a limb above the knee, remove part of a hand, a tumour of importance from a child's side, resect an elbow joint, and operate for strangulated hernia. One gentleman has a salary that gives him 2*s.* 2¼*d.* per order; a second, 4*s.* 11½*d.*; and a third, 14*s.* 7*d.*; while I have but 1*s.* 3¾*d.*

"My Lords and Gentlemen, I pray you will no longer permit me to be thus cruelly misused. The poor-rates of the country, as well as the payments from the consolidated fund, ought to be impartially, and not, as in my case, capriciously administered. On remonstrating privately with two members of the Board of Guardians on the iniquitous treatment I receive, one replied: 'I cannot help it; we are mere automatons; the Board above rules all.' The other said: 'Fixing the salaries rests with the Poor-Law Board and not with us,' which bears out the belief I previously expressed, that the law has entrusted to your Honourable Board the power to regulate our salaries (see 4 and 5 Will. IV, c. 76, s. 46). I entreat you, therefore, to remove the oppression under which I groan, and which I do not deserve. The only charge that can be brought against me is, that I seek a reform of the abuses that exist in the medical department of the Poor-Law. I desire only that the Poor-Law medical officers may be enabled to do their duty to the four millions of the labouring classes entrusted to their care. We live in an age of reform; the government of the country is called a reform government; the existence of your Honourable Board sprung from reform; surely, then, I ought not to be persecuted for humbly endeavouring to follow in the footsteps of the great men of this age. I beseech you to uphold me, by giving me a salary commensurate with the duties I have to perform. If you cannot do this I beg you will say so, that I may lay my case before counsel, and ascertain if it is probable the Court of Queen's Bench can afford me any redress; if not, I will then present an humble address to her Majesty in Council, and pray she will graciously be pleased to grant me assistance, that I may do my duty to her poor without robbing my family.

"I have the honour to be, my Lords and Gentlemen,
"Your most obedient servant,
"Richard Griffin.

"The Poor-Law Board."

FEES FROM ASSURANCE OFFICES.

Letter from W. Sankey, Esq.

Sir,—I have perused with much pleasure the communication of Dr. C. Radclyffe Hall, of Torquay, but regret he should have allowed the Unity Life Office to escape the payment of his legal fee.

I have now for upwards of forty years acted as medical referee for this town and neighbourhood, and have ever resisted the proffer of half-guinea fees; and, moreover, whenever my report has been sent in (ignorant of the intention on the part of the office to offer the half fee), I have insisted upon, and obtained, my legal demand of one guinea.

One of the last instances that occurred, my fee was paid, but with an intimation that the office would in future not require my services.

I am, etc.,
William Sankey.

Dover, October 11th, 1857.

FEES OF ASSURANCE OFFICES.

Sir,—The occasional behaviour of insurance offices towards members of our profession, as illustrated by the last two numbers of the Journal, deserves our serious consideration. Some of our brethren, I am well aware, consider this treatment just and honourable; in such opinions I cannot coincide, and I believe the holders of these opinions are mistaken. The views they urge are simply these.

The offices say, We have our own medical referee, who will examine you on our account, but we require you, the proposer, to bring a certificate of good health from your own private medical attendant. If this is honestly the position, why do the offices apply for it themselves, and state that the answers to the queries will be considered "*strictly confidential*"? In so doing, do they not wholly nullify the position? They thus make it a *personal favour* to themselves; they apply for it and, of course, under such circumstances, in all honesty should pay for it.

Again, they urge, life insurance is a mutual benefit, both parties have their duties to perform. Granted; but is the risk mutual? The fact that the *whole risk* from bad lives is on the side of the office is wholly ignored.

It may be justly asked, what right has any person to require from us information possessed by ourselves alone, obtained in the practice of our profession, required only because it is a professional opinion, valuable only in proportion to the professional acumen which marks it, acquired very probably at the risk of life, a life how valuable known only to those dependent on it for daily bread; yet this knowledge, possibly all-important to the office, and impossible often to obtain from any other source, is not worth the purchase, and is only obtained surreptitiously, if at all, in many cases.

On what grounds, too, is the assurer to provide and pay for this information, which may be so fatal to his chances of success, and prove the only stumbling block to his hopes? But supposing that this fatal information is given, is it not given too frequently at the loss of the practitioner, and for this, are we to receive no indemnity at the hands of the office, the only party in the transaction who is benefited thereby?

It appears to me the only safe and honest plan for offices to act as though they suspected imposition, and that therefore it is their duty, as undoubtedly it is their interest, to adopt every possible measure to discover such imposition, and to pay liberally for those efforts. Inconsistently enough, many offices reward handsomely solicitors and agents for business introduced by them, and yet without the medical information, for which payment is so frequently refused, that very business may be ruinous to the office, and valuable only to the proposer and agent—these offices having yet to learn the fact, that no outlay so well repays them as that spent in obtaining *healthy* lives, except that which is paid for the rejection of *diseased* proposals.

So many cases of this class having occurred, it would be well could some fixed rule be adopted. Is our Association powerless on such a topic as regards the behaviour of its members? Can it not, at least, recommend a plan which will be consonant with the dignity of our profession, and free from injustice towards any of the parties interested.

I am, etc., A Sufferer.

Oct. 12th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Colborne. On October 8th, at Chippenham, the wife of Wm. H. Colborne, M.D., of a daughter.

Croft. On October 9th, at 13, Camden Road Villas, the wife of *Robert C. Croft, Esq., Surgeon, of a daughter.

Mantell. On August 11th, at Balasore, Bengal, the wife of Alfred A. Mantell, M.D., of a son.

MARRIAGES.

Eddowes—Macaulay. Eddowes, Thomas Storer, Esq., of Sutton Coldfield, Warwickshire, to Margaret Anne, eldest daughter of *Thomas Macaulay, Esq., Surgeon, of Leicester, at St. Margaret's, Leicester, on October 13th.

Iliff—Moorsom. Iliff, William T., M.D., of Newington Place, London, to Marianne, eldest daughter of George Moorsom, Esq., Surveyor-General for Tonnage, Her Majesty's Customs, at Caldbeck, Cumberland, on October 10th.

O'Bryen—Graham. *O'Bryen, John, M.D., of Clifton, Bristol, to Celia, only daughter of the late Patrick Graham, Esq., of Worth Hall, Sussex, at Mount Plunkett, county Roscommon, on October 1st.

Read—Henderson. Read, William, Esq., of 3, Holles Street, Cavendish Square, to Jessie Mary, only child of the late — Henderson, M.D., H.E.I.C.S., at All Souls', Langham Place, on October 3rd.

Stevenson—Maning. Stevenson, Thomas, Esq., Surgeon, of Upper Grosvenor Street, to Emma Pauline, daughter of Charles James Maning, Esq., at Rothesay, Bute, on Oct. 5.

DEATHS.

Bailly, John, Esq., Surgeon, for upwards of fifty years a respected practitioner in Sutton St. Mary, Lincolnshire, aged 74, on October 4th.

Boyes, W. R., M.D., 1st Bengal Native Cavalry, massacred at Cawnpore, on June 27th; also Kate, his wife.

Bush, John Stafford, Esq., Assistant-Surgeon H.E.I.C. Madras Service, of remittent fever, after six days illness, at Kamptee, aged 30, on August 15th.

Curran, —, M.D., at Waterloo House, Dublin, aged 75, on October 2nd.

Luke. On October 8th, at Greenhithe, Richard Butler, eldest surviving son of James Luke, Esq., Surgeon to the London Hospital, aged 27.

Rennalls. On October 10th, at Woodside, near Lymington, Hants, Jane Flacon, widow of the late John Powell Rennalls, M.D., formerly of Jamaica, aged 75.

Sedgwick. On October 4th, Harriet Matilda, daughter of Charles Sedgwick, Esq., Surgeon, of Hollingbourne, Kent, aged 25.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, October 9th, 1857:—

Applin, Augustin Oliver, Army
Braden, John George, Commercial Road East
Ellis, James, St. Thomas's Hospital
Grabham, George Wallington, St. Thomas's Hospital
Lowe, John, Lynn Regis, Norfolk
Mansel, Thomas, Pembroke
Molyneaux, James, Manchester
Tench, Edward Bevan, Hereford

At the same meeting of the Court:—

Tronson, John Mortlock, of H.M.S. *Wellington*
Lewis, William Jarrett, of Haslar Hospital

Passed their examinations as Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively August 6th, 1852, and May 15th, 1854.

The Fellowship. The following members of the College, having been elected at previous meetings of the Council, were admitted to the Fellowship on the 8th inst.:—

Bunce, John Strudwicke, Woodford: diploma of membership dated February 23rd, 1838
Charles, Thomas, Sydney: April 15th, 1836
Chesshire, Edwin, Birmingham: August 9th, 1841
Gregory, John, Sunderland: June 27th, 1842
Holman, Henry Martin, Hurstpierpoint: June 27th, 1842
Isbell, Warren John, Stonehouse, Devon: November 10th, 1837
Kinsey, Robert Bancroft, H.E.I.C.S., Bengal: March 30th, 1838
Owen, Edwin Robert, Oxford: June 17th 1842
Ransom, Thomas William, Darlaston: March 4th, 1842
Robinson, Charles, Edgeware: May 20th, 1842
Rowland, Rowland, Strata Florida, Cardiganshire: May 17th, 1841
Russell, William Alexander, St. Albans: Jan. 8th, 1841
Wilson, Walter, Burton Crescent: December 4th, 1840

Apothecaries' Hall. Members admitted on Thursdays, October 1st and 8th, 1857:—

Wood, William, Middleton, near Beverley, Yorkshire
Foster, William Frederick, Hambledon, Hants
Wood, William, Wakefield, Yorkshire

University of Edinburgh. The following gentlemen obtained the degree of M.D. at the graduation on August 1st. Those to whose names triple asterisks are prefixed, obtained prizes for their dissertations; those with double asterisks, were selected for competition for the prizes; and those with single asterisks, were commended for their dissertations.

Scotland:

Beath, John Henry—On Chronic Lepra Tuberculosa
*Bell, Oswald Home—On Croup
*Campbell, Alexander Dugald—On General Paralysis o the Insane
Carfrae, George Mann—On Scarlet Fever
Carmichael, William—On Rheumatism
Clarkson, Eben—On the Actions and Uses of Tobacco
Clay, Robert Hogarth—On the Gastric Juice

**Coghill, John George Sinclair—On the Structural Relations of the Peripheral Nervous System
Cuthill, James—On Vital Statistics
*Don, William Gerard—On the Statistics of Life and Disease
Edie, Robert—On the Vital Force in Relation to Disease
*Forbes, David—On the Diagnosis of Local Tubercular Disease
**Gilchrist, William—On the Structure of the Spinal Cord
*Gourlay, Frederick—On the Theory of Vaccination
Gulland, Alexander Dudgeon—On the Diseases which were most prevalent in the Army of the East
Haig, William James—On the Causes of Hunger and Thirst
*Hargitt, Henry—On Scurvy
Hilson, Archibald Hamilton—On Inflammation of the Serous Membranes. (Dr. Hilson graduated on 24th March, 1827)
Inkson, James—On Pericarditis
Lidderdale, Robert—On Scarlatinal Dropsy
Macintyre, Alexander—On the Nervous System, and its Influence on the Organic Functions
Mackay, James—On Pneumonia
M'Kinnel, John—On Granular Degeneration of the Kidney
Maclaren, Peter Hume—On the Structure and Functions of the Human Placenta
*MacLaurin, Henry Normand—A Commentary on a Case in Medicine
Meikle, William—On some of the Actions and Uses of Water as a Therapeutic Agent
*Menzies, James—On the effects of Cold on the Human Body
*Milne, George Davidson—On the Anatomy, Physiology, and Pathology of the Biceps Flexor Cubiti
*More, James—On Psychical and Physical Life in relation to the Category of Time
Munro, Seymour Hugo—On Tetanus
Murray, John—On the Bite of Poisonous Serpents
Murray, Patrick—On the Influence of Alcohol as an Agent in Inducing Disease
Nichol, William—On Pus
Pagan, John Mackenzie—On the Tonic Treatment of Erysipelas
Park, James Hall—On the Diagnosis of Tubercular Diseases
Paterson, Alexander Stuart—On Malaria
Pow, Andrew—On the Causes and Cure of Ununited Fracture
Rattray, James Clerk—On the Anatomy and Development of the Placenta
*Scott, Thomas—On the Races of Men
*Simpson, David—On the Prostate, its Physiology and Pathology
Smart, Henry Sanderson—On the Physiological Action and Therapeutic Use of Cold and Warm Bathing
Smith, Philip Broke—On the Causes of Sudden Death
Surenne, James Gabriel—On the Iris
Turnbull, James Somerville—On the Fibrous Tissues
Watson, William—On Fœticide
Wield, David—On Natural Parturition
Woolley, George—On Vaccination
*Yellowlees, David—On Tracheotomy in Croup
**Young, John—On Acute Purpura
***Young, Peter—On the Development of the Eye in the Chick

From England:

*Bennet, Robert—On Facts in Therapeutics
**Cook, William Henry—On the Uterine Leech
*Duffin, Alfred Baynard—On the Pathological and Dynamic Relations of the Eruptive Powers
Frodsham, John Mill—On the Origin of Contractility of Muscular Fibre
Galloway, James—On the Connection between Pulmonary and Cardiac Diseases
Guy, William—On Hysteria
Hill, William Robinson—On the History of some of the Vegetable Tonics
Irving, James—On the Causes of the Circulation
*Jackson, Robert Edmund—On Climate, Health, and Disease
Law, John—On the Temperature of the Human Body
*Lowe, John—On Strychnia
Metcalfe, John Augustus—Can Physical Configuration and Habits descend to Offspring?
Miller, Ebenezer—On Hydrophobia
Miller, James William—On the Diagnosis of Local Tubercular Disease
*Morris, John Thomas—On the Pathology of the Urine
Paxton, James—On Ovarian Dropsy
*Riding, William Steer—On Cancer of the Lung
Stilwell, Henry—On Epilepsy
***Turle, James—On Fractures of the Humerus, and on the Treatment of Fractures in General
Walker, Arthur Abney—On the Comparative Anatomy of the Organ of Hearing in Man and the Lower Animals
Walker, Henry—On the Pathology and Treatment of Gout
Wheatley, Thomas Dalemain—On Phlebitis
Williamson, John Edwin—On the History, Diagnosis, and Treatment of Primary Syphilis
*Williamson, John Newby—On Uterine Hæmorrhage
Wingett, William Browne—On Chloroform

From Ireland:

**Gracey, Alexander Leslie—On Infanticide
Moore, George Bartley—On Retention of Urine

From Australia:

Cox, James Charles—On Icterus Neonatorum
Williamson, Walter—On some Diseases of the Knee-Joint

From Van Diemen's Land:

Wright, Daniel—On some Forms of Articular Disease

From the Island of Ceylon:

Aserappa, Simon de Melho—On Cancer Uteri

From the East Indies:

Cumming, William James—On the Morbid Anatomy and Causes of Apoplexy
Giraud, Byng Thomas—On Functional Diseases of the Heart
Howison, William Young—On Intermittent Fever
*Pemberton, John M'Leod—On Certain Forms of Insanity

From New Grenada:

Dawson, John J.—On Intermittent Fever

From Jamaica:

Todd, William Henry—On Podophylline and its Source
Hamilton, George Albert—On Epidemics

From the West Indies:

***Sutherland, George Sackville—On Malarial Fever

From Nova Scotia:

*Davies, William Henry—On Uterine Hæmorrhage

From New Brunswick:

*Osborne, Robert—On Yellow Fever
Land, John Coates—On Puerperal Mania

From Canada:

Doran, James—On Struma
Sewell, James Arthur—On Typhus Fever. (Dr. Sewell graduated on 19th September, 1856).

HEALTH OF LONDON:—WEEK ENDING OCTOBER 10TH, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London in the week that ended on Saturday (October 10th), is 993. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1007; but as the deaths of last week occurred in an increased population, it is necessary, with a view to comparison, to raise the average in proportion to the increase, in which case it will become 1108. The public health is therefore so far in a satisfactory state that the number of deaths last week was less by about a hundred than would have occurred under the average rate of mortality as derived from the early part of October in former years. The excess of births over deaths is 375.

Diarrhœa, which was so prominent during the summer, is now reduced nearly within its ordinary limit, and, as compared with other diseases of the zymotic class, is third in the order of mortality. Typhus was fatal last week in 57 cases, scarlatina in 52, diarrhœa in 41, hooping-cough in 26, measles in 21, croup in 13, dysentery in 12, small-pox in 3, and cholera in 1. The single case of cholera occurred to a girl of 13 years, at 3, Fisher's Alley, Spitalfields; the illness was of five days duration, and terminated in consecutive fever. Four of the deaths

from scarlatina occurred in the district of Hampstead: of these, two at 16, New End; four of those from measles occurred in the sub-district of Gray's Inn Lane. Cancer was fatal in 19 cases; 8 women died of diseases incidental to child-bearing; 8 infants of inanition and want of breast-milk. A woman in Wandsworth was poisoned by muscles. The four persons whose deaths are returned for the week, and who stand highest in point of longevity, are all widows, two of whom had attained the age of 90 years, one of 91 years, and the oldest is a centenarian, whose reputed age is 102 years. The death of the last occurred at 22, Red Lion Street, Clerkenwell.

Last week the births of 690 boys and 678 girls, in all 1368 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1397.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·357 in. The highest barometrical reading was 29·75 in., at the beginning of the week; the instrument fell to 28·67 in., its lowest point, on Thursday. The mean temperature of the week was 50·7°, which is 1·6° below the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily reading was below the average till Saturday. The highest temperature in the shade occurred on Wednesday, and was 63·4°; the lowest was 41·9°, on Monday. The entire thermometrical range was therefore 21·5°. The mean dew-point temperature was 47·9°, and the difference between this and the mean temperature of air was only 2·8°. The wind was generally in the south-west on the first three days, and was very variable afterwards. There was rain on almost every day; the amount measured was 0·83 in., a great part of which fell on Wednesday and Thursday.

According to an analysis which has been made by Dr. Robert Dundas Thomson, at St. Thomas's Hospital, the composition of the Southwark Company's water taken from the stand-pipe at the cabstand opposite the hospital, was in August 16·28 grs. of total impurity per gallon, of which 1·08 grs. were organic matter. On 7th September, the total amount of impurity was 75·56 grs. per gallon, and of this 5·66 grs. were organic matter. This water in September 1857 was as impure as the dirty water which was supplied to the inhabitants of London in former years, when the water was taken from the Thames at Vauxhall.

Fourteen thousand two hundred and fifty nine persons died in the quarter that ended September 26th. The number exceeds by nearly 200 that of the same period in 1856. But if diarrhœa had not prevailed more in the past summer than it did in 1856, other conditions being unaffected, the present returns would have indicated a superior degree of health. In the last three summers the total deaths were (taking them in the order of time) 13,042, 14,066, 14,259; and the deaths from diarrhœa were 1,258, 1,610, 2,343. The influence of a particular disease in raising the total mortality, which would otherwise be stationary or depressed, is palpable in these numbers; and a like increase is traced in the deaths attributed to complaints of a kindred character, and to some sporadic diseases affecting the alimentary system. Dysentery was fatal in the three summers to 46, 73, and 84 persons; cholera to 106, 131, and 177 persons. To tabes mesenterica 262, 284, 333 deaths are referred; to diseases of the liver 122, 143, 187; and under teething, though the number decreased in 1856 from 141 to 122, it rose this summer to 163. The unusual heat experienced in the first months of the quarter, co-operating with agencies that are more under control, has perhaps been mainly efficacious in producing these results; but with the knowledge that cholera has been lately infesting parts little removed from our coast, it may be conjectured that the epidemic virus extended itself in a milder form beyond the immediate field of action, its advance *in force* being only a question of time and opportunity. The speculation may be futile, but the facts must be admitted, and supply a more than sufficient motive for preparation.

The heat of the last quarter is its most striking meteorological feature, and will be described by stating that the mean temperature was 63·6°, which is 3·5° above the average, and that there was an excess of the mean temperature above its average in 12 weeks out of the 13, and on 71 days out of the 91. The result is a reduction in the mortality of pulmonary diseases, particularly bronchitis and pneumonia; and it will be seen also that cephalitis, apoplexy, and paralysis were less fatal than usual.

Sanitary Progress. The Town Council of Tynemouth, as the Local Board of Health, are adopting prudent measures for the conservancy of the public health. Labourers are cleansing out all the back lanes and alleys in the borough, and an ample supply of quick-lime is kept in depôts in various parts of the town, which is furnished to the labouring classes free of cost for whitewashing. The common lodginghouses are also put under the surveillance of the police, and overcrowding is carefully prevented. Sailors' lodgings are also now licensed. Since 1853 this borough has been thoroughly drained by a system of main sewerage, laid down at a considerable outlay, under the the inspection of a surveyor belonging to the General Board of Health. All the parish graveyards have been closed, and a new general cemetery belonging to the borough has been opened in the suburbs. Since the sewerage has been completed, typhus and other fevers are reported to be less common and fatal. It will be remembered that, while Tynemouth escaped the cholera in 1853—for the six deaths reported were cases brought from Newcastle to the seaside—the village of Howdon Pans was nearly decimated by it. The older portion of Howdon is exceedingly unhealthy; and the River Tyne Commissioners, who hold the principal portion of the property, are about to level it, and raise it and build streets of new and commodious houses. The village will also be well drained. Howdon has had three visitations of cholera. On each occasion the disease, before it became epidemic, entered one particular tenement in an old house, and struck down its first victim. A brief enumeration of a few facts will show what was the result of a little timely precaution, and the exercise of magisterial power in South Shields in 1853. In 1849, cholera broke out in a most malignant form in the common lodging-houses of one particular locality in South Shields—Union Alley. The inmates nearly all perished on that occasion, and the police were obliged to burn the furniture and shut the house up, to prevent the epidemic extending. A short time previous to the appearance of cholera in 1853 in Newcastle-on-Tyne, those lodginghouses were brought under the Common Lodginghouse Act. They were licensed, the number of inmates limited, and they were inspected nightly by the police. The result was most striking. Other dwellings were visited by the cholera in 1853 in this locality and other poor districts of South Shields, and several of their inmates perished; but during the whole of the fearful autumn of 1853, and though scores of poverty-stricken people came direct from the worst infected districts of Newcastle to lodge, not a single death occurred in any of the common lodginghouses of South Shields from cholera.

The Cholera. We know now what class of persons will furnish by far the greater number of victims to cholera, and on what street—it may almost be said on what house—it will descend. The season at which its appearance may be expected is a subject of somewhat less certainty; but the unimportant doubt to which it is open cannot be supposed to affect the necessity of our precautions. On one occasion, after manifesting itself at Hamburgh in September, it has been among us in November; while, on others, it has been held in check for a time by the early advent of a cold season, only to break out at the beginning of the following summer. We cannot predict which precedent will be followed now, but we know that the disease will come; and we can lay our fingers, without the slightest liability to error, on the weak places which it will assail and invest. Were any experienced officer of health to go, for instance, through Manchester, he could mark out every square yard of space on which the disease will probably settle, and trace the course which it will take as soon as the congenial season gives the signal for its rising. If such knowledge as this had been imparted to us without power of averting the danger we must foresee, it is hardly possible that a greater curse could have descended upon man. So far, however, is this terrible state of impotent anticipation from being our real condition, that just as surely as we know when the cholera will burst forth from its smouldering ashes, and where it will make its most destructive ravages, so surely we know how to check its appearance in some quarters, and mitigate its force in all; and the precautions which we may adopt for this purpose will not be superfluous if the visitation which we apprehend should be withheld, inasmuch as they will bar the progress of other diseases which are never absent from among us, and increase the moral as well as the physical wellbeing of society. (*Manchester Guardian.*)

University of Oxford. A Convocation will be holden on Tuesday, the 27th inst., at 2 o'clock, for the purpose of electing a Clinical Professor on the Foundation of Lord Lichfield, in the room of the late Dr. Ogle.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

SANGUINEOUS CYST IN THE THIGH.

Under the care of PRESCOTT G. HEWETT, Esq.

LOUISA R., aged 25, a young married woman, of worn and anxious appearance, was admitted on August 5th, under the care of Mr. Prescott Hewett, on account of a tumour in the left inguinal region. She had been in the Hospital about four years previously, when Mr. Hewett removed a tumour from the back of the left thigh, just above the popliteal space. This was of a fibroplastic character, very soft, and containing a quantity of extravasated blood. It was easily dissected out, the wound healed kindly, and there was no appearance of any disease till two years ago, when she noticed a small lump in the inguinal region of the same side. This was situated rather below the position of the inguinal glands; it was quite hard, and did not increase in size for a long time. Five weeks before admission, it was not larger than a small pear. There were no other tumours in the groin. She had been suffering for several months from night sweats and cough, for which cod-liver oil and acids were prescribed with benefit. As, however, she was uneasy about the tumour, she was requested to come to the Hospital, when a consultation was held, and it was deemed advisable, on account of her appearance and state of health, to postpone any operative interference. She walked home from the Hospital, and two days afterwards, the tumour suddenly increased to the size of a large orange, and was soft and fluctuating. She was seen again, when the tumour was punctured. A large quantity of bloody serum came away, but no solid matter could be felt. A few days afterwards, the tumour had become as large as before, and it was then determined to operate.

Accordingly, on August 6th, she was brought under the influence of chloroform, and a long incision was made into the tumour. A considerable quantity of dark sero-sanguineous fluid escaped, followed by much dark clotted blood. The contents of the cyst having been thus evacuated, the membrane which formed it was dissected out entire. It was exceedingly thin, and was found to lie over and be closely adherent to the sheath of the femoral vessels, which was exposed for some extent in the dissection. There was only trifling hæmorrhage from small vessels. On examination of the cyst-wall, several rounded red projections were seen. These were found to consist of clotted blood enclosed between two membranes; one of them the outer wall of the cyst, the other the lining membrane of the principal cavity.

There were no diseased glands.

She went on very well (with the exception of a transient attack of symptomatic fever) till August 20th. She was, however, very weak, and the suppuration from the wound was rather copious. On that date, the skin around the wound was attacked by erysipelas, spreading down the thigh for some little distance. She was feverish and low, and the back was becoming sore. Under the use of diffusible stimulants, wine, and emollient applications (calamine and lead ointment), the erysipelas subsided in about a week, and the wound began to heal rapidly.

On August 28th, she had a slight shivering fit; and on September 1st, a swelling showed itself in the right nates. This was situated in the subcutaneous cellular tissue, was lobulated and hard, and felt at first very like another tumour of the same character as that operated on. It soon, however, showed evident signs of suppuration; and on the 11th was opened, discharging well formed pus mixed with a little blood. She still remained in a very weak condition. The left lower extremity had remained œdematous ever since the attack of erysipelas, and she complained much of pain in the calf. This part was exquisitely tender, especially in the middle line of the limb. The wound had healed, and the cicatrix did not seem to be making any pressure on the vessels. The œdema and pain in this limb gradually subsided, and the abscess closed after having continued to discharge healthy pus mixed with blood for about a fortnight. It left behind it only a little thickening, which soon disappeared altogether. The opposite (right) leg, however, now began to swell, with the same pain in the calf and tenderness as had been observed in the left. There was also considerable swelling of the calf, apparently from some effusion below the fascia. She was very weak; the pulse ranging above 100, very small. She complained of headache and night sweats, but was free from cough. From the pain and weakness she could hardly raise her legs. The countenance looked pinched and anxious, and she was much wasted.

She left the house on September 27th, and was seen shortly afterwards at her own home. A large abscess had been opened in the right calf, and she was very much improved in health and strength.

REMARKS. The history of this interesting case is so far imperfect that we cannot say at present that the patient is recovered; nor, on the other hand, that the disease is progressing. As, however, she has passed out of the Hospital, it seems convenient to publish the case as far as it has gone. Perhaps another opportunity may enable us to acquaint our readers with its final result. It is difficult exactly to appreciate the connexion which the two tumours from which she had suffered had to each other; or whether their successive appearance, though in the same extremity and in the regular course of the circulation, was not a mere coincidence. The first symptoms pointed to a decidedly opposite opinion. It is true that the original tumour—that at the back of the thigh—had no external characters of malignancy; but numerous observations have shown satisfactorily that even those tumours which are most decidedly innocent in appearance may not be so in their course. The cases recorded by Mr. Paget (*Surgical Pathology*, vol. ii, p. 150) are sufficiently in point, although the structure of those (which he calls malignant fibrous tumours) was not exactly the same as of that in this patient. The woman's general condition also decidedly favoured the idea of malignant disease, recurring in one of its most natural situations. Yet the tumour which was removed from the groin bore no resemblance to any known form of malignant disease. It was merely a multilocular cyst, the areolæ of which were filled with fluid presenting only the usual characters of healthy blood, probably furnished by exudation from the vessels distributed on its interior. On the nature of the morbid process which produces these cysts in the areolar tissue, it seems useless to speculate—whether they arise from chronic inflammation localised by some unknown cause, from aberrant cell-formation, or any other agency. Two other methods of generation were suggested for this swelling; viz., that it was originally developed in the dilated elements of one of the absorbent glands, and that it might be a diverticulum from one of the veins in the neighbourhood. Neither view received much support from the anatomy of the disease, which seemed seated below the position of the inguinal glands on the one hand, and on the other, though lying close to the femoral sheath, appeared separated by it from the femoral vein, and had no connexion with the saphenous; at least, it was cleanly dissected out, without any venous hæmorrhage. It will be seen that its removal was followed by symptoms closely resembling those of phlebitis; but this seemed rather from that latent variety of pyæmia, which is now known to occur much more frequently than used to be

supposed, and for which a sufficient exciting cause would be furnished, especially in so cachectic a subject, by the inflammation necessarily induced by the wound in the immediate neighbourhood of the coats of the vein.

ST. MARY'S HOSPITAL.

CASES OF POISONING BY A MIXTURE OF BELLADONNA AND OPIUM, AND BY OPIUM ALONE.

Under the care of F. Sibson, M.D., F.R.S.

We subjoin short notes of a case of poisoning by belladonna prescribed as a lotion, and taken in mistake, which illustrates the treatment to be employed in an affection happily not common, and the symptoms which an excessive dose of this drug may occasion.

The other case is reported in the words of the gentleman who had charge of it. It is an extreme instance of opium poisoning, and, but for the treatment so vigorously insisted on, would no doubt have proved fatal. Some useful hints may be derived from its perusal for the management of such patients.

Case I. *Poisoning by Opium and Belladonna.* Sophia W., aged 60, was admitted on September 9th, under the care of Dr. Sibson. She had been a patient of Mr. White Cooper, on account of incipient cataract, for which she had been ordered a mixture containing three grains of extract of opium and two grains of extract of belladonna in an ounce. Of this she swallowed an ounce by mistake. This was about noon. Three or four hours afterwards, she began to lose consciousness, "felt stupid, and talked all sorts of nonsense." She was admitted at about 7 o'clock. At that time she was quite delirious, laughing continually. The pupils were dilated, and she went groping about the room as if in search of something. She complained also of double vision. The hands and arms were constantly twitching. She had a peculiar manner of groping at objects quite close to her, such as a wall against which she had run.

An emetic of sulphate of zinc was given immediately, and eight grains of carbonate of ammonia every two hours; and a nurse was in attendance to prevent her sleeping.

Sept. 10th. She felt better. The pupils were still dilated. She was given strong coffee, with broth and milk diet. The ammonia was continued, and some vinegar and water given from time to time.

Sept. 11th. She was much better, but the twitchings still continued, and she had difficulty in swallowing.

The ammonia was omitted, and she was ordered quinine. No fresh symptom occurred.

Case II. *Poisoning by Opium: with Remarks.* By A. G. Lawrance, Esq., House-Surgeon. Mary Ann A., aged 55, married, and mother of eleven children, was brought to this hospital on Friday, September 25th, at two o'clock P.M., with a history of having poisoned herself with laudanum. It appears that she had lately been addicted to drinking; had had some high words with her husband; and went out and bought twopennyworth of laudanum at one place, and a pennyworth at two other places, making an ounce altogether; being then in a state of excitement, she drank it at ten o'clock the same morning, and was brought here about two in the afternoon. When brought in, she was in a state of insensibility, but muttered a few broken sentences; the eyes were staring and prominent, the conjunctivæ congested, and the palpebræ wide open; the pupils were very much contracted, being smaller than a pin's head, and did not dilate when light was removed. She seemed to be quite stiff, could not support herself, and would have fallen had she not been supported by two men. When spoken to and shaken, her answers were muttering, and referring to herself and our treatment; but immediately stupor overcame her. The pulse was slow and full; the breathing also slow, but not stertorous; her countenance was pale and ghastly. There was no gastric irritation from the opium, so as to cause vomiting.

As soon as I was called to her, I immediately washed the stomach out with lukewarm water; the fluid washed out was slightly cloudy from mucus, but not at all discoloured from the laudanum, nor was there any smell of it. Cold affusion was applied to the forehead, by flagellating it with the end of a towel. Cold and warm water were alternately dashed into the face. At the same time she was walked up and down a long passage by two men supporting her by her arms; and as she went along, the forehead was beaten with the towel dipped in cold water. This was continued for half an hour. I then gave her some brandy and strong green tea, which certainly roused her for a short time. The walking was immediately continued again, and stopped after a short time, and strong coffee and fifteen minims of liquor ammoniæ were administered, which seemed to do her more good than anything. The walking was continued, but her legs were useless, and the whole weight of her body fell on the two men, and she was actually dragged along by them. While in this state, I applied strong ammonia to her nose, but with no effect, and she did not even seem to feel it. Strong coffee and brandy were again given, and the walking continued. As she had now lost part of her garments, counterirritation was applied to the nates and back of the legs with a heavy wet towel, and the spine was rubbed with tincture of cantharides until redness was produced; but the latter did not blister her, although well rubbed in. Cold water squirted into the face, and up the nose especially, roused her now more than anything. Strong coffee again was administered, and the walking and flagellation continued until half-past six o'clock, when she began to get a little more sensible, and began to recover. I then put her on a couch, and tried Dr. Marshall Hall's practice, rolling her from side to side about twenty times in a minute; this seemed to rouse her a little. I gave also strong galvanic shocks, but certainly not with the benefit I had expected. Cold and warm affusions now did good; and from smacking the face well with the palm of my hand, and tickling the feet, she derived great benefit. Large mustard poultices were applied to the abdomen and calves of the legs, all of which being continued until seven o'clock, she became more conscious, but still was obstinately drowsy, so that if left to herself one half minute she was fast asleep. She was kept awake by continual shaking, and cold affusions now and then. At seven o'clock she was sent to bed; two nurses watched her, and with difficulty kept her awake until eleven o'clock; she then became fully conscious and spoke, and felt sleepless, and could not sleep all that night. She complained of great pain in the head; the conjunctivæ were congested and chemosed. I applied three leeches to each temple, which relieved her very soon. I desired the nurse to give her four grains of calomel, and one ounce and a half of senna mixture four hours after, and let her sleep, but she did not close her eyes all that night, or the next day, but did the next night.

When examined two days afterwards, there was a dry rhonchus over the back of each lung, which in a few days changed to a series of moist sounds. This, being treated with half drachm doses of antimonial wine and salines every three hours, soon yielded, and she has gone on well ever since: she walks about, and will soon be discharged.

Remarks. As regards the treatment, I think the flagellation for a time acted most beneficially, with the continued shaking whilst being walked about. Cold and warm affusions were also very beneficial, but especially squirting the water into the face and up the nose. Smacking the face with the palm of the hand and tickling the feet almost excelled my expectations. Galvanism quite disappointed me. Dr. M. Hall's treatment at the later stage seemed to do good. Of the internal remedies, coffee, brandy, and strong ammonia, given alternately, were most beneficial, but I think the strong coffee stimulated her most. Leeches, afterwards applied, I think in a measure warded off internal congestion. As no trace of opium could be smelt in the fluid washed out of her stomach, it is likely that it must have almost all have been absorbed, considering she was brought here four hours after taking it. The treatment might have been considered harsh by a bystander, but I think the case demanded it.

ST. BARTHOLOMEW'S HOSPITAL.

I. CASE OF BRUISE OF THE FOOT, PRODUCING GANGRENE AND SLOUGHING OF THE ANTERIOR TIBIAL ARTERY.

An old man, a patient of Mr. Stanley, exhibits an unusual result of simple contusion—viz., sloughing involving the anterior tibial artery. It appears that he suffered from an accident in which the front of his ankle was bruised severely. He consulted a practitioner in his neighbourhood, who examined the foot carefully, and came to the conclusion that there was no fracture. Notwithstanding the attention he received, the parts sloughed, and exposed the astragalus, which became necrosed. Soon afterwards, bleeding occurred, and the artery was tied. A few days after this he became a patient at the Hospital, ten weeks after the accident. A large part of the astragalus was exposed, but the ankle joint was not opened. The destruction of parts seemed too extensive to allow of reparation, and the foot was therefore amputated. The ligature was still fixed on

the artery; the astragalus was extensively necrosed on its surface, and the soft parts destroyed to the limits of the contusion. This seems to have been a case in which the parts lost vitality merely from the mechanical injury done to them, and not in consequence of any morbid action; and this loss of vitality in a large artery like the anterior tibial appeared of sufficient interest to warrant a passing notice. His advanced age and feeble powers no doubt favoured such a result.

II. TREATMENT OF CANCER BY CHLORIDE OF ZINC.

Two of the cases of cancer treated by Burnett's solution, which we have have reported in this Journal, have recently been heard of. One, an old woman of 70, (Ann F., p. 296) is dead—probably of the disease growing again from the wound; in fact, it is doubtful whether it was then fully removed.

Another (Sophia L., p. 623) presented herself the other day in perfect health, with the breast quite soundly healed. Two other cases are now under treatment in this Hospital, of which we hope to give notes when they are sufficiently advanced.

III. NEW BED FOR FACILITATING THE DRESSING OF SORES ON THE BACK WITHOUT MOVING THE PATIENT.

We have had an opportunity of inspecting, at St. Bartholomew's Hospital, a bed constructed to allow of dressing wounds on the back of a patient without disturbing his position, while at the same time it affords him a firm support. This bed is the invention of Mr. Barker, House-Surgeon to the Hospital; and as it may be useful to some of our readers if engaged in the treatment of similar cases, we append a short description of it, and a notice of the case, in which, and those similar to it, it will be found useful. The patient is a female, suffering from iliac abscess after parturition, and from contractions of the hip and knee-joints. There are large sores on the back which require daily dressing; the joints have been forcibly straightened under chloroform, and the limb put on a splint, and therefore the extremity requires constant rest. To fulfil these opposite indications was Mr. Barker's object, which he has endeavoured, and with success, to accomplish by the following contrivance. To the frame of an ordinary iron bedstead, such as is used in most Hospitals, is fixed a stout ticking and mattress, supported on an iron rim, which is fixed to the bedstead by resting on the four short posts, a few inches above the framework. The rim has attached to it on each side two short chains with hooks, and these hooks fit to corresponding rings, which are fitted to an iron cradle, something like that used in surgical wards to keep the bed clothes from pressing on the leg. This cradle is attached to a powerful crane, by means of which the patient's mattress in its frame is raised gently, and without any discomfort, to a convenient height. The bedstead is then pushed away. The mattress and ticking are perforated at the appropriate places by openings properly filled and guarded by straps, for the use of the night-stool, and for the dressing of the wounds or sores. In consequence of the ticking not being laid directly upon the bedstead, the former utensil can be used at any time. The openings being each of them closed by separate straps and pads, each wound can be separately attended to without too large a surface being deprived of support at once.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

REPORT OF OPERATIONS PERFORMED FROM AUGUST 25TH TO SEPTEMBER 25TH, 1857.

Communicated by C. Bader, M.D., Curator.

I. Lachrymal Sac. In four cases of purulent discharge from the lachrymal sac, the treatment by the actual cautery has been employed; all were of long standing. The purulent matter escaped on pressure by the upper lachrymal punctum, the lower was found obstructed close to the sac: in one case, a patient of Mr. Poland, there was the fistulous opening above the tendon of the orbicularis. The changes in the shape of the surrounding bones, the deposit of pus on the enlarged folded sac, the membranous bridges stretching across it, were the same as in most former cases.

In one case the bone was diseased, which made the application of the white hot iron necessary. The number of cases treated in this manner is too small to express an opinion about it. For a minute account of the operative part, and a considerable number of cases, see Desmarres (pages 393-414, vol. i; second edition). For the future, we shall confine ourselves to mentioning the number, duration, and result of the cases treated after Desmarres' method, unless something occurs which deviates from his experience or manner of operating.

II. Eyelids. One case of ptosis of the upper lid was improved by removal of an oval piece of skin: one disadvantage of this method is the not restoring of the fold between the orbital edge and the globe. In a second case of partial congenital ptosis of the upper lid, a skin incision was made parallel to, and about six lines from, the edge of the lid. Out of the subjacent tissue, the conjunctiva included, an oval piece was removed. The edges of this subcutaneous loss of substance were united with sutures and plaster applied to the skin wound. This modification of Mr. Bowman's operation for shortening the levator tendon from within, is expected to keep the lid drawn up, and to remedy the defects of other methods.

Enlargement of the palpebral aperture by dividing the soft parts from the outer canthus to the orbital edge, and with sutures uniting carefully the upper part of the wound, was performed in one case. The same operation, but subcutaneously, has been tried on a second case. In both cases the object was to obviate the spasmodic contractions of the lids complete success attended the first case.

In a case of complete eversion of both upper and both lower lids, with a highly granular state of the conjunctiva or general enlargement of the palpebræ, a large oval piece of conjunctiva was removed close to the palpebral edge of both lower lids. A large triangular piece, comprising the whole thickness of the lids, its base towards the palpebral edge, was removed from the middle portion of both upper lids. There was considerable arterial bleeding from the well fed granulations. Mr. Hulke united the wounds with a needle whose eye, close to the point, ends in a wooden handle. This instrument will be found useful where the pliability of the parts renders the use of simple needles tedious.

In one case of eversion of the upper lid, consequent on disease of the orbital bone, the lid had been sufficiently brought down by a former operation, to protect the eye; to remove the slight remaining eversion a Λ shaped incision was made through the skin including the cicatrix. By dissecting the flap from its apex towards its base, it was rendered movable. The cut edges left by bringing down the triangular flap were brought together with sutures, and the everted lid regained sufficient mobility to resume its normal position.

A pendulous growth was removed from the upper *cul-de-sac* of the conjunctiva. It consisted of organised fibrine, etc., and was modelled into its shape by the movements of the lid; it was caused by a husk which, on everting the lid, was found imbedded in the conjunctiva, where it had been for two months.

III. Muscles of the Eyeball. Thirty-five operations were performed for internal, and one for external strabismus.

Two cases had to be operated after the old plan by dividing all the tissues in front of the sclerotica; these had been unsuccessfully operated on elsewhere. There were numerous adhesions, and considerable inversion of both eyes.

In five cases the eye had to be kept out by a thread. One severe case of internal strabismus is still under treatment; the eye (right) had been so completely turned in these last fifty years, that no part of the cornea was perceptible; the palpebræ moved over a convex vascular red surface. On careful examination, the outer edge of the cornea could be discovered behind the caruncle. After complete division of the muscles, etc., the eye was kept out with a thread. The present result was severe internal strabismus; the whole of the cornea was visible; the patient has no perception of light.

In one case of paralysis of the external rectus, the subconjunctival fascia had to be extensively divided to replace the cornea in the median line.

External strabismus, the result of an operation for internal strabismus, was to have been remedied after Graefe's method by bringing forward the internal rectus. (See his elaborate paper in the *Archiv für Ophthalmologie.*) After having divided the external rectus, an incision was made parallel to, and at the inner edge of the cornea, which divided all the tissue in front of the sclerotic. Following the direction of the internal rectus, the soft parts were dissected of the sclerotic, so as to make them movable on it; instead of (as Graefe does) searching for the muscle, separating and loosening it, etc. Mr. Dixon suggested at the time to bring the whole of the dissected portions forward. A thread was drawn through the conjunctiva at the outer edge of the cornea, and fixed to the skin of the nose, so as to keep the eye turned in for the next thirty-six hours.

In turning it in, the movable portion advanced sufficiently to cover the inner edge of the cornea; it was left to unite in this position. Three weeks later, there was slight internal strabismus of both eyes. The case is under treatment.

If the eye has to be kept turned out, it is done either after Mr. Bowman's plan as mentioned before, or in a modified way, by drawing strong silk through the conjunctiva close to the corneal edge, and enclosing a piece of conjunctiva of about three lines breadth. Both ends of the silk are with a needle carried together from the conjunctiva behind the outer canthus through the skin outwards. A small roll of plaster is laid between both silk threads, and they are tied over it.

If the eye has to be kept inverted, a single thread is carried from the conjunctiva through the inner canthus outwards, and fixed to the skin of the nose, or without being carried through the inner canthus, it may be secured in this way.

iv. Iris. Formation of an artificial pupil was performed in six cases. In all there had been a large central corneal opacity. The cornea was opened with the broad needle; the blunt hook was used. In some cases, the iris was left in the corneal wound; in others, it was snipped off; in all, a large pupillary opening remained.

In a case of artificial prolapse of the iris, for the relief of what is called acute glaucoma, the operation introduced by Graefe has been followed by a very satisfactory result. The man, a patient of Mr. Critchett, injured the left eye three years ago: immediate loss of vision and final softening and squaring of the globe were the results. Six weeks after the injury, when the inflammation had subsided in the left eye, a black speck spontaneously appeared in the right eye, which within three months diffused itself into a general mist; six months later, an inflammation appeared; which, continuing for six weeks, ended with considerable impairment of vision. Three similar painful inflammatory attacks ensued before the patient came to the hospital. The conjunctiva was then very vascular; the cornea slightly hazy. The iris was of a dull grayish blue colour; the pupil large, immovable; the area of the pupil of a dull grayish hue, as if occupied by some disk-shaped exudation. The eyeball was very hard and painful. The patient only saw the shape of large objects. Mr. Critchett, after having removed the left globe, opened the right cornea at the outer edge with a broad needle, and with the blunt hook drew out a considerable portion (one third) of the iris, leaving it in the corneal wound. The grayish hue in the area of the pupil proved to be some kind of membranous exudation thrown out there. As soon as the aqueous humour escaped, it folded up and moved on the inner anterior aspect of the iris. Mr. Critchett considers that the inflammation in the eye is accompanied by so much exudation that its pressure is injurious, and that by drawing out the iris, a kind of filter is established, which, whenever in the course of inflammation the quantity of fluid in the eye would be sufficient to press upon the contents of the globe, allows the injurious abundance of fluid to drain away. Ten days later, the conjunctiva was much less vascular, the cornea transparent, the iris of normal colour, and the area of the pupil black; there was no pain. The patient told the time by a small watch. The patient, before he came to this hospital, had been treated with calomel and opium; and there is little doubt that if no surgical means had been adopted vision would have been lost. This kind of treatment for so-called acute glaucoma being new, I thought it proper to enlarge upon the case, especially since these cases are not unfrequent, and before this have been almost hopeless.

Detachment of adhesions of the iris was performed in eight cases. In all the iritis had subsided. The organised exudation thrown out in the area of the pupil, and more or less at the posterior surface of the iris, causes, by bands stretching from it to the pupillary edge, and to the posterior surface of the iris, irregularity of the pupil. The pupil under the continued action of light contracts as much as the bands will allow; and it is not improbable that they, continually opposing the iris contractions, take some share in the relapses of iritis. The posterior surface of the exudation is glued to the lens capsule. The extent of this, the number, elasticity, strength, etc., of the adhesions depend on the nature of the exudation itself. The operative treatment has shown the facility with which in many cases these pupillary adhesions may be detached from the exudation thrown out on the capsule, and also the exudation from the capsule itself. Mr. Streatfeild has, I believe, first performed this operation at the hospital. He made a small corneal incision with the broad needle; and with canula scissors divided, or with the blunt hook detached, the adhesions, or with the cataract spatula lifted them away from the capsule, by bringing the instrument between both, and gliding it up and down; he then divided the membrane or band. In cases where the whole of the pupillary edge was adherent, Mr. Streatfeild introduced a cataract needle at the pupillary edge through the adhesion, and then used the blunt hook for detachment of the remainder. No case was followed by an unfavourable result. One patient who could only distinguish dark from light objects, read the smallest print after the operation. A second case was much improved. The detachment of these adhesions, considering the transparency and elasticity of the capsule, might in many cases serve as a preparatory step for an artificial pupil, extraction, etc. In none of Mr. Streatfeild's cases had the lens-capsule been injured.

v. Crystalline Lens. Extraction of cataract was performed in six cases. In one case, the iris had been wounded, and, forcibly contracting, hindered the easy escape of the lens: some vitreous humour was lost. In three cases of congenital cataract (children), the capsule was opened with one needle, and the lens was broken up. The same operation was performed on two cataractous lenses of elderly people, aged 53 and 42.

In a case of traumatic cataract, a central piece was taken out of the lens with the canula forceps by entering the eye through the sclerotic close to the corneal edge.

Six cases of false membrane, after extraction, were operated on with one or two needles.

vi. Excision of the Eye. Case i. G. R., aged 32. Left eye. Loss of vision by purulent ophthalmia; the cornea uneven, ulcerating, at several places perforated; the conjunctiva highly granular; the globe soft; severe pain in the eye. The patient has been suffering for one year and a half.

Case ii. L. H., aged 78. Left eye. General ophthalmia, with perforation of the cornea; total prolapse of the iris; severe pain; inability to use the good right eye.

Case iii. W. W., aged 34. Left eye: immediate loss of vision by an injury three years ago. Six weeks after this, a black speck appeared before the right eye, which within three months diffused itself in a general mist. Six months later, the eye spontaneously inflamed; the inflammation continued for six weeks; the eye recovered vision partially. Since then three other attacks of inflammation had occurred in this eye, all accompanied with pain, reducing vision to mere perception of light.

Case iv. X, aged 40. Left eye. (See iris case of Mr. Critchett.) Loss of vision by an injury; the globe soft.

Case v. A, aged 21. Right eye. Loss of vision eleven years ago by an arrow wounding the eye; globe soft.

Case vi. M. P., aged 51. Spontaneous loss of vision in the right eye nine years ago. Four years ago, the eye inflamed, without any apparent cause; the inflammation, with severe pain in the eye and over the corresponding side of the head, continuing more or less. The left eye followed the same course in a less degree; the patient recognises with it large objects. The eye, since the removal of the right one, is much easier—not painful, and with better perception of objects.

Total of major operations.... 90
Total of minor operations.... 104

P.S. The medical officers would be much obliged to any of the profession who, in aid of the museum of the hospital, would send eyes they may hereafter remove, addressed to the curator, who will be happy to return a report of their minute examination. The eyeball ought to be put in *pure glycerine immediately after removal.*

The Vintage in France. The produce of the vineyards in the neighbourhood of Paris, Champagne, Loraine, Alsace, Le Sancerrois, Le Nantais, and L'Orleannais, is equal to that of a good ordinary year as respects quantity, but the quality is vastly superior. In Lower Burgundy the produce is excellent; but in the Maconnais, the Beaujolais, and the Côte d'Or, the crop is not more than half a fair average. The Bordelais, the Gironde, the Dordogne, and the Gers, having been attacked with the oïdium, will not produce more than one-third of an average crop. The Roussillon has suffered still more, and will not give more than a fifth. Languedoc and Narbonnais will not give more than half a crop, in consequence of the late rains and snow. In the Vosges, the vintage has surpassed in quantity and quality the most sanguine hopes of the vine-dressers. In the Vienne, the quantity is deficient—the quality excellent. In the Doubs, there is both quantity and quality. In the Bouches du Rhône, though the oïdium has committed some ravages, the produce is magnificent. In the Hautes Alpes, it is merely tolerable. (*Times*, October 4th.)

Original Communications.

ON THE TREATMENT OF ACUTE RHEUMATISM.

By Thomas Inman, M.D., Liverpool.

On reading Dr. Fuller's work on *Rheumatism*, I have met with so many statements at variance with my own experience of the disease, that I think it right to give some account of the complaint as we have it here, and the effect of the treatment adopted. A difference so wide between my own cases and those reported in London and elsewhere, can only be accounted for on the supposition that there is some essential difference in the complaints described; or, which scarcely seems probable, that there is some error in description and treatment.

My own experience of rheumatic fever commenced in London, at King's College Hospital, where I for some time officiated as clinical clerk to Dr. Budd; and I have a very vivid recollection of the cases we met with there, and the long discussions that were held upon the proper plan of treatment. I increased my acquaintance with the disease when house-surgeon to the Infirmary in this town. Since my appointment of physician to the Northern Hospital, I have had about thirty cases under my care, which have varied greatly in intensity, etc.

Dr. Fuller gives as the average duration of his cases *five weeks*. The average duration of those I have treated has been about *ten days*. The longest case I have had has been three weeks. Dr. Fuller states that he has found those cases progress the most favourably in which the sour-smelling perspirations are most abundant. On the contrary, I have found that these cases resist treatment the longest, and that relief is proportionate to the diminution of the sweating. I am, however, bound to add as a significant fact, that the smell of the perspiration in my cases has never equalled that with which I was familiar in London, and that profuse sweating is quite the exception with us; and a dry skin, and comparatively clean tongue, the rule.

Dr. Fuller considers it advisable to give a daily aperient. I have never found it necessary to interfere with the bowels in any way.

Dr. Fuller has tried lemon-juice in thirty cases, and only found it do good in *three*. I have tried it in an equal number, and found it do good in *all*. Our last two junior house-surgeons came down fresh from London undervaluing it: one of them remarking in a patronising tone, when he heard me order lime-juice for rheumatic fever—"Do you still believe in that drug here?" My reply was: "Yes; and you will do so to by-and-bye." My prophecy was soon fulfilled; and both became enthusiasts in its favour.

As it would be tedious to go into the details of every case, I may sum up by giving an account of the routine treatment now adopted. I began by giving the common commercial lime-juice in every case in doses of half an ounce every four hours, but was rather disappointed with the results: the dose was then increased to an ounce, and the effects were very marked; relief was commonly experienced in twenty-four hours; and I have repeatedly seen a man, so severely attacked that all motion was intensely painful on Monday, walking about the wards convalescent on the Friday in the same week! In very bad cases, attended with immoderate sweating, the improvement is rarely well marked until the end of the first week; and the *first good sign is the skin becoming drier*.

I have only had two cases of cardiac complication: in the first, the rheumatic fever was severe, but the patient was convalescent and walking about the wards on the *fourth* day. He slept near a door, and complained of having taken cold on the *eighth* day after admission; and on examination, I found a systolic bellows sound, best heard at the apex of the heart. He had no return of the rheumatic pains. The disease of the heart was soon subdued. The second case was one where the cardiac disease preceded the other symptoms for three days.

In all cases at the present time, as soon as the disease shows itself as acute rheumatism, the patient is ordered to take as much lime-juice as he comfortably can; and the minimum is to be an ounce every three hours. If any of the small joints—as the hand, foot, wrist, or ankle—are inflamed, a few leeches are applied, which give instant and permanent relief. If no sleep is obtained, a dose of morphia is given at bed-time. I have never been able to find any other result from the lime-juice than a steady diminution of the severity of fever, pain, and sweating, when present. The diet depends upon the patient's appetite. No other medicines are given, beyond those mentioned above. Up to the present time, no patient has quarrelled in any way with the lime-juice; nor have I had occasion to doubt its value. As its success has been so marked, and as there is great reason to believe that much of what we purchase for lime-juice is manufactured, it is my intention, when I have another case, to try the influence of citric, tartaric, and other vegetable acids.

Of the *modus operandi* of the acid, I can form no idea. To assume that it assists in the oxygenation of lactic acid, is to assume that lactic acid is the cause of rheumatic fever, and that its oxide is less potent than the acid itself—a thing of which we have not the faintest reliable proof. As to the poison being eliminated under the use of lime-juice, there is not the smallest evidence, nor is there any more that it is destroyed in the system.

With so comparatively few cases, I have no right to generalise, nor do I feel disposed to do so, as I am aware that future cases may occur that will force me to lose confidence in my present plan. Of one thing I however do feel certain, as much from analogy as from general experience; viz., that the less rheumatic patients are pulled down by depressing remedies, the more rapid will be the recovery, and the less the danger of cardiac or other complications.

TREATMENT OF SCALP-WOUNDS.

By Thomas P. M. O'Donovan, Esq., Mayfield.

The practice of using sutures in scalp-wounds obtains to this day, in mining practice, and is attended with success; but the same surgeon who adopts this practice in a rural district would not do so in towns.

I have used successfully a very simple method of coaptation, which is as follows:—1. Cut off the hair at the edges of the wound, over a space of about one tenth of an inch, at each side of the cut. 2. Tie some of the opposite hairs together. 3. If the hair be too short, tie some pieces of thread to the roots. If the hair be very long, as in a female, it probably need not be cut at all, as it can easily be prevented from intruding into the wound.

The following case was thus treated:—

Case. A. B., aged about 50, an able-bodied miner, received a scalp-wound from a fall of a large mass of earth. The wound was somewhat rectangular, being about four inches in vertical by six in horizontal extent, denuding portions of the frontal, parietal, and temporal bones. On turning back the flap, the surface of the calvarium was found thickly covered with loam and schist. There was an obovate aperture, equal to about a square inch, in the squamous portion of the temporal bone, about two inches above the concha, and parallel with its posterior edge. From the posterior margin of the aperture rough ligamentous-looking tissue proceeded forwards and inwards, apparently to be attached to the dura mater, between which and the cranium were several pieces of schist.

The patient, when I saw him, was sitting in a chair. His general aspect was that of a person much fatigued. The temperature of the skin, and sensation, were natural. The pulse was natural, and the tongue clean. No symptoms were presented by the head, chest, or abdomen. The limbs were weak. The ligamentous-looking formation showed that the osseous injury was of remote date. The man was in perfect possession of his mental faculties, and informed me that his "skull had been broken some years ago, and it was likely I might now see a hole in his head."

The removal of the loam and schist was tedious, owing to the minute particles of schist being embedded on and adhering closely to the cranium, and being deeply imbedded in the angles of the wound. A few fragments lying between the dura mater and cranium were removed. The scalp was readjusted, and rules 1 and 3 were put in practice.

Immediately after readjustment, the hair being combed over the wound, no injury was discernible—obviously a desideratum, especially when ladies are concerned. The wound healed rapidly by the first intention.

Remarks. With regard to the use of sutures, accurate adjustment and not traction should be their object. If traction be used (unless it be very trifling) the result will be ulceration

of the included integuments and reseparation of the edges of the wound, as exemplified in the following case:—

Case. C. D., aged 20, came to one of the metropolitan hospitals, with an incised wound of the left forearm, of about three inches in length, and gaping in midlength about one inch: it was situate over the head of the flexor carpi ulnaris. It reached to the deep fascia. Sutures were applied with traction by a young dresser. It struck me at the time that strapping would have been more useful; and I feared ulceration and separation of the sutures. As I had anticipated, the patient came to the hospital on the third day with the sutures ulcerated out, and the wound as widely gaping as at first.

As to the retraction of integuments neither the size of a wound nor convexity of subjacent osseous surface cause it: it arises chiefly from subjacent muscular contraction, and partly, but *not very powerfully*, in the scalp by cuticular contractility.

A gentleman of very large experience informs me that he has known scalp-wounds, when rapidly healed, to suppurate subsequently, and therefore prefers healing by granulation.

TREATMENT OF CHOLERA BY PURGATIVES.

By James G. Davey, M.D., Northwoods, near Bristol.

[*Read before the Bath and Bristol Branch, Sept. 24th*, 1857.]

A case of cholera has lately occurred in my practice, and I am afforded, therefore, an opportunity of bringing the question of treatment of this dangerous malady to your notice. It is true that a single case is in itself of no great value as a general rule; but I am not without hope that the facts about to be brought forward will be recognised as realising a certain and fixed principle in therapeutics, which we shall do well not only to keep in mind, but to acknowledge as the basis of all and whatever treatment we may adopt in cholera, whether the disease be epidemic or otherwise.

Much has been written, and more said, of late years, respecting the purgative treatment of *cholera asphyxia*. A few gentlemen have contended for the honour of having been the first to introduce and practise it; others have commended the eliminative treatment; but many more have looked with doubt on the utility of purgatives in cholera. These have put their faith elsewhere; and the majority of practitioners have condemned, though prematurely, the treatment named. Drs. Ayre and G. Johnson have given us their views. The first advises small and frequently repeated doses of calomel; the second, half-ounce doses of castor oil. Dr. Ayre fails to perceive that the calomel succeeds only when it happens to act *as a purgative*; and Dr. Johnson is so partial to his oil that he rejects, or did reject, all auxiliary means, as stimulants, etc. However, out of evil comes good. We are indebted at this time to Dr. Johnson for a valuable little book on diarrhœa and cholera, in which he says much that is true and useful, omitting much that was due to his readers. The book I hold in my hand was written in 1834; its author was the late Mr. Twining, surgeon in the Hon. East India Company's Service; and for a long time in charge of the General Hospital at Calcutta. Now Mr. Twining, so far as I can learn, was the first both to advise and practise the treatment of cholera by purgatives—not after an empirical fashion, but on the principle that such were imperatively necessary to substitute "evacuations of a healthy appearance" for those which are abnormal. Unlike Dr. Johnson, Mr. Twining insisted on the use of stimulants; on their aid he relied "to uphold the feeble remains of vital energy, and as it were to resuscitate the patient; otherwise the susceptibility to remedies (purgatives) is speedily extinguished." During the prevalence of cholera in this country in 1832, I lived in the Borough, and was an assistant to Mr. Martin of Bermondsey. Here I saw a very large number of cases. In the course of the following year I found myself at Calcutta, where I had the opportunity of learning the practice of Mr. Twining. I was particularly struck with the results of this gentleman's treatment of his patients, as compared with those witnessed by me before in London. I saw at once that the merits of chalk mixture were as nothing when contrasted with those of purgatives, given discriminately, and backed by other treatment, medical and dietetic.

Case. On September 13th (Sunday), I was requested to meet Mr. Salmon (surgeon), at the house of Mr. ——. The patient, aged 45 (?), used to good living, engaged in husbandry, and addicted to field sports, complained, on the morning of September 11th, of uneasiness in the bowels, with some diarrhœa. He took Seidlitz powder, which acted once, but very freely. This gave Mr. —— considerable relief. On the morrow he felt in his usual health, and went out shooting. Having dined heartily, he drove out for two or three hours. After a light supper, he went to bed at about 11 P.M. At 2½ A.M. he awoke, when the bowels were much relaxed; and, after he had had two or three copious evacuations, great faintness supervened. From 2½ to nearly 5 A.M., the purging and vomiting were incessant; but the renal secretion was altogether suspended. He complained of "cramps" in his legs and "stiffness" of the fingers.

Mr. Salmon saw the patient at 9 A.M. At this time the vomiting and purging had moderated very considerably, but neither had ceased. He complained of painful cramps in the legs and hands, and spoke of a strange sinking pain or sensation across the epigastrium. Mr. Salmon told me that the state of Mr. —— at 9 A.M. was most alarming and death-like; the prostration was fearful. His face was livid, and his features sunken, rigid, and fixed: this lividity was not confined to the face, but affected the extremities and a large portion of the surface of the body, both of which felt coldish and clammy.

I met Mr. Salmon in consultation about noon, when some slight reaction had appeared; the consequence of the remedial means which had been adopted, consisting of mustard poultices, brandy, ammonia, etc. The appearance, however, of our patient was anything than promising. The vomiting had at this time ceased, but a copious rice-water evacuation was ejected before I left the house. No urine was passed. Mr. —— said he felt dying: his voice, too, was of that peculiar character so well known to those experienced in the management of cholera cases. Our first care was to maintain the animal heat, to support the declining vital energies, and to restore the lost tone of all those organs supplied with nerves from the great sympathetic system—in a word, to gain the necessary time wherewithal to secure to our patient the advantages to be expected from those remedies (purgatives) calculated to substitute a normal for an abnormal defæcation. Mustard poultices, bottles of hot water, hot flannels, and such like were put in requisition. Strong beef-tea and brandy, in frequent and small quantities, were given. The following pills were ordered, viz.:—

℞ Hydrargyri chloridi, extracti colocynthidis compositi, āā gr. v. M. Fiant pilulæ ij statim sumendæ.

One pill of this kind was also directed to be given every alternate hour; and, three hours after the first dose of calomel and colocynth, a draught, composed of an ounce of spirits of turpentine and an ounce and a half of castor oil, was prescribed.

I met Mr. Salmon again at 7 P.M. We found Mr. —— better. There had been no evacuation from the bowels for the past three hours; the vomiting had discontinued. The surface of the body was warmer, and had assumed a more natural appearance; the countenance looked better, and had lost much of its sunken and cadaverous expression. He complained, however, of feeling very ill, as well as of great uneasiness over the whole abdomen. He manifested, too, very considerable impatience and restlessness. At this time our patient had taken five of the above pills, besides the draught named; or something like twelve grains of calomel, with the same of extract of colocynth, in addition to a certain quantity of beef-tea, brandy and ammonia, etc. When talking over the facts of the case in the drawing-room, we were summoned in some haste to our patient. He had just passed a few tablespoonfuls of bilious matter from the bowels, and, finding himself directly very greatly relieved, he had sent for us. Mr. —— told us that he felt himself already another man. He had evidently come out of his death-struggle with success; he seemed all at once convalescent. It was agreed that the pills should be continued from time to time, but less and less frequently, according to circumstances; *i. e.*, according to their action on the bowels. Stimulants and nourishment, as brandy, beef-tea, arrow-root, with artificial and external means of warmth, were directed to be employed as they should seem needed.

September 15th (Noon). Since my last visit on Sunday evening, Mr. —— had gone on improving without one untoward symptom. The treatment, as determined on, had been persisted in by Mr. Salmon through Monday, on which day, and up to 6 o'clock A.M., there were five or six large dark coloured (black?) fluid intestinal evacuations; each succeeding one containing more and more bilious matter. The three last I saw; these, by comparison, attested the sure and progressive restoration of the functions of all those organs concerned, either directly or indirectly, in normal defæcation. The excre-

tion of urine had now taken place, after a complete cessation of forty-eight hours. Mr. —— had, in fact recovered.

Remarks. The foregoing particulars I leave with you. I offer you them in earnestness, and yet with all deference to the individual experience and conclusions of gentlemen present. Pray do not prejudge this question of the treatment of cholera; it is one of great importance, involving as it does the health and life of very many now living, and of countless thousands yet unborn. Be assured that cholera statistics are, up to this time, in many respects valueless. You will have seen elaborate tables, long drawn out, prepared to show the comparative failure of the eliminative treatment of this fearful malady; but I would ask you to remember that the castor oil treatment is *not* the legitimate "eliminative" treatment. Such does not constitute the treatment by purgatives, as the foregoing case detailed to you so completely and successfully realises. The statistics of cholera remain to this time to be demonstrated.

INTESTINAL OBSTRUCTION, WITH STERCORACEOUS VOMITING AND HICCOUGH, DURING SEVEN DAYS.

By Jos. C. S. Jennings, Esq., Malmesbury.

[*Read before the Bath and Bristol Branch, Sept. 24th*, 1857.]

Miss A. K., aged 18, of sallow complexion, but with the catamenia regular, came under my care on Tuesday, March 3rd. She had consulted me a few days previously for slight dyspeptic symptoms. I now found her in great agony, with incessant bilious vomiting. I ordered two pills of compound extract of colocynth and blue pill to be taken immediately, followed up by effervescing draughts.

March 5th. On this morning the pills were repeated, with the addition of creasote; but this failing, the following was ordered:—

℞ Pulveris opii gr. j; hydrargyri chloridi gr. j. M. Fiat pulvis 3tiis horis sumendus. Mitte iv.

An enema, containing compound extract of colocynth, was also administered.

March 6th. The same treatment was pursued, but without allaying the vomiting. There were now (10 A.M.) great tenderness of the right hypochondrium, acute lancinating pains, and hard rapid pulse—indeed, all the usual symptoms of enteritis. I therefore had recourse to bleeding, and directed eight leeches to be applied to the painful region.

March 7th. The enemata, with warm fomentations, and the powders, were continued at intervals during the day; but, as no relief was obtained, and the vomiting had become fæcal, I passed up the rectum an œsophagus-tube, to which a pair of bellows was attached by vulcanised India-rubber tubing, and proceeded to inflate the bowels with air until the distension could be no longer borne. This had the happy effect of instantly exciting the peristaltic action of the intestine; and a copious scybalous stool was the result, with immediate abatement of all the alarming symptoms. Some effervescing medicine was afterwards prescribed. In two days the patient was able to sit up, and I found her engaged with her needle; and, though much reduced in strength, apparently in her usual health.

March 19th. I was hastily called on to see her, in consequence of a return of vomiting and violent pains in the abdomen, recurring at intervals of a quarter of an hour. I gave immediately two grains of calomel and a grain of opium; and an antispasmodic mixture, containing compound spirit of sulphuric ether, to be taken every two hours, alternately with a pill containing half a grain of hydrochlorate of morphia.

March 20th. An enema of compound extract of colocynth was administered; and, as the thirst was great, a small quantity of simple effervescing mixture was allowed occasionally. Eight more morphia pills, one to be taken every four hours, alternately with the same containing one drop of croton oil in each, were ordered. The pulse was now small and rapid, but there were no inflammatory symptoms. The vomiting had, however, become stercoraceous, and was ejected with great force and suddenness through the mouth and nostrils.

March 21st. Pills containing one grain of opium were now given after every vomit, and the enemata were continued occasionally. Inflation now failed to relieve the bowels. O'Beirn's tube having, therefore, been passed about a foot, a copious injection of cold spring water was thrown up, to the amount of two quarts; but this also failed to excite any action, although had recourse to three times at intervals. Two-grain doses of opium were now administered in pills, to relieve the very distressing vomiting.

March 22nd, 8 A.M. The vomiting continued. The pulse was very small and rapid; the countenance anxious. Two enemata of cold water were administered without success.

10 P.M. A fermenting mass of yeast, flour and water, was now injected through O'Beirn's tube passed a considerable distance up the bowel, and the opiates were continued during the night.

March 23rd, 12 noon. Great distension had been produced by the yeast which had been retained, but there had been no action of the bowels beyond expulsion of flatus. The pulse was now scarcely perceptible; the throat was dry, with sense of constriction; deglutition very difficult; and the tongue preternaturally red with raised papillæ at its edges. The patient had taken nothing except medicines for two days, and appeared almost unconscious except when spoken to. The eyes were much sunken, and surrounded by a dark zone. Her condition more resembled that of catalepsy. There was also scanty menstruation. I now gave a turpentine enema, and finding after an hour that its peculiar smell could be detected in the breath, I administered the following day, March 24th, at 10 A.M., a similar enema, followed up by inflation of the bowels, and afterwards gave the following pills during a lull in the vomiting.

℞ Olei crotonis gtt. iv; extracti colocynthidis co. gr. viij; pilulæ hydrargyri q. s. M. Fiant pilulæ iv, quarum ij statim sumantur.

Three hours afterwards, a copious stool was passed.

March 25th, 2 A.M. There was a dejection; semi-fluid, containing scybalæ, compressed, riband-like, and fawn-coloured.

5 A.M. Similar stool.

10 A.M. I prescribed aperient effervescing draught to be taken every three hours.

March 26th. The patient was convalescent, and went on well till May 21st, when vomiting returned. A compound colocynth enema was at once administered, and two drops of croton oil with compound extract of colocynth and blue pill were given, followed by a turpentine enema, which produced a copious stool, and all the symptoms subsided.

Remarks. The first attack appeared to be produced by a long walk after an early breakfast, without the usual full midday meal, and a hearty supper of cold boiled beef and a subsequent walk of two miles. I was induced to diagnose intussusception in the first and second attacks, and the peculiar compressed riband-like character of the fæces evacuated seem to favour this supposition. I find a very similar case recorded by Dr. Brittan in the British Medical Journal for January 17th, and another by Dr. Jackson on March 14th, in which the advantage of treating these cases by opium until the tendency to vomiting has subsided, is clearly demonstrated. The means ultimately adopted for the evacuation of the bowel may, I think, be frequently used with advantage, and in some cases where a cataleptic state of the system appears to be indicated.

MALFORMATION OF THE HEAD IN THE FŒTUS.

By Henry G. Trend, Esq., Eye, near Peterborough, late Resident Accoucheur to St. Thomas's Hospital.

During the past twelve months, three almost similar cases of malformation of the head in the fœtus have occurred in my practice; and from their comparative rarity, and the difficulty that was thrown in the way of detecting the presentation, I am induced to lay them before my fellow-associates.

Case I. On September 29th, 1856, about 8 A.M., I was summoned to attend Mrs. J. L., aged 19, a fine healthy-looking young woman, in her first confinement. Her residence not being more than a dozen yards from my own door, I was on the spot immediately, and found her down stairs lying on the floor in a bucket full of liquor amnii and bloody fluid; the women present being all very much excited. I had her carried up to bed, and on inquiry found that she had passed a very good night, and had been first taken poorly when her husband went out to work at six o'clock. On examination, the os uteri was found almost fully dilated, and the finger came against a soft placental-like mass. My first thought was that it was a case of placenta prævia; on further examination, however, I detected higher up posteriorly an uneven serrated edge. I was turning over in my mind what the presentation could possibly be, when a violent pain expelled a male child, and unravelled the mystery.

The child presented a very curious appearance. The whole of the occipital, and both parietal bones, were wanting; there seemed to be no neck; and the face looked as if its lower half were stuck between the clavicles; the posterior portions of the cerebrum and cerebellum, and some of the upper portion of the spine too, seemed wanting. I was very anxious to secure the child, but the friends resisted all my endeavours to examine it thoroughly. The limbs were preternaturally long; the child seemed well nourished, was at the full time, and had not been dead many hours. The placenta came away naturally, and the woman did very well for some weeks; she then caught a severe cold, and died in three months of phthisis.

Case II. About 10 A.M., on June 6th, 1857, I was requested to see Mrs. M., aged 37, who was every day expecting her fifth child. She stated that she had not felt any movement for two days, and complained of a dull aching pain over the whole abdomen; the bowels were very loose, and she was suffering from severe sickness. The abdomen was not larger than natural under the circumstances, and the pain did not seem increased by pressure. The most careful examination did not detect the sounds of the fœtal heart, and there was no placental bruit. I told her I thought the child was dead, and ordered the following mixture.

℞ Confectionis aromaticæ ʒss; liquoris opii sedativi mxxiv; ætheris chlorici ʒiss; syrupi simplicis ʒiij; aquæ cinnamomi ad ʒvj. M. Fiat mistura, cujus capiat cochlearia ij magna 4tis horis.

She was somewhat better in the evening; but the bowels being still very loose, and the pain rather severe at times, I ordered her to continue the medicine, and take the following pills at bedtime.

℞ Hydrargyri chloridi gr. iij; pilulæ saponis comp. gr. v. M. Fiant pilulæ ij.

She passed a very comfortable night. About ten o'clock the next day labour commenced, and the child, a female, was born just as I entered the house It presented almost the same appearances as the one in the last case; but it had been evidently dead longer, and was not so well nourished. The placenta caused considerably difficulty, so that after waiting an hour, I introduced my hand and took it away; the chord was very tender, and the placenta disorganised.

About three days afterwards she had an attack of peritonitis, which however speedily yielded to the usual treatment by leeches and calomel.

Case III. On Friday, October 9th, 1857, about 10 A.M., I was called on to attend Mrs. H., a young woman, aged 23, in her first confinement. On inquiry, I found that she had been poorly most of the night, and the membranes had ruptured about an hour previous to my coming in, discharging several quarts of liquor amnii. An examination showed the os uteri dilated to about the size of a shilling, high up, thick and cushiony, with pains about every half hour; but no presenting part could be felt. I left, giving directions to be sent for when the pains were more severe and frequent. I was again sent for about eight o'clock in the evening, and on examination found what at first struck me as being a shoulder; it, however, seemed too sharp and pointed for that; in fact, I could very satisfactorily make out what the presentation was not. After a very careful examination, I discovered one ear, then the other, and having passed up my finger as high as possible posteriorly, it came against the mouth. This at once satisfied me that it was a natural presentation, with some malformation, the only thing confusing about it being the great prominence of the eyes. In about a quarter of an hour, a female child was born, exhibiting the same peculiarities as in both the preceding cases. The child in other respects was a fine one, well nourished, and had evidently not been dead long. The after-birth soon came away; and the patient is now going on well. I might mention that she had an abundant supply of milk, and that the breasts were very painful, so I thought it a favourable case to try the belladonna as recommended by my esteemed friend Dr. Goolden. Accordingly, on the third day, I painted a little of the extract with a feather around the nipple, as far as the areola extended, and on my visit the following morning, the result was almost miraculous. There was no milk; the breasts had resumed their ordinary size; and there was not a vestige of tenderness. She told me that the application had caused a slight smarting, but that in other respects she had felt no inconvenience.

Remarks. I cannot pretend to assign any cause for the curious *lusus naturæ* exhibited in the foregoing cases. My friend Mr. Beecroft, a retired medical man, residing in the village, saw the first and last cases I have related, and can testify to the difficulty caused in ascertaining correctly the presentation. I very much regret that in neither case was I able to secure the fœtus for an accurate and satisfactory examination. It seems remarkable that in all three cases, the malformation should have been of the same character, and that the children should in all other respects have been well formed, and have lived up to a very short time of their birth.

EXPERIMENTS UPON DOGS WHEN UNDER THE INFLUENCE OF STRYCHNIA, CONDUCTED BY THE LATE DR. MARSHALL HALL.

By John Sloane, M.D., House-Surgeon to the Leicester Infirmary, etc.

It is well known that, some years ago, Dr. Marshall Hall proposed tracheotomy as a remedy in some forms of epilepsy and other allied convulsive affections. To quote his own words, "There are two cases of epilepsy in which the propriety and efficacy of tracheotomy admit of no doubt. The first of these is the *epilepsia laryngea*, of inorganic origin, in its early stage, threatening mind or life, not yet involving organic change; that is *spasmodic* laryngismus and its effects. The same remark applies to other convulsive diseases, puerperal convulsion inclusive. The second is the *epilepsia laryngea*, proceeding to coma and *paralytic* laryngismus or stertor, augmenting the coma, and endangering life. The same remark applies to coma left by other convulsive diseases, and to all kinds of *simple* apoplexy; that is, apoplexy without lesion or rupture of vessels, deep intoxication, narcotic poisoning, etc."

In May 1854, when visiting his relatives at Nottingham, Dr. Hall performed the following experiments at the General Hospital, in the presence of most of the medical men of the town, with the view of ascertaining the effects of tracheotomy upon dogs in which convulsions had been induced by strychnia. He stated that strychnia caused convulsions more closely resembling epilepsy than any other agent with which he was acquainted; and he was of opinion that, by observing the effects of tracheotomy in the spasmodic paroxysms produced by strychnia, much might be learned regarding the influence of his proposed remedy over epileptic convulsions. Dr. Hall directed, and seemed very much interested in, these experiments; and I can never forget the singular zeal and devotion of this distinguished man, whose recent death our profession and suffering humanity have to deplore; who, while afflicted with an incurable disease, which forced him to relinquish a most lucrative practice, at a time, too, when he had achieved a world-wide reputation,—laboured perseveringly and most successfully to extend the boundaries of science. I had the honour of being requested to note the results of the experiments, of which I shall proceed to give an abbreviated description.

A tenth of a grain of acetate of strychnia was given to a terrier bitch on a piece of meat. As no visible effects were produced in a quarter of an hour, the dose was repeated; but the strychnia this time was given in a pill made with mucilage. After the lapse of fifteen minutes, spasmodic action began slightly; the tail was flexed, and drawn between the hind legs; and the animal walked about uneasily, with the nails protruded, so as to cause a rattling noise as she wandered over a boarded floor. In ten minutes she began to pant, with open mouth, and assumed a position as if wearied with running. A minute afterwards, a tetanic spasm occurred, which shortly passed off; and the dog was placed on a table, over which she walked unsteadily for two minutes, when, by a sudden spasmodic action of the muscles generally, she was thrown from the table. The tongue, in the fit, was livid. After it was over, she generally kept her mouth open, and panted; when the mouth was closed, the panting ceased; she lay upon the table on her side, with the legs extended. The respirations were 280 in the minute; the pupils extremely dilated; but, upon examination four minutes afterwards, they had become normal. Mr. Booth Eddison performed tracheotomy, after a method proposed by Dr. Marshall Hall. The skin over the windpipe was drawn into a fold, and divided with a pair of scissors, of which both the inner and outer margins of the blades were sharpened; but there was a projecting shoulder upon the outer edge of the blades, at a short distance from the points. The scissors were next passed between the rings of the trachea, and the handles drawn asunder. An instrument made of silver wire, of due strength, having been so bent alternately eight times, and united at its extreme points, as to form a tube-like cage, was

then inserted into the opening, to keep it patent. Spasms continued during the operation. As Mr. Eddison could not get the cage satisfactorily inserted, the edges of the opening in the trachea were kept asunder by a pair of dressing forceps. Ten minutes after the operation, it was noted that there was a copious fluid secretion flowing from the mouth; the spasms were less severe; the muscles not so rigid; panting continued. The wound was then closed with the fingers; dyspnœa became more urgent; spasms increased. Three hours after the administration of the first dose of strychnia, with no tube on the trachea, the dog was in rigid general spasm; head raised above back; fore legs extended at right angles with body; hind legs drawn backwards; tail hung rather loosely; sometimes right hind leg remained for a short time relapsed, but was soon drawn out rigid again with a jerk. She would then lie comparatively relapsed for two or three minutes, till seized with another spasm, which usually continued for about two seconds, and quickly passed off. An increase of spasm could be excited and kept up by blowing on or touching the animal. A considerable quantity of watery fluid had flowed from the mouth, and some urine had been passed. Towards death, the spasmodic rigidity gradually lessened, and the paroxysmal exacerbations became less prolonged. She died three hours and a half after having swallowed the first dose of strychnia. Shortly after death, the tongue was very livid, and the muscles were rigid. Twenty hours after death, there was some *rigor mortis*. The right side of the heart contained much blood; the lower lobe of the right lung was engorged.

In the second experiment, the dog died in the first convulsive fit, which was very severe, before the windpipe was opened. There was much *rigor mortis* the day after death.

On *post mortem* examination the right side of the heart was full. Both lungs were dark coloured and collapsed.

The third experiment did not differ very much from the first, except that the windpipe was opened, and the cage fixed in its place, by Mr. Thomas Wright, before the spasmodic paroxysms began. During the convulsive attacks, it was observed that the pupils dilated; when the muscles became relaxed and the breathing easy, the pupils contracted to the normal size. The value of an opening in the windpipe, in modifying the paroxysms, was tested in the following manner. When a violent fit came on, a plug of sponge, which had been placed in the opening in the cage, was removed, and the fit lasted for fifty seconds afterwards. In a short time, the dog had two other fits, decidedly less severe, and which lasted for a shorter time. The sponge was again inserted, and there was a series of jerks, succeeded by a severe fit, in which breathing was suspended for thirty seconds, very little for fifteen more, and then the dog appeared to be dead. The plug was removed, and almost immediately he began to revive; and, after passing through another fit, panting again came on. In the last fit, when the plug was out, suspension of respiration only lasted for five seconds. By a repeated resort to these expedients, and uniformly with similar results, the beneficial effect of a free opening in the trachea, in the spasmodic paroxysms produced by strychnia, was amply tested and proved. The dog died, however, with the cage in his windpipe, and the opening in it free. At the *post mortem* examination the right side of the heart was found to contain rather more blood than the left.

Remarks. The last experiment proves that, in the spasmodic convulsions produced by strychnia, there is some laryngeal obstruction, as the paroxysms were mitigated by the existence of a free opening in the windpipe. In a case of poisoning by strychnia, benefit would be derived from tracheotomy, although this operation alone would not appear to be sufficient to save the patient's life. The danger caused by laryngismus would be averted, but not the greater and fatal danger arising from spasm of the respiratory muscles.

The manner in which strychnia destroys life is still a vexed question. Whether death is caused by exhaustion, by laryngismus, by spasm of the respiratory muscles, or by failure of the heart's power, is not yet determined. Exhaustion could hardly have been the cause of death in the dog the subject of the second experiment, as more than five minutes did not elapse from the first seizure with tetanic spasms till his death. Laryngismus was not the cause of death in the dog last experimented upon, because, when he died, there was a large and free opening in his trachea. Dr. Pavy is of opinion, from experiments described in *Guy's Hospital Reports*, that death is always caused by asphyxia from spasm of the respiratory muscles. In a dog in which violent spasms had been induced by strychnia, he kept up artificial respiration for twenty minutes; and, during this period, the heart acted vigorously; but, when the respiration was discontinued, the heart's action soon ceased. He performed a similar experiment upon a rabbit with a like result; and he believes, and I think rightly, that other observers failed to prolong life by artificial respiration, from not having removed the influence of the strychnized muscles by cutting through the cartilages of the ribs and opening the chest, so as to allow the lungs to collapse and expel the air they contain. It would also appear from these experiments that strychnine has no direct effect upon the heart, and that its action is arrested because of the cessation of respiration. The right cavities of the heart, in the experiments which I have described, contained more blood than the left, indicating death by asphyxia.

FATAL INVAGINATION OF COLON, ETC.

By John F. Nicholson, Esq., F.R.C.S., Stratford Green.

I was called, on March 8th, 1856, to see a male child, eight months old, at the breast, that had never been ill until the last two days. On the evening of March 5th, it was laid down asleep by its mother, who soon afterwards heard an unusual shriek, and found that it had vomited. It kept crying, and drawing its legs up to the abdomen as if in pain. It took the breast eagerly, and vomited; the milk curdled almost as soon as swallowed. The bowels had been moved twice during the day, and the motions appeared healthy. It now passed a small greenish motion without straining. One of Steedman's teething powders was given, but it was immediately rejected. The child continued crying and screaming during the night, and was carried in the morning to an intelligent practitioner, experienced in the treatment of children. He considered it to be a case of serous diarrhœa, and prescribed an aromatic chalk mixture. The symptoms continued unrelieved, and on the following evening, I found the child drowsy but unable to sleep owing to sudden seizures of pain, causing contortions of the face and jactitations of the extremities. It constantly retched, and vomited directly whatever was given to it. There was great prostration, a tendency to pallor and coldness of the surface, an exceedingly quick thready pulse, and dry brown tongue. Twice only during the day it had passed apparently without much effort a small quantity of a grumous slimy matter, a mixture of blood, serum and mucus, without a trace of feculent matter. The mother stated that nothing but this kind of matter had passed since the child fell ill, with the exception of the greenish stool passed on the evening of March 6th.

The nature of the case was not clear to me, but it appeared to possess more the symptoms of dysentery than of ordinary diarrhœa. I prescribed a warm bath, Dover's powder and grey powder, and a sedative mixture. The child became more tranquil, and was thought better by its mother, but this arose from increasing exhaustion: it was too prostrate to cry. The vomiting continued unaltered; there was no abdominal tenderness, nor perceptible enlargement; and the belly was normally plump and flaccid. An irruption of a profuse perspiration, a slight flush, apparently less suffering, and involuntary discharge *per anum*, succeeded, and death at last closed the scene after sixty hours of suffering.

Post mortem appearances twenty-four hours after death. The body was fat and healthy. The abdomen was not distended; there was about an ounce and a half of clear brown serous fluid in the pelvis. The peritoneum seemed softer than natural; but not a trace of lymph nor other inflammatory product was observed. The bowels generally were empty; and, more especially below the umbilicus, redder than usual.

The colon was only to be found on the left side, and before reaching the sigmoid flexure for about ten or twelve inches this gut appeared to be distended with fæcal matter, which stopped abruptly just above the point where it enters the pelvis. The upper and middle portions of this obstructing body were thickest, and at its termination it gradually contracted into a round point. On tracing the colon upwards, its transverse portion was apparently twisted upon itself, so as to drag down the gall-bladder and hepatic vessels and duct. Here the ascending colon was lost to view, and not a trace of it could be seen on the right side. A part of the ileum, the whole of the cæcum, the ascending and part of the transverse portion of the colon were invaginated, and where the gut was apparently twisted upon itself was the commencement of the inversion. The finger could be passed into this opening down the side of the gut as it passed within. The

whole was carefully removed; and, on making an incision into the lowest portion upon the obstructing body through the coats of the colon, the inverted mucous membrane was seen of a dark chocolate colour, and covered with a thick grumous, offensive matter, exactly similar to what passed *per anum* before death. The membrane generally was like strangulated intestine, and covered with an albuminous exudation. There was thus presented an even uniform surface of a closely packed, sausage-shaped body: on drawing this out of the intestinal sheath and putting it upon the stretch, it exhibited a regular plaited appearance, from being so firmly compressed, each plait was matted to its fellow by the albuminous secretion before named. On cutting through this dark invaginated body longitudinally, it presented four different membranous surfaces, with the intervening muscular and cellular tissues, namely, two peritoneal and two mucous, the latter being most external. The appendix vermiformis cæci was lying compressed at the lowest portion of the mass, and within the cæcum several inches of the ileum were seen lying collapsed and flattened, forming the very centre of the intussusception, and in all probability the commencement of the displacement.

Remarks. The intussusception, therefore, comprised three portions of intestine: first, several inches of ileum, as the centre or nucleus, were drawn into the cæcum, which contracted upon it; and lastly, both these were sucked onwards into the colon, which formed, as it were, the investing envelope or covering of the malposition. The peristaltic action of the bowels, doubtless, tends to increase such a displacement, and if continued long enough with violent tenesmus, would cause the invagination to protrude *per anum*, as has been noticed in some instances.

Emetics have been recommended as likely to afford relief in these cases, but on grounds that seem to me unreasonable; for first, in what way can they act beneficially? And secondly, as vomiting is always present, and perhaps the most painful symptom, what good can be gained by provoking additional emesis, and aggravating the distress and suffering which are so quickly exhausting to the vital powers? The mechanical treatment by shot and quicksilver is, at any rate, unscientific, if it be not barbarous and cruel,—for even in the dead subject I defy any impression to be made in a favorable direction. It must always be a point of doubt and uncertainty in which direction the invagination has proceeded, whether retrogressive towards the stomach, or progressive towards the anus; for, according to the course taken, the shot ought to be administered, viz., in the opposite direction, if it can ever be of any service. Injections of warm water, if they can be retained, which scarcely ever happens, may afford some comfort, if no positive replacement follows their administration. But in such a case as the one I have described, there can be no resource available but gastrotomy. Considering, however, that the symptoms during life are not sufficiently precise and clearly marked to determine the nature of the malady (which, in most cases, a necropsy only reveals), surely he will be accused of exercising more rashness than careful judgment, who exposes his patient to the risk of an operation, the chances of recovery from which it is scarcely possible to appreciate or define. Opium, in its fullest influence, seems to promise happier results; for it not only alleviates pain, and renders the last hours of suffering more tolerable, but it may, by relaxing spasm, counteract the abnormal force which has caused, and still keeps up, the displacement; while in the less serious cases, at any rate, we may hope by its means to stop the further progress of the malady, and enable nature to regain her lost power, and once more establish the equilibrium of the vital forces.

INJURY OF RIBS AND LUNGS: SIMPLE TREATMENT: RECOVERY.

By Francis Davies, Esq., Pershore.

On August 8th, 1856, I was requested to see J. Collins, a lad fourteen years old, who had been leading a cart, loaded with one ton and a half of gravel, drawn by two horses, *down a slope* into a farmyard belonging to the late F. Woodward, Esq., Bricklehampton Hall. The boy, in checking the horses, got jammed in between the post and the cartshaft. The father said, "If the shaft had been a pecked un, it would have been *threw* him." The point of the shaft, which was blunt and bound with iron, took the boy under the left scapula, and fairly jammed him against the post point-blank; the father being obliged to back the horses before he could release the boy.

On examination, I found a lump on his back, as large as half a cocoa-nut; and it felt like a bladder full of dominoes. It expanded with every inspiration, and left a most unpleasant crackling under the hand. He expectorated a large quantity of blood, of a brilliant colour, and very frothy. The skin was cold; the pulse feeble, 120.

I placed two soft napkins on the swelling, and bound him as tightly as I could with a four-inch flannel bandage. He felt much relieved; his breathing, which was very difficult, was much improved by the application of the bandage.

I went up to the Hall, and remained there four hours. On returning, I found the boy tolerably comfortable. I sent him blue pill and hyoscyamus in a pill, and digitalis and nitrate of potash in a draught.

It is useless to detail the daily treatment. He got well without one bad symptom, and was in the church in a fortnight.

This case may be useful to students, as showing that the heroic plan of treatment is not always necessary in extensive injury to the lungs. To older practitioners, it will only show what immense mischief nature will repair with very little assistance.

Reviews and Notices.

Report of the Surgical Staff of the Middlesex Hospital to the Weekly Board and Governors upon the Treatment of Cancerous Diseases in the Hospital on the Plan introduced by Dr. Fell. Printed by order of the Quarterly Court. 8vo. pp. 114. London: Churchill.

The joint authors of this report doubtless found no easy task in addressing the Weekly Board and Governors upon a plan of special treatment, to be on the one hand scientifically accurate, and on the other sufficiently untechnical to suit the occasion. The difficulty of their position has been, however, well met; and the result of their labours reflects on them great credit. It is remarkable for its candour, and offers a most satisfactory justification of what was stated of these gentlemen, Messrs. Shaw, De Morgan, Moore, and Henry, in the review of Dr. Fell's *Treatise*, published in the number of the British Medical Journal for June 27th, as follows:—

"We must not conclude without referring to the conduct of the surgeons of the Middlesex Hospital. These gentlemen have been, in our opinion, most unjustly reflected upon in connection with this affair. Their names alone should have shielded them from all imputation of wrong. There are not to be found in the profession men more honourable and high-minded than they, or men in whose hands the dignity of the profession would be more jealously guarded. We are thoroughly satisfied that whatever they have done, has been done conscientiously, and as duty dictated; '*fais ton devoir, advienne que pourra*' has been their device. The subject demanded their cognisance, and they investigated it. There were *proofs* that Dr. Fell had eradicated tumours in a novel way; that he had operated with an unexpected degree of success in cases which Hospital surgeons had refused to touch. The Middlesex Hospital had wards specially appropriated to cancer; and their founder had particularly desired that investigations of this nature should take place there."

But to turn from the authors to the report itself. First of of all, what does it say of Dr. Fell's "remedy"—of the sanguinaria—applied locally?

"For the purpose of destroying cancer, it appears to be practically inert. No single fact that has come before us would arouse the suspicion that constitutionally it has any effect, one way or the other. Under this, as under previous modes of treatment, cancer retains its notoriously malignant character; that is to say, its capacity for spontaneous and destructive growth in its primary seat, for obstinate recurrence after what has appeared to be the most complete extirpation, and for progress, if not for reproduction, in other and, it may be, distant organs of the body. The degree of that malignancy has varied in different cases. Each case has had, and maintained throughout the period of our observation, a character of its own, a specific character, as distinct and appreciable as we have been accustomed to recognise in similar cases which had been subjected to other treatment, or to no treatment at all.

The use of the sanguinaria has not altered that character. It has impressed no new or unusual feature upon individual cases; nor, consequently, has it produced, in the whole of them looked at together, anything like an uniformity, an approximation to one character, such as would be expected from the universal employment among them of one single remedy. All these cases have followed known habits of cancer; and the inference from this fact necessarily is, that the sanguinaria root exerts no curative power over the constitutional nature of cancer.

"Whilst avowing our present judgment of the inefficacy of the blood-root in the management of the cancerous diathesis, we see no objection to further and much more extended observations of its effects in that disease. It is evidently a powerful remedy, and as an emmenagogue, is, perhaps, equal to any drug now employed in England. But our hope of its usefulness in cancer is very small; and that becomes less still, when we remember that Dr. Fell himself never suggested that patients should continue the constitutional treatment after the extirpation of the local disease and the healing of the wound, and never advised the use of the sanguinaria-pill in cases of internal cancer, or of those external malignant tumours which were rejected as unfit for local treatment."

The share of virtue belonging to the sanguinaria being thus disposed of, we may fairly consider the action of the escharotic paste as that of simply chloride of zinc; and the surgeons of the Middlesex Hospital may be congratulated on the extended and carefully-made series of experiments with this invaluable agent, carried out through the means placed at their disposal by the Whitbread endowment. Let us quote from the report on this point—namely, on the action of the paste.

"The action of the paste, and the rate of its progress through different structures, varied considerably. Skin, as we have said, yielded little and slowly; contrasting strongly in this respect with the rapidity with which the subcutaneous cellular tissues were penetrated. Healthy breast tissue, and that of the chronic mammary tumour, were easily and speedily destroyed, as well as the soft superficial layers of cancerous ulcers. * * * Nerves yielded the least readily of all the natural tissues to the action of the paste, and seemed to retain their vitality even in the substance of the deepest layer of the eschar." (p. 21.)

The shrinking of the mass during the application of the caustic was very remarkable.....

"It was plain from observing the incisions, that the shrinking occurred in that part of the tumour which had been destroyed by the paste. The effect of this shrinking upon the remaining and more deeply-seated part of the disease, constitutes one of the most valuable facts brought to light by this treatment. For the deep prolongations of the disease are actually by this process of slow shrinking and contraction of the more superficial eschar, brought within reach of the treatment, when at first they appeared hopelessly beyond it."

Armed then with the remedy, and applying it after the manner recommended by Dr. Fell, what are the advantages to be gained? The report says:—

"By the invention of the method of introducing caustics by gradual incision, a very important advantage is gained: it admits to the benefit of treatment an entirely new class of those who suffer from cancer—a class hitherto almost universally abandoned, at least in England—we mean, patients precluded, by the judgment of the surgeon, or it may be by their own choice, from the use alike of the knife or of ordinary caustics. In the cases now reported on, the majority of the patients were of that class, and in none was the value of the treatment more conspicuous. The average of pain was in these very patients the least: and nothing could be more striking than the contrast between the distressed condition of such patients before they were treated, and their comparative ease afterwards; healing sores or temporary scars taking the place of fœtid, tender discharging, and constantly growing masses of cancer. Every such patient restored to comfort, and with life prolonged, is a witness to the value of this treatment; and we cannot but esteem him happy, who could thus suggest and adapt to practice a method by which life and ease are extended to many persons previously without hope of either. That there are still cases so virulent in their malignant character, or so far advanced towards a fatal termination, as to be beyond all help, does not detract from its merit. This plan of treatment is a clear advance upon the past, and may not only be itself improved, but may be the way to more extended blessings upon a class of the community now signally distressed." (P. 27.)

A passage in some respects curiously parallel is to be found in Mr. Ure's paper on the Treatment of Cancer, in the *London Journal of Medicine*. Speaking of the employment of chloride of zinc as an escharotic, Mr. Ure says:—

"It is especially useful in the instance of cancerous sores accompanied with bleeding fungosities, and fœtid ichrous discharge. Ulcers of this nature, 'the mere despair of surgery,' have thus been brought to cicatrise; although the cure be but fleeting, still a few months of calm and apparent health are no little boon to a patient so circumstanced."

The authors of the report thus would appear to attribute to the peculiar mode of applying the caustic, advantages which others would claim for the caustic itself. Our subject is not, however, to discuss questions like these, but rather to offer such a *résumé* of the report, as may enable our readers to form an independent opinion. From the section headed "Comparison of this mode of treatment with that by the knife," we extract the following:—

"With regard to the numerical results, hitherto observed, in respect to the aggravation and recurrence of the disease:—twenty-one of our cases appear to have been adapted for the use of the knife; one of them was aggravated by the introduction of the paste, and was soon discovered to have been originally unfit for any treatment. In two of the cases, disease appeared behind the pectoral muscle, while still under treatment. The tumour was extirpated in ten patients, but in three of them cancerous tubercles formed in the adjoining skin, and a fourth has returned to the hospital, after an absence of three months since the wound healed, with a fresh tumour in the substance of the breast. One patient was sent home for a few weeks, it being doubtful if any disease remained or not. The remainder are still under treatment.

"It is in regard to this important question—the interval that may elapse before the return of the disease—that we necessarily feel the need of further observation of the cases; since time only will allow of a complete comparison between the two modes of treatment. No delay, however, is required for concluding, from the numbers just given, that in this point of view the new plan of treatment is not superior to that by the knife. There has already been a return of the disease in four out of the fourteen completed cases, and a failure in extirpating it in three others out of the whole number of twenty-one. On the other hand, looking to the character of the recurrent disease, neither can we say that the newer mode is proved as yet to be inferior to the knife." (P. 45.)

The report concludes by a strong opinion in favour of Dr. Fell's modification of treatment, and an estimate of his deserts:—

"Cancer, in its constitutional nature, remains as ruthless and as unassailable as ever. Chloride of zinc may, or may not continue to be used for the destruction of the local disease. But the advantage placed in the hands of surgeons by the invention of gradual incisions, claims henceforth their very frequent adoption in the treatment of cancerous tumours, as well as a grateful acknowledgment of the ingenuity of their inventor."

This is warm eulogy indeed. Will future experience ratify this very liberal acknowledgement of Dr. Fell's services? We are afraid not. Be that as it may, Messrs. Shaw, De Morgan, Moore, and Henry may rest assured that the profession in general will, without hesitation, yield to them the honour of having *conscientiously* performed their duty. At the same time, we cannot say that they have acted with due discretion. As, however, we have alluded to this subject more fully in our leading article, we need not enlarge on it further at present. We must not omit to add, that the details of fifty cases are appended to the report.

The Structure and Functions of the Eye, illustrative of the Power, Wisdom, and Goodness of God. By Spencer Thomson, M.D., L.R.C.S.Edin. pp. 272. London: Groombridge and Sons. 1857.

Dr. Spencer Thomson has here produced a little work which will not only afford to the people with anatomical and

physiological instruction regarding the eye, but will tend to raise in their minds a feeling of admiration at the numerous evidences of designed adaptation of structure to function, evinced in the organ of vision. The descriptions given are correct and clear; the work is illustrated with thirty-one figures (several of which represent the microscopic structures of the eye) taken from modern authors; and the concluding remarks of the author, while capable of comprehension to most minds, are pervaded by a philosophical spirit. We heartily commend Dr. Thomson's book to our non professional as well as our professional readers.

British Medical Journal.

SATURDAY, OCTOBER 24th, 1857.

"OH! WHAT A FALLING OFF WAS THERE!"

Iterum Crispinus! Dr. Fell is once more before the public, and this time solemnly reported of by the surgical staff of the Middlesex Hospital. So now the whole comedy is completely played out, and the collapsing bubble at length fairly burst. As we have assisted at some of the phases of this remarkable performance, we cannot refuse to be present at the closing act of it, and to utter our modest funeral oration over the closing scene of so strange and eventful a history. The history may perhaps be made to point a moral. If so, may the lesson not be forgotten by those whom it concerns!

The hero of the tale is now well before us, with all his properties—paste, puccoon, pills, puffs, patrons, praises, and public trials. All the *pièces* are before the court; and we may this time, at all events, proceed to judgment, without fear of being told to wait a little longer—until the grand experiments were fully perfected.

We need not repeat the original history of Dr. Fell and his cancer notions. All the world knows it. We shall rather improve the occasion, as we have said, by extracting the moral, if so it may be, out of this, the last stage of it.

When commenting, long since, upon this subject, we were compelled to ask, in heaviness of spirit, whether pathology was not a mere empty pretence? The question was natural enough at the moment; for did we not behold certain masters of our art—so called heads of the profession—fostering, harbouring, encouragingly patting on the back, and benevolently patronising a downright quackery, instead of dealing with it according to the rules of Hippocrates, and judging of it by the light of our acquired principles of pathology? What avail is it that you great ones, we said, teach the pale student to use up his time, his talents, and his oil, in acquiring a mastery of the principles of his business; when you, the high moral teachers, throw them all quietly to the dogs, at the very moment in which they should have served you as tests, and shining lights to help and guide you to the right? We confess that, for a moment, we began to think of our acquired knowledge as the good bishop did of his body. He, with a well conditioned animal frame, doubted of his corporeal existence; and so we, with a goodly stock of hard won knowledge, came to doubt the *principia* in which we had trusted so fondly.

Time, however, is a wonderful purifier; and Science is ever justified in her generation, and so at length is she in this matter. We have a right, we think, to stroke our beard with some degree of unctuous complacency here; for, when so many of the world were running wild about the wonders of this invention, we ventured to test its value by the aforesaid principles, and, having so tested, declared it to be full of vain pretences. Nay, we may even be bold enough to say that, eight months ago, we wrote as full, as true, and as correct a report of the worth and the efficacy of Dr. Fell's treatment of cancer, as is given in this authoritative judgment lying before us. And this we shall take the liberty of now showing, not for the purpose of gratifying our personal vanity, but, as before said, to prove that the principles of pathology are not vain empty things, but solemn, honest, practical guides to truth, which don't deceive him who wisely trusts them.

But, first of all, we must explain one word that stands above—the ill bred term "quackery". To use it in such fine company seems highly improper; but what is to be done, if truth is to be out? "Amicus Platonis," etc. All we can do is to define our meaning, and so our definition will be our apology with those who see straightly; and if it hit not the case in hand, then do we stand convicted of a gross *inconvenance;* otherwise, not. What we mean, then, by quackery, is the using and administering of a secret remedy, puffing it the while as a wondrous agent, and falsely ascribing to it, when administered in particular diseases, the possession of curative powers above all other existing remedies. This is what we mean by the word; and which of the terms of the definition fails to be complied with in the case in hand? Let his own selected judges condemn Dr. Fell.

The secret remedy was puccoon. "Therewith," said Dr. Fell, "I not alone eradicate the local tumour, but I also destroy the constitutional taint of cancerous direase." Hear his judges: "The sanguinaria is inert;" "Cancer, in its constitutional nature, remains as ruthless and as unassailable (*sic*) as ever." The secret method, again, was comparatively painless. Hereon listen to the Report: "As a general rule, it [the pain] was severe at some time or other in every case." "After ablation by my manipulations, and after my internal administrations," said the American, "cancer rarely returns." "No delay is required for concluding, from the numbers just given, that, in this point of view, the new plan of treatment is not superior to that by the knife." Dr. Fell by puccoon alone removed tumours, he asserted; to which his admirers answer: "For the purpose of destroying cancers, it [puccoon] appears to be practically inert. The metallic is confessedly the efficacious part of the paste."

And thus, then, feather after feather is stripped by no unfriendly hand from the false and gaudy plumage of our hero. But still enough of it is left, as the report declares, to hide his nakedness and even to adorn his person: "The last peculiarity of this treatment is the practice of incisions; and we are of opinion that this is its only, but its very great merit." Now, eight months ago, without the aid of clairvoyance, we summed up Dr. Fell in exactly similar terms, and we believe the reporters themselves might have done so then, as well as now. Our language, of course, was not so select, as is theirs. "Here then," we wrote, "is the fact reduced to its simplest terms, and stripped of all hazy romance. The situation of Dr. Fell before the profession is clear and definite. *He has no new cure for cancer, but only a new method of removing the local tumour.*"

The reporters add on this head: "But the advantage placed in the hands of surgeons by the invention of gradual incisions, claims henceforth their very frequent adoption in the treatment of cancerous tumours, as well as a grateful acknowledgment of the ingenuity of their inventor." This, we think, from the details given in the report, that all will admit. Since, however, we wrote the above verdict on Dr. Fell, a new claimant, other than he, has been started with no mean pretentions, to the honour here implied as due; and it is a most unfortunate circumstance that the reporters themselves have not distinctly stated which of the parties it is, on whom in their opinion the grateful acknowledgment should be bestowed. We naturally incline to the belief that their reference is really to Dr. Fell, for such serious names, as those appended to the report, would hardly be guilty, on an occasion like this, of a *mauvaise plaisanterie;* but still we are forced to admit, as another competitor for the honour of these incisions is distinctly in the field, that the words as they stand in the report will fit him equally as well as they fit Dr. Fell.

We shall not stop here to discuss this question. Anyway, it is certain, that Dr. Fell has brought the method prominently before the profession at this moment, and that the surgeons of the Middlesex say that it is a good method. The manner in which Dr. Fell has done so all the world now knows; so that the amount of honour he deserves for his labours each one may calculate for himself. To him somewhat more or less of the article can be of little consequence; he is, as we understand, placed in a position far above the reach of our small artillery; from whence indeed he can, in serene calmness, smile upon any feeble efforts of praise or dispraise. It was a happy moment for himself, when he held aloft, before the eyes of an admiring world, the famed puccoon, and shook its "showy snow-white leaves." He dazzled thus the sight of many a one; and on himself has descended from the blossoms, no fabled Jove, but real brilliant golden showers.

Thus, for the meanwhile, all ends well, as a rightful comedy should end. The world has had his say and is, we hope, contented. The hero himself drives off the stage in his gilded chariot, amidst the joyful acclamations of the chorus. His admirers claim a word of thanks from the audience for having introduced so brilliant a star upon the scene. Science alone looks ill at ease; abashed and humbled, she turns her back upon the business, and calmly leaves the stage—no place for her.

THE WEEK.

We have hitherto refrained from noticing the absurd notion which seems to obtain in some quarters, that the Waterloo Bridge tragedy is, after all, only the hoax of some medical student. That the public should have for one moment entertained such a solution of the mystery, is a proof of its profound ignorance of medical students, and of the arrangements in connection with our anatomical schools. To listen to the penny-a-liners in the public papers, it may be imagined that there was no such a thing as the Anatomy Act, and that subjects were as easily obtained as dead dogs; whereas, any one who knows anything about the matter is well aware that medical students have no more facilities for obtaining dead bodies than other people. It is the province of one public officer to distribute to the different schools, in proportion to the number of the students, the "subjects" that have died without being claimed in the different workhouses, prisons, and hospitals; and he could no sooner dispose of one of this ghastly number without detection, even if he were inclined so to do, than he could make away with the man when alive. Let us further remark, that the season for the commencement of anatomical studies had scarcely commenced when the contents of the carpet bag were discovered; it is therefore impossible that they could have been the remains of a body which had undergone the manipulation of students, putting out of view the fact that students do not hack flesh and saw bones as the flesh and bones of the murdered man were hacked. The penny-a-liners, having been driven from the medical-student-hoax view of the subject, nevertheless insist upon the student in medicine having a finger in the pie. For instance, the gentleman who does the marvellous for the *Morning Advertiser*, boldly states that a man who wore clothes answering to the description of those found in the carpetbag, was last seen alive in the company of a medical student in a tavern at midnight. We do not believe that the writer intended to convey the grim inference, that the student had anything to do with the murder; but the public will most certainly draw that inference. We beg to protest in the most indignant manner against the way in which the character of medical students is thus trifled with by men who write often for a dinner, and who put on paper the promptings of their own gin-inspired brains, totally regardless of the injury they are calculated to do to the students of an honourable profession, who, we will venture to say, conduct themselves as well as those of the sister professions.

Alas for the progress of medical science in Austria, and alas for the intolerance of that ancient Catholic Empire! The *Times* of Monday, in its foreign intelligence, states, that "*In future no Protestants are to be appointed chief physicians or professors in the General Hospital of Vienna.*" This regulation is, of course, one of the fruits of the Concordat lately concluded with Rome. We had fondly imagined that the spirit which sent Galileo to prison, had given place, in these milder days, to the progressive feeling of the age, but we are unfortunately undeceived; and in Austria, at least, medical science can only be allowed to play its part in public when associated with the Catholic faith. Let us imagine this order,—so intolerant, so unjust, and so hurtful to the cause of science,—put in force by the church in England. Let us imagine the several eminent Catholic professors of medicine, at present filling posts in metropolitan hospitals, abruptly dismissed,—but we cannot possibly even imagine such an injustice, and we therefore refrain from enlarging upon it. There are among our readers, we know, many Catholics who will deplore, equally with ourselves, this absurd and deplorable injunction against their brother professors of Vienna who may happen to belong to the Protestant faith.

"That doctors differ," the world has gone on tritely remarking for ages. Why the poor doctors should be stigmatised for their disagreements, we never could exactly understand, seeing as we do that everybody seems to disagree with everybody, and that lawyers and divines have been at loggerheads since the beginning of time. We did not expect, however, to find the

classical world falling by the ears with each other as we have done the last week about such an insignificant thing as the formation of a new word from the Greek. Shall a telegraphic message be designated a telegram or a telegrapheme? It shall be telegram, says "First Class Oxford." It shan't, says "First Class Cambridge;" it shall be telegrapheme. As you will, gentlemen, only say nothing in future about doctors differing. If we may be allowed to interfere for one moment between the contending parties, we would say, the public will settle this matter, and not you. When we see the middle clipped out of our old names, Gloster made out of Gloucester, Ciceter out of Cirencester, and all long-winded proper names, such as Cholmondeley, disembowelled in order to suit the railway speed of modern times, we do not think that John Bull will be very likely to chew over such an outlandish-looking word as telegrapheme, when the short and handy telegram is already put in circulation by such an organ as the *Times*.

The character of Nena Sahib is certainly a study to psychologists. We read an account of his former life, which certainly contrasts strangely with the atrocious deeds he has lately performed. This incarnate fiend, we are told, was known to be so tender hearted, that he could not read certain verses of Byron without crying, he exhibited a sensibility on all occasions that astonished the straightforward Britons with whom he associated. It is said that he was deeply in love with a young English lady who died of consumption, and that he deplored her loss with the most passionate outbursts, calling upon his "fair Margaret" to return to him. It may seem strange that such ultra sensibility should be found in the same person who so lately astounded the civilised world by his cruelties; but those who have studied human character have observed, that this extreme sensibility is by no means inconsistent with horrible outbursts of cruelty. Robespierre was as tender and gentle as a child at home, and Marat was anything but a savage person in his private relations. Indeed, extreme sensibility in a man would seem to be a disease—an hysteric symptom, which may be developed into a brutal disregard of humanity.

A half-yearly general meeting of the members of the Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity, was held on October 14th, D. Henry Walne, Esq., V.P., in the chair. After reading the minutes of the several transactions during the past half-year, the members unanimously passed a resolution approving of the proceedings of the Court of Directors relative to the decease of the late lamented Sir Charles Mansfield Clarke, Bart., M.D., F.R.S., the president of the Society since the year 1844; and further expressing their own deep sense of the great loss which the Society on the one part, and the profession and the public on the other, had sustained by his removal. Sir Charles's incessant exertions to promote the welfare of the Society, his skill in his professional career, and his great amiability and moral excellence were severally dwelt upon; and it was determined that the resolution should be published in the *Times* newspaper. A new form of law was read a first time, setting forth, in memory of the munificent legacy of £5,000, duty free, bequeathed by the late Thomas Copeland, Esq., a scheme for granting extra relief in certain cases of grievous bodily or mental affliction. It was reported also that the late president had bequeathed £500 to the Society. We observe that the grants for relief by this Society amount to about £1,700 a-year; yet that out of nearly two thousand five hundred members of the profession eligible to become members of the Society, about three hundred only actually belong to it. Its powers of doing good, therefore, are very much limited, while destitute widows and orphans of our deceased professional brethren abound in all directions; but for them this Society exists in vain, because their deceased husbands or fathers have declined to subscribe the sum of two guineas a year—a small sum, compared with the privileges they obtain. This is difficult of belief, but it is a fact deeply to be regretted, yet never forgotten; for the books of the Society show that about one in seven of its members deceased and withdrawn, or one in five of the deceased only, leaves a widow or a whole family dependent upon the Society.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, October 1857.

MEETING OF COMMITTEE OF COUNCIL.

Held in Birmingham, on Tuesday, October 12th.

Present:—Sir C. Hastings (in the Chair); Mr. Eddison; Mr. Griffiths; Dr. Johnstone; Dr. Lyon; Mr. Michael; Mr. Solomon; Mr. Stedman; Mr. Waters; Mr. Watkin Williams.

The following resolutions were unanimously adopted:—

That Professor Christison be requested to deliver an Address either on Therapeutics or the Action of Poisons, at the next annual meeting of the Association.

That Professor Miller be requested to deliver an Address on Surgery.

That Professor Simpson be requested to deliver an Address on Midwifery.

That a monthly list of Paid Subscriptions be published in the Journal.

That the forthcoming List of Members be arranged in counties.

That a distinguishing mark be appended to the names of those members who shall have paid their subscriptions up to as late a date as practicable.

That the Secretary be requested immediately to apply to all members in arrear, and to inform them that the above mentioned list will be published.

That a proof copy of the List of Officers and Members of the Association be sent to the Branch Secretaries, for correction, a week prior to publication.

Charles Hastings,
Philip H. Williams.

Worcester, October 1857.

Reports of Societies.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

[*Continued from page* 874.]

Section of Public Health.

INFLUENCE OF HABITATION ON THE COMMUNITY. BY W. H. MICHAEL, ESQ.

The evils resulting from overcrowding were augmenting, for our population increased at a rate much more than commensurate with house building. What, then, was to be done to check the onward flow of this tide of disease and crime? The Public Health Act was inefficient even where it was in exercise. It might prevent new buildings of the same character; it was powerless with the old. It dealt with the apparent; it was too often afraid to touch the real, and it never could do its work efficiently for the public until the interior, as well as exterior of houses, were somewhat under the control of efficient medical officers, whose duty it should be to prevent, not to cure disease. The truism that "Every Englishman's house is his castle," might serve well to turn a period; but owners of property must be taught that no property could be held for private gain at the cost of a great public wrong. This, however, and a great many other truths the public were not prepared to receive. Sanitary reformers were looked upon by the great mass of the people as amiable enthusiasts. Many years also, it was to be feared, would be required to persuade the public that sanitary improvements were the greatest boon it was in the power of the authorities to bestow; but until this public opinion was created, legislation would prove, to a great extent, inoperative. But should it become general only to allow two-thirds of property to be built upon—to afford proper and well regulated inspection of houses, and generally to afford efficient relief in the way of ventilation, drainage, and water supply, it would be a noble result of the labour bestowed in this cause.

HOUSES FOR WORKING MEN: THEIR ARRANGEMENT, DRAINAGE, AND VENTILATION. BY THE REV. C. HARTSHORNE.

In the course of his remarks the lecturer referred to the well-planned cottages built by the Prince Consort, particularly twenty in Windsor Great Park. Since 1851 Mr. Gore had caused 100 new cottages for labourers to be erected on the lands belonging to the Crown. There were upon the Duke of Northumberland's estate 592 bondagers' cottages, and 787 cottages for independent labourers. His Grace had extensively repaired and made equal to new 250 cottages at an expense of about £55 each, and erected 210 new ones at a cost of £120 each, making a total outlay upon 450 cottages of the large sum of £52,700; and large works of this kind were still in progress. Earl Spencer had erected 87 new cottages at a cost of £15,220, or £190 each. The Duke of Bedford had built in Bedfordshire and Buckingham 282 cottages; in Devon and Cornwall, 190; in Cambridgeshire and Northampton, 72; in Dorsetshire, 22; making altogether 566; showing an expenditure of £62,680, besides a large sum for repairs. The average interest paid upon the expenditure on these cottages was computed not to exceed 2½ per cent.

DENSITY OF POPULATION AND LOCALISATION OF DWELLINGS. BY H. W. RUMSEY, ESQ.

Were we, Mr. Rumsey said, to stop short at the palliative stage? Could no advance be made in a preventive direction? Could nothing more be done than was doing so imperfectly to remove the obvious and admitted cause of atmospheric vitiation—namely, the density of town populations? The area of the London division of the English population allowed in 1851, on the average, 30 persons to the acre, or 160 square yards to each of its 2,362,000 inhabitants. But this average allowance of space gave little idea of the real crowding of particular districts. In the East London Union 290 persons were pressed into an acre, allowing 17 square yards to each—about one-tenth of the average metropolitan space. Even grouping the four central districts, the East and West London, the Strand, and St. Luke's, the average was only 19 yards to each. In our parsimonious use of land for buildings we had neglected a most important sanitary regulation—namely, the separation of houses. It was a law of the Twelve Tables, one in force during the best days of Rome, that no two houses, whether the *domus* of the nobility or the *insula* of the common people, should touch. A space of not less than five feet was to be left between them; but in our great cities we were not satisfied with uninterrupted lines of houses, but prevented the possibility of postern ventilation by a *dos à dos* arrangement. He argued that more direct interference was needed on the part of the State. Meanwhile a great social crisis might occur; and when the time for moderate measures of prevention had perhaps passed, the very persons who now cried out against State interference would be the first to denounce the Government for past supineness, and to drive it into arbitrary and desperate measures. Sound political economy would, he believed, justify national intervention in this state of things. Such legislative provisions as were in force for aiding agricultural drainage might be applied to the advance of capital necessary for the erection of well-ordered suburban villages. No expulsive process nor forcible extradition of the poor should be permitted in towns; perhaps not even stringent prohibitory laws against undue crowding, however desirable their object, should be enforced until the State, or the capitalist under legal sanction, should have supplied proper accommodation for the scattered and houseless thousands. Even if large national advances were required for the inauguration of such a reform, would a people which unhesitatingly sacrificed £20,000,000 in one vote merely to shorten the duration of a colonial slavery certain of extinction—a people which no less willingly spent £80,000,000 in two years to protect a distant ally, and to adjust a hypothetical balance of power in Europe—would such a people refuse a bold outlay to effect a thorough social reform at home,—a reform which must incalculably increase the happiness, security, and wealth of the whole community? He could not bring himself to believe this. All that was wanted was the directive mind. Instead of expending million upon million in rendering densely-peopled districts more safely habitable, let the dispersion of the compressed masses be cautiously and gradually promoted. Let open and elevated spots, of good soil, climate, and water supply, be selected for occupation. Let wide streets of detached double cottages, not more than two floors in height, be built on these sites, so as to afford, on the average, sixty square yards of surface to each inhabitant. And to complete the project let railway transit be provided (on fresh lines, if necessary, and of a simpler and far less expensive kind than that now afforded) for the conveyance of working people to and from the commercial depôts or manufacturing establishments where they might be employed. Under recently-discovered economical processes, without reckoning on future improvements of this sort, the total cost of railway conveyance need not equal the difference between the rent of a rural cottage and a set of rooms in some confined city dwelling. Then would the city workman possess his little plot of garden, the charm of the English cottage, while his own vegetable

produce would both economise and improve the diet of his family.

Lord Stanley (President of the Section) pointed out as a subject for consideration, as well as those which had been submitted, the indifference of the former class to ventilation. As affecting health, the habits of the inmates and their insufficient supply of food must be looked at, as well as the character of the houses in which they lived. It would not do to draw a contrast between the different number of deaths among the rich and the poor, and then ascribe the difference to the overcrowded dwellings.

Mr. A. Helps pointed out as obstacles to improvement—first, our dire familiarity with things close to us and about, which seemed to require a continuous stream of talent, so to speak, directed upon them, to awaken and fix our attention; next, the tremendous ignorance generally prevailing on this subject; and thirdly, the peculiar ignorance of members of Parliament. [*Laughter.*] He had noticed with the greatest possible pain that whenever measures had been brought forward, prepared with great care and after long study, some person—probably a metropolitan member—steeped in ignorance to the lips, made some foolish objections, perhaps called the minister Jack Cade [*laughter*], and caused the loss of the measure. One practical suggestion he had to make: he was excessively anxious to bring before the public in some way which they could not ignore the effects of a vitiated atmosphere. Was it not possible for scientific men to invent an instrument which should show the vitiation of the air? If an instrument could be stuck up in the theatres to mark this in a way which would impress itself forcibly upon the popular mind—as, for example, that in the Princess's, it stood at 30, in the Lyceum at 25, and so on—a great good would, he believed, be attained. He would leave Greek scholars to invent a name for such an instrument—perhaps the stenchometer would do. [*A laugh*]. People would soon believe in it; and even members of Parliament, with such an appeal to their senses, might perhaps be won over to believe in the existence of the evil which they were now considering.

Mr. Slaney, M.P., cautioned those present against encouraging the idea of too much State interference in the construction of houses.

The Mayor of Hull (Mr. Moss) remarked on the obstacles thrown in the way of sanitary improvement by the remissness or ignorance of local boards of health, illustrating his remarks by reference to the borough with which he was connected.

Mr. Cowper, M.P., said the main difficulty experienced in sanitary legislation was not to prevent men from doing certain things which they ought not to do, but to compel them to do something which they ought to do. Now, he very much feared that in the existing state of public feeling they would entirely fail in enforcing a system of compulsion upon local bodies. Upon these points they must trust to the common sense and the gradually increased knowledge of the persons charged with the local execution of sanitary arrangements.

Mr. H. Austin feared that railways could not be relied on for carrying the working classes from their places of labour to suburban residences. He believed that by properly constructed dwellings workmen and their families might be healthfully accommodated in the numbers now found upon a given area in the metropolis. The system of flats in dwellings would be the true solution of the over-crowding difficulty.

After observations from Dr. Farr and Dr. Conolly—

Lord Stanley observed, that though it might be thought they had great cause to complain of the conduct of many boards of health, still they were bound to remember that this sanitary subject was comparatively a new one to the community in general. A great deal of indifference, or what looked like indifference, was really mere ignorance. Information propagated itself very slowly in this country, and that very fact was in the end the best security for its permanence when established. As to compelling local boards, except in the most extreme cases, to take upon themselves the responsibility of action, he agreed with his right honourable friend (Mr. Cowper) that whether this was justifiable on grounds of policy or desirable in itself, it was simply impossible. You might interfere by a general law to prevent a thing being done, but to compel a body of men to act against their own opinions, would obtain no satisfactory result.

SOME OF THE DEFICIENCIES OF SANITARY LEGISLATION AND ADMINISTRATION IN ENGLAND AND WALES.

BY H. W. RUMSEY, ESQ.

The time had arrived when they might reasonably call for something like philosophical legislation on the whole group of questions, when the *membra disjecta* of hygienic law might be reclaimed and connected, when the incoherent and abortive attempts to remedy particular insalubrities might yield to something like a system of sanitary pandects worthy of so great and intelligent a nation. The sources of past legislative error might generally be traced to those contracted and defective views of State medicine which prevailed not only in Parliament and among the people, but in the medical profession itself. One evidence of popular misconception on this subject was, that laws which were intended to regulate not one-tenth part of the matters included under the title were called "Public Health Acts". The effect of this bestowal of a generic designation upon specific measures was a direct injury to the cause they advocated. The unthinking majority were led to identify the question of public health with town councils and town sewers; and both these often proving nuisances as impracticable as those they were intended to remove, the whole subject was proscribed, while the amendment and codification of sanitary law, including the organisation of an effective official corps for their execution—reforms of incalculable moment to society—were treated as details of mere local management and inferior interest. Instead of limiting sanitary measures to towns, the whole of Britain should be included in sanitary districts. Were this done, he believed the legislature would find no difficulty in restricting the application of great structural works to certain parts or wards of those districts. Among the reasons which might be urged against conferring measures of public health to separate communities within defined boundaries were the following:—1. The rapid extension of the areas of towns with a greater diffusion of their populations (the main point to which sanitary reforms should tend) must render those boundaries a constant subject of change, dispute, and litigation. 2. So long as the adoption of a Public Health Act was optional with the inhabitants of any circumscribed spot, strong efforts would be made by a parish-vestry party to exempt their little sphere of petty authority from legal responsibility. 3. The actual condition of some of the excluded districts, especially those immediately surrounding the jurisdictions of existing boards of health, imperatively demanded their inclusion. 4. All analogy was against restricting laws of general benefit to particular places. The administration of justice, the management of the poor, the religious (he wished he could say the secular and industrial) education of the people, were happily not confined to places in which they were called for by the inhabitants. What would have been the result of limiting that great and beneficial social reform, the Poor-Law Amendment Act, to parishes which petitioned for its adoption? What would be thought of a Constabulary Act which enabled certain districts avowing themselves to be particularly honest, moral, and quiet, to claim freedom from visits of the police? Peculiar to this country was its method of constituting local administrative bodies—a method which immensely aggravated the evils inseparable from isolated and densely peopled jurisdictions. Instead of admitting a representation of all classes of the people from all sorts of localities—instead of infusing a leaven of disinterested and cultivated thought, speech, and action, into the local boards—the right of membership was by law confined to those whose private interests were often involved in maintaining the density of population and other local causes of physical and moral degradation—to persons, therefore, who could seldom have wholly escaped the moral infection of their corrupted social atmosphere. The sole personal qualification required for the arduous task committed to them is that either of owning property of a certain value or of paying rates to a certain amount. No security whatever was taken by the Public Health Act, or the Metropolitan Management Act, for the possession of higher qualifications—mental competency, philanthropic zeal, freedom from interest in existing abuses, or special knowledge of the arts and sciences concerned in public hygiene. He was far from doubting that many of our local boards, however strangely constituted, had done much for the sanitary improvement of their towns. He granted that the rough and ready method of the Anglo-Saxon often led to a result much more satisfactory than could have been expected from the process; but it was also no less certain that many remarkable blunders, absurd or lamentable, or both, had been committed by the new local boards; and the general impression was unfavourable to their efficiency. Consistently with these primary defects in our system of local organisation was the adoption by the legislature of the singular principle that, unless the inhabitants should voluntarily accept the reform, an

excessive death rate must be shown before the Act could be applied. He (Mr. Rumsey) contended that the execution of laws for the prevention of disease ought not to be delayed—a sanitary organisation ought not to be refused—until circumstances had arisen manifestly to shorten human life.

Mr. Simon observed that it was for the people rather than Government to bring a proper pressure to bear upon local bodies disinclined to carry out the requisite sanitary measures. He would venture to state what appeared to him some very obvious propositions which occurred to him on this subject. First, primary rudimental sanitary powers should be possessed all over the land; no place should be without the powers necessary for its own protection against preventible disease. Then, he also thought it requisite that in this country the exercise of those powers should be by local elective authorities, subject to the least interference, the least central control, consistent with the due protection of unrepresented interests. What were the unprotected interests? What was the due protection which should be afforded them? These were questions of detail admitting of discussion; but about the accuracy of the general principle there could be little doubt. One such interest was the interest of life. He heard much of a rate-paying interest, for which he had great respect; but life was a great interest too. Many lived, and, alas! many died, who were not ratepayers. The interests also of posterity, bound by the mortgages of local boards, should likewise be considered; and an appeal to some central authority was indispensable for the protection of those interests. In other words, local authority, as it had full swing so long as it did not burden posterity, should come to Government to sanction the purpose for which the mortgage on posterity was to be applied. Then there was another principle for which one might contend, namely, that any place which the Government believed to be unduly unhealthy should be examined and reported on. It was a matter of notoriety that there were parts of the country where the death-rate was double that in other districts. Three-eighths, or about 40 per cent., of all our deaths were of children under five years of age. But this mortality varied greatly according to district; for while in some places children had a reasonable chance of life, in others they died three times as fast. Then look at the long list of preventible diseases. In the seven years from 1848 to 1854, 20,000 deaths a-year occurred from typhus. Then 135,000 deaths were assigned to the epidemics of cholera. This was in England and Wales. Now, where evidence existed of these preventible diseases prevailing to an undue extent, he thought a certain responsibility devolved on Parliament. If members of Parliament had occasion to go among courts and alleys in the towns they represented, they would not perhaps, as they sometimes did, call the statements of medical men exaggerated; but unfortunately there were no votes in courts and alleys. Though, however, Parliament could not inquire by means of individual members, it might inquire through a department. Such an inquiry should be made, not with a view to coercion, but in order that the facts might be before the public. He would have this inquiry instituted whenever the death-rate in a particular locality was above the average of the country for the time being. These were obvious principles, which might be acted upon without any undue encroachment upon the liberty of individuals, corporations, and local bodies. As far as he could judge, nothing was so desirable for the welfare of the country as that there should be vigorous local government. The greatness of England depended, no doubt, in an infinitely great degree upon what had been done by corporations of one kind and another. You could not respect this voluntary co-operation too highly, when these bodies were willing to work honestly and steadfastly for the public good. But let them work, and not altogether stand still. If they did stand still, inquiry and publicity, considering the great interests at stake, would be of the utmost advantage.

THE HEALTH OF WATERGUARD AND WATERSIDE OFFICERS OF CUSTOMS IN LONDON, FOR TEN YEARS ENDING 31ST DECEMBER, 1856. BY J. O. M'WILLIAM, M.D.

The author of this paper, which was illustrated by a series of elaborate tables, commenced by giving an account of the duties "afloat" and "ashore" which were performed by the waterguard and waterside officers of the Customs respectively. The tide-waiters, besides being exposed to every vicissitude of weather on board ship, and often in open boats, by night as well as by day, occasionally have to board ships, the cargoes of which give out effluvia productive of inconvenience and even of disease. Among the unhealthy cargoes were guano, hides, horns and bones, grain in bulk, sulphur, turpentine, sugar in bags and matting, rags, etc. With respect to the watermen, the most severe part of their duty is when they are engaged in what is called steam duty, which requires them to search minutely, or, as it is called, "rummage" every part of steamers from the continent, with the view of detecting any concealment of goods. To do this effectually, the watermen have to creep, cat-like, over and behind the boilers, and under and sometimes into the flues, while the fires have been recently, it may be only partially extinguished. On a cold winter's day the transition from the deck to the engine-room, and again from the engine-room to the deck, under such circumstances, more nearly realised a rapid interchange of tropical and arctic climate than anything else that can be imagined. The officers of the waterside department, consisting of lockers, weighers, messengers, and gatekeepers, are, in the performance of their respective duties, also a good deal exposed; but they have defined hours of employment, regular diet, and other advantages not possessed by the waterguard. From a table illustrative of the rate of sickness in the two departments, there were in the waterguard, with an average strength of 740, 21 sick daily, or at the rate of 2·97 per cent., while the annual average of cases of sickness deduced from ten years was 722·7, and the average duration of each case 10·77 days. In the waterside department, the statistics of disease disclose the milder nature of the duty of its officers; for, with a strength of 498, the number daily on the sick list was 5·97, equal to 1·06 per cent., the annual number was 192·7, and the term of each case was 11·6 days. During ten years, 94 waterguard and 75 waterside officers were placed on the superannuation list, the ratio being 1·4 per cent. in the waterguard and 1·5 in the waterside: but the age at which superannuation took place was in favour of the latter department, the age of the lockers averaging 67 years and service 33½ years, the weighers 58 years and service about 30 years, while of 66 tidewaiters superannuated the average age was 59·4 and service 32·2; of 17 watermen placed on the superannuation list the average age was 60 and of service 36 years; and 11 constables and watchmen also superannuated had attained an average age of 60 and of service 36 years. Of the total number (169) superannuated in the course of ten years, 27 of the waterguard and 22 of the waterside department had died before Dec. 31st, 1856. Dividing the ten years into two quinquennial terms, the deaths in the waterguard in the first term was, in a strength of 692, from all causes, including cholera and accidents, 62, or in a ratio of 1·8 per cent.; in the latter term, with a strength of 785, there were 43 deaths only, or at the rate of 1 per cent., the difference in mortality of the two terms being due mainly to the small loss from cholera during 1854, compared with that incurred by the epidemy of 1849. In the waterside department the deaths were in the first term 30 in a mean strength of 492, or 1·2 per cent.; and in the latter term 32 in a mean strength of 512, equal to 1·2 per cent.: as in the first term, the death rate in the two terms having been but little disturbed by the loss by cholera in the department incurred during 1849. Dr. W'William gave a comparative statement of the mortality of the two departments, for the whole period, with that of the general population, and of that of London, at the same period of life, and with that of the army and navy on the home station:—Mortality among male population of England per 1,000 between 25 and 65 years of age (as in the Customs service), 16·0; ditto, in London at corresponding ages, 19·9; mortality in infantry of line per 1,000 (ages between 20 and 40), in United Kingdom, 17·5; ditto, foot guards in London, 20·5; ditto, royal navy in home station (age from 16 to 45), 10·6; ditto, in waterguard of Customs (age from 25 to 65), between 1847 and 1856), 14·1. In the same department and at the same period, after deducting the loss from cholera in 1849 and 1854, per 1,000, 11·5; ditto, in the waterside department from all causes during same period, 11·9. Dr. M'William concluded his paper by alluding to some beneficial changes that had been effected in the service. In 1854 a most important modification of the system of paying officers was adopted in the waterguard. Before that time it was the custom to remunerate the subordinate officers by a combination of salary and day pay, the latter, which formed the largest portion of their income, being stopped when sickness or other cause required absence from duty. On the recommendation of the Board of Customs, the Lords of the Treasury sanctioned the augmentation of the certain part of the income—the salary—and a proportionate reduction of the day pay. An officer when sick or on leave now loses only a small part of his income, and thus is enabled to meet the extra expenses incurred during sickness, and to enjoy his holiday in

contentment. In 1855 the same indulgence was extended to the day-pay officers of the waterside department, and, indeed, to all day-pay officers in London and in the outports, and with the most salutary effect. In common with other departments of the civil service, the Customs has of late received two great concessions from the Government. The first opens up to subordinate officers a new and honourable field of ambition, by admitting them to competition for several superior offices, from which they were formerly shut out. This, as was to be expected, has excited a wholesome spirit of emulation and of pride in the service, which cannot fail to be attended with the most beneficial results; and the other, the abolition of the superannuation tax (a measure which benefits all classes who have entered the service since 1829) has already borne good fruit in having enabled many subordinate officers to insure their lives, who could not otherwise have done so; and in other respects has stimulated and encouraged provident habits among the classes whom it relieved.

PROLONGATION OF LIFE DURING THE EIGHTEENTH CENTURY.
BY SOUTHWOOD SMITH, M.D.

We possess records of this in the great tontines of 1693 and 1790, the interval being exactly a century short of three years. On each of those occasions, a loan for the service of the State was raised—the first by William and Mary, and the second by William Pitt. In the case of a tontine, by which a person advancing £100 was at liberty to name a life during which he drew a certain annuity, it evidently offered the strongest inducement for the shareholder to name the youngest and healthiest infant he could select. It was clear, therefore, that, at all events, such only would be named as would justify the expectation of long life. The tontine of 1690, consisted of 438 females and 594 males; and that of 1790, of 3,974 females and 4,197 males. The latter tontine was not yet extinct, for it was shown that on the 1st of January 1851, there still remained alive, sixty years of age and upwards, 1,312 females and 977 males out of the original number, so that the difference between the mortality of the nominees of 1690 and 1790 was not yet so great as it would ultimately be. Taking these data, Mr. Finlaison, the Government calculator, had worked out in a very elaborate manner the means of making a comparison between them and their actual prolongation; and the life in the seventeenth century was proved, first, by the difference in the death rate of the two periods, and next, by the addition of an ascertained number of years to the age of each individual. It was thus shown that in the year 1690, the expectation of life of a man aged thirty would have been as 26·565; while in 1790, it would have been 33·775: while the actual addition of the excess of years which the persons engaged in the latter tontine had over the former, proved that in 1790 the expectation of life was increased by fully one-fourth; that is to say, that if in 1690, a person, aged thirty, could expect to live thirty years, in 1790, a person of the same age could reasonably expect to live thirty-seven years. An increase in the duration of life was a proof of increased comforts, or increased enjoyment of certain elements upon which human life is dependent—such as air, light, food, warmth, and shelter. In fact, what we called progress in civilisation, was an improvement in the means of securing regularly and unfailingly, in abundance and purity, those physical agents for the bulk of the population. The accomplishment of this object was the main cause of all the activity and energy by which a state of civilisation was characterised. It was a matter of familiar history that an extraordinary activity reigned throughout the eighteenth century. Forests were cleared, marshes and swamps drained; and from the more settled government of the country, cities and towns, being no longer fortresses, had extended beyond the walls of their fortifications. But at this period, special attention began to be paid to the well ordering, cleaning, and paving of towns. The narrow streets were widened, slate roofs substituted for thatch, bricks for timber, and the manufacture of glass so much increased, that glass windows, even in the poorer towns, became common. Agriculture made a surprising advance, multiplying a hundred-fold the production of fresh vegetable food, and increasing in a still more remarkable degree the amount of fresh animal food by the extension of the comparatively new art of collecting and storing fodder for cattle in winter. The increase of manufacture gave improved and cheap clothing to the people, not only conducive to warmth and health, but almost equally so to cleanliness, the texture compelling frequent washing. Accordingly, disease assumed a milder form, and epidemics in particular became much less formidable. Dr. Smith concluded by asking if the advancing civilisation of the eighteenth century was accompanied by such a prolongation of life, what must have been latterly gained? It was clear that even at present the classes which formed the base of the pyramid of society lost a great portion of life; and it was the duty and noble aim of this association to remove—for it was removable—this crying disgrace to our country, to bring this unhappy class within the pale of civilisation. Until that was done, the columns of the Registrar-General would give no fair result of sanitary improvement. How far the time of life, however, in the aggregate could be extended, they did not know; but it was plain that it was not possible as yet to assign a definite limit. [*Cheers.*]

Mr. Jerrick, in illustration of the facts given in the paper, said that the average duration of life in London at present was twenty-seven years, whereas in the last century it was only twenty-two. The connexion between sanitary precautions and the prolongation of life, was well illustrated by the healthy condition of the inmates of modern prisons.

Editor's Letter Box.

A PSEUDO-MYSTERY EXPLAINED.

Sir,—Four years ago, I was consulted by a middle aged married man (who appeared to be the picture of health, with a ruddy complexion, such as is possessed by few), for what he and his medical attendant considered was spermatorrhœa. The general health was perfect; he had neither difficulty in or objection to fulfilling his marital duties frequently; his family were strong and healthy; and he did not know what illness was. The symptoms complained of were—discharge of semen at every costive stool; and excitability and emission, with incomplete erection, if he witnessed any lascivious conduct; and, as his business took him a great deal amongst seamen, he found this a great inconvenience. The quantity of semen discharged at stool was small—about five or six drops—and attended with some scalding. The colour of the discharge was faintly yellow. I was unable to do him any good, but saw him from time to time, the last a few months ago, and always the picture of jovial health. The case was one clearly affording food for thought.

An occurrence happening to myself a few days ago, not only threw some light upon this case, but seemed to me to be of such importance in a physiological point of view, that I resolved, though somewhat reluctantly, to lay it before the profession.

I am, I consider, in rude good health; married; aged 37; with a fine family; nothing wrong. I am costive at times, and use enemata. After the use of a cold water injection one night, I happened very accidentally to notice that in straining, I frequently passed a few drops by the urethra. This was a very common occurrence under similar circumstances; and I had never before given it more than a passing thought; but on this occasion, I examined it, and finding it "slimy", collected a minute quantity, and at once went to examine it with the microscope. I was not a little startled to find abundance of living zoosperms! Here was a discovery for a doctor! But I was not going at once to fall into a state of despondency, as I had seen others do; for I felt sure all my organs, etc., were correct. The quantity discharged was small; its colour was semitransparent; and other things, unnecessary to particularise, led me to believe that the deduction ordinarily drawn from this state of things was wrong. In a little time, I had the satisfaction of demonstrating that the seminal discharge at stool was but an overflow, and that the quantity remaining was not appreciably diminished. I need not enter into details; but I considered the fact indisputable from subsequent investigations.

The subject is not one of the most attractive to the profession, but it is of absorbing interest in regard to our patients; and if the record of this observation should prove of value to those who, not seeing the true physiological explanation of the phenomenon, do not know how to prevent their patients from distressing themselves unnecessarily, I shall be repaid.

I enclose you my card for your editorial satisfaction, but for obvious reasons I wish to remain

Anonymous.

October 19th, 1857.

THE THIEF WHO ROBS MEDICAL MEN!

Letter from Henry Hanks, Esq.

Sir,—Five months ago, I cautioned my professional brethren against the pilfering of a woman, who is, it appears, still pursuing her avocations with uninterrupted success. In my letter are these words: "To convince her mistress that she made no mistake, she wished me to furnish her with a card." This expression concurs with her language to Dr. Wynter; she begged his card "to show her mistress that she had called at the right place". My letter was inserted in the Journal of May 2nd, 1857, p. 382, and which my fellow-associates may refer to to protect themselves and assist in her detection. It is remarkable after an extensive publicity of her proceedings that she should continue them without being arrested, especially as she resorts to artful practices similar to those related by myself. I hope Dr. Wynter will, like myself, recover his lost articles.

I am, etc.,

Henry Hanks, M.R.C.S.Eng.

36 Assembly Row, Mile-end.

CAUSTIC HOLDERS.

Sir,—Will you allow me to call the attention of surgical instrument makers to the clumsy kind of caustic case with which they continue to supply us, and to suggest the formation of an article of more useful and convenient size. I think one might be made, either of silver or "vulcanite," on the principle of the telescope slide, to occupy only two inches when shut up, and as much as six or eight when drawn out. Thus such an instrument might be made equally convenient for our pockets and our patients' throats.

Inconvenience is often experienced in cauterising either the throat or uterus, which with the form now suggested might be obviated.

I am, etc.,

J. A. B.

Leicester, October 13th, 1857.

FEES FROM ASSURANCE OFFICES.

Letter from Henry Dayman, Esq.

Sir,—In the much disputed matter of fees from Insurance Companies, I have been in the habit of recommending the following plan, which has been very generally approved. When it is proposed to ensure a life for *any* sum, the table of medical questions is submitted to the person to be assured, and he is asked whether he thinks his medical man can answer the questions satisfactorily. If he says "No," of course his own answer is sufficient ground for declining the life; if he says "Yes," a fee of one guinea is demanded of him by the authorities of the office, who forthwith forward the table of questions to his medical adviser, and in due time the fee also. The question of refunding the fee to an accepted life, is one with which we have nothing to do; it lies between the office and the assured; but by following the method I propose, the medical man can never be defrauded of his right. I am, etc., Henry Dayman.

Milbrook, Southampton, Oct. 21st, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Bristowe. On October 14th, at 3, St. Thomas's Street, Southwark, the wife of J. S. Bristowe, M.D., of a son.

Hinton. On October 18th, at Hinton, near Bath, the wife of *Joseph Hinton, Esq., Surgeon, of a daughter.

Hope. On August 15th, at Morro Velho Minas Geraes, Brazil, the wife of — Hope, M.D., of a son.

Macnamara. On October 15th, at Uxbridge, the wife of *George H. Macnamara, Esq., Surgeon, of a son.

Martyn. On October 17th, at Brompton, the wife of William Martyn, Esq. Surgeon, of a daughter.

Minter. On October 16th, the wife of John M. Minter, Esq., Surgeon, Her Majesty's yacht *Victoria and Albert*, of a son.

Mould. On October 15th, at 1, Onslow Crescent, the wife of *J. T. Mould, Esq., Surgeon, of a son.

Nisbet. On October 15th, at the Royal Hospital, Haslar, the wife of Alexander Nisbet, M.D., Inspector-General of Hospitals, of a daughter.

Williams. On October 15th, at 13, Newhall Street, Birmingham, the wife of *Thomas Watkin Williams, Esq., Surgeon, of a son.

Woods. On October 20th, at Godmanchester, Huntingdon, the wife of C. J. Woods, Esq., Surgeon, of a son.

MARRIAGES.

Bristowe—Mason. Bristowe, Thomas Lynn, Esq., third son of John Syer Bristowe, Esq., Surgeon, of Camberwell, to Ellen, second daughter of the late Joseph Peter Mason, Esq., of Mincing Lane, at Hornsey, on October 20th.

Clarkson—Campion. Clarkson, William N., Esq., Surgeon, of Whitby, to Ann, eldest surviving daughter of Joseph Campion, Esq., of Whitby, on October 13th.

Hullot—Woodforde. Hullot, M. Joseph A. Z., *ex-militaire*, of Paris, to Maria, widow of the late James Woodforde, M.D., H.E.I.C.S., and daughter of the late Henry Clutterbuck, M.D., of London.

Lithgow—Wills. Lithgow, James, M.D., to Emily Augusta, younger daughter of the late Samuel Wills, Esq., of Exeter, on October 15th.

Webster—Longmore. Webster, James, M.D., to Helen, eldest daughter of William Longmore, Esq., banker, Keith, N.B., at Keith, on October 14th.

DEATHS.

Bellingham, O'Bryen, M.D., at Dublin, aged 51, on October 11th. Dr. Bellingham was known for his researches on the cure of aneurism by compression, and on diseases of the heart.

*Brown, Patrick, M.D., late Surgeon to the second Regiment Warwickshire Militia, at his residence, Leamington, on October 14th.

Giraud. On October 19th, at the Royal Medical Benevolent College, Epsom, aged 13, Henri Arnaud, third son of *Fred. F. Giraud, Esq., Surgeon, of Faversham, Kent.

Harris, Horatio Philip, Esq., Assistant-Surgeon H.E.I.C.S., Civil Surgeon at Cawnpore, killed at Cawnpore, aged 33; also, Myra, wife of the above named H. P. Harris, Esq., aged 31.

Thane. On October 19th, at Springfield House, Canonbury, Merton Seymour, eldest son of Charles Seymour Thane, Esq., Surgeon, aged 3 years.

Wood. On October 7th, at Ashton-under-Lyne, aged 19, Hannah Mary Binns, eldest daughter, of Thomas Wood, Esq., Surgeon.

APPOINTMENTS.

Acland, Henry W., M.D., F.R.S., appointed Regius Professor of Medicine in the University of Oxford, in the room of the late *J. A. Ogle, M.D.

Easton, John A., M.D., appointed Lecturer on Clinical Medicine in the Glasgow Royal Infirmary.

HEALTH OF LONDON:—WEEK ENDING OCTOBER 17th, 1857.

[*From the Registrar-General's Report.*]

The total number of deaths registered in London, which in the previous week was 993, was in the week that ended on Saturday (October 17th), 1003, of which 507 were deaths of males, and 496 those of females. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1016; but as the deaths of last week occurred in an increased population, the average, to admit of comparison, should be raised in proportion to the increase, in which case it will become 1118. It is to be inferred that the metropolitan population now enjoy good health, for the figures show that more than a hundred persons survived last week, whose names would have been placed on the registers if the average rate of mortality had prevailed.

The births were very numerous last week, and exceeded the deaths by 782.

The deaths from diarrhœa were 39, being nearly the same as in the previous week. Of that number, 25 occurred to children under two years of age. Scarlatina has increased considerably;

it was fatal in 52 and 49 cases in the last two weeks. Three children died within nine days of scarlatina maligna, in a house in Wilderness Row, Clerkenwell: in reference to which cases, the medical attendant adverts to the bad condition of the house and its neighbourhood, and to the fact that one of the dead bodies was retained for seven days among the living. Four children died of the same disease in the south sub-district of Chelsea; two of these in a family in Beaufort Terrace West. Two deaths occurred from small-pox in Wellesley Street, Somers Town; in one of the cases, a woman, of 27 years, was the sufferer.

Four deaths from cholera and choleraic diarrhœa were registered last week. In Bethnal Green, one girl, aged 4½ years, and one boy, aged 6 years, died at 17, Cranbrook Street, of choleraic diarrhœa; and one girl, aged 2, died of cholera infantum, at 2, Sweet Apple Square, on Saturday, the 10th of October. The son of a brass-finisher, aged 14, died of "Asiatic cholera", at 2, Peter Street, Bromley, after an illness of twenty hours. He worked in a factory on the banks of the Thames. "He was perfectly well," Dr. Bain reports, "on Thursday night, his father having taken him to a tailor's for a new coat; at five o'clock on Friday morning, he was seized with diarrhœa, vomiting, great prostration, darkness of the surface, thirst, loss of voice." At one o'clock on Saturday morning the poor boy died. Seven deaths by cholera have also been registered in the West Ham district, which adjoins London, but is not within the jurisdiction of the Metropolitan Act.

Cases of diarrhœa and of cholera occur every year in London; but the annexed case, which was published in a former table, appeared to bear an epidemic character:—

St. Olave; St. John.—At Horsleydown, on board the *Lütcken*, on 22nd September, a seaman, aged 27 years, "cholera Asiatica (19 hours)." Mr. Platt, the registrar, says:—"The ship *Lütcken* arrived at Horsleydown, St. John's, on the afternoon of the 21st instant, from Harburg (Hanover); she had touched at Gluckstadt, and stopped there twenty hours, at which place cholera raged lately, and carried off 5 per cent. of the inhabitants. Deceased had not been ashore at Horsleydown."

An immense commerce is carried on between England and Hamburgh on the Elbe, in vessels which are in a very unsatisfactory sanitary condition; the berths of the steamers conveying passengers being at times saturated by the steam of water-closets. The condition of the ordinary vessels may be easily imagined. To avoid the delays of quarantine, all steamers should undergo sanitary inspection; and the sailing vessels in the river should be thoroughly cleansed. They should get pure water. And they would not then form a bridge over which epidemics can march from Hamburgh to London.

Dr. R. D. Thomson has repeated his analysis of the water supplied by the Southwark Company. On October 14th, a gallon of it contained only 17·6 grs. of extraneous matter. On October 15th, the total impurity in the pump-well of Abbey Row, West Ham, amounted to 56·16 grs. in a gallon, comprising 4·40 grs. of organic matter.

All the London waters should be analysed weekly under present circumstances, for the protection of the public.

At the Royal Observatory, Greenwich, the mean barometrical reading in the week was 29·915 in.; on two days the mean reading was above 30 in. The mean temperature of the week was 55·2°, which is 4·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week. The highest reading of the thermometer in the shade occurred on Monday, and was 67·7°; the lowest was 42·3°, and occurred on Wednesday. The range of the week was therefore 25·4°. The mean dew-point temperature was 53·3°; and the difference between this and the mean temperature of the air was only 1·9°. The amount of rain was 0.19 in., all of which fell on Sunday, the 11th.

Royal College of Surgeons. In an examination of the list of Fellows, etc., of this institution, it appears there are now 979 Fellows; and of this number 218 have obtained the honour by examination. The Licentiates in midwifery amount to 483. The same publication also gives us an account of the receipts and expenditure for one year, amounting in the former case to £12,784 : 19 : 10, from the following sources of income: Court of Examiners, £10,254 : 5 : 0; Fellowship, £1,039 : 10 : 0; *Ad eundem* admission to membership, £66 : 0 : 0; Midwifery License, £351 : 15 : 0; Admission to the Council, £42 : 0 : 0; Sales of College publications, £35 · 7 : 6. The Disbursements amounted to £12,693; 12 : 6, principally on account of the College department, viz., £6,972 : 9 : 2; the Museum, £2,436 : 16 : 6; Repairs and Building £1,439. From the same Report it appears that the *incidental* income amounts to £11,788 : 17 : 6, and the expenditure to £9,158 : 0 : 6; whereas the *permanent* income is only £996 : 2 : 4, and the expenditure £3,335 : 12 : 0.

St. Bartholomew's Hospital. At the conclusion of one of Mr. Skey's lectures last week, he suggested to his class the gratification they would derive from contributing to the funds now being raised for the relief of the sufferers from the Indian mutiny. Notwithstanding most of the students had already subscribed elsewhere, they handed over to their esteemed teacher £15 : 17 : 0 to be forwarded to the Lord Mayor. We think this example may be followed by other hospitals.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity. The following officers and directors for the year 1857-8 were elected at the meeting held on October 14th:—*President.* Thomas Arthur Stone, Esq. *Vice-Presidents.* Martin Ware, Esq.; Everard A. Brande, Esq.; John Nussey, Esq.; Sir J. M'Grigor, Bart., M.D., K.C.B., K.C.T.S.; Sir B. C. Brodie, Bart., F.R.S.; Peter M. Latham, M.D.; John Bacot, Esq.; Thomas Turner, M.D.; Benjamin Travers, Esq., F.R.S.; D. Henry Walne, Esq.; A. J. Sutherland, M.D.; Edward Tegart, Esq. *Treasurers.* John Miles, Esq.; John Clarke, M.D. (Acting); James T. Ware, Esq. *Directors.* Archibald Billing, M.D.; George Beaman, Esq.; John Propert, Esq.; Henry Blenkarne, Esq.; Richard L. Thorn, Esq.; C. J. B. Aldis, M.D.; G. J. Squibb, Esq.; Henry Combe, Esq.; A. M. Randall, Esq.; H. Jeaffreson, M.D.; John Hilton, Esq.; Henry Oldham, M.D.; Richard S. Eyles, Esq.; William Self, Esq.; Henry Sterry, Esq.; G. Hamilton Roe, M.D.; Harvey K. Owen, Esq.; Robert B. Todd, M.D., F.R.S.; George Burrows, M.D., F.R.S.; Edgar Barker, Esq.; William Cathrow, Esq.; James Paget, Esq., F.R.S.; John Adams, Esq.; Frederick J. Farre, M.D.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

We will notice Dr. Laycock's letter on Parliamentary Reform and Medical Constituencies, published in the *Scotsman* of October 15, in our next.

Communications have been received from:—Mr. J. C. S. Jennings; Dr. J. G. Davey; Dr. Bader; Mr. T. P. M. O'Donovan; Mr. H. G. Trend; Mr. F. Davies; Dr. T. Inman; Mr. T. Holmes; Mr. J. F. Nicholson; Dr. Sloane; Dr. P. H. Williams; Dr. R. G. Mayne; Mr. J. V. Solomon; Dr. Markham; Mr. Frederick F. Giraud; Dr. S. D. Lees; Mr. T. P. Teale; Mr. John Ash; Dr. H. Vernon; Mr. J. C. Kennerly; Mr. J. Audland; Dr. Handfield Jones; Mr. Prichard; Mr. W. Thurnall; Dr. James Williams; Mr. Blower; Mr. J. C. Woods; Dr. Banning; Mr. Joseph Hinton; Dr. R. U. West; Mr. W. H. Michael; Mr. J. C. Clendon; Dr. S. W. J. Merriman; Dr. Cockle; Mr. Dayman; Dr. S. Birch; Mr. Nunn; Mr. H. Terry, jun.; Sir Charles Hastings; Mr. E. A. Brown; and Mr. Stone.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. On the Transmission from Parent to Offspring of some forms of Disease, and of Morbid Taints and Tendencies. By *James Whitehead, M.D. Second Edition. London: Churchill. 1857.
2. Tables of Diagnosis of Diseases of the Brain. By J. Russell Reynolds, M.D. London: Churchill. 1857.
3. Prostitution considered in its Moral, Social, and Sanitary Aspects, in London and other Large Cities. With Proposals for the Mitigation and Prevention of its Attendant Evils. By William Acton, F.R.C.S. London: Churchill. 1857.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XLIV.] LONDON: SATURDAY, OCTOBER 31, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BRISTOL ROYAL INFIRMARY.

CASES OF STRANGULATED HERNIA REQUIRING OPERATION.

By AUGUSTIN PRICHARD, Esq., Surgeon to the Infirmary.

IT is a frequent saying of the older hospital surgeons much accustomed to operations, that no hernia case is like its predecessor, and that something new turns up at each successive operation; and that these remarks are true, the following cases will tend to prove. They are all upon which it has been my lot to operate during the last twelve months; and all but one were in the wards of the Bristol Royal Infirmary. They are of interest, not only on account of their varied nature, but because some of the accidental symptoms which occurred in their progress were of the rarer kind.

CASE I. *Large Irreducible Femoral Hernia, with Symptoms of Strangulation: Ulceration of the Sac, and Operation: Recovery.* M. W., aged between 45 and 50, was admitted under my care on the 21st of August of last year. She had been the subject of rupture for twenty years; and eight years ago was operated upon for strangulated hernia by a surgeon in the neighbourhood of Bristol. The swelling has since that time been large and irreducible.

On Monday, August 18th, she was coughing, and the tumour increased in size, and a hole appeared on the outer part, from which fluid oozed; and in the course of a day or two, a large quantity flowed out. This was evidently from the sac which had given way.

Upon admission, there was a large irregularly lobulated oval tumour extending completely across the upper part of the right thigh, down to the edge of the labium, and considerably overlapping Poupart's ligament. It was very tender, but not very tense; while the abdomen was both tense and painful. She had frequently vomited, and her bowels had been confined since Monday. She stated that she had passed flatus *per anum* once since that time. Her pulse was low and weak.

I operated, under chloroform, about 9 P.M. (two and a half hours after her admission), and laid open about three-fourths of an inch of the tumour from the opening where the sac and integuments had given way, and introduced my finger. The sac was fully distended with small intestine, apparently healthy. The opening into the abdominal cavity was free; and as the patient was very weak and sinking, and it did not appear safe to lay open the sac thoroughly, I brought the wound together, and sent her to bed.

In the night she was much worse; collapsed, and weak, and vomiting; and the next day (22nd), as the symptoms were very urgent, I determined to examine further, to find out if there was any strangulation below. I therefore made two incisions into the sac, one above and the other below, and introduced my finger freely to the lower part, and found the intestines much glued together by recent peritonitis. After separating them considerably, I sent her back again to bed, without much hope of her recovery. I ordered her a pill, containing half a grain of opium, one grain of calomel, and two of blue pill, every two hours.

In the evening I found her rather better, having passed flatus *per anum*, by which she was relieved. She had also slept.

August 23rd. She passed a good night. The tumour was very tense, measuring *fifteen inches* in its largest diameter (*i.e.*, horizontally), and *eight inches and a half* across (*i.e.*, vertically). The integuments were inflamed. I ordered her to have an injection of warm water, and to take a pill every four hours.

August 24th. The vomiting returned. The tumour became very tense and red, with tympanitis. In the evening the bowels were moved three or four times, relieving the pain and tension. An opiate draught was ordered to be taken twice a day.

Diarrhœa set in next day, and was checked chiefly by opiates. She had a little wine, but had no appetite for food. The sac suppurated and began to discharge freely on August 28th; and on the 1st of September she began to take food. From this time she gradually mended, and was discharged cured, with a bag truss contrived by two of my pupils under my direction. It was made of a mould of gutta percha fitting to the tumour (which, of course, remained irreducible), and lined with lint, kept in its place by means of elastic webbing from the four corners, the two lower passing round the upper part of the thigh, and the two upper round the pelvis. By this contrivance, constant tolerably firm and equable pressure was made on the tumour, and it was protected by the gutta percha from external injury.

REMARKS. The large size of the tumour in this case added greatly to the danger; for if I had, according to the old fashioned method, laid open the entire sac, it would undoubtedly have proved fatal; and although I divided no stricture, I believe that, by separating the adhesions by the finger in the second operation, the obstruction to the canal was removed, and the patient placed in a better position with a view to recovery. The calomel and opium pill was of decided service.

CASE II. *Inguinal Hernia: Operation on the Third Day of Strangulation: Death with Symptoms of Pyæmia.* A. B., a rustic labourer, aged 65 years, was admitted under my care on Saturday, December 6th, about 3 P.M. He had been a free liver, and had been for some years the subject of rupture. The swelling had been down since Thursday, December 4th, and was larger than it ever was before. It was very tense and hard, and he had vomiting, with great abdominal tenderness. The hernia was in the left groin, but he was also the subject of a ventral hernia in the upper part of the abdomen, and of inguinal hernia of the right side, as well as of stricture of the urethra.*

In performing the operation under chloroform, after making a fair trial of the taxis, I came down upon something like a sac, containing a vermiform appendage, which proved to be a cyst upon the true hernial sac. The latter contained but little fluid, and about five inches of intestine, not very dark in hue. The stricture was very tight. After dividing the outer ring upwards, I experienced much difficulty in returning the intestine, and was obliged to make a further division of the stricture before I could get it all back. During the manipulations, a small rent was made in the peritoneal covering of the intestine.

In the evening after the operation, he appeared much in the same state, without any signs of rallying: the pulse was intermittent and weak, and he had vomited. The treatment consisted of opiates and stimulants. In this way he went on for three days, without any perceptible rallying of his powers; the scrotum became very dark, and infiltrated with blood, and he died on the 9th; *i. e.*, on the fourth day after his admission. His symptoms before death were those usually seen in pyæmia, with uninterrupted failing of all his powers.

At the *post mortem* examination (at which I was not able to be present), nothing very distinctive was discovered. There was imperfect suppuration about the spermatic cord and scrotum, but no extravasation of blood was found in the abdomen

* Many years ago, during my apprenticeship, I assisted my friend Mr. Morgan in a *post mortem* examination of an old gentleman (formerly a truss-maker in this city), and he was also the subject of three herniæ, which were not immediately connected with his death.

or about the wound. The intestine appeared to have recovered itself.

Case III. *Femoral Hernia; very tightly strangulated: Formation of Artificial Anus on the Eighth Day: Recovery.* D. F., aged 45, was admitted in the evening of January 17th of this year, suffering from strangulated hernia on the right side. She had been the subject of rupture for many years, but never wore a truss. It had been down for twenty-four hours, and some efforts at reduction had been made. The tumour was hard and tense and painful; she had vomited, and the abdomen was tender.

I applied ice for an hour, then gave her chloroform, and tried the taxis, but that having failed, I operated. There was no difficulty of any kind about the operation, which was straightforward in every respect. I could find no aperture under the ligament which would enable me to divide the stricture without opening the sac, and when this was done, I had considerable difficulty in finding any crevice through which a blunt curved director could be passed. After a little time, I succeeded in dividing the edge of Poupart's ligament with a probe-pointed bistoury, and returned the intestine immediately. The gut was excessively black, but firm in texture and shining on its surface. The wound was brought together with two sutures and a compress, and when she awoke from the chloroform, she said that she was easier.

January 18th. She was going on well. The abdomen was tender and the skin hot, but she slept and had passed flatus *per anum.*

January 19th. She was better, but complained of heartburn and pain in the stomach, for which a little alkaline medicine was ordered. In the evening, she was feverish, and I ordered her a grain of calomel with a quarter of a grain of opium every three hours.

January 20th. The bowels had been open, and she was better, but from this date until January 23rd she was very feverish and low, and I ordered her some wine. The sac sloughed and projected at the wound, with some discharge of an excessively fœtid matter, some being of a yellow colour. The bowels had been moved.

January 24th. The yellow matter had much increased in quantity, and turned out to be fœcal; the flow of it from the wound was copious, and she felt better, but the bowels had not been moved in the ordinary way. She was ordered to take eight ounces of wine a day, and to have some eggs, and middle diet.

January 31st. During the past week she had great fæcal discharge from the opening in the groin, but at this period I removed a slough from the wound, and the flow ceased for a time.

February 3rd. The flow returned, but on the 7th it ceased finally. The bowels were moved naturally on the 3rd (with the aid of castor oil).

February 10th. The wound was well.

When this patient got up she could not stand upright, owing to the dragging from the wound; but this gradually ceased, and she went out quite well, but within the last month I have heard that a swelling has appeared at the side of the scar of the wound left by the operation.

Remarks. The stricture was so tight that in twenty-four hours the intestine had not only become quite black, but it was so pinched that a small portion of the circumference lost its vitality and poured out the contents through a little opening fortunately circumscribed by adhesions, which healed spontaneously afterwards. At the time of the operation, after I had divided the stricture, and returned the intestine, the aperture was so small that it would barely admit my little finger. I cannot help thinking that the chance of recovery in this case would have been lessened if I had succeeded in my attempts to divide the stricture and return the intestine without opening the sac.

Case IV. *Strangulated Femoral Hernia: Intestine much damaged by previous Manipulations: Operation: Recovery.* Mrs. C., a healthy woman, of 60 years of age, and of good courage, who had not been the subject of rupture, was admitted under my care on March 25th of this year. The tumour appeared on March 23rd, and on the 24th, considerable efforts at reduction had been made, but without avail. The bowels had been slightly open, and she had vomited.

When she was admitted she was sick, and the abdomen and tumour were painful on pressure. I tried the taxis, which failed, and then I operated. I tried in this case also to divide the stricture without opening the sac, but could not do it; I therefore opened it, and found in it some dark jelly-like substance, being the serum of the blood squeezed out and coagulated. The intestine was very black, collapsed and ragged on the surface. The stricture was unusually tight, but gave way at once on the application of the bistoury, and the intestine went back.

In the evening, she complained of great pain, and there was a large flow of serum from the abdominal cavity. Pulse 140. She was ordered to take three grains of calomel and ten of Dover's powder at once, and to repeat the dose on the following morning.

March 26th. Pulse 150; tongue dry. She was still vomiting. I therefore ordered her two ounces of wine with ice, and found that after a few hours she felt better, and the pulse sank to 120, and her tongue became moist. The abdomen was very tender.

March 27th. She was better; but the abdomen was much distended and tender; the wound was in a healing way. Considering that she had some low peritonitis, I ordered her a quarter of a grain of opium and three grains of blue pill every four hours, with four ounces of sherry wine daily, and under this treatment she gradually improved, with the only drawback of having great difficulty of passing urine, and distension of the abdomen on March 29th.

March 30th. Her pulse again became quiet, and her mouth a little sore from the blue pill, and she passed flatus *per anum.*

She then took the pills three times a day for a short time, and the bowels began to act in a natural way, her appetite returned, and in a few days she went out cured.

Remarks. The result of this case was very satisfactory, for the intestine was so damaged by the tightness of the stricture and my manipulations, that it was very doubtful whether it could recover itself, and it was a point of considerable importance to keep the canal quiet, and give the vessels of the strangulated part time to return to their usual functions. Although the patient required stimulus to keep her up, the relief from all the symptoms immediately, when the mercury showed its effect upon the mouth, was most marked.

Case V. *Femoral Hernia: Strangulation: Operation: Recovery.* Mrs. R., aged about 50, had been subject to rupture for some time, but had suffered but little inconvenience from it. It became strangulated on the 4th of April last, without any very urgent symptoms at first. Pressure was applied by the hand, and with a compress and bandage; and the tumour seemed to disappear. She was given a fair share of active purgative medicine, without any good effect.

I saw her on April 7th, and found a tumour in the left femoral region, which was very tender; the pain extended all over the abdomen, and she was constantly crying and vomiting, and was excessively prostrate.

I operated at once, without chloroform, and found no fluid in the sac. Some omentum occupied the anterior part of the cavity, and behind was a small knuckle of dark coloured intestine, of healthy consistency. I divided the stricture upwards and inwards, and the intestine slipped easily in. The omentum seemed hard and thickened by a long stay in the sac, and I therefore left it in the wound. The parts were brought together by two sutures and a bandage. She vomited once soon after the operation, but from that time went on well. The next day, diarrhœa set in, excited, in all probability, by the remedies taken before; but this was checked by suitable means, and she progressed rapidly and uninterruptedly, without any other untoward symptom, until she was well, which was in three weeks after the operation.

Remarks. This case requires no comment; it was straightforward and simple in every particular, according to the description given in our surgical and anatomical books—just such a case as one would like to fall in with for a first hernia operation.

Case VI. *Recent Femoral Hernia, from Accident: Strangulation: Operation: Sloughing of Sac: Recovery.* T. B., aged 60, employed as a farm-labourer in the last harvest, fell off a hayrick on July 9th. On July 10th he began to vomit, and he continued to do so until he was admitted, on the morning of the 13th. The swelling of the left groin was discovered two days after the injury. He had never been ruptured before, and his bowels had been slightly moved on the day before his admission. He was brought in an open cart twelve miles, and was much chilled and depressed. The tumour was very painful, and the integuments were red and œdematous, and his abdomen tender.

I operated at half-past five on the morning of July 13th, cutting down upon the tumour; for I was unable to pinch up the skin because of the œdema. When I had cut down to the

sac, some white thick matter oozed out, which appeared to be puriform matter in the cellular tissue outside the sac. The latter contained dark coloured serum, of the usual appearance; and only a small portion of the calibre of the intestine was engaged in the opening. The protruded part went back as soon as I had divided the lower edge of Poupart's ligament upwards. I had given him an ounce of brandy and thirty drops of Battley's sedative before the operation. He also took chloroform well, and knew nothing of what had been done to him afterwards, but said he was quite easy. He did not sleep after he was removed to bed; and I therefore ordered him ten grains of Dover's powder with four of calomel; and, in the evening, his tongue was moist, but the abdomen was tender, and he had retention of urine, requiring the use of the catheter. He was ordered an opiate draught at night, and a calomel and opium pill three times a day. The bandages were divided at night.

On the next day, he passed urine: the wound was much inflamed, and his abdomen very tender. The wound was ordered to be poulticed.

July 15th. He was very low and sinking, and was ordered to have four ounces of wine, which revived him before the evening.

The next day, by some casual omission, he did not get his wine, and at night was very low again. The bowels had not been moved, nor had any flatus escaped. He had great difficulty in passing urine. The abdomen was tumid and hard. I ordered him six ounces of wine daily, and to take two drachms of castor oil, with twenty minims of turpentine, at once.

July 17th. He was "five pounds better". In the afternoon, he passed flatus, with great relief; but there was no further action of the bowels. I therefore ordered the draught of castor oil and turpentine to be repeated.

July 18th. His bowels were gently open. The wound had been very unhealthy, and after poulticing the whole of the sac appeared to slough out, and by July 21st he was convalescent.*

Case VII. *Enormous Scrotal Hernia, of long standing; Symptoms of Acute Strangulation: Operation: Death in Eight Hours: with Air in the Veins.* G. D., aged about 35, a labouring man, had been subject to a large scrotal hernia of the right side for a long time. The tumour always came down by day, and went back at night; and he never wore a truss. On one occasion, it became much swollen, and there was great difficulty in returning it. This, however, was ultimately accomplished.

On August 11th, he was admitted under my care. It appeared that he had finished his work in the morning, and that his bowels were being moved, when the hernia suddenly came down to a large extent. I saw him a few hours after his admission, and found him with a tumour of the scrotum much larger than the head of a child at birth. It was very tense and very painful, and was dull on percussion at the neck, and clear at the prominent part of the tumour. His abdomen was also a little tender, but chiefly at the epigastrium. Cold had been applied for a few hours, but the tumour had become more tense. I tried the taxis fully, while he was under the influence of chloroform, holding the neck of the tumour in the proper position and direction with my two hands, while one of my colleagues maintained firm and steady pressure upon it, for it was too large and unwieldy for one pair of hands to manage. Finding it immovable (and there was not even the slightest impulse given to it when the man coughed), I punctured it with a grooved needle, and let off from the sac about two ounces of red fluid, and some little gas from the intestine; and then tried the taxis again, but to no purpose; and I therefore proceeded to operate.

When the sac was reached, and opened to the extent of about two and a half inches, some red serous fluid escaped, and the intestine presented itself, turgid, tense, and very black. At first it appeared to be the cæcum and ileum, but afterwards it became evident that small intestine only was contained in the hernia, and that it was all much distended with gas. I found that I could pass my forefinger at once through the ring and under the stricture; but the pressure was extremely hard, so as to make my finger ache. I could distinctly feel two hard rounded cords, one behind the other, pressing upon my finger; and these were the inner and outer abdominal rings, which had become parallel and opposite one another by the weight and constant pressure of an old and heavy hernia. These hard cords were firmly contracted, and felt like the round tendons of some of the muscles of the extremities. I divided the anterior cord, and made the opening freer, and tried to return the intestine, but in vain. So much of it occupied the scrotum that I could not get it back; and, after varied attempts for at least half an hour, I divided the margins of the ring more freely, and ultimately returned the whole. The mesentery was dark, as well as the intestine; and I could distinctly see points of extravasated blood in its substance. One small patch of peritoneum (rather larger, perhaps, than a fourpenny bit) was split away from the surface of the ileum. The intestine was thickened, and not very firm. After it was all reduced, I had the greatest difficulty in bringing the parts together, and keeping the intestine within the abdomen; but it was at last satisfactorily accomplished with a compress and bandage. The patient was under chloroform for an hour at least, and bore it well; for the pulse was pretty good, even at the end.

I ordered him an opiate draught; and, when I came down to see him at 8 the next morning, I was dismayed to find that he had died at 7. He had been seen by the house-surgeon at 2 A.M., when his breathing was hurried, and he had been sick; but his pulse was good, and he did not complain much. He was seen at 4 A.M. by the assistant house-surgeon, who, finding him lying round on his face and apparently asleep, did not disturb him.

Post Mortem Examination, at 4 P.M. (*i. e.*, about nine hours after death). The weather was very hot. The body was so swollen and disfigured that I could not recognise my patient of the night before. The face and neck were dark purple and tumid, crepitating under the fingers. He was also purple and green about the wound, and over the parietes of the abdomen and pelvis, and on the scrotum and penis. There was no blood in the abdominal cavity, but some little was extravasated among the muscles. The stricture at the rings had been entirely divided, and the opening was patulous. The intestines were removed; they were filled with gas, and the portion that had been strangulated was very distant from the rest, being almost black, thick, distended, and separated from the healthy intestine by a well marked constricted line. It was the ileum, and measured fully *two yards and a half* (all of which was quite black), reaching to within an inch of the ileo-cæcal valve. Blood was extravasated into the substance of the gut, and it appeared to be on the point of becoming gangrenous.

The only other remarkable fact connected with the *post mortem* examination was the *presence of air in the veins.* A large thyroid vein, the internal mammary, the iliacs, the vena cava, and the vena azygos, were distended with gas. The vena cava inferior, where it lies by the side of the aorta, looked like a piece of the small intestine of a child fully distended with air. Frothy blood was in the heart, an accumulation of air in the ends of the auricular appendages, froth in the spleen, in the cellular membrane, and in the integuments. The appearance of the corpse was that of a man drowned, or otherwise asphyxiated; and I believe that he died from the presence of air in his circulating system, but how it got there I cannot form any opinion. The intestine, after only twelve hours strangulation, was so damaged that he must certainly have died; but this condition of his veins was undoubtedly the immediate cause of death.

His pulse was good for some time after the operation, and he rallied well after the chloroform. He only took half an ounce.

Remarks. I am not aware whether there is any case on record where so great a length of intestine (nearly eight feet) was so thoroughly strangulated and disorganised in so short a period. There are three interesting cases of air in the veins (producing death) recorded by Mr. May of Reading, in the Journal of the present year (No. xxix), which much resemble that above described in some important particulars, and with which my case might be conveniently classed. Mr. May alludes in his paper to the records of many other similar instances, and adds the disagreeable fact that, in six deaths from chloroform, air has been found in the heart.

In the case which I have just narrated, the operation was urgently required to give the patient a chance of his life; and he died from the presence of air in the veins, but whether caused by the prolonged operation, or by the chloroform, or the damage produced by the disease, I am quite at a loss to determine.

* I have since heard, in a casual way, that his hernia had reappeared, and that his condition now (about three months after the operation) is very precarious.

ST. GEORGE'S HOSPITAL.

I. ENCEPHALOID TUMOUR, INVOLVING THE HEART AND LUNGS.

Under the care of H. A. Pitman, M.D.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

T. B., aged 23, formerly an army pensioner, but latterly employed as a day labourer, was admitted September 16th, under the care of Dr. Pitman. He was a stout, well made young man, of florid complexion and generally healthy appearance, and had never noticed anything wrong about himself until the end of last March, when cough came on, without any assignable cause, accompanied by pain in the right side, for which he was cupped, and thus relieved. About the same time, he one day observed a small lump at the upper part of the sternum, on its right side; and this gradually increased until, at the date of his admission, it was as large as a pigeon's egg. Twice he spat a little blood. For a week he had lost his voice, and had experienced difficulty in swallowing; his breath was also short. The bowels were costive; tongue furred; urine healthy; and he perspired profusely at night. His cough was harassing, and he expectorated frothy mucus. He was ordered a dose of calomel and senna, and nitric draught, with henbane and nitric ether, three times a day; and a belladonna plaster was applied to the tumour.

September 17th. His pulse was full and bounding, but rather unequal in the force of the successive beats in the right wrist. There was increased dyspnœa, for the relief of which he was cupped between the shoulders to ten ounces. The dysphagia, however, remained. The urine passed this day was high coloured and full of lithates. On examining the tumour at the upper part of the chest, it was found to pulsate strongly, and over it a systolic *bruit* could be heard synchronous with one at the base of the heart; but, after repeated examination, no aneurismal whirr was detected.

September 19th. There was less pulsation of the tumours. He slept better, and the perspiration was not so profuse. At times there was a degree of lividity about the features, occurring especially after a paroxysm of coughing. Sinapisms were applied for the relief of the breathing, and he took oxymel of squill alone.

September 21st. The cough was worse. He passed a restless night, and complained of pain in the chest at its central part. His pulse got weaker, and he became much exhausted from loss of sleep. The same auscultatory sounds were to be heard over the tumour. At the back of the lungs, the breathing was tolerably clear. No irregularity of the pupils was observed by any one who saw the patient. Morphia at night relieved his pain and cough.

September 28th. He spoke of feeling more comfortable. He remained so for three days, and then complained of renewed pain and dyspnœa, especially in the early morning. But the uneasiness was referred to the interior of the chest: in or about the tumour itself there was no pain.

October 5th. He had great difficulty in swallowing solid food. He was ordered to have arrowroot, eggs, and beef-tea. He generally sat at the table in the centre of the ward, or on the edge of his bed, with his left elbow on his knee, his head inclining to the left, and leaning on the corresponding hand; and in this position he appeared to breathe more easily.

October 7th. He had more cough, and sharp pain in the left side, for which he was dry cupped. The right pulse was 108, and intermittent.

October 9th. The pain had left him, although the cough continued severe.

October 10th. Increased dyspnœa came on towards evening; and his face, neck, and chest, were suffused with a deep red colour. At 10 P.M., after an attack of coughing, he expired; at the last turning to a pallid hue, as remarkable as the previous rubescence.

At the *post mortem* examination, forty hours later, on reflecting the skin from the tumour in the neighbourhood of the right sterno-clavicular articulation, the fibres of the pectoral muscle were found expanded over it; and, by dissecting these off, the surface of a mass of malignant matter was exposed. This lay, for the most part, in one mass, concealing the bones; but there was a separate tubercle lying on the sternum close below the large tumour. On section, it was seen that the sternum in many places had been completely absorbed. The portions of bone left, when cut through, appeared, on first sight, to be parts of the ribs, so exactly did they correspond in shape, size, and situation, to the second and third ribs. The intercostal muscles in the first two intercostal spaces were infiltrated with the disease, but not equally; those in the lower space being only partially affected, and that on their deep surface. From this circumstance, and from the peculiar manner in which the sternum had been eroded, it was clear that the external portion of the tumour was of later formation. On tracing it into the interior of the chest, it was found filling up the anterior mediastinum entirely, and extending far into the upper part of both lungs, and into the heart. As to the lungs, it is sufficient to remark, that the greater portion of their upper lobes was infiltrated with cancerous deposit, so as to leave no trace of the natural structure; and was thus adherent to the neighbouring parts, viz., to the portion of tumour which projected out of the thorax on one side, and to the base of the heart on the other. The remaining portions of the lungs were congested, non-adherent, and otherwise healthy. The disease had affected chiefly the right side of the heart, numerous scattered tubercles being found in various parts of the muscular walls, principally on their surface; and the pericardium was adherent throughout. At the lower part of the right ventricle was a mass of malignant matter, as large as a walnut, which occupied the whole thickness of the wall of the heart. The tricuspid valve was also much interfered with by a deposition of similar malignant disease around more than half of its circumference. This deposit served to keep the orifice patulous, and probably hindered the complete closure of the valve. The walls of the left ventricle were healthy, except for the presence of one or two small tubercles; and the auricles were unaffected, as also were the mitral and arterial valve-flaps. The pulmonary artery and aorta ran completely through the mass, but seemed quite exempt from the disease. The large branches of the aorta were displaced backwards by the tumour, but appeared perfectly healthy. The trachea lay in a groove on the back of the tumour, and was pressed considerably backwards.

II. ANEURISM OF THE ARCH OF THE AORTA: PHTHISIS.

Under the care of H. A. Pitman, M.D.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

W. J., aged 30, a potman living in Knightsbridge, came under Dr. Pitman's care on September 16th. His habits were intemperate, but he had generally been healthy, and able to do a fair day's work. His health began to fail ten months ago, when, after repeated exposures to cold, cough settled upon him, and he became an in-patient of Brompton Hospital from April until August. After being under treatment four months, one of his medical attendants observed a projection close to the sternum, and immediately below the right clavicle. It was painless, and on placing the hand over it pulsation was felt. Gradually it increased in size; and when he came under our notice it was about as large as a pigeon's egg. An indistinct blowing murmur was heard on its distal side. The man was emaciated, perspired at night, and expectorated nummular sputa. The bowels were open, tongue furred, urine clear, slightly phosphatic, and free from albumen. In the right wrist the pulse was scarcely perceptible. For the first two or three days he complained of pain quite at the lower part of the chest; this left him, and he continued much the same for a week, except that he got more anæmic. A belladonna plaster was placed on the tumour, and nitre draught with a little tincture of opium was given every six hours, and morphia at bedtime. September 25th, he had a smart attack of dyspnœa, and the cough was worse. He slept pretty well at night, but throughout the 26th was much distressed in his breathing, and was obliged to sit up, leaning forward on a bed-table. Severe orthopnœa occurred on October 2nd, and in a similar paroxysm he sank on October 4th.

The body was examined thirty hours after death. A hollow could be felt in the sternum on the right side near its articulation with the clavicle, but there was *no appearance of a tumour.*

On reflecting the skin from the part above named, the pectoralis major was found infiltrated with serum; and on turning back the muscle it was discovered that the sac of an aneurism had been opened, and some loose clot was seen projecting through the hole in the bones. The aneurism was seated on the highest part of the arch of the aorta, and all the branches of the arch opened into it. With the artery it communicated by a very large opening, which, however, did not include the whole calibre of the vessel; and it was almost empty. Towards

the upper and back part, however, the sac was thickened by the deposition of a considerable quantity of laminated decolorised fibrin, closely adherent to it; and the general cavity of the aneurism contained a small quantity of loose coagulum. The whole tumour was as large as an average sized man's fist, and the opening in the bones was some way down its anterior surface. There was a wavy yellow line at its mouth, apparently indicating the cessation of the internal coats of the vessel, but the sac was lined by a membrane exactly resembling the serous coat, and had not been ruptured anywhere; for even at the hole in the bones where it appeared imperfect the condensed pectoral muscle had formed a sort of false sac, and prevented the effusion of blood into the cellular tissue. The aorta was atheromatous, but the large arteries springing from it were unaffected. The heart was healthy. The lungs contained scattered tubercles, and were congested. The bronchi were full of purulent fluid. Where the aneurism had pressed against the lower part of the trachea the lining membrane of the tube was deeply congested. The other organs were congested, but otherwise healthy.

Remarks. The difficulties usually experienced by the physician in diagnosing between intrathoracic tumours and aneurisms, appeared comparatively few in the first of the two cases related above. The patient was free from the cachexia ordinarily attending malignant disease, and a tumour was found pulsating in a situation which would justly lead one to suspect aneurism of the arch of the aorta, or of the innominate artery. I believe Dr. Holland, somewhere in the *Dublin Quarterly Journal of Medical Science*, from an examination of many recorded cases, decides that aneurism of the innominate may be distinguished from that of the aorta by the almost uniform appearance in the former case of a tumour to the right of the sternum, and in the latter case to the left. But although the aspect of the patient appeared to warrant our setting down his complaint as aneurism, it is now quite evident that, by his healthy look, the obstacles to correct diagnosis were multiplied tenfold, and the case affords a most valuable illustration of disease simulating thoracic aneurism. Did the limits of this paper allow, I could bring forward several instances of encephaloid disease involving, to a large extent, the thoracic organs, and remaining undetected until the autopsy. I will, however, mention two only.

Case I. A pensioner, 67 years of age, and of intemperate habits, came into the hospital in January 1855, with supposed chronic bronchitis. He had only been ill seven weeks, and his previous health had always been excellent. There was general want of resonance in his chest, but not in any way marked, nor more in particular parts than others, nor more either than might be caused by loss of elasticity in the ribs. Moist and sonorous râles were heard everywhere; and some hypertrophy of the heart was believed to exist, but no murmur could be heard. Three days before death, drowsiness and confusion of thought came on, and great agony of dyspnœa. Nothing could induce him to remain in bed; and he sat on its edge till, exhaustion ensuing, he fell back and soon expired.

On examining the body the lungs were found of large size, one of them weighing 4 lb. 9 oz., and both were in about an equal degree occupied by encephaloid deposit, leaving but little texture not involved. The carcinomatous matter had not protruded through the pulmonary pleura, but it projected, in softened patches, into some of the bronchial tubes. There was also considerable lesion of the aortic valves.

Case II. A married woman, twenty-six years of age, was in St. George's during October and November, 1855, with hæmaturia and Bright's disease. After being under treatment three weeks, paraplegia came on; she rapidly wasted, and sunk from exhaustion. No chest symptoms ever occurred. After death every organ, except the heart, was found to participate, more or less, in encephaloid disease. The lung tissue was invaded to a great depth. The same malignant deposit was found in the brain, the bones of the skull, the vertebræ, and the membranes of the spinal chord.

If, therefore, it is so difficult to certify to the presence of a malignant tumour in the thorax, unaccompanied by external signs, can it cause surprise that a healthy looking man, with a pulsating tumour in a suspicious situation, should have been thought to labour under aneurism, rather than to bear within his chest a huge mass of disease which had encroached, to a great extent, on the tissue of the respiratory organs? The wonder is, that the dyspnœa was not more severe for a longer period, and that such marked relief was obtained from depletion. In fact, the tranquil breathing which ensued after cupping was confirmatory of aneurismal affection, in which great benefit is produced by frequent moderate abstraction of blood. I know some will say that, in aneurism, the dysphagia caused by the tumour pressing on the œsophagus is relieved equally with the dyspnœa, and, in the case before us, this did not happen; but this one circumstance, *per se*, would not much influence the physician in forming his diagnosis; and I am sure that I have seen cases of undoubted aneurism where, after cupping, dyspnœa was relieved, but dysphagia remained, and *vice versâ*. The absence of aneurismal thrill proves nothing; and Dr. Stokes affirms, that "there are no peculiar or constant signs belonging to aneurism, by which sounds, produced in the tumour, can be distinguished from those of the heart:" and elsewhere he adds, that in aneurism of the arch or of the innominate, murmur even is frequently absent.

On the second case I hope at a future time to say something; at present, I shall only allude to the existence of tubercles in the lungs. Dr. Stokes says, that phthisis is the most common accompaniment of aneurism. Dr. Fuller, in two papers on Thoracic Aneurism, published in the *Medical Times and Gazette* of November 1856, ventures to call in question this statement. I have before me notes of fourteen cases which have come under notice in the medical wards since I have been registrar. Twelve of these died, and eleven were examined for tubercles; and only in the case now under consideration did phthisis exist. The other two patients left the hospital by their own desire: in neither had we any reason to suspect tubercular disease. These facts serve to corroborate the ideas which Dr. Fuller has laid before the profession.

ST. BARTHOLOMEW'S HOSPITAL.

I. REMOVAL OF SCIRRHOUS GLANDS NEAR THE BREAST: DEATH FROM PLEURISY.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

A woman, aged 50, was admitted on October 12th, under the care of Mr. Paget, on account of scirrhous cancer recurring in the glands of the axilla and near the scar of an operation for scirrhous mammæ performed eighteen months before. The wound had soundly healed, and as there was no contraindication in the patient's health or general condition, it was resolved to attempt the extirpation of the disease. This was accordingly done on October 17th, when the remainder of the diseased tissue was removed.

Two days afterwards, constant hacking cough, with pain in the left thoracic region, came on; it was treated by expectorants, narcotics and cupping, but without benefit. On October 20th, mercury was prescribed and leeches were applied. Her strength, however, failed so rapidly, that it became necessary to give stimulants in large quantities, in spite of which she sank rapidly, and died on the 22nd.

At the *post mortem* examination, extensive pleurisy was discovered, depending apparently on secondary infection, as the wound did not involve the intercostal muscles, and thus had no communication with the pleura. The veins were not visibly affected.

Remarks. We have been induced to mention this case without going into details, just as a memento that amputations of the breast by the knife, though usually successful as operations, are not exempt from the risks of pyæmia and other diseases which follow more frequently on operations involving the bones. See also a case reported also from St. Bartholomews Hospital, at p. 473. Time will test the assertion of the Middlesex Hospital surgeons that the caustic treatment enjoys an almost complete immunity from these disastrous sequelæ. But, in the meantime, we may take exception to the tone in which they speak of the pain attendant on the use of the chloride of zinc by itself. Two cases are under treatment at this Hospital, of which we shall shortly, we hope, be in a position to give our readers the particulars, which prove that this application, though painful (and Dr. Fell's is not free from pain), is not by any means intolerable.

II. LOSS OF THE FOOT BY THE EXPLOSION OF AN OLD SHELL: RUSSIAN AMPUTATION AT THE ANKLE.

A singular accident which occurred to a young man, now an inmate of this Hospital, deserves a passing notice. He was a sailor, and had occasion a few months ago to visit Sebastopol. He was walking about smoking his pipe tranquilly amongst the many relics of the late contest, when a spark fell out of it on to

an old shell which lay at his feet, and which immediately exploded, shattering his left foot. The result is not very creditable to the countryman of Pirogoff who treated the case. Amputation was performed at the ankle-joint; but so little skin has been left (especially as the projecting extremities of the bones were not removed), that the tibia is only just covered, and by so irritable a cicatrix, that it will be necessary to repeat the amputation higher up.

III. DELIRIUM TREMENS IN THE FEMALE.

Delirium tremens in the female is sufficiently rare to make it worth while to produce short notes of an extremely virulent case, which seemed to run its course quite in defiance of the vigorous treatment adopted.

Mary S., aged 38, was admitted September 25th, on account of a wound produced by thrusting her hand through a pane of glass. The radial artery was wounded, and the forearm lacerated. She had been incessantly drunk for five weeks, her favourite liquor being rum; and she was still in a state of intoxication. Her countenance was pallid, pulse feeble, and she had lost a good deal of blood. The artery was tied. She was ordered beef tea and six ounces of rum. Three doses, each containing a drachm of tincture of opium, were given during that day, but no sleep was procured.

September 26th. She was ordered to have a drachm of antimonial wine in camphor mixture every three hours; but without benefit.

September 27th. The antimony was persisted in, and several large doses of tincture of opium were given. These amounted altogether to six and a half drachms in the course of the twenty-four hours, but still no sleep was procured.

September 28th. She was ordered half a grain of acetate of morphia, and a drachm of antimonial wine, every three hours. This seemed at first to allay her struggles, but in the later part of the day she became much more violent, and died fairly exhausted in the evening.

The *post mortem* examination showed only fatty disease of the liver.

BIRMINGHAM AND MIDLAND COUNTIES EYE INFIRMARY.

CASES OF CATARACT TREATED IN THE MONTH OF SEPTEMBER 1857.

Under the care of James Vose Solomon, Esq., F.R.C.S., one of the Surgeons to the Institution.

Case I. E. S., aged 50, a "bankswoman", had double cataract. Reclination was performed in both eyes, and on the same day. This operation was selected because there is chronic disease of the lids and conjunctiva. The commissures are much contracted. Inversion of the lashes of the upper lids and entropion of the lower ones had been remedied by an operation. For several days after the reclination, a free discharge of straw-coloured secretion was yielded by the conjunctivæ; so that, had a double extraction been performed, both eyes would assuredly have been lost, from want of union of the flaps.

Result. Good sight with both eyes; pupils central and round.

The sounds of the heart are natural.

Case II. J. B., aged 50, a boatman, had a hard cataract, which was extracted through an upper section in the left eye, without accident to the iris or vitreous humour. The left globe had been previously excised, because it was disorganised.

Result. Good sight; pupil central and round.

The heart's sounds are natural.

Case III. H. F., labourer, aged 71, intemperate, was admitted for cataract of the left eye. The *right* lens was reclined in 1856. The patient was at that time very feeble; and the vitreous body, from the appearance of the left eye, was believed to be unsound—a conjecture which proved correct. He reads large print.

In the *left* eye, the amber coloured nucleus of a lens, attached only at its upper border, moved backwards and forwards as on a hinge. The patient's health had much improved since last summer. Mr. Solomon, fearing that, after making the section of the cornea, the nucleus might sink deeply into the fluid vitreous, attempted with a needle to detach and dislocate it into the anterior chamber, previous to making the corneal incision. The attachment, however, proved too tough and too elastic to permit of this being done. After lodgment of the opaque body in the bottom of the front chamber, it ascended, on the withdrawal of the needle, to its old position in the pupil. The connecting membrane resembled capsule, and was speckled with white. A quarter section was made at the upper part of the cornea, through which the lens and some vitreous humour escaped. No accident occurred to the iris. The wound rapidly healed.

Result. Good sight. The pupil is drawn upwards, in consequence of the loss of vitreous humour. In this case, a hard lens had undergone (as a result, probably, of rupture of its capsule) absorption, with the exception of its highly dense centre.

The heart's sounds are healthy.

Case IV. R. T., aged 17, a metal-pickler, had the left eye amaurotic, the iris tremulous, and the pupil black, and not dilated. The right presented a soft cataract and a tremulous iris. The shadow of a finger, when passed before it, was recognised. Solution was performed. No inflammation followed.

Result. Not ascertained at present.

Case V. J. H., aged 28, a miner, had cataract of the left eye from a blow. "Linear extraction".

Result. Good sight; pupil central and round. Neither double or confused vision has been experienced.

Case VI. W. A., a porter, aged 72, had double cataracts. The capsule of the right lens was thickened, and of the colour of white paper. The left lens was extracted by the upper incision, without accident to the iris or vitreous humour. No operation was performed on the right.

Result. Good sight; pupil central and round.

The sounds of the heart are natural.

Case VII. J. S., a boatman, aged 62, had double cataract. In the left eye, the cataract is complicated by posterior internal disease. In the right eye, the anterior capsule was opaque; the iris dilated freely under atropine; and the pupil was round, although there were adhesions between the two membranes. It was a question whether the lens was present. Mr. Solomon thought it was not; but, not being quite sure, he passed a needle through the cornea to ascertain, determining to act afterwards according to circumstances. The lens was not present; the capsule was readily cut away from the iris, and removed through a small incision of the cornea. It contained some particles of earthy matter. Some fluid vitreous humour was lost. Acute inflammation of the eyeball followed.

Result. Useful sight. The pupil is quite round, except at its lower part, which forms an horizontal line instead of a curve. When the effects of the atropine have passed off, and *a few months have elapsed*, it will, if we may judge from what we have seen in other cases, assume its natural form.

Case VIII. J. C., a boatman, who said he had never had a day's illness in his life, and did not know what it was to have a headache, was affected with double cataract. The left eye is unsound; the sclerotic vessels are enlarged; the capsule evinces signs of past inflammation; and the pupil, of circular form, does not duly expand after the repeated application of atropine. There is a slight divergent strabismus. The shadow of a finger, passed before this eye, was recognised. The right eye had the appearance of health, with the exception besides the cataract, that here and there the pupillary margin of the iris was *minutely* jagged. The upper incision was accomplished in this eye without accident to the iris, but, in consequence of spasm of the straight muscles and a little "hanging" of the knife, which cut badly towards its heel, a fair quantity of vitreous escaped with the lens. For twenty-four hours all went well, and then acute inflammation was set up.

Result. Closure of the pupil, which is drawn upwards.

The heart-sounds are natural.

Case IX. J. F., a glass bead-maker, aged 49, intemperate in his early days, latterly in very poor circumstances, had double cataract, complicated by chronic congestion, if not inflammation, of the deep internal tissues. The right cataract is fluid, with the exception of an amber nucleus, which is plainly visible when the head is erect and directed a little forwards, and disappears when it is thrown backwards. The left appears to be of a soft consistence externally, and would probably, if not surgically interfered with, assume the same condition as was observed in its companion. In July, Mr. Solomon operated with a needle through the cornea on this eye. The external fibres of the lens were soft; the nucleus was hard. Inflammation, as anticipated, followed. In September, a mere concave shell of lens remained, from which a central round portion was cut out with a needle. There was no consecutive irritation.

Result. Good vision; a round pupil.
There is a loud cardiac *bruit.*

Case x. T. G., aged 62, a mechanical draughtsman, healthy, rather feeble, who had suffered a good deal of anxiety of late, had double cataract. The upper section was done in the right eye without accident to the iris or vitreous humour. The incision was slow in uniting, but not so much so as in Case xi—a younger and much stronger subject. No operation was performed on the left eye.

Result. Good sight. The pupil is central and round.
The sounds of the heart are natural.

Case xi. C. B., a nailer, aged 51, had double cataract. The capsule of the right lens was thickened and opaque. The left lens had a slightly greenish shade. The eyes are deep set, and the brows very large and prominent, which give a forbidding aspect to a countenance, which, in other respects, was not disagreeable. An operation for convergent strabismus was performed in 1856, in anticipation of the cataract treatment. Severe headaches preceded the dimness of sight. The lenticular disease is referred by the patient to a contusion of the eyes, from a thrust of a man's finger, about four years since. The lower incision was executed in both eyes, and on the same day, without accident to the iris or vitreous humour. From the toughness of the capsule, some difficulty was presented in the extraction of the right cataract, and a little vitreous humour escaped. No inflammatory pain followed. Union took place very slowly. Meat was given on the second day after the operation, and ale on the third. Although the patient was a younger and stronger man than T. G. (Case x), the repair of the wound was more tardy than in his case.

Result. Good sight in both eyes. The pupils are central and round; a very small pellet of capsule adheres to the lower margin of the right pupil.
The sounds of the heart are natural.

Case xii. L. R., aged 77, a female, has double cataract. The left is complicated by retinal disease. The right eye affords a good specimen, as in Case ix, of Morgagnian cataract. The anterior capsule is speckled, which gives the appearance of gruel to the cataract. When the head was turned back, the solid nucleus disappeared, and a general milkiness was substituted. Illness obliged the patient to leave the house before the adoption of any surgical proceeding.

Remarks. These cases present a very fair practical exposition of cataract as met with in the practice of a public institution. The number of patients submitted to surgical treatment was *eleven*, of eyes *thirteen.*

Nine of the latter were treated by extraction; *two* by reclination; *two* by solution. The upper incision was selected in *seven*, the lower *two.* In three patients, the fellow eye of that operated upon was obviously diseased in its deep seated tissues. In one of these, the diseased globe was excised, and an excellent recovery after the extraction of the cataract secured. In the others (two), acute sthenic inflammation followed.

Original Communications.

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

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[*Continued from page* 827.]

Part III.—Therapeutics.

Before attempting to lay down what I believe to be the true methods of treatment applicable to disordered states of the uterine motor functions, I will pass in review very briefly some particulars relative to the past history of this aspect of the medical art. In no department of medicine, perhaps, has there been a more marked revolution than in that part of it which relates to uterine therapeutics. And not only has there been one revolution, but there has been a second; and obstetricians have oscillated by turns between the wildest credulity as to the virtues of remedies, and the most dogged scepticism.

The very earliest practitioners of obstetricy had very simple ideas on the subject of labour, and as to the objects to be obtained by medication, manipulation, incantation, or prayers. The object of every therapeutic endeavour was to make labour *quick* and *easy.* As regards the part acted on, their idea was that medicines or applications of any kind were of three kinds; viz., such as brought the fœtus down, such as brought the secundines down, and such as brought down both. Now, if this could be done *quickly* and *easily*, then obstetricy had achieved its triumph. As regards the choice of means, the ancients were guided by whether the fœtus was alive or dead; the foundation of such difference in treatment being their belief that the fœtus was the main instrument in its own birth. They speak frequently of births being delayed by reason of the weakness of the fœtus, and evidently thought that it worked its way out just as a young crocodile would wriggle out of its shell. Had not the placenta been such an unmistakably anti-locomotive object, the obscure property of a "conatus ad partum" would doubtless have been attributed to it also. So great a share, indeed, did ancient physicians imagine the fœtus took in the process of its own birth, that they never thought of any means of assisting labour during the life of the fœtus, except such as were mechanical. The fœtus was looked upon as exercising a sort of *vis à tergo;* and if this was not sufficient, then it was to be supplemented by a *vis à fronte—i.e.*, by some mechanical appliance. Hippocrates, the old man of Cos, who, by the way, was a "general practitioner," gives an elaborate account of the drugs to be used to bring down a *dead* fœtus. He enumerates also the proper drugs for bringing away the placenta, as if the birth of these were a process essentially distinct from the fœtal birth, specifying for this purpose mugwort, dittany, castor, spikenard, rue, wine, flower of white violets, leaves of agnus castus, garlick, and small onions. Celsus was evidently under the same delusion as to the active part the fœtus takes in its own birth, for he confines his remarks to cases where the fœtus is dead; he says: "Si vero infans intus decessit, quo faciliùs dejiciatur, malicorium ex aquâ terendum, eoque utendum est." This curious opinion that the child worked its own way out of the maternal nidus, or at any rate assisted itself very much, although abandoned a long time ago as a formal doctrine, nevertheless continued to influence obstetrics up to a comparatively recent date. Thus in all the old herbals and obstetric books oxytocic remedies were arranged in three distinct categories, corresponding with the ancient idea mentioned before; viz., that the live fœtus, the dead fœtus, and the secundines had each some special properties of their own, which demanded different drugs for their expulsion respectively. And, indeed, so late as within eighty or ninety years of the period when Denman was at the zenith of his reputation, and within fifty years of Smellie's time, this ridiculous distinction as to the action of oxytocics was kept up. Ignorance and credulity are constant associates; for we find that the animal and vegetable kingdom alike were ransacked, and multitudes of substances of the most innocent nature generously invested with the property of procuring "easie travell" or "speedy deliverance," or "bringing down the dead fœtus," or "expelling the secondine."

The nature of the remedies in vogue formerly, and the modes of applying them, are curious in the extreme. Poultices and unguents were perhaps the least objectionable appliances; but the favourite mode of proceeding seemed to be to cram an atrocious mass of wool and unguents up the vagina, or to force something still more execrable down the throat. Various kinds of excrement were recommended. Hippocrates gave "the dung of a hawk in wine." His successors gave the excrement of the horse, the goose, the vulture, and even human excrement. Schrœder is said to have given bugs. The secundine of various animals, to wit, the cat and the goat, is another of the pleasant medicaments used in the good old times. Powder of earth-worms, to the extent of a ℈i or ℈ii, also figures as an important remedy. The powder of horse's testicles, the gall of the scorpion fish, the liver of the cormorant, the flesh of the weasel, and burnt horse's fat, with eel-powts, toads, and newts, complete the list of animal abominations. The list of vegetable oxytocics, though much more copious, is decidedly cleaner. Some of them attained to such reputation as to be popularly named according to their real or supposed virtues; thus the aristolochia was called birthwort; and one of the species of horehound went by the name of motherwort. Some of the most remarkable were such as we believe at the present day to possess some control over the contractions of the uterus. Thus savine and cinnamon are mentioned in all the old herbals as used for this purpose. A very interesting paper by Mr.

Howship Dickinson appeared in the *Medico-Chirurgical Transactions* of last year, the object of which was to show that digitalis possessed the power of inciting the uterus to contract. But the diligence of our forefathers had included foxglove amongst the helps to labour two hundred and fifty years ago. If we even turn to the only mineral oxytocic known, viz., borax, we find that it was an ingredient of the "pulvis ad partum" of the Edinburgh pharmacopœia of 1699. And Dr. Salmon gives pretty nearly the same formula as the "pulvis ad partum" in his curious dispensatory, and says "it is a great secret for this purpose; and if you add round birthwort root, myrrh, bryony root, and inspissate juice of savine, the medicine will be much the stronger." Oil of amber was formerly extolled as an oxytocic, and entered into the composition of both the above mentioned powders. Then there were some celebrated pills called "Scheffer's uterine pills"; they were composed of hiera-picra, asarabacca, gentian, birthwort, elecampane, myrrh, dittany, madder, saffron, and syrup of mugwort. All these herbs and scores of others are confidently spoken of in the old herbals as of undoubted potency. One authority went so far as to say, that the cyclamen or sow-bread acted so powerfully on the uterus that it was not safe for a pregnant woman to go near it. He took the precaution of setting up sticks in his garden wherever it grew, with notices to breeding women not to touch or remain near the herb. Should pregnant women incautiously walk over it, he averred that they would surely abort or fall in labour directly. A Flemish physician, by name Dr. Francis Rapard, claimed nearly equal virtues for the common columbine; he administered the powdered seeds. In addition to those I have specially mentioned above, the following appear to be the agents most probably possessed of some real oxytocic powers, which were used by our forefathers; aloes, flower de luce, cummin seed, galbanum, lavender, mistletoe, rue, sage, tormentil, darnell, laburnum, dittander, colocynth, hippoglossum, male fern, angelica, imperatoria or masterwort, anagallis aquatica, polygala senega, and the various products of the pine and fir trees, such as tar and turpentine.

It is curious to observe how servilely the different compilers seem to have copied from their predecessors. The virtues of different herbs are described in almost the same words in book after book. Turner's *Herbal*, published in 1551, mentions so many plants which "help the birth," that one would almost fancy the vegetable kingdom had been created one monstrous repertorium of obstetric simples. The same is true of Andrew Boord's *Breviary of Health*, published in 1575; the same of that of Dodoens, published in 1619. Johnson's *Herbal*, published in 1633, repeats the same things, and adds some curious tales; but the most wonderful work of all is that of "William Langham, Practitioner in Physic," published also in 1633. He enumerates and describes the virtues at length of 48 herbs which will surely expel a dead child; 56 which guarantee "easy deliverance"; 90 good for "women in travell"; and, to turn to analogous remedies, the astounding number of 108 infallible emmenagogues.

This farrago of simples and other uterine remedies, however, disappeared from medical practice very rapidly after about the year 1700. In the second edition of Smellie's *Midwifery*, published in 1752, he says, when speaking of the treatment of lingering labour: "But if she (*i.e.*, the woman) is not to be satisfied, and strongly impressed with an opinion that certain medicines might be administered to hasten delivery, it will be convenient to prescribe some innocent medicine that she may take between whiles, to beguile the time, and please her imagination." Stimulants, depletion, and moral influences seemed to be all that Smellie could rely upon in lingering labours, apart from manual interference. His faith in oxytocics was evidently very small; and when he gave medicine it was confessedly only as a *placebo*.

About forty years later Denman writes thus: "It is perhaps beyond the influence of any earthly power to give to the uterus its native or genuine disposition to act, to add to its power, or in any material degree to increase its energy, though many applications and medicines have been recommended and tried for this purpose. Human art may put or preserve the constitution in a state fitted for such action, or it may remove any impediments to its effect; but the principle is wholly independent of the will of the patient, or the skill of the practitioner." This citation of Denman's opinion marks the extreme reaction from the credulity of the former century; it is a kind of obstetric Pyrrhonism, doubting everything. But this state of matters was not destined to last for any great length of time; for, eight years later than the edition of Denman I have quoted from, viz., in 1803, Herder made his experiments upon galvanism; and in 1807 Dr. Stearns, of New York, introduced the ergot of rye into the place in obstetric practice which it has held ever since.

We now come to modern oxytocics. The list has increased since Denman averred that no earthly power could materially increase the contractions of the uterus. A second reaction has set in, and we find ourselves making a reverse movement; not really retrograde, it is to be hoped, but only apparently so; for we have before us the warning examples of extreme credulity and extreme incredulity; and the light of an advanced physiology and pathology by which we may steer safely through the dangers of scepticism on one side, and too ready belief on the other.

It is, perhaps, the most encouraging circumstance in connection with modern therapeutics, that we are able to connect much of our treatment with the facts of physiology and pathology in a clear and rational manner. Even where treatment is of little avail, so far as it does actually work for good, we can, in a great many cases, trace the action of the therapeutical measures adopted to either the operation of their well ascertained physiological actions, or to a quasi-specific action, so well established and easily recognised, that, in spite of empiricism, we feel ourselves resting upon a safe basis. In the treatment, for instance, of traumatic inflammations of all kinds, of acute rheumatism, of scurvy, or of ague, we are able to connect our ratio medendi either with a series of well known facts in physiology, or with some ultimate and empirical facts, either of which are abundantly satisfactory. And even where we can push our inquiries no further back, we appear in this day to have made up our minds to the acceptance of ultimate facts, a virtue which, to our forefathers, was quite unknown. When facts fail us, and our induction is imperfect, we do not now, so frequently as formerly, fall back upon some hypothesis or figment of the imagination to complete our philosophy, nor create for ourselves a delusive *chiar'oscuro* out of a jumble of facts and fictions. In obstetric medicine it is fortunately our privilege to be able to draw the connection between science and art very close. Hardly any treatment of aberrant forms of uterine motor action are insusceptible of an explanation by a reference to physiology; and the therapeutics of such morbid states are generally to be found as clearly and closely related to physiology as the pathology itself. If this really be so, then it may be asked to what purpose is it that we are vexed with the reiteration of what is already known? My answer is, that in the first place the facts pertaining to this subject have hitherto been lying scattered abroad to a certain extent; secondly, that although much is known in each separate department of hystero-dynamics, the correlation of the facts in each has never yet been thoroughly shown, or, indeed, attempted at all in a systematic manner; and, thirdly, I believe I have not merely displayed the facts and principles of the subject in an orderly manner, but have made a truer physiological analysis of labour than any yet extant, given a more copious account of the pathological facts than has hitherto been done, and added something to the therapeutical knowledge we possess in this department of obstetricy.

It will be remembered that in the physiological analysis of labour, five elements were specified as the anatomical constituents, whose functions taken together are parturition. To speak briefly, they may be mentioned as—

1. Peripherical arrangements of cerebro-spinal and sympathetic nerves.
2. Incident cerebro-spinal and sympathetic nerve-fibres.
3. Nervous centres, both cerebro-spinal and sympathetic.
4. Efferent cerebro-spinal and sympathetic nerve-fibres.
5. The uterine muscle and other muscles.

In the pathological investigation it may be remembered that, to a great extent, the *second* and *fourth* of these elements were eliminated, as not being of primary importance in a pathological point of view. The same is true as regards the therapeutics of morbid uterine motor action, as a necessary sequence. I shall, therefore, treat of the therapeutics of morbid uterine motor action in three sections, each corresponding to those physiological elements and pathological developments which are of primary importance. Thus, in relation with peripherical arrangements of nerve, of certain natural capacities, are a variety of morbid states, consisting of alterations in the manner and degrees in which such endowments are manifested; and we consequently look for means of cure specially adapted to these aberrations. The nervous centres again have their normal actions, and their abnormal, both of which have been traced, guided by the same thread; and these latter have their own

therapeutical indications. And the uterus again has a physiological condition of its textures, as well as a diseased, and we seek for a means of either restoring its natural condition, or obviating the ill effects which may possibly accrue from its failure.

It will naturally follow, then, to arrange the therapeutics of the subject under these three heads:

I. Modes of diminishing the irritability of cerebro-spinal or sympathetic nerve-terminations of the uterus itself, or of parts in sympathy with the uterus.

II. Modes of exciting the nervous centres concerned in parturition, of exalting their polarity, or of diminishing it.

III. Modes of preserving the uterus itself in, or restoring it to, a healthy condition as regards its textures, or of obviating the dangers to which a deficiency in its quality may give rise.

I. Hyperæsthesia of the various nerve-terminations in connection, either immediately or remotely, with the uterus, encounters the obstetrician very frequently. To be able to recognise them, or to be aware of their existence and nature, which amounts practically to the same thing, will smooth many of the minor difficulties of patient and accoucheur. To commence with the uterus and the vagina, I will refer first to irritable conditions of these organs, and morbid states of certain of their contents which admit of alleviation. Irritable states of the upper part of the vagina and vaginal surface of the cervix uteri, existing at the time when labour actually takes place, may be treated in two ways: either the parts themselves may be made the subjects of various applications, or general anodynes may be resorted to. In minor cases, where suffering is not very intense during the early stage of labour, local medication is perhaps the best, because it does not interfere with the natural chain of events in any way. When acrid and profuse discharges exist, whether connected with specific disease or not, injections of carbonate of soda in solution with watery extract of opium, may be serviceable; or, the parts having been cleansed by tepid injections, various extracts may be smeared on the surface of the cervix uteri, or left to produce their effect in the vagina as soluble pessaries. Conium, hyoscyamus, belladonna, and watery extract of opium may all be used for this purpose; I have saturated a sponge with solutions of these extracts and introduced it into the vagina, with good effect. A part of the influence of such remedies is of course due to their absorption into the circulation; but in the main their effect is local. Emulsions of oil and mucilage may be used for the purpose of allaying an irritable condition of the vagina; and they will be the more efficacious if containing one of the anodyne extracts mentioned before. An opposite kind of application may be used if the case comes under observation two or three days before labour sets in; viz., a lotion of nitrate of silver of about five grains to the ounce. I am referring now to instances of cervico-vaginal leucorrhœa, and more especially to those which are dependent upon constitutional syphilis. When the epithelium of the upper part of the vagina desquamates in patches, leaving a highly injected surface bare, the nitrate of silver is peculiarly suitable; indeed, no other agent appears to be able to allay even temporarily the irritability of the canal under such a condition; and, failing its use, recourse must be had to the internal administration of anodynes—to centric medication, in short, instead of eccentric. When abrasions or ulcerations exist, which is not often the case, the irritability they produce may be treated in exactly the same manner. Cicatrices, if not dense enough to require surgical interference, are best treated by the application of some anodyne extract, while at the same time antimony and opium internally will materially assist, not only in favouring relaxation of the part, but in inducing a quiescent state of the nervous centres, as well as of the vascular system. Plethora of the uterus is a condition which it is hardly possible to deal with unless it be discovered some time before the advent of labour. It is characterised by lingering persistent pains in the early, and irregular crampy pains in the later stages of labour. It is associated, moreover, with a full state of the hæmorrhoidal veins, with a general engorgement of the pelvic viscera, with torpor and congestion of the liver, and with a tendency to obesity or general plethora. The obvious plan of treatment is the exhibition of moderate purgatives; not, of course, pushed to such an extent as to bring on labour. Small doses of blue pill at night, and potassio-tartrate of soda in the morning, given several days consecutively, will prove of service; but generally speaking the actual existence of uterine plethora is unknown till labour commences. Irritable conditions of the uterus, arising out of inflammations of the placenta and amniotic sac, are commoner than is generally supposed; though, connected with syphilis, they are by no means invariably so. I have been able to trace distinctly the progress of inflammation of the amnion sac, from the first symptom of rigors to that of local pain and tenderness, then dropsy of the sac, then premature and painful labour. I have seen patches of recently effused lymph on the membranes in such cases. The treatment of irritability from such a cause is the treatment of the inflammation itself; *i.e.*, if there is opportunity before labour for treatment at all. Leeching, grey powder, and Dover's powder, stupes, and fomentations are appropriate. But if labour has begun, we may choose between sedatives internally or mere sedative applications as described before. The irritability which derives from the presence of tumours must, if such growths are irremovable, be treated by centric medication—opium, belladonna, hyoscyamus, conium, or chloroform.

The reflected irritations which influence the character of labour form a more important class of phenomena than the purely local hyperæsthesiæ of the uterus and vagina. The treatment of the morbid alterations in the character of the uterine contractions which accrue from the numerous forms of reflected irritation, may be resolved into two modes of influencing such alterations. In the first place, it may be sought to bring the polarity of the nervous centres, through which all impressions must pass, down to a level somewhat below the natural standard, or at any rate below the standard which obtains at the time when interference is made. In the treatment of reflected irritations, this principle has been too much overlooked; it has been very much the custom to inculcate the propriety of removing the sources of irritation; but it has been insufficiently remembered that the nervous centres are after all capable of very much modifying the impressions conveyed to them, and through them. An irritation, in short, is only important according to the value it possesses after transmission through a nervous centre. Morbid excitement of nervous centres, as in tetanus and hydrophobia, present us with violent actions of a reflex nature, quite out of proportion to the stimuli applied; and various kinds of narcotism, on the other hand, show us a disproportion of a reverse kind between excitation and motion. The law of physical dynamics, which tells us that action and reaction are equal, is not true in vital dynamics; for at the point of reflection we have organs which are capable of multiplying or diminishing the incident stimuli. Whatever organs, then, may be in a state of morbid irritability, and from whatever reflected irritations the uterus may be suffering, provided the special features of the case do not forbid it, we are always open to consider how far we may avail ourselves of the assistance of narcotics or anæsthetics. I shall not enter upon the general question of the employment of such agents here, because I wish to discuss it in another section, and in connection with the properties of some particular remedies. But I will only insist upon this; viz., that there are numerous cases of mal-action of the uterus arising from reflected irritations which are amenable to, and properly treated by, narcotics and anæsthetics, and that such a method of treatment is not only justifiable, but preferable in most cases to any other. Practically it will be found that in a large majority of cases there is not time to initiate any treatment beyond the administration of general anodynes, narcotics, and anæsthetics.

In the event, however, of time being sufficient to allow of our attempting to subdue the various eccentric hyperæsthesiæ which are reflected to the uterus, by acting upon the organs themselves which are in an undue state of excitability, the following are the means which appear most adapted to the end in view. And first of all, with regard to states of the ovaries. It is in the earlier months of pregnancy, that is to say, from the second or third to the seventh months, that hyperæsthetic conditions of the ovaries influence the uterus. Whether this irritability of the dominant organs of the female sexual economy is of the nature of neuralgia or congestion, or subacute inflammation—or whether it be an exaltation of a a special force which normally determines the advent of uterine combinations, appears very obscure; and, like many obscure things in medicine, not very important in a practical point of view. Deep seated pain in the flank, tenderness as deeply situated, pain down the thighs and in the inguinal region, wandering pains in the abdomen, irritability of the bladder, slight uterine contractions, and the commencement of secretion from the vagina, or a slight show of blood, are symptoms which indicate the several varieties of ovarian excitement *about to terminate in labour*. In the pathological investigation, I stated that conditions of the ovaries do not influence mature parturi-

tion in the same way as they do premature labour; and this fact does appear to me to make rather against the theory which regards the ovaries as the fountains and originators of the parturient impulse; for if morbid excitations of the ovaries are at the root of abortions and painful premature labours, which is an undoubted fact, *à fortiori*, morbid excitations of the ovaries should still more concern mature labour. I need hardly say that this *is not* the fact. In short, the further we are from mature labour, the less conspicuous is the influence of the ovaries over the parturient act, as far as all morbid actions are concerned; and we have yet to learn that a subtler influence issues from the ovaries at the full period, or one essentially different in its nature from the influence which determines abortions and premature births. As far as regards ovarian hyperæsthesia occurring at the full period, and during the actual progress of labour, I must confess myself ignorant, both as to its diagnosis and treatment: as to the latter, however, I see no room for special medication, even if the disorder were recognised; I should resort to general anodynes. In early pregnancy, however, the case is different. Hygienic precautions are perhaps as useful as drugs in allaying or preventing ovarian excitement. Recumbence exercises an influence over even neuralgia of the ovaries in the unimpregnated condition, which appears inexplicable even by reference to the effect of posture upon the circulation in these organs; in the pregnant state its influence in still more marked. The bed slept in should be hard, the coverings light; the temperature of rooms inhabited cool; the diet unstimulating, and especially as regards wine, spirits, or malt liquors; for the ovaries resent alcoholic drinks as decidedly as the testicles do when inflamed or irritable. I have seen half a glass of bitter ale throw a patient into a paroxysm of the acutest suffering, when the ovaries have been the seat of neuralgia. Sexual congress should, of course, be prohibited. A solvent condition of the bowels should be kept up by the use of sulphur or Rochelle salts; resinous aperients should be avoided, as they all stimulate the rectum more or less; and active diuretic salts should also be avoided, for they stimulate an organ which is in very close sympathy with the uterus; viz., the kidney. Local bleeding does not appear to be advisable, unless tenderness on pressure is a prominent feature of the case; but counterirritation I would certainly resort to. The establishing of a blister is certainly producing a new eccentric irritation; but then it is substituting an irritation of a part not in special sympathy with the uterus for an irritation of an organ most specially in sympathy: and this is its advantage. Medicines which possess a peculiar anodyne influence over the ovaries are not much known. Antimony, ipecacuanha, lupuline, camphor, and sugar have been looked upon as sedatives both of the male and female dominant sexual organs. Antimony and other drugs which create nausea do certainly allay sexual excitement; but whether this is due to their effect on the circulation primarily, or to a special action on the sexual organs, there does not appear sufficient evidence to determine. Aconite may be used on the same principle. Lupuline I have tried, and I see no reason to believe that it is anything more than a general anodyne and narcotic; and camphor does not, in my opinion, exert any special influence over the ovaries. It may appear strange to speak of sugar as an ovarian sedative; but there are facts which tend to show that this article is not without a very marked influence upon the sexual system. I have been told by Americans and West Indians that at the time of the sugar harvest, when the negroes eat large quantities of sugar, they become very fat, and almost entirely cease to copulate. I have been told also that whites who indulge in sugar in the same way experience temporary impotency, or such a degree of disinclination to sexual commerce as renders them proof against any solicitations, however seductive or importunate. Whether these facts are applicable to the treatment of ovarian hyperæsthesia, I have not been able to ascertain. I made some experiments, in which sugar was given to the extent of half a pound a-day, but no satisfactory results were arrived at; the experiments, however, were neither numerous nor very well chosen, so that the inquiry still remains perfectly open. Cannabis Indica has not received the attention it deserves in relation to the sexual system. On the whole, much faith is not at present, at any rate, to be placed in sedatives which act specially on the ovaries. As, however, habitual irritation of these organs invariably sets up exalted polarity of the nervous centres, we can fall back rationally and usefully upon general anodynes; these, with counterirritation, recumbency, laxatives, and careful hygienics, will serve our purpose moderately well.

Irritable states of the bladder occurring during labour, and arising out of calculus, cystocele, or a chronic catarrh of its mucous coat, are not very much amenable to topical medication. If the calculus could be kept in any particular position during the progress of labour, it would be an object to adjust its position to the fœtal presentation; but I should suppose that nearly all that could be done would be to keep it above the pubes as the fœtal head descended. One point, however, seems obvious; viz., to keep the bladder as full of urine as may consist with safety. By this means the whole weight of the calculus will not be concentrated on the surface it is actually in contact with. In cystocele, an exactly opposite course is best; the water should not be allowed to collect in the bladder at all. I have passed a small catheter into the urethra in such a case, and at the same time placed an ovoid sponge in the vagina, so as to prop up the prolapsed vesical wall; the patient in this case declared she suffered much less than on any previous labour since she had been subject to the prolapse, and the treatment evidently produced a marked diminution of her sufferings. When there is an irritable state of the bladder from catarrh or chronic inflammation, it may not be amiss to wash the bladder out, by means of a double catheter, with warm water, and then to rely upon a full dose of opium.

Fissure of the rectum can only be treated by suppositories of watery extract of opium, or by overpowering doses of opium or morphia, or by chloroform. Hæmorrhoids, in so far as the irritation they produce, may be dealt with in the same way. Rectal irritations are the most severe perhaps of all those which react upon the uterus; and this depends not only upon the sympathy which exists between these parts, but upon the influence which states of the rectum have upon various muscles very much concerned in the act of parturition. It is hardly possible, indeed, to have a morbid state of the rectum and not to have a morbid action of the muscles which form the floor of the pelvis (and of the vesical muscle also); other respiratory muscles also take on abnormal actions, and a natural and equable operation of the mechanical forces is put out of the question. On account of the violence with which rectal irritations react upon the uterus, it will, I believe, generally be found advisable to resort to chloroform. Scybalous masses lodged in the rectum do not come under this category; for copious warm water enemata will nearly always remove them; and if anything more is required, a morphia suppository will answer every necessary purpose.

Renal irritations should be attacked at as early a date as possible. In albuminuria, the state which is nearly always connected with renal irritation in the pregnant woman, no remedy appears to act more speedily and with greater effect than local bloodletting—cupping. The glasses should be applied in the lumbar region, of course; and relief to the lumbar pain will generally be afforded even during the operation. The skin should be kept active by warm baths or vapour baths; the liver and bowels kept tolerably active by such aperients as the compound jalap powder, and moderate doses of grey powder. By these means part of the work of depuration will be taken off the kidneys; and the secretive functions of the organ being less taxed, there is the desirable condition of comparative rest obtained, and a less active circulation in them. The use of diuretics requires some caution. They are, I know, nearly always resorted to, and frequently with the best effects; but it is necessary to exercise discrimination in their choice, and to have clearly in view the objects we seek to obtain by using them. The aim of treatment in such cases is threefold; first, to subdue renal irritation; secondly, to relieve the distress arising from tension of dropsical parts; and, thirdly, to stop the secretion of albumen, and improve the condition of the blood. The first of these indications is answered by cupping, aperients and cholagogues, vapour baths, and other sudorifics, and dilution of the urine; the urine in such cases is very commonly loaded with lithates and lithic acid, and is stimulating on account of its intense salsification with acrid salts. The best diluent is water. The dropsy and its attendant discomfort are to be removed by increasing the flow of urine; in short, by draining the body. Now, in effecting this purpose we should be careful, first, not to over-stimulate the *secretive* function of the kidney, and, secondly, not to exhibit any drug which will excite uterine contraction, or destroy the fœtus *in utero*. I think it is pretty clear that alkaline diuretics will give us a maximum of watery flow with a minimum of kidney stimulation. The kidney, it should be remembered, is the natural eliminator of saline matters; and, imitating nature, if we apply stimuli of like kind to the physiological stimuli, we shall procure the increment of function at

the least expense of stimulation. The diuretic essential oils and scoparium I object to as being too stimulating. Digitalis is dangerous in two ways; first, because there is a risk of setting up uterine contractions; and, secondly, because digitalis will sometimes kill the fœtus *in utero* by producing paralysis of the heart. I have seen this occur. We are not concerned here with the other indication of treatment. The form of diuretic I would use would be the acetate of potassa *largely diluted*, combined with the vinegar of squill, and full doses of tincture of henbane. It was taught by the late Dr. Golding Bird that acetate of potassa was the best diuretic salt in the pharmacopœia; and he especially insisted on the practice of *dilution*. The urine appears to be more readily made alkaline by this salt than by the other salts of potassa; the nitrate passes out of the body as nitrate; liquor potassæ is less diuretic and is apt to throw down the phosphates of the urine while the bladder is still full; and the same is true of the carbonate; the bicarbonate may be used if the stomach rejects the acetate. It should be remembered that it is not diuresis *only* that is required, but a copious secretion of bland urine, at the expense of as little stimulation to the kidney as possible.

Hyperæsthesia of the gastric nerves is a very embarassing complication of pregnaney. The danger to both mother and fœtus is very considerable; indeed, it often happens that one must fall a sacrifice to the other. The vomiting which declares this irritable state of the nerves of the stomach is only, so far as I am aware, capable of being dealt with by two methods of treatment as long as the fœtus remains *in utero*. The first is the resolute use of morphia and hydrocyanic acid; and the second is a dietetic system, of which I will speak presently. A radical error is generally committed in the administration of opiates in the gastric irritability of pregnancy, and in other cases also where it is desired to allay vomiting. The *bulk* of the dose is almost invariably too great, the sedative is given too much diluted, and the quantity of fluid is resented by the stomach. It should be borne in mind that a medicine used for the purpose in question is essentially a *lotion* to the coats of the stomach. If the lotion is made too weak the intent is frustrated. The bulk of the dose should never exceed one fluid drachm, and it may be made less with advantage. Half a grain of acetate of morphia, three drops of the dilute hydrocyanic acid, and one of Fleming's tincture of aconite, to a drachm or even half a drachm of water, will not only burthen the stomach less, but will produce a greater *topical effect* on the nerves of the stomach than if given in the usual state of dilution. The food should be given in one of two ways; if taken in any considerable quantity, *i.e.*, if any attempt at a meal be made, it should be eaten soon after the exhibition of a dose of the medicine, and should be soon followed by another; or the diet should consist of single spoonfuls of milk, strong beef tea, or egg-brandy, often repeated; or very frequent doses of protein. The most remarkable case of vomiting I ever heard of was successfully treated by five grain doses of protein given in a teaspoonful of milk every hour; the case occurred some years ago, and was recorded in the journals of the time, but my memory will not serve me for a reference. The dietetic principle seems to be either to overpower the hyperæsthesia immediately before eating; or to give food in small quantities, and in such a form as to pass readily into the duodenum, thus diminishing the offence to the stomach, and throwing the task of digestion mainly on the small intestines. It is of course only possible within these limits to do more than indicate the general plan of treatment or the principles upon which to act. Modifications easily arise when the main principle is grasped.

The last eccentric irritation to which I shall refer is hyperæsthesia of the mammæ. Mere irritability of one or both breasts may obtain, or the altered innervation of the part may be succeeded by great vascularity and induration; and in some extreme cases suppuration takes place. There can be little doubt but that these affections of the breast, which in the first instance derive from the irritation of the ovum contained in the uterus, are again reflected upon that organ. A brisk saline aperient and leeching, followed by the application of a belladonna plaster, will be found the best method of treatment.

The preceding remarks are a mere sketch of *eccentric medication*. In the next paper will be discussed *centric medication;* the properties of the agents used, and the circumstances which call for, or disallow, their exhibition.

[*To be continued.*]

CASES OF POISONING BY WHITE PRECIPITATE, AND BY POPPY-HEAD.

By W. H. Michael, Esq., Swansea.

[*Read before the Monmouthshire and South Wales Branch, July 23rd,* 1857.]

I. POISONING BY WHITE PRECIPITATE.

Miss P., a schoolmistress, aged 37 years, on December 27th, 1856, bought, at three druggists' shops, fourpennyworth of white precipitate, for a suicidal purpose. She obtained, as it would appear from the statement of the tradesmen who supplied her, 140 grains of ammonio-chloride of mercury, two samples of which, when analysed at the shops, were found to be absolutely pure. At or about 8 o'clock in the evening of the same day, she ate a large portion of the powder spread on bread and butter. About ten grains, adulterated with sulphate of lime, were found on the plate which she had used, and on some portion of the bread and butter she had been unable to eat, and had thrown away. Judging from her own statements upon several occasions, and from the foregoing facts, it appears probable that not less than one hundred grains were swallowed. She was seen by me about three hours and a half afterwards, and was then lying on the floor of a bedroom, complaining of great pain in the region of the stomach, and severe intermitting cramp of the left side and lower extremities, which came on at intervals of two or three minutes. The pulse was very rapid, weak, and thready; the surface cold, and covered with a clammy perspiration; the countenance was pale, drawn, and anxious; the tongue very red; the pupils were dilated, and contracted but slowly under the stimulus of light. She had vomited very freely a thick tenacious mucus, of a white colour, with white sediment. This I was unable to examine, as it had been thrown away previously to my arrival. About half an hour afterwards, the bowels were very freely acted on, an enormous quantity of fœtid fæces passing, sufficient to fill two chamber utensils. Several pieces of white precipitate were picked off the tongue, which had apparently been left there by the action of vomiting, which was kept up by diluent drinks for two hours. Great prostration continued for several hours, and the pain in the stomach continued for three or four days, when it gradually subsided. On Dec. 28th, reactionary fever set in, which, however, was never severe, the pulse seldom ranging beyond 120, and the head remaining unaffected: indeed, it appeared as though the thorough unloading of the alimentary canal had been productive of great benefit to the general health; the appearance of Miss P. after her recovery, which took place in a fortnight, being better than it had been for some years. *No salivation occurred.* The treatment adopted consisted of emetics, diluents, and sedatives, with counterirritation and application of external heat until reaction set in, when ordinary salines, etc., followed by quinine, were employed.

The features of interest in the case are, the large quantity taken, and the comparative immunity from alarming symptoms, which may probably have been owing to the vehicle (butter) shielding the coats of the stomach, and disarming the poison of some of its noxious effects.

II. FATAL POISONING BY A POPPY-HEAD.

On February 27th last, two children, twins, about three months old, were brought to me about 11 A.M., evidently suffering from narcotism. It appeared, upon inquiry, that the mother had the night before, with the view of procuring sleep, boiled a poppy-head in a small saucepan, and given each child one or two teaspoonfuls of the decoction. Stimulants, coffee, etc., were administered; but one child died the same evening, seven or eight hours after it was first seen. The poppy-head was shown me, and a few drops of the remaining decoction, which had the characterisic opium smell. No tests were applied.

CASE OF CONCEALED ACCIDENTAL UTERINE HÆMORRHAGE.

By John Audland, Esq., Tintern, near Chepstow.

On Sunday afternoon, August 30th, I was sent for to visit Mrs. M., aged 42, who expected her tenth confinement in three or four weeks. I learned on that and subsequent visits, that on the previous Wednesday night, soon after getting into bed, she became very faint and cold, and had a severe fit of shivering. Some gin was given her, and she gradually rallied. The next morning she got up, but felt very weak and giddy,

and her limbs could scarcely support her. On Friday, she was obliged to go out, and walked with some difficulty a distance of about a mile and a half. About 2 A.M. on the Sunday morning, she was suddenly seized with vomiting, and became faint, and felt, to use her own words, her burden fall down. She continued weak and faint, and vomited at intervals during the morning; and between two or three o'clock in the afternoon, I saw her. She was then extremely low and weak, with pale face, sunken eyes, contracted features, and a weak and fluttering pulse. She had had no regular pains, but felt a fulness about the loins and hips, and a constant bearing down. The uterine tumour was large and prominent, and remarkably hard and tense. On making an examination, I found the os uteri dilated to about the size of a crown-piece, the membranes unbroken, and the head presenting. There had not been the slightest discharge. I administered stimulants; and before I had decided what other means to adopt, a severe pain came on, by which the membranes were broken, the child (of course dead) and the placenta, followed by large clots of blood, were expelled. I bound up the abdomen, gave a large dose of tincture of opium, administered brandy and other stimulants, and the woman gradually rallied. By nutritious diet, a course of iron, etc., she slowly recovered, and is now, although still weak, able to go about.

Remarks. The presumption is, that from some cause or other blood was, on the Wednesday night, poured out between the uterus and placenta, where it was confined; for, on examination, a portion of the placenta (about one-sixth of the surface) was much more condensed than the remainder, and had clotted blood firmly adhering to it; and that, perhaps, on account of her exertion on Friday, more blood was shed, which caused the whole placenta to be separated on the Sunday morning when she was suddenly seized with vomiting, etc., and felt her burden fall down. It was very fortunate that the woman had a capacious pelvis, and had always rapid labours, for had any delay taken place in the birth of the child, she would probably have sunk.

In an interesting paper on "Concealed Accidental Uterine Hæmorrhage", by Dr. Oldham, in the *Guy's Hospital Reports* for 1856, it is stated that only three cases occurred in that institution out of 22,498 deliveries, and that all three were fatal. One successful case, a private patient, is reported.

Such being the rarity and fatality of the occurrence, perhaps the above case, where nature herself successfully effected the delivery, may be worthy of record.

British Medical Journal.

SATURDAY, OCTOBER 31st, 1857.

THE CHOLERA AT WEST HAM.

The outbreak of cholera at West Ham has, we are glad to say, ceased. The six deaths which took place in "Abbey Row," together with the decease at Horsleydown, will, therefore, we trust, include the amount of the scourge for the present year. It was at first stated that in several of the cases there was no premonitory diarrhœa; but Dr. Macloughlin has since carefully investigated the whole of them, and has arrived at the conclusion that diarrhœa was present in every case.

Dr. Snow, whose ideas respecting the transmission of choleraic poison are well known, asserts that the evacuations of the seaman who died of the cholera on board ship at Horsleydown were thrown into the Thames, and that the poison was in this manner transferred to the well, from which the people in Abbey Row drank, the well being subject to the overflows of the river Lea, which is several miles from the place where the organic choleraic evacuations were discharged into the Thames. If it be indeed possible to impregnate the immense mass of water in such a river by such apparently homœopathic doses of choleraic matter, it seems to us that every person who drinks of that water, and not only every person who drinks of it, but every person who breathes the air on its banks loaded with its vapour, should be subject to an attack of the epidemic as well as the unfortunate people of Abbey Row, who at least had the advantage of receiving the affected water filtered through the earth.

Dr. Snow would perhaps argue that, inasmuch as the minute particles of cholera seed would become widely dispersed in the water of the Thames, the chances are that only a few of them would come into contact with the human stomach. This would indeed be one manner of explaining the difficulty; but we confess we can scarcely imagine one of these particles so perverse as to sail up the Lea, and actually seek out a certain pump through the very earth that lay below it, and the sewer it was supposed to have entered; for, be it remembered, it is not at all proved that the Lea water finds its way in any other manner into the well, if, indeed, it finds its way there at all. It is much more easy to believe that the cholera evacuations would float up and down the main stream, than that they should enter a small well, as they must have done, according to Dr. Snow's hypothesis. Of course it is impossible to disprove that gentleman's explanation; but we must confess, with Dr. Lankester, that he does not, in our opinion, at all succeed in proving his case. What has become of all the other cholera seeds? Are they still floating about the Thames, and only waiting for the accidental dip of a bucket to introduce the disease at any point between the North Foreland and the place where the tidal influence ceases? If, indeed, these death-dealing germs are always laying in wait for us in the river, what guarantee have we that they may not be taken up by the pipes of the water company, and thus be distributed to us any morning as we wash our teeth? Dr. Snow may object, indeed, that the filters interpose between us and "pure death" in the form of this unfortunate seaman's floating dejecta, but he has already managed to percolate it through the earth at Abbey Row in order to get it into the well.

This theory is, we confess, a very alarming one, and calculated to keep Londoners from trusting water in any form. And why Londoners only? The cholera germs may escape out to sea, and ultimately poison somebody at the Feejee islands—for the germ, according to Dr. Snow, would appear to be indestructible. We trust Dr. Snow will pardon us for thus carrying out his theory to an absurd conclusion, and beg to assure him that it is far from our wish in any way to depreciate his labours with respect to cholera; they have been unsparing and able, and entitle him to the respect of his medical brethren. We fear, however, that he is carrying his theory of the manner in which cholera is propagated too far, in thus attempting to clip and shape any new outbreak so that it shall fit the Procrustian bed he has made for it. That cholera evacuations may be conveyed from one person to another by means of water, and thus spread the disease, is most probably, under certain circumstances, the case; but Dr. Snow should scarcely have floated his cholera germs with such unerring accuracy for two miles up a great tidal river and its tributary, into a sewer, and thence into a well, in order to account for the deaths of six people from cholera in Abbey Row.

THE WEEK.

A trial took place at the Central Criminal Court, on Wednesday, which forcibly illustrates the wickedness of allowing the public sale of opium. A woman named Bridget Kavanagh was indicted for the wilful murder of her child, Julia, aged three months, by poisoning it with laudanum. It appeared that the child was a little sick after its breakfast on the 13th of September, when the mother asked a witness if she could not get some "doctor's stuff" to make it sleep, expressing at the same time a wish that the child was dead. Shortly afterwards she went out and returned with a bottle of "doctor's stuff," which afterwards proved to have been laudanum. The potion, of course, poisoned the child, who died fifty-four hours afterwards at the University College Hospital. It appears from the following evidence that the poison was obtained as what is termed the "open shop" of a surgeon.

"Mr. G. Tuttle deposed, that he was assistant to a surgeon named Carter, in Fitzroy-street. On the 14th of September the prisoner came to the shop and asked for some laudanum. He inquired what she wanted it for, and she said it was to make a woman sleep, and she wished to know how much she was to give her. He told her ten or fifteen drops, and gave her a drachm of laudanum in a bottle, and put a label on the bottle, marked "Laudanum—Poison," and he also at the same time told the prisoner it was poison. A drachm would contain sixty drops. He did not think he was doing wrong in selling the laudanum to the prisoner. She did not tell her name or where she lived. He made no farther inquiries of her, and did not ascertain whether the laudanum was to be given to a person in health or sickness, or whether it was a strong poison or not."

The Judge, in summing up, observed,

"That it appeared to him to be, at all events, a careless proceeding on the part of a chemist, or other person acting in that capacity, when fifteen drops were sufficient for the required purpose, to give, as had been done in the present case, four times the quantity, namely, sixty drops; and he thought a special caution ought to have been given, that the quantity contained in the bottle amounted to four doses."

The Judge, of course, in his remarks, has in view the accidental poisonings that may flow from the indiscriminate sale of poisons. Of course the mere labelling of the bottle with the proper dose would be of no use in the case of a would-be suicide; indeed, it would only have the effect of showing the amount necessary to procure the desired end. We think he should have dwelt upon the carelessness of allowing the sale of opium at all to unknown persons. God only knows how many infants are put out of the world with this kind of "quietner;" and we regret that the drug was sold at the "open shop" of a surgeon whose assistant should have known that it was very likely to be criminally used. The profession will, indeed, have a bad name if the public get the idea that, through their carelessness, the tendency to infanticide, already so strong in this country, is strengthened. The jury, after a reproof to the vendor of the drug, taking a very merciful view of the case, found the woman guilty of manslaughter only.

The chairs of Regius Professor of Physic, and of Clinical Professor, in the University of Oxford, rendered vacant by the death of Dr. Ogle, have both been filled by the appointment of Dr. Acland. In the case of the Regius Professorship, the appointment was made by the Crown: for the Clinical Professorship there was an election by Convocation, in which Dr. Acland was opposed by Dr. Jackson, a graduate of the university and one of the physicians of the Radcliffe Infirmary. We are glad, however, to find that Dr. Acland was elected by a large majority. For, however good a man Dr. Jackson may be, and notwithstanding his seniority to Dr. Acland in the Infirmary, his successful opponent has shewn himself to be more than ordinarily qualified for the performance of the duties to which he has been appointed; and it would have been almost a pity, considering that there is not in Oxford a great *embarras des richesses* in the way of materials for practical instruction, to exclude the Regius Professor of Physic from the power of making the systematic and the clinical courses harmonise with and illustrate each other. The selection of Dr. Acland to fill the vacant offices is one which will give great satisfaction to the profession; and the University of Oxford is to be congratulated on so efficient an addition to her professorial staff. As for Dr. Acland himself, we trust that he may long enjoy his honours, and always continue to follow that path of onward progress on which he has for some time past been journeying.

The recent election of a Surgeon to the Queen's College at Birmingham, the circumstances attending which are recorded at p. 915, was certainly a rather curious affair in its result. The Professors of Medicine and Surgery in Queen's College were requested to make a report on the testimonials of six candidates. They accordingly reported, that all the six candidates were qualified and eligible; but they made a special recommendation in favour of Mr. J. S. Gamgee, both on account of his professional ability, the manner in which he had performed his public duties, and his contributions to surgical science. But, strange to say, this recommendation was set aside, and a candidate was chosen, who, however great may be his merits, certainly does not appear to have the same standing or to have enjoyed the same opportunities of acquiring professional skill as several of the other candidates, even not including Mr. Gamgee. Rumour hints that there has not been altogether fair play; in short, that the object of the new scheme in neutralising jobbery has been defeated. Until this is proved true, little can be said about it; but one thing is certain—that the Queen's College Professors have not been treated exactly as gentlemen should be, to whom the performance of a responsible duty has been committed.

The inquest on the remains found a few weeks ago at Waterloo Bridge has terminated in a verdict that the deceased was murdered by some person unknown. So far, then, there is no doubt as to the mode of death, but it yet remains for justice to lay hands on the perpetrator. The elaborate report of Professor Taylor distinctly establishes the facts that the person was an adult male, of rather tall stature, probably a dark hairy man; that death was probably produced by a stab in the region of the heart—there being no marks of violence discoverable in any other part of the remains; and that the body had certainly not been dissected or used for the purposes of anatomy, having been cut and sawn up by a person or persons utterly ignorant of the anatomical relations of parts. After Dr. Taylor's report, all practitioners and students may rest assured that no one with a grain of sense will again insinuate that the body was one which had been in the hands of a skilled dissector, and that it was thrown over Waterloo Bridge for an absurd frolic, or for any other equally discreditable reason.

Association Intelligence.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Saturday, October 10th, 1857.

Francis Hird, Esq., President, in the Chair.

This was the first meeting of the Session, and was numerously attended.

INSTRUMENT FOR CLINICALLY DETERMINING THE AMOUNT OF SUGAR IN DIABETIC URINE. BY A. B. GARROD, M.D.

The instrument, named a *Glucometer* (manufactured by J. Coxeter, Grafton Street East), is constructed upon the fact, that glucose or diabetic sugar, when boiled with a solution of carbonate of potash, gives rise to an amber colour, and that the tint is in proportion to the quantity of sugar. The apparatus consists of a standard, a graduated tube of the same calibre as the standard, and an accurately divided minim measure, the standard being filled with a solution of the exact tint produced by a known quantity (half a grain) of the diabetic sugar to the fluid ounce. The following is the method of using the glucometer:—A small quantity of the urine, say half a fluid drachm, either previously diluted or not, according to circumstances readily ascertained, is to be accurately measured in the small minim tube, and mixed with the same bulk of a solution of carbonate of potash of a given strength, and after the measure has been washed out with a drachm or two of distilled water, the whole is to be kept at the boiling point over a spirit-lamp for five minutes, either in a large test-tube, or, still better, a very small flask. After cooling, the coloured liquor should be transferred to the large tube, and distilled water added until the tint exactly corresponds to that of the standard,—a process which may be readily effected by holding the tubes side by side, directing them to a moderately bright light. All the required data for determining the amount of sugar are now obtained. Suppose, for example, that the half drachm of urine employed in the quantitative analysis requires to be diluted so as to occupy six and a half drachms before the standard tint is obtained, such urine would contain six grains and a half of sugar per ounce. Again, suppose the urine had been diluted with three times its bulk of water before being employed in the glucometer, which, when the urine is rich in sugar, may be necessary, in order to prevent the graduated tube being of inconvenient length, then it is only required to multiply the amount of sugar by four to obtain the total quantity in the original urine. In the above-named experiment it would therefore be twenty-six grains in each fluid ounce. Dr. Garrod expressed a hope, that by means of the glucometer the clinical determination of sugar might become a matter of little difficulty, and capable of being effected by any one engaged in the practice of medicine; and he also considered that such determinations might prove of great value, not only in ascertaining the amount of disease under which any diabetic subject might be suffering, but also the value of various articles of diet and of different remedies in the treatment of this disease.

STARCH FROM THE ANIMAL KINGDOM. BY F. W. PAVY, M.D.

Dr. Pavy exhibited some of the newly discovered amylaceous material which is obtainable from the healthy liver, and which forms the source of the animal sugar. Upon the announcement of the discovery by Bernard in 1848, that sugar was formed in the animal body, it was referred to a transformative action of the liver on an albuminous constituent of the portal blood. The next step of information showed that the production of sugar could not be regarded as analogous to the process of secretion. In September, 1855, Bernard announced, at the Académie des Sciences, that the formation of sugar continued for twenty-four hours after death, in a liver from which the blood had been entirely removed. During the early part of the past summer, Dr. Pavy had noticed, whilst conducting experiments on the *destruction* of sugar, that he could isolate a material from the liver which subsequently underwent transformation into sugar; and he had recorded in his laboratory-book the influence of chemical agents, such as acids, alkalies, and alcohol, on this material. He had since learned, however, on his recent visit to Paris, that Bernard had most satisfactorily made out the nature and relations of this body, which, from the analogy presented in its chemical bearings to starch, he had called an animal amylaceous or starchy material. It had also been called glucogenic material, and this was probably the best term to apply to it at present, because it implied nothing more than we knew the substance in reality to be. The specimen of this glucogenic material which Dr. Pavy exhibited had been procured from the liver of a dog in the following manner:—The dog had for some days been submitted to a strictly animal diet, so as to preclude the introduction of any starchy material into its system from the vegetable kingdom. After killing the animal, by the destruction of the medulla oblongata, the liver was removed, and a tube firmly ligatured in the portal vein, for the purpose of passing a current of water through the vessels to wash out the blood, and at the same time remove the sugar. In half an hour the water which had passed through the vessels was colourless and destitute of sugar, as was also the tissue of the liver itself. The organ was now cut up into small slices, placed in an evaporating dish, boiled in the liquid which exuded from it, and subsequently strained and pressed to obtain all the liquid that was procurable. The object, in fact, was to make a decoction of the liver, which holds in solution the glucogenic material, and has, thereby, communicated to it an opalescent or milky appearance. This was then mixed with alcohol (in the proportion of one part of the decoction to about five of the spirit), and immediately a precipitate was produced, which was collected on a filter and dried. The substance was of a greyish colour, which resulted from contamination with albuminous matter. It might be made perfectly white by prolonged boiling in a solution of potash, which did not at all affect its properties. It was insoluble in alcohol and strong acetic acid. Its solution in water presented the same milky appearance as the fresh decoction of liver. It gave no reaction with the sugar-tests, nor was it susceptible of undergoing fermentation. It was, however, readily convertible into dextrine and sugar by the same agents which produced this change in the starch of the vegetable kingdom. Indeed, boiling with acids and contact with diastase, saliva, pancreatic juice, blood, or any animal matter in a state of change, very readily effected its transformation into glucose, when it gave all the characteristic reactions of this substance. Dr. Pavy further stated that, by means of chemical agents and the microscope, the natural seat of this material could be shown to be in the interior of the hepatic cells.

THE PRESENT STATE OF SURGICAL SCIENCE IN REFERENCE TO CANCER AND ITS TREATMENT. BY F. HIRD, ESQ.

After briefly reviewing the important subjects embraced in the origin and development of cancer, Mr. Hird proceeded to discuss the treatment, dwelling on the means of arresting cancerous growths by medicinal agents, and contrasted the comparative advantages of removing the local disease by caustics and the knife. In reference to medicines, the author believed that, if any remedy possessed a power of retarding the progress of the disease, it was arsenic, which he administered with cod-liver oil. Caustics the author had found more tedious in their operation and more painful than the knife, and to occasionally fail to enucleate the tumour; and he had no faith in a supposed physiological action on the constitution through the part treated. He had seen six cases in which the disease returned after removal by caustics, and had read and heard of many more. Nevertheless, there are cases in which caustics offer greater advantages than the knife; as in certain localities, and in particular conditions of the tumour, and where loss of blood, or the dread of a cutting operation, would greatly depress the patient. Early operation the author strongly advised, as affording the only hope from surgery in scirrhus, colloid, and epithelioma. In encephaloid he did not advise an operation.

Saturday, October 17th, 1857.

Francis Hird, Esq., President, in the Chair.

OUTBREAK OF CHOLERA AT WEST HAM. BY J. SNOW, M.D.

The outbreak had taken place in a row of cottages, called Abbey-row. He had learned a number of particulars from Dr. Elliott, who had attended most of the cases, from other persons, and by his own observation, which he would relate to the Society. Abbey-row consists of about sixteen small houses, situated about a hundred yards from one of the divisions of the river Lea, and about two miles from the Thames. There had been upwards of a dozen very severe cases in a short time, besides some slighter ones, and seven deaths occurred between the 3rd and 13th of the present month. All the cases occurred in the row of houses above-mentioned, except one, which was fatal on the 11th to the sister of a publican living opposite to Abbey-row. She assisted in the business, and had frequent intercourse with persons from the houses where the disease was prevailing. The sole water supply of the row was from a pump situated opposite to the centre of the row, and this pump was used only by the inhabitants of Abbey-row, for the surrounding houses had other supplies. The water from this pump was very impure, and deposited a considerable quantity of organic matter on standing at rest. This impurity was derived, according to Dr. Elliott and others, who had no doubt on the subject, from a sewer which passes almost close to the pump-well. This sewer was open in the greater part of its course between Abbey-row and the branch of the River Lea. It was not a black, offensive sewer; for the water of the Lea flowed up it at a certain part of every tide, and its contents did not differ much in appearance from Thames water. The following was his (Dr. Snow's) explanation of the origin of this outbreak: According to the Weekly Returns of the Registrar-General, a seaman died of Asiatic cholera, on September the 22nd, on board ship at Horsleydown, after an illness of nineteen hours. The ship had arrived the previous afternoon from Hamburgh, and had touched at Gluckstadt, and stopped there twenty hours; the cholera had lately raged at Gluckstadt, and had carried off five per cent. of the inhabitants. There might, of course, have been other cases on board of the shipping from the Elbe, but if not fatal they would not be published in the Returns of the Registrar-General. The ejecta of the above seaman, at all events, would be thrown overboard, and become distributed amongst the water of the Thames, passing up and down with the tide. Now the water of the Thames passed up the Lea, and a portion of this water passed up the tidal ditch or sewer by which the pump-well supplying Abbey-row was contaminated. There was therefore an opportunity for some of the minute particles of the ejecta thrown overboard into the river Thames to reach this pump-well. The first case of cholera in Abbey-row occurred on September 29th, seven days after the death of the seaman at Horsleydown, and two other cases occurred in the same family, but they were not fatal. Numerous occurrences in former epidemics of cholera confirmed this explanation, extraordinary as it might otherwise seem. The first recognised case of true Asiatic cholera in this metropolis in 1848, occurred also on September 22nd, and the subject of it was also a seaman from the river Elbe (the port of Hamburgh), who died at Horsleydown, but ashore, and near the river. Excepting the next case, which occurred in the very same room, all the first succeeding cases, to the number of thirteen, took place as follows: On September 30th a man was taken ill in Lower Fore-street, Lambeth, and died on the following morning. On the same day the first of a series of cases occurred in White Hart-court, Duke-street, Chelsea, near the river. A day or two afterwards there was a case at 3, Harp-court, Fleet-street. The next case occurred on board a hulk, lying off Woolwich; and the next to this in Lower Fore-street, three doors from where the previous case had occurred. Now the people in Lower Fore-street obtained water by dipping a pail into the Thames, there being no other supply in the street at that time. In White Hart-court, Chelsea, the inhabitants also obtained water in a similar way, and had no other supply. The people in Harp-court, Fleet-street, were in the habit of procuring water from St. Bride's pump, which was afterwards closed on its being found that the well had a communication with the Fleet Ditch, and the tide flows up this ditch from the Thames. So much for the introduction of the cholera to Abbey-row, and there were also circumstances to explain its propagation on the spot. The houses were provided with a sort of water-closet, to which, however, the water was carried by hand, and these water-closets communicated, by means of drain-pipes, with a large covered cesspool at the back of the row. This cesspool was believed to be not yet full as regarded its solid contents, but it received all the water used in the cottages, and the overflow of this liquid passed into the same tidal sewer or ditch, by which the pump-well was contaminated. In this way the disease had, in his opinion, been communicated from one to another of the inhabitants of the row without personal intercourse. Some patients, however, when others were previously ill in the same family, had probably acquired the malady in the more ordinary way, by the reception of the *materies morbi* without the medium of water, and the public-house in which one case had occurred was provided with a separate pump-well on the premises. The handle of the pump was removed on the previous Monday, the 12th, and there was but one case after this, which was fatal on the following day. He did not know, however, whether or not the outbreak might have exhausted itself before this precaution was taken. It was not known that there were any other cases of cholera at the time in the parish, or even in the whole of London.

Dr. Lankester had no doubt that the cases referred to were true cholera. Though Dr. Snow had proved his position with respect to the Broad-street pump, he (Dr. Lankester) did not think he had succeeded in showing that the cases at West Ham had their origin in the case on board a vessel two miles away. The outbreak was more likely to be dependent on some atmospheric or climatic influence making choleraic matter contagious.

LUPUS TREATED BY COD-LIVER OIL. BY T. HUNT, ESQ.

Mr. Hunt exhibited a patient who, under a protracted course of cod-liver oil, in small doses, had been cured of lupus exedens, of the strumous character. The patient was a woman twenty-two years of age, and had suffered from the disease for twelve years, the ulceration having involved a portion of the nose and face. The oil was administered in drachm doses three times a day, and continued for some months.

ON THE MORTALITY OF INFANTS IN FOUNDLING INSTITUTIONS, AND GENERALLY AS INFLUENCED BY THE ABSENCE OF BREAST-MILK. BY C. H. F. ROUTH, M.D.

After a few introductory remarks on the paucity of statistics published on this subject, as showing the experience of this country, Dr. Routh stated he was obliged to have recourse to the experience of foreign countries, more especially France. It was true that there might be error introduced by the comparison of data collected in different countries, still, as the vital statistics in most countries were governed by the same laws, the results would still be relatively true. Most writers on foundlings had attributed the mortality to want of breast-milk, whereas there were other causes of mortality far more potent. In papers of this kind, it was usual to speak of three hospitals, Paris, Lyons, and Rheims, besides Parthenay, and a place called X. Now, in Lyons and Parthenay, where the children were suckled at the breast, the mortality was respectively 33·7 and 36 per cent.; whereas in Paris, Rheims, and X, where they were brought up by hand, it was respectively 50·3, 63·9, and 80 per cent. From more extended examples in Europe, it was found the mortality of ordinary foundlings varied from 40 to 91 per cent. M. de Watteville, however, had shown that in France the mortality, where it was highest for foundlings, varied from 50—25, a mean of 26·5; where it was least, from 0 to 5—mean, 3·6 per cent.; and for exposed foundlings, from 83 to 60 where it was highest—mean, 72·4; and where it was least, from 0 to 19·2—mean, 13·4. In other words, the mortality from 1 to 12 years was 78 per cent.; in the first year, 50 per cent.; and the mean duration of life of foundlings was 4 years. Fortunately, of late years, it was on a decrease for all France, having been 14 per cent. in 1838, and 11·30 in 1844. Dr. Routh then instanced particularly the cases of Lyons, Rheims, and Paris, showing that the arrangements in Lyons were excellent, and all the children were wet-nursed. In Rheims, besides dry-nursing, they were very badly cared for; whereas in Paris, most were also wet-nursed, but in the two latter cases the nurses were not watched sufficiently closely.

1. In comparing the mortality of such institutions, it was necessary to determine what was the actual mortality out of hospitals amongst children generally. This was mostly neglected. Here, at the outset, there was a remarkable difference between *town* and *country* residents. In Ireland, in civic districts, the mean mortality was per cent. for children under 1, 14·7 civic, 8·8 rural districts; for children under 5 years old, 8·1 civic, 4 rural. In England, taking towns and agricultural counties, the proportion of deaths of children under 1 and 5 to all deaths was respectively, for the former age, 23·7 and 49·8; for the latter age, 21 and 34·9. Calculating for foundlings from 1 to

12 in France, the mortality was 72·2 in towns to 11·5 in the country, showing that foundling hospitals should always be established in the country: a point seldom insisted on.

2. It was said that the mortality of foundlings was greatest in the first year, and usually 50 per cent., but also greatest in the first month of the first year. In Bordeaux, the foundling mortality was 51 per cent.; in Lyons, 37·1 per cent., in the first year; but the mortality was not stated for the first month. Still he deduced the latter from lying-in hospitals and data of accoucheurs, and he found it in both cases 6·1 per cent. In all cases of children in a general population it was so also. In Ireland, the mortality in all children aged 1 month was very high, even in the ordinary population: for all Ireland, civic districts, 31·6; rural, 22·2 per cent.; while in Leinster it was respectively 38·8 and 24·9. In England, the mean mortality of such children, compared to the number of births in the year, was—towns, 4·6; agricultural counties, 4·1 per cent. For the first year it was—Ireland, civic, 14·8; rural, 8·8 per cent. England—towns, 16·7; agricultural counties, 13·9 per cent.

3. Hospital aggregation was a prolific cause of increased mortality. In London alone, for children under 1, the mortality of the population was, from diseases peculiar to children, under 1 year, 11·1 per cent.; under 5, 22·5 per cent.; from all diseases, 16·6 per cent. in the first case, to 34·1 per cent. in the second. He attributed the mortality of children under 1 month, in Ireland, to the filthiness and poverty of Irish cabins, which he described in a quotation from the *Quarterly Review*, No. 203, p. 78.

Thus, apart from foundling hospitals, a large share of this mortality could be accounted for.

In specifying some of the causes of mortality peculiar to foundling hospitals—

1. Effect of removal had not the injurious results ascribed to it. This was proved by statistics from France.

2. Season. Spring was most fatal to the children. All deaths being 100, those in spring would be 30·8; winter, 27·7; summer, 27·1; autumn, 14·3. Out of hospitals, in a general population, it was greatest in winter.

3. The abuse of the recumbent position of infants, and want of exercise, was then dwelt upon at length, and M. Hervieux's experience quoted to show the fatal effects of it.

4. Dr. Routh then proceeded to show that want of breast-milk, including cases of privation, cold, premature debility, atrophy, in a general population, could only account for a mortality of 3·6 per cent. per annum in 100 births. That therefore this influence was greatly exaggerated, particularly as M. Benoiston de Chateaunef had shown that the mere substitution of a hired wet-nurse's for a mother's milk increased the mortality 10·6 per cent.

Dr. Routh concluded by giving the result of his experience, as confirmatory of these views, in two institutions to which he was attached, specially insisting on the mortality from atrophy, diptheritis, and diarrhœa. The effect of different kinds of diet on mortality he reserved for a second paper.

Dr. Webster said that the mortality in foundling hospitals was so great that they should not be founded or patronised by any government. This great mortality was owing to several causes, amongst which was the want of breast-milk, the bad mode of feeding, and the swathing of the children up like mummies.

Dr. Chowne remarked, that to make the comparative statistics of town and country valuable, many circumstances besides the mere number of deaths must be taken into consideration, such, for instance, as the food employed, the care taken of the children, etc. The mortality in the London Foundling Hospital had much decreased of late years, in consequence of breast-milk having been substituted for artificial diet. But the congregation of many children together must be injurious, as was also the recumbent position in which children in some hospitals were placed. Many children of wet-nurses died whilst their mothers were suckling the offspring of others. This mortality often arose not only for the want of the natural support, but from the absence of the mothers' care, nursing, etc.

Mr. Hunt attributed the diminished mortality of children in the country to the greater purity of the milk, and the absence of alum in the bread.

Dr. Lankester hoped that the paper of Dr. Routh would have an influence in checking the system of collecting a large number of healthy children together in a kind of hospital. Want of breast-milk had less influence on mortality than the want of proper food and care in the management of the children.

Mr. Streeter considered that the great mortality in children brought up by hand arose from the difficulty of obtaining an uniformity in the character of the food administered. In the absence of great intelligence in the nurse, few children so brought up lived. It was a good maxim, that if food given did not agree it should be changed. Generally, the artificial food given was too thick.

Dr. E. Smith remarked, that the substitutes for milk given to young children, as arrowroot, etc., were deficient in those nutritive properties which were found in milk, and hence were a cause of much mortality. Another cause was the bad constitution of many mothers, whose milk was consequently unsustaining.

Mr. Harding observed, that the figures in the paper showed the mortality amongst the entire population. If the population were divided into classes, it would be found that the great mortality was amongst the children of the poor, and not amongst those of the middle and higher classes. The mortality of the children in foundling hospitals bore comparison only with the poor, who were deprived of the advantages of proper care in their bringing up.

Dr. Routh, in reply, stated that he had not in his paper entered into some of the points discussed, but had confined it within certain limits. He had avoided entering into the question of the influence of diet, as that would form the subject of a separate paper.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Clapp. On October 18th, at 22, Orchard Street, Portman Square, the wife of W. J. Clapp, Esq., Surgeon, of a son.

Dobson. On October 24th, at Highbury, the wife of W. Coyle Dobson, Esq., Surgeon, of a son.

Gunning. On October 24th, at Cloughton, near Scarborough, the wife of Henry James Gunning, Esq., Surgeon, of a son.

Leslie. On October 18th, at Alton, Hants, the wife of *L. Leslie, M.D., of a son, stillborn.

Mackie. On October 8th, at Insch, Aberdeenshire, the wife of *George Mackie, M.B., of a daughter.

MARRIAGES.

Fernie—Murphy. *Fernie, Andrew, Esq., of Wellingborough, Northamptonshire, to Sophia, youngest daughter of the late Richard Murphy, Esq., of Claremont Row, Islington, on October 21st.

Rooke—Shipton. Rooke, Thomas Morley, M.D., of Scarborough, to Mary Ellen, second daughter of James Shipton, Esq., of Wolverhampton, on October 13th.

DEATHS.

Coleman, John, jun., Esq., Surgeon, at Dover, aged 38, on October 26th.

Jeffery. On October 25th, at Jerington Place, Arthur, infant son of G. A. Jeffery, Esq., Surgeon, of Eastbourne, Sussex.

Lichtenstein, Dr., Professor of Natural History in the University of Berlin, and Director of the Geological Museum in that city, lately.

Rognetta, Dr., at Naples, lately.

APPOINTMENTS.

Acland, Henry W., M.D., F.R.S., elected, by Convocation, Clinical Professor in the University of Oxford, in the room of the late *J. A. Ogle, M.D. Dr. Acland was opposed by Dr. Robert Jackson, of Oxford. The numbers of votes were: for Dr. Acland, 470; for Dr. Jackson, 222.

*Adams, William, Esq., elected Surgeon to the Royal Orthopædic Hospital, in the room of the late E. Lonsdale, Esq.

West, James F., Esq., elected Surgeon to the Queen's Hospital, Birmingham.

HEALTH OF LONDON:—WEEK ENDING OCTOBER 24th, 1857.

[From the Registrar-General's Report.]

The total number of deaths registered in London in the week that ended on Saturday (October 24th), is 988. In the corresponding weeks of ten previous years, 1847-56, the average number was 1002. The same rate of mortality in the present increased population would produce 1102 deaths; and a comparison of the real with the estimated result shows a difference in favour of last week to the extent of 114.

Whilst the population of the metropolis lost 988 lives last week, the registration of births shows that 1582 children were born; sufficient to supply the places of the dead, and to increase the number of inhabitants by 594.

The deaths of 476 males and 512 females were registered. 231 boys and girls died before completing their first year; at the other extreme of life, 26 men and women died who were 80 years old and upwards. Two aged persons, both widows, one in Paddington, the other in St. Luke's, attained the respective ages of 93 and 96 years.

The deaths from diarrhœa, which numbered 79 in the first week of October, fell last week to 42, about the average of former years; of that number, 27 occurred to children under five years of age.

Six deaths from cholera and choleraic diarrhœa were registered last week. At 19, Asylum Terrace, Chelsea, a boy, aged 11 months, died of "cholera infantum" (62 hours). At 10, Duke Street, Old Artillery Ground, Whitechapel, a boy, aged six years, died of "choleraic fever" (14 days). At 3, Nelson's Court, Limehouse, a boy, aged nine months, died of "cholerine" (7 days). At 2, Mast House Place, Mill Wall, Poplar, a man, aged 77 years, died of "Asiatic cholera" (5 days), collapse (2 days), secondary fever (3 days). At 8, Aldred Street, Bermondsey, a man, aged 39 years, died of "choleraic diarrhœa"; and at Hill House, Gordon Road, Peckham, a girl, aged 8 months, died of "choleraic diarrhœa". Typhus was fatal to 54 persons, 29 of whom were under 20 years of age; 21 children died of measles, 50 of scarlatina, and 27 of hooping-cough. At 17, George Terrace, Brook Street, Upper Clapton, a man, aged 37 years, died of fever (3 weeks). The registrar adds: "this is the second death from typhus fever in Brook Street, and there are eight or nine other cases of fever."

Last week the births of 814 boys and 768 girls, in all 1582 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1475.

The registrar of the West Ham sub-district, which adjoins London, reports:—"No fresh case of cholera or of death has occurred in my district during the week."

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·638 in. The highest reading was 29·974 in., which occurred on Saturday; the lowest was 29·414 in., which occurred on Sunday. The mean temperature of the air was 51·5°, which is 2·7° above the average of the same week in 43 years (as determined by Mr. Glaisher). The lowest temperature in the week was 42·7°, on Thursday. The wind was variable during the week; but the north-east winds prevailed. On Thursday, the wind blew from the north and north-north-east, while heavy rain fell continuously during the whole day, making the total fall at 9 P.M., 2·57 in. The average annual fall of rain in London during the seventeen years 1840-56, was 24 in.; consequently, more than a tenth part of the average fall of rain in 365 days fell on Thursday last. The fall of rain on an acre was 58,140 gallons, or rather more by weight than 259 tons. As the area of the London districts is 78,029 acres, the fall of rain on the whole surface, if the average rainfall be assumed to be represented by the Greenwich Observation, exceeded twenty million tons, or eighty-four million hogsheads. Now the question of the drainage of London is under consideration, these facts will no doubt attract the attention of engineers.

ELECTION OF SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

At a meeting of the Council of Queen's College, held on Wednesday, October 14th, the Rev. Chancellor Law in the Chair—the Mayor of the Borough, the High Bailiff of the Manor, the Dean of the Faculty, the Rev. Dr. Miller, Professors Drs. Birt Davies and Heslop, F. I. Welch and T. Bagnall, Esqrs., Messrs. E. T. Cox, Armfield, Boucher, Taylor, Cliff, and Haines, being present—the following Report from the Professors was presented:—

"The Professors in Medicine and Surgery of the Queen's College at Birmingham, having been requested by the Council to report on the testimonials of the candidates for the office of Surgeon to the Queen's Hospital, specifying the names of such candidates as in their judgment are qualified and eligible, and in their opinion best fitted to fill the vacant appointment, and the grounds of their recommendation, have to report that six applications have been received; namely, from—

"Mr. Joseph Sampson Gamgee, Staff-Surgeon of the First Class, principal Medical Officer of the British Italian Legion during the war, late Assistant-Surgeon to the Royal Free Hospital, London, House Surgeon and Ophthalmic Surgeon's Assistant at University College Hospital.

"Mr. Benjamin Hunt, late House Surgeon of University College Hospital, late Resident Physician's Clinical Assistant at the Hospital for Consumption at Brompton, late House Surgeon to the Kent County Hospital for Diseases of the Eye and Ear, and late Medical Officer of the Queen's Hospital.

"Mr. Thomas Furneaux Jordan, late Resident Surgeon of the Warneford Hospital and Bathing Institution, Leamington, and Junior Anatomical Demonstrator at Queen's College.

"Mr. Henry Lakin, Surgeon to the General Dispensary, late Assistant-Surgeon *Dreadnought* Hospital Ship, Greenwich, late Assistant-Surgeon Smyrna Hospital and General Hospital before Sebastopol.

"Mr. James William Moore, Surgeon in the Bombay Army, Honourable East India Company's Service, late Resident Medical Officer of the Queen's Hospital.

"Mr. James F. West, late Resident Medical Officer of the Queen's Hospital.

"That after mature and careful examination of the testimonials of the respective candidates, the Professors report that all the candidates are both qualified and eligible.

"That in their judgment, Mr. Joseph Sampson Gamgee appears best fitted for the appointment, on the following grounds:—

"That he was a most distinguished student of University College, London, and obtained, as evidence of his abilities, no less than five gold medals in the various sciences of anatomy, physiology, surgery, clinical medicine, and clinical surgery.

"That he discharged the responsible duties of Resident House Surgeon at University College Hospital, and also those of the Ophthalmic Surgeon's Assistant, to the satisfaction of the surgical staff and the governors at large.

"That for a period of two years he availed himself of the vast field of study afforded in the hospitals, dissecting-rooms, and in the museums of the continent, and obtained such a reputation for industry, ability, and skill, as to warrant the strong testimonials of such men as the Baron Larrey, surgeon to the Emperor Napoleon, of M. Bonnet, Professor of Clinical Surgery in the Hôtel Dieu of Lyons, of Carlo Burci, Professor of Surgery in the University of Pisa, of M. Velpeau, member of the French Institute, who says—'My personal knowledge of you, the zeal of which you have given proof in our hospitals, your published writings, warrant me in affirming that you have all the intelligence, all the learning, and all the aptitude requisite for an excellent hospital surgeon, and that science will find in you a worthy representative'—and of many other eminent surgeons in France and Italy.

"That Mr. Gamgee was appointed to organise the medical staff and superintend the hospitals of one of the British Foreign Legions in the late war, the onerous duties of which position were so fulfilled by him, that the Minister of War, the Director-General of the Army Medical Department, his Excellency Sir James Hudson, and others, expressed their opinions of his public services in high terms.

"In addition to the recommendation of the distinguished individuals above referred to, testimonials are submitted to the Professors in favour of Mr. Gamgee from many of the most distinguished medical men of this country; one of these, from Professor Paget, F.R.S., of London, is thus expressed:—'He (Mr. Gamgee) is a gentleman not only of great natural ability, but of surpassing activity and enterprise. How good a surgeon he is, he has proved by his numerous works, and by the reputation he has gained in every post he has filled; how able to teach others, the energy and clearness with which he speaks and writes, will abundantly testify; how skilled in extending and improving surgical science, his constant zeal in new and laborious inquiries has long established.'

"As an author, Mr. Gamgee is favourably known to the profession by his works on Pathological Anatomy and Clinical

Surgery, and on the Treatment of Fractures by the Starched Apparatus, and also by numerous papers on scientific subjects in medical periodicals.

"In conclusion, it may not be irrelevant to state that Mr. Gamgee is within a few months of thirty years of age."

After some discussion, the Council proceeded to a vote, which resulted in the election of Mr. J. F. West, by a majority of *one*.

THE WATERLOO BRIDGE MURDER.

The adjourned inquest on the body found on an abutment of Waterloo Bridge was concluded on Monday last.

Mr. R. B. Painter, divisional surgeon to the F division of police, in his last evidence before the Court, gave a short outline of the main features of the case under investigation; but there were one or two points which he had omitted to notice, and which he should like now to supply. He had made a further examination of the remains of the deceased, and on the ramus of the right ischium he found a small portion of the corpus cavernosum. He had placed the portions in an antiseptic solution; but before doing that, he separated a portion of muscles with some saline particles, and, placing them in a bottle, retained them carefully in his own immediate possession. That bottle, with its contents, he had since handed to Dr. Taylor for analysis, with whom he had been associated in examining the remains subsequent to the last inquisition.

Dr. A. S. Taylor, to whom the examination of the body had been entrusted, read the following report:—

"I made an examination of these remains on three separate occasions—viz., on the 18th, 19th, and 21st of October. They were shown to me on each occasion by the divisional surgeon, Mr. Painter, in the presence of Inspector Durkin. These remains are parts of a human body, and, making some allowance for the missing portions, they admit of an accurate adjustment to each other. Twenty-three pieces of the body were shown to me, consisting chiefly of bones with the flesh adhering to them. The flesh had been roughly cut from the bones, apparently with the view of removing as much of it as possible; and the parts had been cut and sawn into small lengths, probably to reduce their bulk, and to allow them to be packed within a small space. The trunk, including part of the chest and spine, has been cut into eight pieces; the upper limbs have been cut or sawn into six, and the lower limbs into nine pieces. The deficient portions are the head, with the greater part of the spine—namely, fourteen out of twenty-four vertebra (seven cervical and seven upper dorsal), the hands, the feet, and some portions of the left side of the chest. The whole of the viscera of the chest and abdomen are also deficient. When compared with the average weight of the body, the quantity found is small. The twenty-three pieces produced, after soaking in brine for some days, weighed only 18 lb. This is about one-eighth of the average weight of the adult body.

"These remains have been examined especially with a view to the solution of the following questions:—

"1. The sex, age, and stature of the deceased.

"2. The presence of any physiological or pathological peculiarities in reference to identity.

"3. The presence of any marks of violence with reference to the probable cause of death.

"4. The general condition of the remains, with a view to determine whether they are parts of a dissected body, and whether they had undergone any chemical process for the purpose of preservation.

"5. The length of the period which has elapsed since the death of the deceased.

"I. *Sex and Stature of Deceased.* It is unnecessary to deal with a question sometimes raised on these occasions, whether the remains, or any of them, are those of an animal. Beyond all doubt, they are parts of a human body, and there are no duplicate portions, such as are commonly found when bodies have been used for the lawful purposes of dissection. The parts found belong to one and the same body. The sex is also placed beyond all doubt. The length and massiveness of the bones of the upper and lower limbs, the marked characters of the ridges and processes, the form of the pelvis, the dimensions of the part called the inlet, the narrowness of the space in the arch of the pubis, clearly indicate that the deceased was of the male sex. This is confirmed by the remains of a portion of the anatomical structure of the male still adhering to the arch of the pubis on the right side. An attempt has obviously been made to destroy all traces of the sex; and this, so far as the soft parts are concerned, has been effected on one side of the arch of the pubis, but not on the other. These sexual parts have not been dissected, but rudely mutilated, and irregularly cut on the two sides after death. The firmness, solidity, size, and weight of the bones, the complete ossification of the ends of the long bones, and the thickness of the shafts of the thigh-bones, compared with the space occupied by the medullary cavities, are in a condition which show that the deceased had reached a full adult age, which I would assign presumptively, judging from the appearance of the skeleton, at from 30 to 40 years.

"I. *Physiological or Pathological Peculiarities.* The bones presented in no part marks of malformation, disease, united fractures, or mechanical injury, excepting that which had been produced after death by sawing. Some of the joints were fixed with the sawn portions of the bones in an unusual direction. The head of the right thigh-bone remaining on the hip-joint was flexed or bent on the trunk at an angle of 45 deg.; the knee was also firmly flexed on this side, at an angle with the thigh. The left arm was fixed in such a direction as to be widely separated from the left side of the body, instead of lying parallel to it; and on this side the forearm was firmly bent on the arm at the elbow-joint, at an angle of 45 deg. On the right side, viewing the direction of the bones, as fixed by the portions left in the joints, the forearm was bent on the upper arm at an angle of 80 deg. On examining the joints, it was found there was no ossification or other disease to account for this firmly fixed condition of the upper or lower limbs on the right side, and the upper limb on the left side. So I infer from this examination that the limbs had not been relaxed since they had undergone the rigidity of death; that the body had been cut and sawn while in this rigid state; and that the mode in which it was subsequently treated, to which I shall presently refer, tended to preserve the fixed condition of the joints, as a result of cadaveric rigidity in a constrained posture. The small portions of skin remaining on the wrist and on the right knee are rather thickly covered with long dark hair.

"III. *Marks of Violence.—The Cause of Death.* The cutting and sawing of these remains took place after death. The cutting has been effected roughly with a knife, while the sawing has been performed in the shafts of the long bones with a fine saw. In one portion of the left side of the chest, comprising the second, third, and fourth ribs, with one half of the chest bone attached, there is an aperture in the flesh presenting the appearance of a stab. It is situated in front, between the third and fourth ribs, near their junction with the chest bone. It has penetrated the cavity of the chest, and presents, as seen from the inside, an opening of about six-tenths of an inch in its longest axis, which is obliquely placed, but inclined to a vertical direction. Assuming that this wound had been inflicted during life, it would have penetrated the heart, and have produced rapid, if not immediate death. The muscles of the chest through which this stab had passed were for some space around of a dark red colour, evidently produced by blood which had been effused as a result of this wound. This appearance is unlike that produced by a cut or stab in a cold dead body in which circulation has ceased. The edges of the wound are everted, and this fact, together with the infiltration of the muscles with blood, which even the soaking in liquid for a week had not removed, lead me to the conclusion that this wound was inflicted on the deceased either during life or within a few minutes of death—*i.e.*, while the body was warm and the blood was liquid. There is no other mark of violence during life, or any other appearance in the remains which points to a cause of death. The deceased may have actually died from a fracture to the skull and injury to the brain, or from a stab in the abdomen affecting some large bloodvessel. As the organs of the chest and abdomen are not forthcoming, any opinion on the cause of death must be a matter of speculation. The ribs and muscles of the right side of the chest (which are complete in three pieces), when placed together and examined present no marks of stabbing or fracture; any mortal wound on the chest, therefore, must have been on the left side. The first, fifth, and sixth ribs, with their attached muscles, are wanting on this side. There may have been stabs in the spaces between these missing ribs which would have involved the large bloodvessels of the chest or the heart itself.

"IV. *General Condition of the Remains.* The portions of the twenty three pieces of the body presented no appearance of having undergone dissection for the purposes of anatomy. The muscles, bloodvessels (which were not injected), and the nerves had been cut through in all directions without any reference to relative positions, or the respective courses of the

vessels and nerves. The spinal marrow had been violently torn out of the vertebral canal, and left hanging by its sheath to the vertebræ. The joints had been sawn through, evidently with great trouble, at points where a scalpel in the hands of even a young anatomist would have speedily effected a separation of the limbs. The acromion process of the right scapula or bladebone had been sawn through in order to remove the shoulder. The right clavicle was left attached to the upper rib on that side; the sternum, or chest bone, was sawn in a right line through its centre, while the cartilages of the remaining ribs, which are always cut for the convenient examination of the chest, were uncut. The left scapula or bladebone had been roughly sawn through, so as to leave the cavity of the shoulder-joint, with the neck of the bladebone still attached to the head of the humerus, or long bone of the arm; and the ribs and processes of the vertebræ of the spine were sawn and cut without reference to their anatomical bearings. The pelvis was sawn into two pieces through the centre of the sacrum. In short, the clearest examination, coupled with the knowledge derived from an experience of seven years spent in the study of anatomy by dissections, leads me to the conclusion that these remains have not been employed for any anatomical purpose whatever. On the contrary, I believe that, from the period at which the rigidity of death took place they have been rendered utterly useless for any such purpose. The flesh left upon the bones was brittle and of a brownish colour. A portion of this, as removed from the bones soon after their discovery, was delivered to me by Mr. Painter, and I made a chemical examination of it in his presence. It had not undergone putrefaction, and had the smell of salted muscle. It was submitted to analysis for the detection of those substances which are used for the preservation of animal matter—namely, arsenic, corrosive sublimate, common salt, nitre, alumina, and chloride of zinc, with the result that the only substance present was common salt. This was separated from the muscular fibre, and obtained in a crystalline state. The thicker portion of the flesh remaining on the bones of the pelvis, when cut into, was of a slightly reddish tint. This red tint was probably partly owing to the effects of salting. The superficial portion of flesh in the remains presented a brownish colour, and softened and corrugated appearance, produced by exposure to boiling water. The ligaments, tendons, the exposed portions of cartilage of the joints, and the skin on the wrists and right knee, presented such appearances as exposure to boiling water for a short period would alone account for or explain. The cuticle of the skin, which was not in a state of putrefaction, could be peeled off. The bare skin itself was swollen, gelatinous-looking, and curved inwards at the margin where the feet had been removed from the cellular membrane beneath. Such would be the effect produced by boiling water. An examination of the swollen shafts of the long bones clearly shows that the marrow has been melted out and removed by boiling water from the medullary cavities at each exposed extremity. The boiling has not been continued for a length of time, since the deep-seated portions of the muscles do not show the changes which would have otherwise been produced in them, and the marrow is not removed from the centre of the long bones. The divided ends of the arteries, and the divided portion of the spinal marrow with its sheath, also show such effects as boiling water would produce. The cut portions of the arteries are opaque, hardened, and averted.

"To this exposure to the action of boiling water, while the separate portions of the body were in a state of cadaveric rigidity, I attribute the peculiar fixation of the thigh, knee, and arms in a flexed or bent condition. The ligaments appear to have contracted as a result of the action of hot water, and thereby to have retained the same portions of bone, remaining on the joints in the position which they had acquired as the result of rigidity. The appearances are such as are produced by boiling water on dead animal matter. There is nothing to show that boiling water has acted on any living structure, while it is obvious, from the effects produced on the sawn bones, ligaments, and arteries, that the body must have been cut up before the parts were exposed to boiling temperature. It is my opinion that the remains were exposed to boiling water before they were salted. In reference to the portion of flesh which I examined, the salt was in such quantity that it was easily dissolved from the outside by cold distilled water; and I am confirmed by Mr. Painter that when first examined by him parts of flesh presented solid gritty particles like salt. These facts lead to the inference that the salting took place after the partial boiling of the remains; the object of these two operations being probably the same—namely, to prevent putrefaction, and the probable discovery of the remains by the escape of putrescent effluvia. The piece of flesh which I examined, as taken from the remains by Mr. Painter, had no offensive smell whatever, although he had kept it for a period of eight days.

"5. *Period since Death.* On this point only a speculative opinion can be given. As the remains have been partly boiled and salted, those changes in the animal matter on which we are accustomed to rely for evidence of the period of death have been suspended. Still, an examination of the deep-seated parts of the flesh and of the right hip joint, which had not been opened or disturbed until the 21st inst., has led me to the conclusion that the person of whose body these remains were a part may have been dead three or four weeks prior to that date. This would carry the probable time of death to the last week in September or to the first week in October. The period may have been shorter than this—that is, that death may have taken place more recently; but, considering that the weather during that time was mild, humid, and favourable to putrefaction, I do not think that it was longer. Had death occurred at a more remote period, I should have expected to find some visible changes indicative of putrefaction in the interior of the right hip joint and on the deep-seated portions of flesh on the bones around the joint.

"*Conclusions.* The conclusions which I draw from this examination are—

"1. That the remains are those of a person of the male sex, of adult age, and in stature of at least five feet nine inches.

"2. That they present no physiological or pathological peculiarities by which they can be identified. The only fact observable under this head is that the portions of skin remaining are thickly covered with dark hairs on the wrist and right knee, and that the deceased was therefore probably a dark hairy man.

"3. That the remains present no mark of disease or of violent injury inflicted during life, with the exception of one stab in the space between the third and fourth ribs on the left side of the chest. This stab was in a situation to penetrate the heart and to cause death. It presents the characters of a stab inflicted on a person either living or recently dead.

"4. That these remains have not been dissected or used for the purposes of anatomy. All those parts which are useful to the anatomist have been roughly severed and destroyed by a person or persons quite ignorant of the anatomical relations of parts. They have been cut and sawn before the rigidity of death had ceased; *i.e.*, in from eighteen to twenty-four hours after death, and in this state have been partially boiled and subsequently salted. The body of the deceased has not been laid out or attended like that of a person dying from natural causes, whose body might be lawfully used for anatomical purposes.

"5. That the person of whose body these remains are a part may have been dead for a period of three or four weeks prior to the date at which they were examined by me—namely, on the 21st of October.

"*Report on Certain Articles of Clothing found with the Remains.* On Monday, October 19th, and on Wednesday, October 21st, various articles of clothing, stated to have been found in a carpetbag with the remains, were shown to me by Superintendent Durkin, at the Bow Street Police-Station, in the presence of Mr. Painter.

"Overcoat.—The lining of the left sleeve in the armpit is much stained with blood. It appears to have collected there. The right sleeve is cut or torn up in its length. On the collar behind and towards the left side there is a cut or stab, as from a double-edged knife.

"Under-coat (frock-coat).—This is completely cut up the back from behind, and in the hollow corresponding to the left armpit there is a deep stain of blood. On the left side of the collar behind is a stab or cut, as from a double-edged knife, apparently corresponding to the cut on the collar of the overcoat.

"Waistcoat.—This is torn up the back. There are stains on the left side from blood (inside), apparently diffused by wetting. On the top of the collar behind there is a cut or stab as from a double-edged knife, corresponding in form and direction to the cuts in the collars of the over and under-coats. In the waistcoat this cut was found to be in its long axis five-eighths of an inch in length.

"Trousers.—These are torn up at the back. There is no appearance of blood inside or outside. There are some stains of dirt and other matters.

"Shirt.—The right sleeve is torn up. On the left side in

front there are eight cuts or stabs, corresponding in number and apparently in situation to cuts or stabs in the under-shirt. There was no appearance of blood about these cuts, either inside or outside; but the front of the shirt, at the upper part, presented a generally diffused redness, such as would be produced by blood diluted with water.

"Under-shirt (merino).—This is torn in its length at the side and behind. On the left side, and in front, there were eight cuts or stabs near to each other, leaving the long axis upwards and a little slanting. The largest of these was three-quarters of an inch in its long axis, and the smallest one and a quarter of an inch. There were no marks of blood about these cuts either inside or outside; but the shirt was much stained with blood just above them, both inside and outside, in a direction towards the left shoulder. The blood appeared diffused, as if by wetting, except under one of the buttons, where it had coagulated, as it does when it issues from the body of a living person. There was also much blood (diffused) on the wrist of the left sleeve.

"The Drawers.—These were cut up the back. There was a diffused stain of blood on the right side. In the waist, in front, there was a puncture or stab, about three-eighths of an inch in its greatest length, such as would be produced by a sword cane. This apparently corresponded to apertures in the trousers and on the shirt.

"The Socks.—One of these presented on the inside diffused marks of blood. On one there was a distinct spot of blood near the toes.

"Half of a Black Satin Necktie.—There was a slight reddish stain on the lining.

"*Conclusion.* The examination of these articles of clothing leads me to the conclusion that the body of the person who wore them must have been subjected to great violence. The stab penetrating from behind the double collar of the overcoat must have been inflicted with great force, as it extends through the collar of the undercoat and waistcoat. It is chiefly on the inside and on the left side, towards the left armpit, that the principal stains of blood are met with in the overcoat, undercoat, and waistcoat. The only wound found in the remains is a stab on the left side, which, by its situation, might have led to the effusion of blood. Assuming that the clothes belonged to the deceased, these facts appear to receive an explanation. The clothes have, however, been exposed to wet since they were stained with blood, and this creates a difficulty in forming an opinion. The cutting and tearing of the coat, trousers, and drawers at the back, and the cutting and tearing of the right sleeves of the overcoat, undercoat, and shirt, are consistent with the assumption that the body had become rigid after death in a distorted position, and that the clothes were violently torn from it. This position is indicated in the remains, especially on the right side by the flexed or bent condition of the hip and elbow joints. Some of the stains of blood present the appearance of having flowed from a living person, and this renders it therefore probable that the clothes were on a living body when the wounds producing such effusion of blood were inflicted. While there is nothing to prove directly that these clothes were worn by the deceased, they have, in my opinion, been worn by some one who has sustained serious personal injuries. Their condition, however, is consistent with the supposition that they were actually worn by the deceased individual with whose remains they were found.

"Alfred S. Taylor, M.D., F.R.S.

"15, St. James's Terrace, Regent's Park, Oct. 3rd."

Dr. Warlomont, the eminent ophthalmic surgeon of Brussels, and editor of the *Annales d'Oculistique*, has been nominated knight of the orders of Francis the First of Naples, and of Saints Maurice and Lazarus of Sardinia.

The Serjeant-Surgeoncy. We learn that Benjamin Travers, Esq., F.R.S., has just been appointed Serjeant-Surgeon to the Queen, in the vacancy occasioned by the decease of Robert Keate, Esq. It was generally expected that the honour would have been conferred on a younger member of the profession; but the public will be gratified by the selection now made.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

The Report of the Birmingham and Midland Counties Branch shall appear next week.

Communications have been received from:—Mr. J. S. Gamgee; Dr. David Nelson; Dr. Handfield Jones; Dr. R. U. West; Dr. Ranking; Dr. Cockle; Dr. H. Vernon; Mr. Michael; Mr. W. Parker; Dr. J. Williams; Mr. Stone; Mr. T. Holmes; Dr. P. H. Williams; Dr. Day; Mr. J. V. Solomon; Mr. Blower; Mr. J. Audland; Mr. J. H. Brown; Dr. Drage; Dr. J. H. Stallard; Dr Fraser (10th Hussars); Dr. E. Hodges; Dr. Treffry; Mr. Prichard; Mr. J. C. M. Thomas; Dr. Fuller; A Roman Catholic Associate; Dr. S. T. Chadwick; Mr. A. B. Steele; and Mr. J. K. Spender.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. On Plastic Operations for the Restoration of the Lower Lip, and for the Relief of several Deformities of the Face and Neck. By *Thomas P. Teale. London: Churchill. 1857.
2. A Manual of Medical Diagnosis; being an Analysis of the Signs and Symptoms of Disease. By A. W. Barclay, M.D. London: Churchill. 1857.
3. The Chemistry of Wine. By J. G. Mulder, Professor of Chemistry in the University of Utrecht. Edited by H. Bence Jones, M.D., F.R.S. London: Churchill. 1857.
4. Archives of Medicine. Edited by Lionel S. Beale, M.B., F.R.S. No. I. London: Churchill. 1857.

ADVERTISEMENTS.

Microscope. — Elementary Course of EIGHT LECTURES on the Use of the Instrument; Examination and Preparation of Specimens, etc., on Wednesday Evenings, at Eight o'Clock, by Prof. LIONEL BEALE, M.B., F.R.S., at 27, Carey Street, Lincoln's Inn, W.C. First Lecture on November 4th. Fee, £1:11:6. A Syllabus will be sent on application.

MORITZ VON BOSE, Ph.D., Assistant.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL:

MELANOSIS RECURRING IN THE SCAR OF A PREVIOUS OPERATION: NO SIGNS OF CONSTITUTIONAL AFFECTION.

Under the care of W. FERGUSSON, Esq., F.R.S.

[*From Notes by* P. W. SWAIN, Esq., *House-Surgeon.*]

IN the excellent account which Mr. Paget has given of melanotic tumours (*Lectures on Surgical Pathology*, ii, 483) he says: "I have referred to a case of melanotic epithelial cancer (page 443); but with this exception, I have not seen or read of any example of melanosis or melanotic tumour in the human subject, which might not be regarded as a medullary cancer with black pigment. In the horse and dog, I believe, black tumours occur which have no cancerous character; but none such are recorded in human pathology." If this *dictum* is true (and nothing in our experience leads us to question it) the following case is interesting, as showing for how long a time cancer may confine itself to a purely local manifestation; not amenable to treatment, recurring after excision, affecting and infiltrating parts in the course of the absorbent vessels, reproduced in the scars of previous operations, but still leaving the constitution and general health quite unaffected. The same course is followed by many tumours which are regarded as innocent; and it is only the issue of the disease which can distinguish the latter cases, in which the patient, if he dies of the disease, sinks under the effects of ulceration, from the former, in which, after a longer or shorter period of immunity, the constitution becomes affected and the disease attacks remote or internal organs. So lengthened an acquaintance with individual cases is, however, necessarily rare; hence our knowledge of the tumours (comparatively numerous as they are) which occupy the debatable ground between innocent and malignant, is hitherto in a very imperfect state. The experience of private practitioners is perhaps more likely to supply this defect than the records of hospital surgery.

Geo. S., aged 36, was admitted on December 10th, 1856, on account of a tumour in the right groin. It seemed that he had had a tumour removed five years before from the great toe, which the surgeon called a fungus. There then existed a black spot, of the size of a pin's head, between the great and the second toe. This had increased gradually, but very slowly, up to the date of admission, at which time it was as large as a pea. It appeared to be due to melanosis affecting the skin.

Three years ago he noticed a swelling in the right groin, just below Poupart's ligament. This was, on admission, as large as a duck's egg. Eighteen months ago a similar swelling appeared just above Poupart's ligament, which had grown to the size of a walnut, and was obviously connected with the others. The man was in all other respects healthy, and there was no family history of cancer.

On Jan. 10th he was brought under the influence of amylene, and Mr. Fergusson removed the tumour with some suspicious looking glands. During the operation the patient had his eyes open, and was to a certain extent conscious of the operation, though feeling no pain. The wound suppurated healthily for a few days, then closed without any bad symptom, and he was discharged on Jan. 28th, "cured, as far as the local disease was concerned," as it is expressed in the case book.

The man was re-admitted on Oct. 21st. It seems that, three months after the last operation, he noticed a small lump on the outer side of the cicatrix, on the level of Poupart's ligament, of about the size of a pea. It had since then increased steadily to the size of a walnut. He had suffered no inconvenience from it, and his general health was not deteriorated.

The small lump between the toes appeared in the same state as before. On October 24th Mr. Fergusson dissected the tumour out under the influence of chloroform. On cutting into it it displayed (as in the former case) the ordinary features of melanotic cancer.

The wound united, except a very small part, by the first intention.

ST. GEORGE'S HOSPITAL.

ENCEPHALOID DISEASE OF THE FEMALE BREAST.

Under the care of PRESCOTT G. HEWETT, Esq.

SARAH G., aged 62, was admitted on October 6th, 1857, under the care of Mr. Hewett. She had always enjoyed good health till April last, when she perceived a swelling in the right breast, which grew very fast without much pain or inconvenience, except from its weight. Her general health was still pretty good.

On examination when she was first seen, a large lobulated tumour was found, not affecting the skin (which was healthy), feeling soft in parts, and presenting altogether, considering also the general good health of the patient, most of the characters of sero-cystic or tubero-cystic tumour. No operation was at that time undertaken; but when she was seen again, six weeks afterwards, the tumour had materially changed its aspect. It was still growing rapidly, and had now involved the skin, which was thickened, brawny, and red; the surface of the tumour was covered with large veins, and its substance felt very soft. Suspicions of malignant disease were then entertained, and it was determined to operate without delay.

The breast was removed on October 7th. The morbid growth was found to be of the encephaloid variety; it involved the whole of the gland, no trace of the healthy glandular tissue remaining, and had apparently infiltrated the pectoralis major muscle to a slight extent. A portion of the latter was accordingly removed.

An examination of the tumour after its removal left no doubt of its nature. In appearance and consistence it pretty closely resembled the white matter of the brain. There were no traces of the healthy gland to be found. The substance of the tumour showed under the microscope numerous large nucleated cells, and a very sparing development of fibrous tissue.

No symptoms calling for remark have hitherto followed. The wound, which was necessarily of great size (for the patient was fat, and had a full bosom), has been healing healthily, and is now much contracted. The granulations are quite healthy, and her general health and spirits are perfectly good. The complexion, also, is that of a person in good health.

REMARKS. The foregoing case was principally interesting as a question of diagnosis; and it must be allowed that the history of this, as well as of Mr. Fergusson's case which precedes it, tends rather to show the difficulties which at present beset the diagnosis of cancer in the living body, than to furnish help for avoiding those difficulties. In Mr. Fergusson's case, indeed, there were the history and the presence of melanosis in another organ to lead to a correct opinion; here there was nothing to show the true nature of the case. There was no "malignant cachexia" (and let us remark, in passing, how very often this symptom is absent, especially in soft, rapidly

growing, and therefore especially malignant, tumours), no implication of any other part, nor any constitutional sympathies. The patient's age was, indeed, an unusual one for any innocent tumour; but to show that too much weight should not be attributed to this, we subjoin short notes of a case which occurred in a woman of about the same age some time since at St. Bartholomew's Hospital, and in whom the tumour, though presenting many of the characters of scirrhus, turned out to be of the chronic mammary variety.

As to the disease itself (encephaloid tumour of the mamma), it is rarely met with: and we understand that at St. George's only one or two instances have been seen for several years. A very interesting account of one such case, in which the disease had progressed too far for operation, and where the patient died of malignant disease affecting the free surface of the mitral valve, will be found in the *Medico-Chirurgical Transactions*, vol. xxx, p. 3, by Mr. Hewett. In that case it will be seen that a very large cyst existed, as much as a pint of serous fluid having been evacuated from it at one time. In other respects it seems to have closely resembled, both in external and microscopical characters, the tumour above described.

Should any further symptoms of interest arise in this case, we shall hope to lay them before our readers. The patient being a servant of a gentleman in the neighbourhood, it is very probable that her future history will be known at the Hospital.

ST. BARTHOLOMEW'S HOSPITAL.

CHRONIC MAMMARY TUMOUR.

Under the care of J. Paget, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Susan H., aged 64, was admitted under Mr. Paget's care, October 3rd, 1855. She was a well nourished woman, who had always enjoyed good health. On admission, a firm, irregular nodulated swelling, about the size of a small apple, was seen on the clavicular margin of the left breast. The superficial veins were enlarged, but there was no discoloration of the skin nor any adhesion of the gland. The tumour was partly, but not entirely, movable, and was the seat of excruciating pain. The glands in the axilla were unaffected.

She was a married woman, but had never been pregnant. The catamenia had been regular, and had ceased thirteen years before. The tumour had been growing gradually, and without symptoms, till five weeks before, since which time it had increased rapidly, and had become very painful. The nature of the tumour being uncertain, an exploratory puncture was first made; and as this revealed the absence of fluid, an incision was made through the swelling, which proved to be a mammary glandular tumour, and was therefore dissected away from the gland. She recovered without any bad symptom.

LONDON HOSPITAL.

I. EXTENSIVE INJURY OF THE FOREARM.

Under the care of J. C. Wordsworth, Esq.

[*From notes by* F. Owen, Esq., *House-Surgeon.*]

The following is one of those extreme cases in which conservative surgery obtains occasionally such extraordinary and gratifying results. There can, we think, be no question that many limbs (especially hands and forearms) are saved nowadays, which it was the fashion of our elders to lop off without much ceremony. Whether here and there a patient does not die with his arm or leg on, who might have lived with it off, is another question, and one very difficult to settle. Occasionally, we venture to think, this most laudable affection for conservative surgery is carried rather to excess, as in a case which we saw some time since, in which a surgeon was attempting to save a thumb after he had removed *both* phalanges for disease. No such criticism, however, can be applied to Mr. Wordsworth's proceedings in the present instance, as there can be no doubt that, imperfect as the movements of the injured limb may be, they are infinitely superior to that of any mechanism by which it could be replaced.

We saw, a few days ago, at St. Bartholomew's Hospital, an almost equally bold attempt at conservation by Mr. Skey, and hope to be able soon to report an equally cheering result. The case was progressing most favourably when last heard of.

J. W. Jackson, aged 14, was admitted April 11th, 1857, into the London Hospital, under the care of Mr. Curling, suffering from a compound fracture of the upper third of the radius, a compound dislocation of the ulna from the triangular cartilage at the wrist, and a very severe laceration of the integuments and muscles of the forearm. The supinator longus and extensor carpi radialis longior muscles were severed from their origins, and hanging by their tendons; the short radial extensor was also partly divided. The nerves and blood-vessels were uninjured.

Mr. Wordsworth was sent for, in Mr. Curling's absence; and decided to attempt to save the limb. The supinator longus and extensor radialis longior were removed from their tendons; the dislocation was reduced; and, the wound having been dressed with wet lint, the arm was placed on a splint. There was little constitutional disturbance, but, at the end of a week, considerable suppuration. He was ordered to have eight ounces of wine and full diet. He made a good recovery, and was discharged as an out-patient on July 14th, with the wound nearly healed.

September 22nd. He presented himself, with the wound quite healed.

The ulna is tilted upwards from the wrist, and there is very little power of rotation or extension. It is proposed to assist the extension by a bracelet, to which is attached a spring, to act on the palm of the hand, and so straighten the wrist.

II. LIGATURE OF THE BRACHIAL ARTERY, FOR A WOUND SLICING OFF A BRANCH CLOSE TO THE MAIN TRUNK.

Under the care of J. Adams, Esq.

[*Reported by* F. Owen, Esq., *House-Surgeon.*]

The following case is given as an instance of a somewhat rare accident, viz., a branch of a large artery divided close to the trunk. The case is, surgically speaking, pretty nearly identical with a wound of the vessel itself, as there is not sufficient space left for the formation of a coagulum which could resist the force of the circulation after ligature of the divided branch only. As to the operation of ligature of the brachial artery itself, it is one which is now rarely necessary, since bleeding is less frequently practised, and almost always by competent persons; but it is, we believe, almost uniformly successful.

Thos. Marter, aged 15, labourer, was admitted into the London Hospital September 10th, 1857, under the care of Mr. Adams, with a severe incised wound, of a horse-shoe shape, above the elbow-joint on the inner side of the arm, extending about three and a half inches up the arm. It completely divided the biceps, and exposed the course of the brachial artery for about two inches. There had been considerable hæmorrhage, which was found to proceed from a small branch having been sliced off close to the main artery. The accident occurred from the boy falling on a hay-knife. With the kind assistance of Mr. Forbes, I placed a ligature on the brachial artery above and below the origin of the injured branch. The hæmorrhage at once stopped, the wound was closed with sutures, and the arm bent and kept in that position by a bandage.

September 11th. He was going on well; but the temperature of the hand was much lower than that of the other. He was rather feverish, and was ordered to have saline mixture three times a day.

September 12th. Erysipelas showed itself extending up the arm; this was completely checked by collodion. A poultice was ordered to be applied to the wound, the edges of which looked sloughy. The sutures were removed, and the arm placed on angular splints.

September 15th. The patient was much better. Zinc dressing was ordered.

September 17th. The wound was healing. The pulse was distinctly felt in the radial and ulnar arteries, and the hand was of the same temperature as the other. The anastomotic vessels around the elbow-joint were enlarged, and could be felt pulsating.

September 19th. The upper ligature came away.

September 20th. The lower came away.

October 3rd. He was discharged as an out-patient. The wound was nearly healed, the arm being slightly bent.

Original Communications.

CASES OF NERVE-DISORDER, RECORDED WITH REFERENCE TO THE PROBABLE OPERATION OF MALARIA AS A CAUSE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Series II.

Case I. Alice W., aged 2, residing very near the canal at Kensal New Town, was admitted November 10th, 1856. She had been ill one year. She is emaciating; the abdomen is large, soft, and distended by flatus; the bowels are relaxed somewhat, the motions offensive. The tongue is clean. She takes her food well. Under the use of cod-liver oil, with steel wine and occasional doses of hydrargyrum cum cretâ, she improved till December 20th.

December 22nd. The following note was made. There are patches of roseolous rash all over her, with general pyrexia. She is very restless at night, and has great thirst. The bowels are open, the motions white and slimy. She has got all her teeth. She has gained much flesh. The oil was continued, and a saline mixture with henbane given also, and a dose of grey powder and rhubarb alternate nights.

December 29th. The head has been very hot at night, the back of it especially. She is delirious, startled, and restless at night, with cold perspirations. The motions are as before. The tongue is clean. She still gets stouter. The oil and steel wine were continued, and iodide of potassium with tincture of cinchona were prescribed in cascarilla infusion. One grain of Dover's powder was ordered to be taken every night.

January 7th, 1857. She still gets stouter, but is very restless at night, and scarce sleeps by day. She was ordered to continue the steel wine and oil, and to have three-fourths of a grain of quinine at four and seven P.M. daily.

January 12th. She has slept very much better until last night, when she had only one quinine dose. She is suffering again with feverish heat; the head is hot; there are red patches on the cheek and thighs. There was no pyrexia at the time of visit. She is much stronger, and looks very well.

January 19th. The face and legs are all covered with patchy redness, which appeared this morning. She has been very much better all the week. The oil and quinine were continued.

January 26th. She has been quite well, doing nicely all the week; she sleeps very well, and can now almost run about; a month ago she could not stand.

February 2nd. She has comparatively quite recovered. The bowels are right. She is much stouter. She has taken the quinine only since last date; the mother calls it "sleeping medicine." She was discharged.

Remarks. I suspect very much that the canal influence was concerned in causing this child's illness. The morbid phenomena were slight; bowel disorder, roseolous rash, nocturnal cerebral disturbance, and pyrexia. All these may be referred to paralysis of vaso-motor nerves. One may consider the cutaneous hyperæmia as an outward manifestation of that which took place at night in the membranes of the brain and produced delirium. The positive good effect of quinine, after other means, including direct sedatives, failed, testifies strongly to the malarious character of the morbid action. It is apparent how injurious any depletory treatment would have been, supposing the head affection to have been regarded as substantive.

Case II. W. H. B., male, aged 5, was admitted May 14th, 1857. He resides in Bayswater in a good situation. There are, however, some damp fields behind the house where building is going on. He has been lame three or four months, more decidedly ill the last three weeks. His mother states that he screams with pain in both legs the whole night through, only getting short snatches of sleep. The pain comes on half an hour after he goes to bed, whatever the hour be. The other night, after a warm bath, he was unconscious and delirious the whole night. During the day he is quite well, except that he cannot walk straight, and cannot bear any one to touch his legs. The appetite is quite good; the tongue much coated, with red tip; the bowels are regular; the urine very pale. He walks lame and unsteadily. His face is pale. He is naturally indolent, not like the other children. He was treated by iron and quinine with three grains of Dover's powder at night till June 1st, and improved somewhat. From June 1st to 4th, the iron and quinine were omitted.

June 4th. He does not sleep; is very delirious at night, screaming very much. He plays about in the day, but screams out if any one touches the leg. He walks very lame with the right leg, but there is no sufficient evidence of articular disease; he refers the pain to about the junction of the upper and middle third of the front of the thigh. He can walk a good deal better than he could at first. The skin is cool; the pulse quiet; urine natural; the bowels open; the tongue whitish.

℞ Ferri et quinæ citratis gr. viij; potassii iodidi gr. i; tincturæ nucis vomicæ ♏x; aquæ ʒi. M. Fiat haustus ter die sumendus.

Omni nocte sumat pulveris Doveri gr. vi.

June 11th. He is considerably better as regards his nights; he has slept remarkably well three nights without Dover's powder. He allows me to move the leg without complaint, and uses it himself more freely; he has walked to the hospital in half an hour less time than on any other day.

June 18th. He sleeps all night now. The mixture was continued, increasing the dose of iodide of potassium to two grains.

June 25th. The nights are more disturbed again; he cried all last night. The mixture was continued, omitting the iodide of potassium; and he was ordered to have a drachm of cod-liver oil three times a day.

July 2nd. He has had a good night, and is considerably better.

July 9th. He walks better, and looks well.

July 16th. He cried the whole of last night; other nights have been good. He walks limping, but is cheerful.

℞ Strychniæ gr. 1-30; quinæ disulph. gr. i; ferri sulphatis gr. ij; acidi sulph. diluti ♏v; aquæ ʒss. M. Fiat haustus ter die sumendus. The oil was continued.

July 23rd. There is high delirium at night when he takes the medicine, even in half-doses; he is well during the day. The bowels are right. The oil alone was continued.

July 30th. He is in great pain at night, wakes up, and cries much. The tongue is whitish.

℞ Morph. acet. gr. 1-6; aquæ ʒij. M. Fiat haustus omni nocte sumendus.

Omni nocte sumat hydrargyri cum cretâ gr. i.

℞ Pulveris rhei gr. v; tincturæ aloes ♏xx; aquæ cassiæ ʒiv. M. Fiat haustus omni mane sumendus.

August 3rd. He does not sleep at all, but cries all night through, even worse than before. The bowels are open; the tongue whitish. He was ordered to have two grains of disulphate of quinine with a little dilute sulphuric acid at seven and nine P.M. daily.

August 17th. He eats well and sleeps well; he has no screaming at night, but is in fact recovered. He halts in walking, but gets on well.

Remarks. This boy did not reside in a situation that would ordinarily have been suspected of malaria. He suffered, however, from well marked neuralgia with periodic exacerbations, controlled very positively by quinine, especially when given so as to anticipate the nocturnal attack, and not depending so far as appeared on any other cause than some endemic influence. It is especially worth notice that after he had benefited very greatly by iron and quinine with nux vomica, the administration of strychnine in place of the latter disagreed very decidedly, and seemed to aggravate the symptoms. I have observed this before; and I believe it gives the lesson that even when tonics are indicated in cases of nerve-disorder, it requires care to adapt them well to the system. They may entirely fail to do good from being in too large a dose, or in some form that causes irritation. It is never to be forgotten that most nerve tonics are tissue irritants, and that skill may be requisite to obtain the beneficial effect and avoid the injurious. As in case I, sedatives were useless. The length of time during which it was necessary to continue treatment, and the tendency to relapse, are points to be remarked. The cause of the abiding lameness was probably some permanent alteration of the muscular nerves of the part; there was certainly, as careful examination showed, no disease of the hip-joint.

Case III. Mrs. E., aged about 45, of dull puffy aspect, robust make, having had no children, residing in one of the best streets at the west end of town, came under my care in the beginning of April 1856. About two years before, she seems to have had rheumatism while at the seaside; her limbs she described as being stiff, and copious perspirations existing at the same time. After she had removed to an inland locality, she suffered a

severe attack of abdominal pain, on account of which she was treated by mercury every two hours until she became severely salivated. This was done from fear of cholera, which was prevailing at the time. Since this period she has never been well. She complains now of hot and cold sensations, occasional vomiting of food, oppression at the chest, sense of suffocation, tendency to faint, with apprehension of sudden death, so that she quite expects to be found dead some day. At times she is so nervous that she cannot bear the rustling of a newspaper. She is always worse in the early part of the day, and better towards night, but her sleep is often restless. Her memory appears to fail, sometimes so much that she cannot remember how to spell her name. The cold sensations amount at times to shivering; at others, she has perspirations. The pillow at night feels too hard for her head, which seems to her to yield and be pressed in. She has had rather profuse catamenial flow, but it has quite ceased for some months. She takes little exercise. The skin is cool; the pulse natural; the bowels costive. During the course of my attendance upon her at intervals for a year, the same symptoms continued more or less marked at various periods with other intercurrent phenomena. At one time her nose was stopped up, tender on pressure, with a slightly sanguineous mucous discharge; the tongue at the same time felt hot and sore. There was repeatedly a good deal of swelling of the hands and feet; of the latter especially, and most in the morning. In the latter part of the summer she fell into an extreme state of nervous depression, evincing the most extreme susceptibility to anything like a chill, her state being in fact such that the acutest observer would have been perplexed to say whether the root-malady was of mental or bodily origin. About the middle of January, she had an attack of facial neuralgia, with heat flushes and chills, general puffiness and swelling of the subcutaneous tissue, a sensation of being bloated, and general *malaise*. The catamenial discharge was very irregular—a mere occasional show. The pulse was quiet; the skin cool; the tongue sodden and whity. Three days later, having been put on quinine with nux vomica, she was much better; the facial neuralgia was nearly gone, and the puffy swelling of the hands was very much diminished. She could now close her hands, which before was scarcely possible. A symptom not unfrequently present was wheezing at night—a kind of asthmatic affection. Latterly, some circumscribed erythema has appeared on both legs. About the beginning of last June, she was suffering much with pain in the head, a stupified sensation, nausea and general depression. At the end of the month, she had an attack of hemiplegia, affecting the right hand and arm, and her power of speech was much impaired. In this attack I did not see her, being absent from town; but the opinion of the eminent physician who attended her, as expressed by himself to me, was "that the attack had more to do with some actual or threatened dilapidation of the brain or its vessels than with any active determination of blood to the part." The paralysis continued for about two months; there was no loss of consciousness at any time. After the paralysis occurred, she had a good deal of eruption about the neck and elsewhere, so that her skin at times was quite red.

The remedies employed have been strychnia, quinine, and iron, with occasional aperients; these have been of material benefit, though very imperfectly tried. Change of air on those occasions at least has been of remarkable efficacy, and is evidently that which she essentially wants. It restored her from the very depth of nervous distress and debility to a condition of perfect comfort, so that she was quite surprised at herself when she found what she was able to do.

Remarks. In its earlier period, this case might well have passed for an instance of hysteria (that indefinite, much abused term), or of amenorrhœal disorder. The remarkable benefit derived, on more than one occasion, from change of air, seems to go near to prove that the malady was of a different kind—a form of aguish disorder. Entertaining this view from the first, it was to me a matter of extreme interest to observe the various phenomena that arose, and to perceive how they were all referrible to the action of a poison on the nervous system. Some evidently had their seat in the cerebro-spinal, others in the vaso-motor nerves. Of the former class were the facial neuralgia, the hyperæsthesia, and the hemiplegia; of the latter, the heat-flushes and chills, the subcutaneous œdema, the syncopic tendency, and the erythematous eruption. The paralytic seizure was, I suppose, of the same kind as that designated by Abercrombie simple apoplexy. I entirely agree in the opinion above quoted, that the attack was not owing to sanguineous congestion; but I incline strongly to the view that the pathological state was rather one of functional disorder than of any organic change. It seems to me most highly probable that the motor nervous centre may be similarly affected as a muscular nerve in peripheral paralysis, or a sensory nerve in many neuralgic attacks. The exact kind of change which occurs we do not know, but it is evidently one which interrupts the function for a time. M. Bailly, whose work on pernicious intermittent fevers is well worth perusal, recognises most distinctly a form of coma depending solely on a particular state of the nervous force, quite independent of congestion. The subcutaneous œdema was a very curious symptom, and was most palpable, and was not to be accounted for by any disease of heart or kidney. Like the other phenomena belonging to the vaso-motor nerves, it seems to imply a loss of power, a degree of paralysis in them. In short, if we regard the case as one in which a poisonous influence was acting on and depressing the *vis nervosa* throughout the system, the manifold phenomena become quite intelligible. The marked benefit derived from the use of nerve-tonics shows that the condition of the nervous system was one of depression and debility; and the still more decided good produced by change of air makes it very probable that the poisonous influence was of local origin. Dr. Copland notices the morning depression and evening amelioration as a symptom often observable in chronic obscure remittent—a term which correctly designates, I think, the foregoing history.

Case iv. M. B., aged 41, the wife of a butcher, was admitted July 2nd, 1856. She had been ill two months. She suffers with swimming in head, pains about the sacrum, dimness of sight, flushes of heat preceded by chills, and failure of memory. Her appetite is bad; the tongue is too red; the urine is very high coloured. She has much thirst; the bowels are regular. There is no uterine affection. Ten days ago, she got out of bed at midnight, and fell down insensible, and remained so for two hours: she felt very ill in the morning. At this time last year, she had attacks of giddiness and violent retching for twenty-four hours. She took sulphate of strychnine, with citrate of iron and quinine, for about seven weeks; and improved very much.

Remarks. I regard this as an instance of a weak nervous system succumbing under some depressing poison; it may be a malarious miasm, or foul gulley-hole emanations, or some undefinable urban influence. It is clear that good was done by sustained tonic treatment, enabling the weak system better to resist the depressing agency.

Case v. D. M., aged 22, was admitted February 13th, 1856. He had been employed as a boatman on Paddington Canal for nine years. He is of healthy aspect. He had rheumatism badly two years ago. He was attacked with hemiplegia three weeks ago; the right arm and leg are affected, and also his speech. He has no pain in the head; the intellect is clear. The skin is cool; the pulse weak; the bowels open. Iodide of potassium, and afterwards bichloride of mercury, were given during the first four or five weeks, with some, but not much, benefit.

March 15th. He was feeling very weak, faint, and languid. Quinine was then given, at first three grains, afterwards seven grains, three times a day. Under this he improved at once and decidedly, and was able to return to work about the middle of April. A month later, I heard that he remained at work on the canal, and that his speech and motor powers were very fairly perfect; but he had no appetite, and was getting thin. From this I was quite prepared to hear that, a few days afterwards, he was again attacked with hemiplegia, but now of the left side—the opposite to that first affected. His speech was also lost, and he experienced a degree of faintness. The attack occurred at Tring, where he was under the skilful care of Mr. Dewsbury, who kindly favoured me with a history of his state. As the hemiplegia yielded, acute rheumatism appeared.

Remarks. I can hardly think that the paralytic seizures in this case depended on any organic disease. Had such been the case, it is not probable that the affection would have occurred the second time in a different part, or that recovery should have taken place after two attacks, or that quinine should have been of decided efficacy for good, as it was on the first occasion. From the experience I have had in other instances of the injurious influence of a residence near a canal on the health, I am much inclined to believe that this man owed his hemiplegic attacks to some malarious emanation from this source. It seems to me also far from improbable that the sequel of acute rheumatism in the second attack was not an accidental occurrence, but that the same morbid influence affected at first the brain, and afterwards the vaso-motor

nerves of the limbs. It is an old opinion, that rheumatism and malarious disorder are in some way allied.

Case vi. S. A., aged 50, female, married, who had had four miscarriages and three children, was admitted April 9th. She had rheumatic fever six years ago. She has been salivated severely. She is of rather sanguine aspect, and has always been subject to indigestion. The heart is enlarged; it beats in the epigastrium, as well as in the normal site; the sounds are nearly normal. Breathing is easy now; but she is awakened after an hour's sleep at night, with wheezing in the chest—a kind of asthmatic paroxysm. The urine is clear and free. The catamenia ceased suddenly two years ago. The pulse is regular, weak. The tongue is clean. She has some cough and expectoration. There is much leucorrhœa. Under the use of various tonics, latterly three grains of quinine three times daily for nearly fourteen days, she improved much. On June 10th, she reported that she had been going on quite well till May 30th, when there came on a discharge of blood from the left nostril; and the next day she had a sort of fit, in which she was unconscious for an hour. The attack came on suddenly, and was preceded by throbbing of the left side of the head and palpitation. She had now a mucous discharge from the nose, and pain on the left side of the nose, the orbit, and forehead. The pulse was quick; she had no appetite. She felt very weak indeed, and had copious perspiration at times; no chills, but heat-flushes. The bowels were well open. Quinine was continued in four-grain doses three times a day, with twenty minims of tincture of sesquichloride of iron. After four days, this was changed for eight grains of quinine three times a day.

June 21st. She stated that the nasal discharge was what she had most to complain of; it occurred from both nostrils, was bloody, and attended with pain and heat about the bridge. She derived much benefit from the medicine, and was worse if her supply failed her.

June 28th. She was still further improved, and the discharge from the nose was not at all like what it had been. She then quitted London.

Remarks. This patient's health had no doubt been much impaired by the severe salivation and the miscarriages she had suffered. The attack on May 31st was no doubt one of cerebral congestion, dependent on paralytic dilatation of the carotids and other vessels, chiefly the left. It was similar to apoplectic seizures, referred to by Mr. Martin, at page 204 of his work, where he quotes Dr. Henderson's opinion that the distinction between apoplexy and remittent fever was scarcely possible. The epistaxis and mucous flux were both poured forth from surfaces supplied by ramifications of the paralysed vessels, and probably gave some relief to the cerebral congestion. The nerve-toning action of quinine both relieved the head and diminished very much the morbid flux by lessening the flow of blood to the seat of morbid action.

HYSTERICAL COMA, WITH PARALYSIS.

By James Williams, M.D., Aspley Guise.

[*Read before the South Midland Branch, September 29th*, 1857.]

Emma K., of Apsley Guise, aged 20, daughter of highly scrofulous parents, at the age of fourteen became the subject of scrofulous ophthalmia, which continued some time, and left bad opacities. Soon after this, she had bronchocele, which was treated in the usual manner, and in a few months gradually subsided. This was followed by a loss of voice, which has continued, with some intermissions, until the present time. About this time (1852), mesenteric enlargement came on, rendering the abdomen tense and indurated, interfering very much with the healthy development of the system. These symptoms continued for upwards of two years, with all the usual accompaniments, variable appetite, etc., and torpor of the whole frame, with troublesome hysterical symptoms. After some eighteen months treatment, the tumefaction began to subside; and, at the termination of the period above mentioned, the hysteric fits became gradually of an epileptic character, and on one occasion, during the autumn of 1855, she had as many as eight distinct seizures. After eating a very hearty supper, she had a severe fit, in which the eyes became closed, and articulation totally lost for eighteen weeks; that is, from October 15th, 1855, till the following March 1856.

After Emma K. had been in bed about a month, her sister (who had been consumptive for several years) died. During her sister's illness, Emma K. lay very still generally, and especially when any one was in the room conversing with her sister. When the consumptive sister was dying, Emma was very restless, but did not notice her death particularly.

When the bell was tolling for Elizabeth's funeral, Emma beat time with the bell; and, when the dead body was removed, she motioned them back towards her with her hand. She also made a mourning noise after the people had left the house, but no articulate sound.

During the whole time (five months) of this partially insensible state, she had occasional fits, and, during the early part of the attack, she passed her motions and urine involuntarily, and seemed to all appearance like a person labouring under the coma attendant upon apoplexy. In the course of six or seven weeks, consciousness gradually returned, and she showed some restlessness upon wishing to pass her motions, and soon after this she would signify her want of food by gnawing her finger; and, if she wanted drink, would lift her hand before her mouth, as we should do in raising a cup.

The catamenia appeared once (and the *first time*) only during the early part of the semi-unconscious state. Blisters were applied to the neck, and the head shaved, with no effect. Other judicious treatment was adopted, but with no beneficial result. Our lamented friend Mr. Thomas Camps, of Fenny Stratford, saw her. He attributed the symptoms to scrofulous taint, and prescribed iodide of potassium; but this made her restless, and it was therefore discontinued.

On one or two occasions, I tried to raise her from the bed, but the body became perfectly rigid, and convulsions were sometimes induced thereby. If an attempt was made to open the eyes, they closed the more violently; scarcely any of the cornea could be seen, from the upraised condition of the eyeball. She would generally put out the tongue when requested to do so, and sometimes nod assent to questions. It may be mentioned that, if the body were raised in bed, and the support for a moment withheld, she fell like a totally inanimate substance.

About a month before she opened her eyes, a seton was inserted in the nape of the neck, and gave no apparent pain. This is also the case in catalepsy, epilepsy, and apoplexy; but in hysteria the patient is conscious, and remembers events. When the seton became inflamed and the discharge established, she manifested uneasiness when it was dressed. After the discharge had been established about a month, with no other apparent change, one eye opened, giving her a very strange appearance. This was on March 12th. Next day, the other eye opened (March 13th); and the next day (14th), she spoke, and afterwards conversed with her mother, having been unable to do either for upwards of five months. She had no recollection of her sister's death, nor indeed of anything that had occurred in the interval, though, as I have shown, she had consciousness generally as regards the mind, except during the first month of her illness, but no physical sensibility as to pain.

After the recovery of her sight and articulation, she gradually improved in other respects, but remained in bed another week. Her legs continue flabby and swollen to this day, and her voice has been lost again nearly twelve months. One eye has a large speck upon it; the mind is weak; and the system generally in a very feeble condition. The bowels are smaller, though still large; and difficulty of swallowing also remains a troublesome symptom, and hard food is much disliked. It should be stated that the various members of the family are below the average standard of intellect.

The foregoing narrative contains much to interest the more philosophical and speculative members of our profession; and I would gladly have entered upon the various connexions with chorea, catalepsy, etc. The field, however, is so wide that, for the present, I must be content with this brief outline of facts.

The reading of this paper elicited considerable discussion, in which cases were quoted bearing upon the hysterical origin of the case. Instances of feigned disease were described, in which some similarity was supposed to exist. The general opinion, however, was, that the case in question was not assumed, but real disease, dependent upon the presence of scrofulous tubercle upon the brain, probably about the crura cerebri and origin of the portio dura, thereby producing and perpetuating irritation to the extremities of the facial nerve, until absorption gradually took place, releasing the patient from the strange vagaries of disordered physiological and pathological conditions.

CONTRIBUTIONS TO THE DISEASE STATISTICS OF BEDFORD AND ITS NEIGHBOURHOOD.

By William Blower, Esq., Bedford.

[*Read before the South Midland Branch, September 29th*, 1857.]

I. MEASLES.

Measles, according to observations made during my residence at Bedford, occurs as an epidemic in this town every sixth year. Thus it has prevailed here under this form, within the period of my acquaintance with the diseases of this locality, in the years 1826, 1832, 1838, 1844, 1850, and 1856; but of its history previous to the earliest of these dates, I have no knowledge. This disease has occasionally been introduced here at other times; but in this case it has not spread extensively, and has only affected those who have had communication with the sick; whereas, in the years specified above, it has prevailed generally throughout the town, and has attacked most of the parties unprotected from it, even in many instances where no direct or indirect exposure to contagion could be traced. It has not always occurred in the same season of the year: in 1826 and 1832, it prevailed in the winter; in 1838, in the autumn; in 1844, in the spring; and in 1850 and 1856, in the summer. Its ordinary duration has usually been about four months, exclusive of the occurrence of a few cases before the disease became general and after it had abated. The virulence and the consequent mortality of this disease depend partly upon its type, but principally upon the season of the year at which it occurs: thus, when it has prevailed in the winter and in cold and wet weather, as in 1826 and 1832, the cases have been severe, and the mortality great; whilst when it has occurred in the summer and in warm and dry weather, the cases have been mild, and the mortality consequently slight.

This periodical recurrence of measles, as an epidemic every sixth year, has not been noticed by any British medical author that I am acquainted with; but Dr. Dewes, an American, mentions it in his treatise on the *Diseases of Children*.

On two occasions, during my residence at Bedford, a peculiar disease, apparently a compound of measles and scarlet fever, has occurred here as an epidemic. It has the external character of measles and the internal affection of scarlet fever; but it is not prevented by previous attacks, nor does it prevent future attacks of either of these diseases. Dr. Copland has given a description of it in his *Dictionary of Practical Medicine*, under the head of "rubeola"; but I am not aware that any other English medical writer has noticed it.

II. BRONCHOCELE.

Some time ago, I was called to attend a woman at Oakley, who was suffering from a large bronchocele. On inquiring into the history of the case, I learned that it came on during a residence at Ridgemount; and the patient remarked that no female could live in that place for six months without having either a thick neck or thick legs. Shortly afterwards, I was sent by the relieving officer of my district to visit a poor woman residing in Bedford, but who came from Ridgemount; and she too had an enormous bronchocele. I have also been informed by other parties that this disease is very prevalent in that village, and that almost all the inhabitants derived their supply of water, until lately, from one well.

Ridgemount lies about twelve miles south-west of Bedford, on the brow of a hill or chain of hills at the northern extremity of the green sand and near to the Oxford clay. The common well is situated on the side of the hill, near to the top; and the water, on being subjected to chemical analysis, exhibited the absence of free carbonic acid, and consequently of bicarbonate of lime, and also of magnesia. The water of the well at the railway station in the valley contains an abundance of these substances, and no case of bronchocele has ever occurred here. The Duke of Bedford has, within the last two or three years, caused other wells to be dug; but I am not acquainted with the contents of their waters, or whether any change has taken place in the prevalence of bronchocele, since they have been used.

The absence of free carbonic acid and of bicarbonate of lime from the water in places where bronchocele is endemic, has been recorded by many observers. Thus, Dr. Falk, in his thesis on the *Endemic Bronchocele of Nassau and the Electorate of Hesse*, relates that in the places where this disease is frequent, the water is characterised by the absence of free carbonic acid, and consequently of bicarbonate of lime. Dr. Black, in an article on the Medical Topography of Bolton, inserted in the fifth volume of the *Transactions of the Provincial Medical and Surgical Association*, states that bronchocele is so prevalent in that town as to be reckoned an endemic, and that the water contains only an appreciable impregnation of lime. Humboldt also says, that it prevails in districts where the water is free from calcareous impregnations. And many other writers state the same fact either directly or indirectly.

Bronchocele is not of common occurrence in the town and neighbourhood of Bedford, except at Ridgemount, and in persons who have resided there. A slight enlargement of the thyroid gland is occasionally seen in strumous and anæmic young females, but the tumour does not attain the size or acquire the character of genuine bronchocele. The spring water contains free carbonic acid and bicarbonate of lime in considerable quantities; but the river water is nearly destitute of these substances. Persons who live near the river use the water without being subject to bronchocele. This exception, however, can be accounted for by the fact, that the water contains a large quantity of chloride of calcium—a substance which, under the name of muriate of lime, was regarded before the discovery of the medicinal properties of iodine as a potent remedy for bronchocele—and thus, that the simultaneous occurrence of the antidote with the bane prevents its evil consequences.

Numerous theories of the cause of bronchocele have been published, but not one of them has stood the test of criticism. It may, therefore, appear presumptuous to hazard another, which may run the risk of sharing the fate of its predecessors. I trust, however, that I have made out a case which merits further investigation, and one which will induce medical practitioners, resident in or near places where bronchocele is endemic, to analyse the water, and ascertain whether it shows the same deficiency of free carbonic acid and bicarbonate of lime, as in the instances narrated above.

III. NYCTALOPIA.

Nyctalopia, that morbid affection of the visual organs in which the patients can see in the day-time, but are blind during the night, has generally been considered by ophthalmic authorities to be of rare occurrence in this country. Within the last few years, however, numerous cases have occurred at Kempston, a large and populous village situated about two miles west of Bedford. It was first noticed about the year 1840; and for some time it appeared to be exclusively confined to that place; but latterly a few cases have been observed in the surrounding parishes. The parties affected have been almost exclusively males. I have not heard of more than two females who have suffered from it. All the patients, except one male and the two females, have been employed in the open air from sunrise to sunset; they have principally been agricultural labourers or gardeners, and they have belonged to the poor and labouring classes. It has occurred at all ages, and has attacked boys of 12 years, and old men of 70. It usually commences at the latter end of February, and continues until June, when it ceases, and does not recur in the autumn. Those persons who have once suffered from it, appear predisposed to be affected again the next spring. Last year, however, I met with a case in August, and this year I have met with another in September (the present month); and these two cases, together with that of one of the females who was subject to it during pregnancy, have been the only exceptions to its occurrence in the spring. The number of cases seems to be in some measure dependent upon the season; as after mild winters, when there has been but little snow, the cases have been few; whilst after severe winters, when there has been much snow, the cases have been more numerous.

It does not in general prevent the patients from following their accustomed occupations; as the agricultural labourers and gardeners have been able to continue their employment during the day, although they have not unfrequently been obliged to be led home from their places of work in the evening, when they have stayed out after sunset. In the case which occurred in August 1856, the man told me he had to be guided off the corn-stacks which he was building when he remained until dusk; and in the case of the present month, the patient, a carpenter, resident in Bedford, but who has been working at his trade at Kempston for the last six weeks, and who was attacked about a month ago with nyctalopia, has his face marked by contusions which have been occasioned by his inability to see when he has been late in going home. These persons have only experienced inconvenience in the evening and night, and have not suffered any pecuniary loss by the disease; but in one instance, the patient, a game-keeper, whose duty included watching the preserves at night, was incapaci-

tated for this service, and, of course, was dismissed from his office.

A few of the patients have complained of aching about the eyebrows; but the greater part sustain no pain or inconvenience, except that arising from the blindness at night. They appear to see tolerably well during the day, but at sunset the sight becomes dim, and as the darkness increases, the dimness of sight increases, until they become totally blind. On a careful examination, the only deviation from the normal character of the eye observable is a dilatation of the pupil, indicating diminished sensibility of the retina—the probable cause of the blindness in a dim light. The sight does not sustain any permanent injury; as, after midsummer, in those cases which occur in the spring, it is as good as it was before the attack.

The parties affected by it do not take so much notice of it now as they did when it first occurred, for they find by experience that it ceases at midsummer, and that medicine has but little influence upon it. The popular remedy is the effluvium from fried bullock's liver, but it appears to have but little if any good effect. Five grains of blue pill taken at bed-time relieves the brow-ache, and seems—at least, in the opinion of the sufferers—to mitigate the affection, so as to have acquired for the medicine the name of "night-blind pills". Patient endurance, fortified with the confidence that the affection will cease at midsummer, and the careful avoidance of being from home after sunset, is, however, on the whole the best course for the sufferer to pursue.

LABOUR, WITH PERFECT OBLITERATION OF THE OS UTERI.

By R. G. Mayne, M.D., Surgeon, Leeds.

[*Continued from page* 752.]

I stated that I had neither heard nor read of a strictly analogous case, and now offer the grounds of this qualified statement.

The late Dr. Wm. Campbell of Edinburgh, in his obstetrical work, relates two cases of very close contraction of the os thus: "Both were first pregnancies: in the first, uterine action continued about twelve hours before the os uteri could be distinguished, when it felt like a minute cicatrix." . . . "The second had regular pains for two nights and a day before the os uteri could be perceived, and she suffered so severely as to require three persons to keep her in bed. Both patients were largely bled, gave birth to living children, and had a good recovery."

Churchill had "a case in which the os uteri was not observable until after forty hours of labour, and then it was felt about the size of a small crowquill. Notwithstanding the delay and obstruction, however, the patient was delivered naturally of a living child."

Rigby says: "We may suspect the protraction of labour arises from agglutinated os uteri when at an early period of it we can discover no vestige of the opening in the globular mass formed by the inferior segment of the uterus, which is forced down into the pelvis, or at any rate when we can only detect a small fold or fossa, or merely a concavity, at the bottom of which is a slight indentation, and which is usually a considerable distance from the median line of the pelvis. The pains come on regularly and powerfully; the lower segment of the uterus is pushed deeper into the cavity of the pelvis, even to its outlet, and becomes so tense as to threaten rupture; at the same time, it becomes so thin that a practitioner who sees such a case for the first time would be induced to suppose the head was presenting, merely covered by the membranes. After a time, by the increasing severity of the pains, the os uteri at length opens, or it becomes necessary that this should be effected by art; when once this is attained, the os uteri goes on to dilate, and the labour proceeds naturally, unless the patient is too much exhausted by the severity of her labour."

Burns (*Midwifery*, ed. ix, p. 460) states: "The os uteri may be naturally very small. In some instances, it has with difficulty admitted a sewing needle; and in some instances I found it impervious, hard, circular, and with difficulty discovered, but it gradually dilated."*

These cases, real and hypothetical, refer to *first* pregnancies, and to *patent*, though extremely constricted os, in one instance indistinguishable till after twelve hours action of the uterus, when it felt "like a minute cicatrix"; in another, imperceptible till after "regular pains for two nights and a day"; in a third, not discoverable till "after forty hours of labour"; in a fourth, similarly hidden till after protracted labour. They therefore do not present the strict analogy to that forming the subject of this paper, which has been referred to, Mrs. W. having had several children, and there being no patency of the os whatever.

Burns continues: "It is also possible for the os uteri to be closed in consequence of inflammation, so that it has been necessary to make an artificial opening."† This is the only mention of obliterated os uteri the result of inflammation, which, in my limited resources of reference, I have been able to meet with. In conjunction with it, I take the liberty of here repeating, from the passage in the *Dictionnaire de Médecine* quoted by Mr. Hatton, the only sentence to my purpose:—"But it is also demonstrated by facts of anatomical pathology, that the orifice becomes completely obliterated in consequence of inflammation of the mucous membrane which invests it." Mr. Hatton's case appears not to have been of this character at all, but similar to those previously cited; for although, in it, the constriction or contraction was so great that "no os uteri could be detected," there had been no disease of the womb, so far as ascertainable; and the impregnation indisputably implies some degree of patency, however minute. Then, it was a first pregnancy, and the patient had menstruated regularly from the age of sixteen (whether this regularity has regard to time, or quantity, or both, is not stated); and there was "a slight degree of puckering, or rather roughness," concluded to be the site of the (assumed) imperforate os uteri.

The two extracts in the preceding paragraph, from Burns and the *Dictionnaire de Médecine*, are well illustrated by the case reported by me, some of the antecedents of which I will now give. Mrs. W. had long been severely afflicted by a condition of the womb which, though its real character is still matter of dispute, is well understood by *ulceration of the mouth and neck*, accompanied by excessive discharge, much pain and exhaustion. She came under my care towards the close of 1855, in a very broken-down condition; life seemed burdensome, and she was scarcely able to move about, having been an invalid from the same cause, in greater or less severity, for some years before, during which she had not been pregnant, and had undergone medical treatment without relief. A few weeks attention, on the principles so ably laid down by Dr. Bennet, very much improved her state; and, by perseverance in the same course for a further period, she ceased to come to me, being quite restored to health, and in the enjoyment of comfort and strength, which she had long been deprived of. I heard no more of her till she called to engage me to attend at her confinement.

With reference to my inquiries at the bedside, already referred to, as to any sensation of uneasiness in the uterine region after she became aware of her pregnancy, I subsequently drew from her the following facts:—That, in her fifth month, as she thought, she accompanied her husband on an excursion trip by railway to Manchester; that, as is usual on such "pleasure" jaunts, the progress, what with stoppages and delays, was made as tedious as possible, causing her considerable uneasiness then and during her fatiguing walks through the streets; that they left Manchester about 10 o'clock at night, and arrived again at Leeds between 4 and 5 next morning. This long confinement to a cramped position greatly increased the uneasiness in the lower part of the body, so that she had much pain and difficulty in reaching her home, which is about three quarters of a mile from the railway station. Her sufferings in this way continued till within six weeks of her delivery, when they altogether ceased; but she had not applied for help any where, under the idea that, though unknown in her past experience, they depended upon her pregnancy. I submit that there is here a satisfactory explanation of a case which, so far as I have been able to discover, is singular as to the *perfect obliteration of the os*, not only after impregnation, but after several natural full-timed births.

* "In a case probably of this kind, from Guy's Hospital Reports, no os uteri could be felt. An incision was made into the tumour formed by the uterus in the vagina, and the contractions seem to have lacerated this farther. Great exhaustion followed the laceration and birth of the child, with rapid pulse; but the patient recovered." (*Lancet*, June 1837, p. 392.)

† "*Vide* Case by Campardon, in *Recueil Period.* tom. xii, p. 227. Muscati gives a case where, in consequence of injury by the forceps, the os uteri was so small that it would not admit a probe. A number of incisions were made round it, after which it dilated. In the next pregnancy, slighter incisions sufficed; and in the last, none were required. Aubertin performed in a case of this kind the Cæsarean operation. In a subsequent pregnancy, in the seventh month, the cicatrix was ruptured, and by very little enlargement a child was successfully extracted. In a case by Gautier, the os uteri was obliterated after a labour in which the shoulder presented. The menses were retained, and required a perforation for their evacuation."

A few words as to the treatment. In mentioning this case to one or two professional friends, I was told that a crucial incision would have been best, as the approved practice in obstructed menses, etc.; but from this I dissent. In primiparæ, where the os is like "a minute cicatrix", "a small crowquill", "a slight indentation", or is "impervious, hard, and circular", the crucial incision may be the very best; but where the known recently existing state of parts was that of ample development after repeated child-bearing, and where, therefore, the new formation must extend, lengthwise, from side to side, and be comparatively narrow from back to front, such incision was neither required nor applicable. Bleeding, large or small, was never thought of. It startles one to read of the Cæsarean operation having been performed "in a case of this kind"; and as for destruction of the child in Mr. Hatton's case, this was resorted to on other grounds than the occlusion, and which were deemed sufficient to demand so serious an expedient.

CASE OF CUT-THROAT: RECOVERY.

By William Thurnall, Esq., Bedford.

[*Read before the South Midland Branch, September 20th*, 1857.]

On September 4th, 1855, G., aged about 37, a sub-contractor on the Leicester and Hitchin Railway, attempted self-destruction about 4·30 P.M., by cutting his throat with a razor. He had been in a desponding state of mind for some time previous to the injury, and had suffered from severe diarrhœa for four days.

When I arrived at the house, about half an hour after the occurrence, I found him upstairs lying on his back, having been placed in that position by two of his neighbours, who attended immediately upon the alarm being given by his wife. There was a very large quantity of blood upon the floor, and upon examining the wound, I found that an incision, about four inches in length, had been made across the os hyoides, which bone had a groove across the whole of the front surface produced by the razor; a second incision had evidently been made a little higher up, which was six inches in length, and extended from about half an inch from the left angle of the jaw to the right angle of the jaw. The muscles were all divided above the larynx, and the œsophagus was cut through the whole extent, except a small portion at the posterior part. The internal edge of the wound on the right side appeared to be more extensive than the external, as though the point of the razor had been depressed when it arrived at that part, and the muscles in that situation were very much jagged. Upon removing a quantity of coagulated blood from the throat, the large vessels on the left side were found to have just escaped the instrument, but both external and internal carotids on the right side were divided. When the clotted blood was removed from the wound, a gush of blood took place from the external carotid, which was immediately secured, and, while the ligature was being applied to it, a very considerable jet of blood, evidently from the internal carotid, took place; I immediately seized with a pair of forceps a mass of muscle in the direction of the jet, which arrested the hæmorrhage, and as soon as the external was secured, I proceeded to search for the wounded internal, but from the jagged state of the muscles, the great retraction of the vessel, and the hæmorrhage having ceased, it could not be found. The upper end of the external carotid was secured as well as the lower. Another artery, probably the lingual or anterior facial, was secured, also a vein which bled freely, and was supposed to be the sublingual. Mr. Harris of Springfield, who was passing by at the time, was kind enough to render me valuable assistance.

The man appeared fast sinking, and about an hour after the injury the pulse at the wrist was barely perceptible; it gradually became weaker, until quite imperceptible, and remained so for at least four hours, during which time the only way I could tell that a spark of life remained, was by placing a candle near the wound and examining the epiglottis, which merely quivered, but did not half close the glottis. So convinced was I that the man was fast sinking, that I spoke to the chief constable as to the time the inquest would be likely to be held the following day. Reaction very gradually returned, and about eleven o'clock he was carefully removed from the floor (where he had remained from the time of the injury), and placed in bed. He vomited three or four times during the night, when a dark grumous fluid gushed through the wound, a very small quantity upon one occasion coming out of the mouth.

September 5th. At 7 A.M. his pulse had much improved, he became perfectly sensible, and made signs for his daughter to come to him. No hæmorrhage had taken place during the night, but a considerable quantity of saliva and mucus tinged with blood continued to escape from the wound. During the day, he was enabled to write on a slate anything he wished to communicate; and in the evening, the tube of a stomach-pump was introduced through the mouth into the stomach, and about a pint and a half of new milk was injected by means of an India-rubber hydrocele bottle.

From September 5th to the 10th, he continued to sleep well at night, and about a pint and a half of strong beef tea was thrown into his stomach night and morning. On the morning of the 10th, Mr. Couchman and myself closed the wound about two-thirds in extent by means of several sutures, the patient having been kept constantly from the time of the injury on his left side with the head well bent forward on the chest; about an inch and a half of the wound on the left side was left open to allow the mucus and saliva to escape. In the evening, an aperient was given with his food, his bowels not having been opened since the injury.

September 11th. He had a restless night, and complained of much pain in the wound since the sutures were applied. There was a slight erysipelatous blush about the edges of the wound. Cold water dressing was applied; the bowels were not yet relieved; pulse 84. Up to this time, when he tried to talk, the sound was a hoarse kind of whisper, and only a very few words could be understood.

September 12th. He had a better night; pulse the same as yesterday. The bowels were slightly moved; the aperient was repeated. During the night, the patient sneezed and tore out several of the sutures, and the wound being disposed to gape, a broad band of strapping was applied round the throat just below the lower edge of the wound. He said he felt better; the inflammation about the wound was less; and the discharge looked healthy.

From this time he progressed favourably; and about three weeks after the injury, he was able to swallow fluids with care, pretty well; and at the end of about two months, the wound was perfectly healed. Mastication, deglutition, and speech, were impaired for four or five months after the injury, but gradually improved; and eighteen months afterwards, the only perceptible inconvenience was a rather guttural sound of the voice.

USE OF COFFEE IN THE TREATMENT OF STRANGULATED HERNIA.

By Joseph B. Sammut, M.D., Malta.

Having lately perused an Italian medical journal, I was struck with the simplicity of a remedy proposed for cases of strangulated hernia; the efficacy of which I have since had occasion to prove. Not having observed any mention of it amongst the several remarks on this subject in our Journal, I think it might not be unacceptable to draw attention to a method of cure at once so simple and easily obtained. The case was as follows. A coloured man, aged about 55, very robust, cook in a merchant vessel, had been in the habit of wearing a truss for an incipient inguinal hernia, but had left it off for some time. On the evening of October 7th, he, having spent some hours on shore, returned on board somewhat intoxicated, and commenced wrestling with some of the men, when, on a sudden, he felt so severe a pain in the right inguinal region, as to lead him to suppose he had received a kick, but which, from subsequent information, I have reason to conclude was not the case, but simply the hernia descending into the scrotum. He was put to bed, and in some hours afterwards symptoms of strangulation appeared. I did not see him till the following morning between seven and eight o'clock. Having placed him in a convenient position, I tried the taxis, but the patient could not suffer my touching him. I then determined to try strong infusion of coffee (one ounce to each cup), when, to my surprise, after drinking the first cup, the patient's face appeared less anxious, and I was enabled to reduce the hernia with little trouble. This was a result hardly to be anticipated, as the desired effect does not usually take place before administering half a dozen cups, allowing a quarter of an hour to intervene between each. This remedy is frequently used in Habana with success, and has been often tried with equal success by many practitioners; at times in combination with the bath, belladonna ointment over the tumour, etc.

Introductory Lecture

TO A

COURSE OF GENERAL PATHOLOGY;

DELIVERED AT THE

GROSVENOR PLACE SCHOOL OF MEDICINE.

By John Cockle, M.D., Member of the Royal College of Physicians; Lecturer on General Pathology at the Grosvenor Place School of Medicine; etc.

Gentlemen,—We meet for the first time to study a very important branch of the profession you are entering upon—General Pathology; a branch, indeed, which, as it was the earliest, so, also, is it the most essential as a stable foundation for erecting the edifice of practical medicine in its most comprehensive import. In this theatre you are to acquire a knowledge of those general principles which, if intelligibly taught, will enable you to survey particular diseases, as it were, from a high vantage ground, and establish for you that character as philosophical observers which it should be your ambitious and conscientious endeavour to obtain. You will thus elevate yourselves above the mere routine practitioner, and acquire a facility in analysing and interpreting the multiform elements which occasionally associate themselves with the simplest diseases.

On the importance of our subject, then, and the necessity of a familiarity with its principles, I will, for the present, no longer dwell. To the earnestness with which you should regard it, and the teachable spirit you should possess, no nobler incentives should be needed. In this department of knowledge, as in every other, let me also inculcate seriousness of purpose, unremitting industry, and perseverance. The trifler neither respects himself nor others. He offers but a mocking worship at the shrine of truth. Remember, that whether the goddess will deign to unveil herself to the questioning of her votary, will mainly depend upon the sincerity and constancy of the appeal. Still, with the highest degree of talent, and the best of intentions, you will, during your pilgrimage, wander through many a Cretan labyrinth of error, unless you advance with *order*. This is the true thread of Ariadne. Not pathologic science alone, but every other, requires, for its philosophic prosecution, to be studied after a prescribed order or method.

Victor Cousin well remarks: "As is the method of a philosopher, so will be his system; and the adoption of a method decides the destiny of a philosophy." The method you are to employ must be in accordance with the great precept of Descartes: "To commence with the simplest phenomena and the easiest to recognise, gradually ascending to the more complicated phenomena of the series." This precept must be our guiding star—the very essence of our teaching. But, you will naturally ask, Is there a systematic plan whereby to detect these simple phenomena, the verification of which is so indispensable for the formation of the general notions and principles of pathology? *Three* principal means of investigation are afforded us—*Observation*, *Experience*, and *Analysis*. These, according to Lord Bacon, are the instruments with which we are to interrogate nature.

With regard to *Observation*, Zimmermann, in his treatise on *Medical Experience*, observes that "It was observation that first gave rise to the art of healing, and has since led it on towards perfection. Physic, without observation, is only an empty sound. The first care of physicians was to form ideas of individual things; after which they began to reason on these, and then, deducing the consequences of each, they gradually went from particulars to general ideas. Observations are therefore the basis of all our reasonings. If they are good they are acknowledged as *data*."

Let me give one more quotation, from the Roman Hippocrates, Baglivi:

"The two chief pillars of physic are, Reason and Observation. But Observation is the thread to which Reason must point. Every disease has, not a fictitious, but a certain and peculiar nature, as well as certain and peculiar principles—increase, state, and declination. Now, as all these are brought about independently of the mind, so, in tracing their nature, we have no occasion for a subtle and disguised way of disputing, but only for a repeated and diligent observation of what happens to the several sick persons, and such an acuteness of mind as is conformable and obedient to nature's measures."

These extracts strikingly exemplify the value of a habit of faithful and correct observation. Nothing can compensate for its deficiency or supply its place. Unless this habit be sedulously cultivated, our mental powers would languish or be misapplied. Medicine as a science has its foundations based upon the observations of centuries. What made the great physicians of antiquity models for all coming ages? Is not the name of Hippocrates a household word? Is he not the Genius we invoke when we would excite in others the desire to work out an imperishable reputation? Mere theories and systems vanish, like the shifting scenes of a drama, in rapid succession. Many fall still-born, or, at best, rarely survive their originator, however dazzling the eloquence by which they were supported. But the history of well-observed facts lasts through all ages, and is read and re-read with an interest ever fresh and a result ever profitable.

Gentlemen, I cannot here suffer the opportunity to pass of recalling to your mind that portion of the introductory lecture, in which the eloquent lecturer, by a happy use of the figure of contrast, described the changeful face of science. He spoke of the days of Richard the First—of the cloistered schoolmen—of their ardent gaze at the nocturnal Heavens—and their belief that the music of the spheres was to them an audible language, proclaiming that "to-morrow would be even as to-day." He then skilfully changed the scene, and disclosed the vanity of their life's dream. But this is the heritage of humanity—to be by hope beguiled. How often does the speculative philosopher of the hour believe that his life comprises the Alpha and Omega of science. Our sphere is not speculative *rêverie*, but actual observation. Our task is to chronicle from the living book of nature. Time may, and will, add to the page without essentially varying it; and the transcript will still be a true record, despite all mutations of time and opinion. Let me attempt to sketch one instance of this truth. Go back, in thought, to a time yet more remote than that of the lion-hearted king; and, if you will, to a scene as fair. Near to the sunny banks of the Euphrates, where the warm rays were fostering into life and strength the infant sun of science, a medical Zeuxis—Aretæus—was painting from nature, and the schoolmen of his day looked on and recognised her priest. Revolving ages have transmitted to us the pictures which he drew; and again, our *savans* look and own that time has not dimmed their beauty, and that no colour has faded, and no touch has been destroyed. They live, Hebe-like, in their freshness and their truth; and, in their grandeur, pyramid-like and time-defying. Study, then, with unremitting attention, like Aretæus, the phenomena of disease; note down every incident connected with the malady; omit none, however apparently insignificant; continually retest the accuracy of your observations, lest a glowing fancy should permit its pictures to usurp the place of simple fact. By this means, and generalising your observations, you will acquire that ready tact in recognising particular diseases, without which no one can ever become a successful practitioner, and without which, no amount of reading will avail. The cultivation of this talent will also render you self-reliant and independent, when placed under circumstances of difficulty and doubt.

Never forgetting, then, that observation, by discovering the spontaneous movements of nature, has ever been the principal instrument in perfecting our knowledge of diseases, we proceed to the consideration of the second instrument, *Experience*. This term comprises a twofold division; Medical Erudition, or the knowledge of what has been done by our predecessors, constituting the purely historic portion; and the Experimental portion or study of the phenomena designedly developed either in the healthy or diseased subject or in animals. With regard to the first division, *Medical Erudition*, I would beg you to bear in mind that, as the object of general education is not so much to charge the mind with particulars as to ensure the requisite discipline for subsequent intellectual activity, so, in the more limited field of medical study, the great object proposed should be to exercise the judgment for observation in its appropriate sphere. Your memory must of necessity be taxed, but should not be too heavily burdened. Overcharged with detail, it scarcely permits, unless to a gifted few, the full exercise of the judging faculty; and this to you, emancipated from mere scholastic thrall, and seeking now the wisdom of the sage, is a point to be constantly borne in mind. There is an important distinction laid down with respect to memory by writers upon intellectual philosophy—namely, between philosophical and mere

local memory. The latter faculty is the gift of nature and common to all, though in varying degree. The former is the kind most to be coveted by those combating in the intellectual arena. Its element is the contemplation of universal truths, general principles, and of the facts which illustrate them. This is the kind of memory you should chiefly cultivate as best befitting the scientific position you will hold in your special sphere. It will be greatly promoted, first, by endeavouring to obtain distinct impressions of the phenomena submitted to your notice; secondly, by a clear conception of the objects of knowledge; and, lastly, by constantly essaying to reduce such observed phenomena to general fixed principles. Unless these points be attentively regarded, your laboriously acquired knowledge will be submitted to the law of mere local association. The general principle upon which such knowledge depends not being mastered, the mere "pictures drawn in the mind are laid in fading colours," and consequently soon disappear. Remember, then, that the learning which really deserves the name, depends rather upon the harmonious appliance of other faculties than upon a mere treasury of things or events.

Kant says: "Although education may furnish and, as it were, ingraft upon a limited understanding rules, borrowed from other minds, yet the power of applying these rules correctly must belong to the pupil himself; and no rule which we can prescribe to him with this purpose is, in the absence or deficiency of this gift of nature, secure from misuse. A physician, therefore, a judge, or a statesman, may have in his head many admirable pathological, juridical, or political rules, in a degree that may enable him to be a profound teacher in his particular science; and yet, in the application of these rules, he may very possibly blunder, either because he is wanting in natural judgment (though not in understanding); and whilst he can comprehend the general *in abstracto*, cannot distinguish whether a particular case *in concreto* ought to rank under the former; or because his faculty of judgment has not been sufficiently exercised by examples and real practice."

You see, by this extract, how flimsy and unsubstantial Kant thought a mere series of rules learned by rote, unless combined with those higher qualities which judgment implies. Therefore, whether your reading be on an extended or limited scale, let the material be methodised, reflected upon, melted, as it were, in an intellectual crucible, in order that the metal may be purified from dross, and made your own by the best of claims—a right comprehension of your subject. To suggest your working at present in the rich mine of ancient medical literature would, I think, be misdirection. Such a step should be the compliment rather than the initiative of your practical career. By and by, when you become familiarised with disease, and the judgment is matured, you will be well repaid by a careful digest of the literature of medicine, comprising the works of the great masters, both of ancient and of modern times. There is enough in the ordinary *curriculum* of study to challenge all your attention and memory. A very few books will satisfy the requirements of the student. His reading should be rather *multum* than *multa;* and you know how much of truth there is in the old maxim, "Cave hominem unius libri."

We come now to speak of *Experiment*. Should observation, and a knowledge of the past, light insufficiently our future course, we are at times compelled to resort to the torture of living animals. But let me dissuade you, gentlemen, from having recourse to such procedure until after a conscientious consideration of the result to be obtained. Ever "let the end justify the means." We have urgent motives deducible from our moral nature, to refrain from wanton abuse of experiment upon living animals. The care we see bestowed, even upon the meanest, by our common Father, is a cogent reason to pause ere we torture one of his creatures unjustified. The ordinary feelings of humanity, instinctive in all well regulated minds, revolt from any unnecessary infliction of suffering. Still, as I have stated, occasions do exist, and vivisections constitute a particular branch of physiology. We will make only a passing allusion to those very cruel old gentlemen, Herophilus and Erasistratus, who, as Celsus tells us, "Nocentes homines, a regibus ex carcere acceptos, vivos inciderunt.' Haller may with propriety be considered as the father of modern experimental physiology; and he certainly has had some most energetic disciples. Results full of importance to science have been obtained by various experimentalists. From Magendie we have gained clearer views of the process of absorption, the action of poisons, and the nature of injuries of special parts of the nervous centres. In this latter department, also, Flourens has gained a well-merited reputation. With the view to determine the functions of the medulla spinalis, and of particular nerves, Longet, Müller, Reid, Marshall Hall, and others, have instituted well planned experiments. From Hope, Williams, Chauveau, and Halford, we have obtained a clearer insight into the mechanism of the heart's play. Valentin, Bischoff, and others, have shed a new light over the mysteries of generation. To Claude Bernard also, experimental physiology is largely indebted. And, lastly, our able colleague, Dr. Richardson, has taken very original views connected with the coagulation of the blood.

The last instrument for medical scientific research—*Analysis*—is used, as you will imagine, for the purpose of decomposing a complex pathologic principle into the simple elements. By such operation we are enabled to examine the elements more minutely, and to estimate more satisfactorily their relative influence when acting in concert. In scarcely any science is this proceeding more valuable than in pathology. Our constant aim should be to separate the essential from the accidental elements of disease, and to reduce each to a separate category. By the concurrence of this method of elimination, with the others indicated, we arrive at those generalisations which form the great scaffolding of applied medicine. But, notwithstanding the temper of our instruments, and despite a certain facility in using them, we are still liable to be taunted with the uncertainty of our art—that it merely deals with conjectures. Many a pointed shaft has been launched at us by the dramatist, many a weapon of ridicule forged by the satirist, and much well meant advice given by those who never need us to "throw physic to the dogs". Some of this banter has originated from a want of consideration of the actual nature and capabilities of our science; and some of it, I fear, we have drawn upon ourselves from the outward signs of a weak faith in our principles. How many offshoots from the parent tree of medicine have dwindled into deformed or unhealthy branches! Bassanio's speech applies as well to medicine as to theology:

> "What error, but some sober brow
> Will bless it, and approve it with a text?"

But even if the reproach were merited, and our art, in a certain sense, were really a conjectural one, the objection applies with equal force to all other sciences which depend upon probable evidence; and politics, law, and physic, are the triumvirate under ban. It is possible that they may never attain the precision of the physical sciences.

In the latter we are, in general, able to explain their characteristic phenomena by means of comparatively simple laws. Think, for example, of the mechanism of the heavens in connection with gravitation. We see distant orbs, age after age, pursuing their course in obedience to its law, so that their actual position in space at any given time can be predicted with unerring certainty. Now, think again of the characteristics of your science; here, in addition to physical, calculable forces, you have also vital ones simultaneously at work to confuse your problem and complicate its results. You cannot coerce the vital elements into an algebraical formula: their unstable nature deludes the craft of the mathematical analyst.

Take one single example—continued fever. At its advent, calculate as you may, you cannot predict unerringly its course, or tell by numbers what *must* be its issue. It may be fatal by exhaustion, by syncope, by coma, by inflammation, by hæmorrhage, or some other intercurrent or accidental change, or may resolve into health with or without crisis. Which of these given results is to happen you can, at the beginning, at best but wisely conjecture. It is simply a calculus of probabilities brought to bear upon the particular case; and this makes the art of conjecturing with wisdom and sagacity peculiarly your province. Moreover, being founded on a large induction, you obtain at last an amount of probability so strong, that it approximates to certainty, and is, at all events, sufficiently strong for you to act upon. For should you fail of actual demonstration, yet if you leave no room for the application of the adage "non crimen artis quod professoris est," you may console yourselves with the feeling that the source of error does not rest with you, but is inherent in the very nature of the subject matter you investigate.

Having thus, I fear too imperfectly, attempted to sketch the mental training and method to be pursued in the investigation of facts, and the subsequent verification of general principles, we arrive at the consideration of the science it is our privilege to unfold—*General Pathology*.

Like most branches of human knowledge, general pathology has had to pass through its embryotic or preliminary stage prior to a state of scientific development,—a stage in which the true science was obscured by ignorance and superstition.

Almost, indeed, to our own times it has continued under the influence of this double thraldom. As astronomy was the offspring of astrology, and chemistry of alchemy, so, in like manner, pathology was the child of a very unnatural parent—superstition. In the earliest times, the offended deities of the heathen world, having the attributes of human infirmity, were supposed, in fits of spleen, to visit the erring children of earth with "pestilences dire."

In Lord Bacon's day, jail fever was supposed to owe its exciting cause to witchcraft; while, in the more polished times of a later generation the royal touch for king's evil and old women's amulets to cure the ague were important constituents of the popular medical creed. This is in entire accordance with the views entertained by a distinguished French philosopher but just deceased, Auguste Comte. To paraphrase them from the excellent work of Mr. Lewes: every branch of human knowledge passes successively through three definite stages; the supernatural or fictitious; the metaphysical or abstract; and the positive or scientific. In the first or supernatural stage, final causes take the place of physical or efficient ones. The mind aspires to know the essences of things; it regards all effects as the immediate productions of supernatural agents, whose intervention is the cause of all apparent irregularities and anomalies. Any unusual phenomenon is a sign of the pleasure or displeasure of a god. The characteristics of this stage I have just indicated. In the metaphysical stage, which is a modification of the former, and important as a transitional one, the supernatural agents give place to abstract forces (personified abstractions), supposed to inhere in bodies, and capable of engendering phenomena. Such, in pathology, would be the "Nature" of Hippocrates; the *Vis Medicatrix;* the *Archæus* of Van Helmont; the rational soul of Stahl; and the "Vital Principle" of Barthez and later writers. The terms "effort of nature", "vital power", etc., are hallowed by long usage; nor is there any objection to their use, provided you entertain proper ideas of their import; and, instead of regarding them as separate entities or "personified abstractions", view them as a mere formula for expressing the general reactive effort of the entire organism. In the third, or positive stage, the mind, persuaded of the futility of all inquiry into final causes and essences, applies itself to the observation and classification of laws which regulate effects; that is to say, the invariable relations of succession and similitude which all things bear to each other; so that we no longer seek to fathom the essences of life, disease, gravitation, electricity, or galvanism, but only the laws that they obey. It is in the direction of this last stage that, I need not say, you must work if you would clear away the mists which hang partially but heavily over much that should interest you.

Now, a point of direct importance at this very onset of our journey is to possess a clear idea of the nature and purpose of the subject we propose to study, as also of the limits within which such subject should be restricted; otherwise we might trench upon ground that does not come within our scope; and, although it may be somewhat difficult to fix a definite landmark to our wanderings, it seems tolerably broadly mapped in the distinction drawn between the general and special departments. Our science is appropriately designated *General Pathology*, as it contemplates morbid manifestations in general, and all that is correlated to them, whether as cause, complication, or cure, without taking cognisance of particular affections. It is conditional upon general physiology, and is co-ordinate with this science. For, inasmuch as physiology is the study of all that concerns man in health, so is pathology to be considered as embracing all that characterises man in a state of disease. It is therefore no isolated branch of science, but one claiming direct kindred with nearly all other departments of knowledge, and making incessant demands upon them for its constructive material. It may, for example, enter the domain of astronomy, to ascertain how far solar, lunar, stellar, or other occult planetary influence can excite convulsive disorders or modify the periodical uterine function of the female. Professor Schönbein is the great modern advocate of such influence. Esquirol, also, whose experience in mental aberration was immense, has witnessed severe paroxysms of the malady in lunatics when the moon was at her full, and has thus directly vindicated the accuracy of Shakespeare in the opinion that she may

> "Come more near the earth than she was wont,
> And make men mad."

The late Dr. Gall made a long and curious series of observations respecting the influence of the moon upon the catamenia.

Pathology creates, as it were, the necessity of a Medical Geography, by its inquiries respecting the direct influence of soil and climate upon the duration of life, as well in accelerating as retarding the progress of given diseases. Indeed, this latter science bids fair to take a position of the highest order, and has already determined some remarkable results. I shall cite one or two of such from the recently published work of Boudin. He says there are some types of races which appear to adapt themselves to climatic change in a wonderful manner, while others again scarcely endure the slightest alteration of habitat. The Jews may be cited as examples of the first order. They are, at present, spread over all parts of the world. In Europe they are found from Gibraltar to Norway; in Africa, from Algiers to the Cape of Good Hope; in Asia, from Cochin to the Caucasus, and from Java to Pekin; in America they are met with from Montevideo to Quebec. For the last half century they have become residents of Australia, and have given proof of being thoroughly acclimatised under the tropics where a population of European origin have constantly failed to perpetuate themselves. The Jew has also lived through a long series of ages, and still lives, upon the only point of the globe, the valley of Jordan, situated more than 4000 *mètres* below the level of the sea; a spot where it becomes matter of doubt whether the European could ever propagate his race. Finally, wherever the Jewish race has been studied to the present time, the statistical laws of births and deaths, proportion of sexes, etc., which affect it, have been proved to be completely different from those which preside over other nationalities in the midst of which it resides.

In opposition to this cosmopolitanism of the Jewish race, look, on the other hand, to the continuous decrease of an European population in all tropical countries, and to the impossibility, hitherto ascertained, of perpetuating itself in Egypt and several other parts of Africa. In the tables published by the French Minister of War, the mortality of the population, which, in France is 24 in 1000, and which, in 1849, notwithstanding the cholera, did not even attain the proportion of 28 in 1000, has increased in Algeria in the following proportion:—

	Deaths in 1000.
1848	41
1849	101
1850	70
1851	64
1852	55
1853	47

And so late as 1854, the last year that reports have been published, the deaths among European population amounted to 7025, while the births were only 6111. Still to linger in this interesting field one moment longer; how curious is the law of antagonism that appears to exist between ague and consumption. Dr. Green, of Whitehall, in the province of Washington, United States, where intermittents are of unusual frequency, declares that there did not exist one single instance of phthisis developed in the district; and that the consumptive invalids arriving there experienced a relief as decided as it was permanent. The same author also states that a morass near Rutland, having been converted into a pond, the intermittent fevers disappeared from that part of the country, and were replaced by pulmonary consumption. The population having solicited and obtained the suppression of the pool, or, what amounted to the same thing, the re-establishment of the morass, the original agues returned and antagonised the development of phthisis. These facts are supported by the experience of many other competent observers. I need not say that they demand your serious consideration, especially at a period when human migration is going on on so large a scale.

Pathology, again, seeks the aid of the Zoologist, and asks him whether there are grounds for the opinion that peculiar epidemics are caused by the periodic increase of certain microscopic organism—the so-called animalcule theory. It also requires from him a reason why one species of tape-worm is endemic in Switzerland, Germany, and Sweden.

From Chemistry, also, we seek an analysis of certain deleterious gases and other agents; as, for instance, the exact chemical constitution and relative properties of the peculiar element of the atmosphere, ozone, recently discovered by Professor Schönbein; and whether, in point of fact, there exists any casual relation between the augment and decrement of this element and the corresponding augment and decrement of catarrhal and bronchial affections.

From Meteorology we learn the remarkable influence of storms, both upon men and animals, and also of the modifica-

tions produced in those great forces of nature—magnetism and electricity.

From the science of Physics we draw our *quotum* for the groundwork of physical diagnosis.

Again, we derive from the science of Mathematics our formula for the calculation of probabilities. This has been already extensively applied in the statistics of disease and death. Its application to the influence of the various agents of the materia medica upon the system is, however, still a desideratum. Many of these agents have obtained their degree on a very slight examination. A medicament was administered, a change followed, and the *post hoc, ergo propter hoc*, at once inferred. Too often a general conclusion was drawn from a particular premise, thus sinning against logic, and almost against common sense. Although, with reference to this branch, as Hippocrates declared, *Experience* is deceitful, and *Judgment* difficult, still we, in common with all dependent on probable evidence, must acknowledge certain laws. If any one, knowing these matters, were asked the degree of probability of relief being obtained by the use of iodide of potassium in any given case of painful disease of the periosteum in tertiary poisoning, he would estimate it as very high. Ask him again, the degree of probability with reference to the action of juniper or other diuretic in a case of dropsy, and he would probably be at a loss to find a place upon the scale; and so on with many other agents. Our notions of probability do not, however, differ so greatly from those of the mathematician as to preclude all hope of our deriving assistance from him.

La Place, than whom none knew better the limits of the application of the calculus of probability, states, with reference to therapeutics, "To know the best treatments in use for the cure of a disease, it is necessary to try each of them upon the same number of patients, under perfectly corresponding circumstances. The superiority of the most advantageous treatment will manifest itself more and more in proportion to the increase of this number; and the calculus will show the corresponding probability of its advantage, and of the respect to which it is superior to the others."

By this method, we speak from *data* rather than from mere impressions; and if any one demur to this attempted application of the calculus of La Place, and argue that no cases can be "*exactly corresponding*," he must bear in mind that he is, at the same time, dealing a death blow in argument to all other conceivable ways of estimating the action of medicine in disease.

Lastly, I may say that from Philology and Logic we gain a basis for scientific nomenclature (a subject said to call loudly for revision), and from the development of the formal laws of thought a basis for constructing our arguments for the purpose of instruction and self-improvement.

These few illustrations, drawn from the respective sciences, show how discursive a subject is General Pathology. Our subject matter will naturally fall under the subjoined heads, which we shall study together in the following order, making such subdivisions as will bring the science more fully and instructively under your notice:—(*a*) The General Literature of the science—the nature of disease; (*b*) Etiology or doctrine of the Laws of Causation; (*c*) Semeiology and Symptomatology; (*d*) Progress and Termination of Diseases; (*e*) General and Physical Diagnosis; (*f*) Prognosis; (*g*) General results of *Post mortem* Examinations; (*h*) General doctrine of Therapeutics; (*i*) General principles of Hygiene; (*k*) Medical Geography.

I propose to depart from this general arrangement in one branch alone, and that is physical diagnosis. No department finds a more entire application of the truth, "Experientia facit artem, exemplo monstrante viam." So that, with the permission of the lecturer on medicine, I shall teach you this subject practically, by cases; for, without these, all lecturing would be worse than useless. I mentioned to you, but a few moments ago, that general pathology presupposed an acquaintance with general physiology. But such a proposition must be interpreted in its broadest sense, not as synonymous with the positive physiology of to-day, but rather as implying that familiar knowledge of the outward signs of health accessible to ordinary acute observation. It is certain that the ancients, the founders of pathology, could have had no deep insight into those problems which an advancing physiology has in some measure solved. But they apprehended most perfectly what healthy breathing was; and what a tranquil circulation, and what a bright eye, clear complexion, clean tongue, healthy appetite, natural and regular secretions, etc., imported; and on their altered types they founded a science many of the leading truths of which comprise the principles of the moderns. So that it is obvious general pathology may be profitably numbered among your earliest studies. With regard to the second portion of the course—pathological anatomy—it is so essentially dependent upon an accurate knowledge of descriptive anatomy, that I think it would be wasting your time, until you have made this necessary acquirement; so that I shall not hesitate to postpone it until a later period of the course.

Such, gentlemen, is the nature and extent of the domain you have to explore. Let your preparations for its survey be of commensurate magnitude. Regard your course of study as a duty, and it will soon become a pleasure. And should the original lustre shed by Hippocrates over our art be somewhat dimmed by the destroying rust of Time, seek from the *living* lights of medicine, new rays to kindle your enthusiasm.

What made Andral and Louis such authorities in our art? Was it not, in great part, their accuracy as morbid anatomists, and their fidelity as observers? You may each enjoy a reputation upon any subject you choose in pathology, if you will but cultivate that spirit of patient and untiring research which pre-eminently characterises them. In this consists their solid worth. In the every day practice of your profession, gentlemen, a species of dilettantism may and does exist. Alluring theories, polished manners, the advocacy of fashionable remedies, may gain an ephemeral reputation—may open a road to lucrative practice by dazzling the non-professional judgment; but, gentlemen, to pathological fame, even in these quick travelling times, there is not yet obtained a Bill to construct a royal road; the one you *must* tread is toilsome, at times even repulsive, *inter tædia et labores;* but be assured, the journey cheerfully, resolutely performed, you will eventually reach the "land of promise". The hours lost to your profession in less worthy pursuits may yield a certain amount of gratification, but they often leave a fevered body, and, what is more distressing, a fevered conscience. How different the results that follow the calmer, holier pursuits connected with the profession you have chosen! If the Father of Medicine declared that a philosophical physician resembled the gods; and if even Galen, surrounded as he still was by the atmosphere of a false religion, could regard the study of physiology as "an eternal hymn to Deity",—you have still higher reason to regard it in a solemn point of view. You will find, in the late evening of the long career I most sincerely wish you, that, if you have been faithful to your trust, the retrospect will bring no pang; while the direct gratification has been of the most ennobling order, and the best calculated to develope the true dignity of man; for what sweeter reward can you desire than the blessing, breathed at times by grateful lips for lost health restored, under Providence, by you?

Reviews and Notices.

Tables of Diagnosis of Diseases of the Brain. By J. Russell Reynolds, M.D.Lond., Fellow of University College, Assistant-Physician to the Westminster Hospital. London: Churchill. 1857.

Dr. Reynolds has grouped the more common diseases of the brain in four tables, under the following heads: viz., 1. The Acute Febrile Diseases; 2. The Apoplectic Diseases; 3. Acute Convulsive Diseases; 4. Chronic Diseases of mixed character. The object of the author is not to describe all the features of the diseases, but to place in opposition those which present the most striking differences. The work will, no doubt, be of utility in aiding the student and the practitioner in the diagnosis of cerebral disorders.

On Plastic Operations for the Restoration of the Lower Lip, and for the Relief of several Deformities of the Face and Neck. By Thomas P. Teale, Surgeon to the Leeds General Infirmary. pp. 32. London: Churchill. 1857.

Mr. Teale describes several plastic operations for the relief of deformities of the face and neck, and relates six cases of persons whose visages, sadly marred by burns, were restored by his skill to more comely representations of the "human face divine." Photographic representations of each patient before and after operation are given. The results, as illustrated, are highly creditable to British surgeons in general, and especially to Mr. Teale.

British Medical Journal.

SATURDAY, NOVEMBER 7th, 1857.

HEALTH OF TOWN AND COUNTRY.

We are glad to observe that the annual health report of the City of London, in the hands of Dr. Letheby, does not degenerate from the important position imparted to it by the ability of Mr. Simon. The ninth report is now before us, and most certainly a more satisfactory document never was issued by officer of health. The death rate of the City of London for the past year has been at the rate of 23·3 per thousand of the inhabitants, or just nine per cent. less than the general average. It is extremely gratifying to find that notwithstanding the excessive manner in which the habitations of the poor have been crowded together by the demands of space for the business transactions of the busiest spot on the world's surface, the health of the inhabitants has not only not suffered, but has actually improved, and improved progressively; for the mortality nine years ago was 3,763, whilst in the year just past it has only been 2,904—the population having been meantime nearly stationary. It is, indeed, extraordinary that the general annual average of deaths in the City of London should be less than that of the average of other large towns—it is not much more than the average of all England, which is at the rate of 22·8 per thousand. This flourishing state of things we must in a great measure attribute to the sanitary measures which have taken place since the passing of the Acts of Parliament for the supervision of common lodging houses, the suppression of unhealthy trades, and the prevention of the smoke nuisance. Mr. Brown, the gardener of the Middle Temple, informs the public that his chrysanthemums have bloomed this year more brilliantly than they have ever done before; this healthy condition of the plant he ascribes to the increased purity of the air, and we have no doubt whatever that human life has flourished in the City from the same cause as the chrysanthemums. The high state of health in the City of London during the past season of intolerable heat is also an interesting fact, inasmuch as it proves that heat is of itself rather conducive to health than otherwise—a position which seems strengthened by the accounts we hear from India, where the British soldier has been able to undergo the most tremendous fatigue under a burning tropical sun, with less inconvenience and sickness than he generally endured in cantonments. How much the mental excitement has had to do with this result, we have yet to learn.

Dr. Letheby has given a most able analysis of the trade mortality of the City of London, which in some particulars clashes with the conclusions drawn by the Registrar-General in his Census report. For instance, this gentleman astonished the country by stating that an analysis of the deaths among different trades led to the conclusion that butchers were among the most unhealthy of men. The statement appears to be directly opposed to Dr. Letheby's conclusions, as we find in his report

"That butchers, poulterers, and fishmongers, shopkeepers, and merchants, have died at the rate of only from 15 to 16 in the 1,000; while tailors and weavers, shoemakers, printers, and compositors, have succumbed at the rate of from 20 to 23 per 1,000; wine merchants, publicans, and waiters, porters, and messengers, at the rate of from 24 to 26 per 1,000; blacksmiths and gasfitters, painters and glaziers, dyers, bargemen, and watermen, at from 28 to 30 in the 1,000; cabmen, draymen, ostlers, carmen, and stablekeepers, at the rate of 31 in the 1,000; clerks and needlewomen, at from 34 to 35 in the 1,000; and, lastly, the hard working classes of carpenters, masons, and labourers, at from 43 to 45 in the 1,000.

"If we turn to the other modes of testing this matter, we shall find that, while in all London the mean age at death among adult males is a little less than 51 years, each class has its own particular longevity. The merchant, shopkeeper, and domestic servant, will live to be nearly 57 years of age; the butcher, poulterer, and fishmonger, to be about 53. Most of the other classes will reach to the age of from 50 to 52, though the painter and dyer, the costermonger and hawker, the bargeman and waterman, survive only from 48 to 49; and, lastly, the printer and compositor live but to 45, and the baker and confectioner to only 42. Among females, the differences of occupation are not so striking, except in the case of the wives of cabmen and publicans, where, instead of living to the mean age of 55, they die at 49; and the poor needlewoman sinks into the grave at the average age of 40."

Interested as we are in the "diseases of special occupations", Dr. Letheby's attempt to give us a picture of the manner in which different maladies map themselves among different classes of the working population of the City is especially acceptable. He says:—

"Phthisis seems to be the chief disease of needlewomen, printers, bakers, cabmen, and policemen. Fever prevails most among domestic servants, needlewomen, and cabmen; bronchitis and pneumonia, among labourers, painters, butchers, costermongers, and hawkers; brain-diseases, among porters, publicans, watermen, and bargemen; and liver-diseases are the especial attribute of the publicans. There is a signification in all this, for it points to the peculiar habits of the different classes, and indicates how much might be effected by prudence and self-control."

At first sight, it seems strange that brain-disease should especially attack porters, publicans, etc.; but, when we remember that intemperance is the bane of these classes, the wonder ceases.

In the conclusion of his report, Dr. Letheby draws attention to the bad policy of a meddlesome interference as regards trades and occupations. He makes reference to the fact that some of our manufacturing populations are among the least unhealthy of the country, and that we must rather look to improving the dwelling of the artisan than to the perfection of the workshop. There is some truth in this, but only some truth. If we were to leave the workshops alone, where the workers spend ten hours of the day, we should only be half doing our work. We trust Dr. Letheby does not wish to conciliate the manufacturing interest of the wealthy city too much; if he does, we would remind him that he is the officer who should stand between master and man, between lucre and life, and that on no consideration should he allow the latter to be sacrificed to the former; for of what avail is the wealth of the whole world if, in its acquirement, we enfeeble those who make it?

The Registrar General's Report of the Public Health for the quarter ending September 30th, would go to prove that the extreme heat of the summer weather has been prejudicial to the public health generally, especially to that portion of the

population which dwell in the marshy and agueish districts. The excess of deaths in the last summer quarter over that of the year 1856 was 12944. Ague, fever, diarrhœa, and putrid sore throat, appear to have been among the main causes which have raised the mortality higher during the last quarter than it should have been. Whilst, however, the country has been the principal actor in swelling the death list, we are sorry to find that some of our towns, heretofore considered particularly healthy, have, in this respect, of late considerably deteriorated. Thus the Birmingham district is reported to be a backslider as regards its sanitary condition. "The deaths," says the Registrar General, "in the three corresponding summer quarters of 1855, 1856, and 1857, were 920, 1118, and 1520 in the Birmingham district; 293, 353, and 529 in the Aston district; and 132, 114, and 202 in the King's Norton district, containing Edgbaston, which has hitherto been one of the healthiest districts in the country." This is certainly a most unsatisfactory state of things; and we hope it may turn out that the mortality of Birmingham during the last quarter has been due to exceptional causes.

THE WEEK.

The opening of a new provincial hospital is always a matter of interest to our associates; but we think particular interest attaches to the completion of the Bristol General Hospital, as it is built on a plan which will afford a good example to other cities which have it in their power to imitate the example of the charitable people of Bristol. In the first place, it is but too often observable that the hospital is the dingiest and least inviting-looking public building of a town. Of course, no objection can be made to the observance of a due economy in the erection of a public building, the chief requirements of which are comfort and good arrangements within; nevertheless, we think that, without any additional expense, an ornamental character may be given to such buildings, which would render the dislike to enter them less marked than it is at present. The Bristol General Hospital, which is calculated to hold from one hundred and eighty to two hundred beds, and thus to claim for itself the privileges of a school if necessary, is one of the most ornamental buildings of the kind we have ever seen. It is situated on an eminence overlooking the harbour and New Cut of Bristol, and commands from its central tower a full view of the shipping and docks on every side. Advantage has been taken of its Italian style to make open corridors in which, sheltered from the weather, the convalescent patients can command this busy and interesting prospect in fine weather. For wet and cold weather, an admirable convalescent ward is constructed in the central tower, which enables the poor people to see what is going on in the outer world at all times. We cannot too much commend the construction of such apartments, as the presence of patients who are rapidly progressing towards recovery in the sick ward is not only inconvenient to others, but is prejudicial to themselves. Without considering the *ennui* of the sick ward, the atmosphere is at all times, comparatively speaking, foul, and this foulness is always drawn to one focus by the open fireplace, *round which it is the habit of convalescents to sit.* Thus they are placed in a perpetual bath of concentrated foul air—than which arrangement nothing can be worse. The ventilation of the Bristol General Hospital is said to be excellent, and all the arrangements are exceedingly ingenious and well planned. We trust that the new Hospital about to be erected in Sheffield will be built on an equally excellent model.

An addition has just been made to the number of those useful but little known institutions—students' medical societies. The pupils at the Grosvenor Place School of Medicine have, within the last few days, formed among themselves a society for the purpose of reading and discussing papers on professional subjects, and have appointed Mr. Adams, one of the lecturers on Surgery at the school, as their first president. Convinced as we are of the vast practical utility of all such institutions as those to which we are referring, we must express our high gratification at the step which is being taken by the Grosvenor Place students, and wish them every possible success.

The Duke of Newcastle last week, on the occasion of the opening of a new lunatic asylum near Nottingham, in referring to the insane, spoke of them as reduced to "the condition of the brute creation". We should not have been surprised at the use of such a phrase as this thirty years ago, before the present humane ideas with respect to the insane were prevalent; but we must confess it does seem strange to hear a nobleman giving utterance to phrases such as this, inasmuch as they have a direct tendency to degrade this unfortunate class of the population still lower in the social scale than they are at present. The noble Duke seems to think that any man who is troubled with insanity is something worse than the idiot, for even the idiot is not quite degraded mentally to the condition of the brute, however deficient he may be to him in the natural instincts. Of the infinite variety of the shades of insanity—some so slight that they can scarcely be separated from mere eccentricity—the noble Duke takes no account. His Grace should remember that, with the insane, names are things; for the old ideas respecting them are not yet extinct, and to call a man a brute is to go the right way to have him treated as such.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, October 1857.

Association Intelligence.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

THE MEDICAL BENEVOLENT FUND.

ESTABLISHED 1836.

OFFICERS.

President: Sir James Clark, Bart., F.R.S. *Vice-President:* William Newnham. *Trustees:* Sir Charles Hastings, M.D., D.C.L.; George Burrows, M.D., F.R.S.; William Newnham; and Joseph Toynbee, F.R.S. *Treasurer:* Joseph Toynbee. *Honorary Secretary:* Edmund A. Parkes, M.D. *Assistant Secretary:* William Self. *Bankers:* London and Westminster Bank, St. James's Square.

TREASURER'S APPEAL.

No one can deny that in spite of the aid presented by Life Assurance and other Benevolent Institutions,* cases not unfrequently occur in which a medical man, after having done his best, is struck down by ill health and poverty, or dying, he leaves those most dear to him in this life penniless as well as fatherless. For the relief of such cases, the Medical Benevolent Fund was established; who can say that this object is not a truly noble and Christian one?

Again, cases are constantly occurring in which a medical man comes to ruin from sheer mental inability to support his family, or, from recklessness and want of thought, dies, leaving his widow and children penniless. For the relief of such cases, the Medical Benevolent Fund was established. Who can say that this object is not a truly Christian one?

Medical men! you who are earning honest, plentiful livings, and feel the blessing of so doing, and you, the public, who owe so much to the medical profession, give us your aid in carrying out these objects. Do you require me to say more? Listen: What do you think of our inability to give more than a scanty £10 or £20 to a poor widow left utterly destitute, with ten or twelve children, when we want to give £50 or 100? I will cite one case in point, which occurred last month. Mrs. O., aged about 50, widow, has *eight* children between the ages of 20 and 5: her husband died after he had applied for aid. He had been long ill, and on a sick bed for many months, and his practice had gradually dwindled away. Only £30 could be voted, and that with some doubts of its being too large a sum in the state of our funds, even after the donation of 500 guineas.

Remember that the funds are voted by a Committee, who give to cases according to their deserts; that we have no canvassing and voting at elections, whereby too, too often, the most clamorous, and not the most deserving, attain success.

Another word: Think of the honoured name of William Newnham, our late Treasurer, whose heart, head, hands, time, health, and money, to an extent no lips can ever tell, have been during many years joyfully given up to carry out the objects of our Fund. He can no longer work for us; may the peace and happy quietude of his declining life be increased, by feeling that he has stirred you up to follow him in the good work! Be assured that those remain who will *try* to do for the Fund what your Newnham did—they have the will, the way cannot be far off.

As a proof that we ought to be supported, let me say that we relieved seventy-four cases last year; that our working expenses are almost too small to be noticed. As a proof of our being duly appreciated by some, our yearly income is, from Subscriptions, £634; we pay from our Funded property £286 a year for our pensioners; we have six houses, comfortable homes, given us by Mr. Bailey, of Chippenham; we have just received an anonymous donation of 500 guineas, for the aid of *urgent* cases; and we have, by the kindness of Mr. Churchill, the use of a committee room, free of expense.

To show you how much may be done by those having the will to aid us, let me remind you that Mr. J. G. Leete, Surgeon, of Thrapstone, gave us in 1857, the sum of £13:3:2, collected, by his own efforts, in shilling subscriptions, from Poor-law medical officers.

Surely not a word more is required than these—"to do more good, we want more money."

Joseph Toynbee, *Treasurer.*

October, 1857.

Communications respecting Cases, Annuities, and Grants, are to be made to Mr. Toynbee, 18, Savile Row, Burlington Gardens, W.

Subscriptions are to be paid to Mr. Self, 8, Lucas Place, Commercial Road East, E.

[In inserting this document, which has been sent to us by Mr. Toynbee, we join him heartily in his appeal on behalf of the Medical Benevolent Fund; and hope sincerely that it will be largely responded to. Editor.]

* It must be remembered that only the healthy medical man can insure his life, or even participate in the invaluable advantage of the Society for the Relief of Widows and Orphans of Medical Men.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

An Ordinary Meeting of the above Branch was held at the Hen and Chickens Hotel, Birmingham, on Friday, October 8th; Edwin Bartleet, Esq., President, in the Chair.

The minutes of the Third Annual Meeting of the Branch were read, approved, and signed.

MEDICAL REFORM.

The following resolutions were unanimously passed:—

"That a Medical Reform Committee be appointed, which shall at first consist of twenty members of the Branch, who shall have power to add to their number.

"That not fewer than twelve members of the said Committee shall be resident in the country."

The following were elected to serve on the Committee:—For the country: W. Brown, Esq. (Lichfield); H. D. Carden, Esq. (Worcester); S. Chesterman, Esq. (Banbury); E. H. Coleman, Esq. (Wolverhampton); J. L. Hobbs, Esq. (Bellbroughton); T. Holyoake, Esq. (Kinver); J. H. Houghton, Esq. (Dudley); S. J. Jeaffreson, F.R.C.P. (Leamington); W. Jessop, Esq. (Cheltenham); W. E. Masfen, M.B. (Stafford); E. Mason, Esq. (Nuneaton); N. Troughton, Esq. (Coventry). For Birmingham: The President; A. Baker, Esq.; B. Fletcher, M.D.; J. J. Hadley, Esq.; J. H. Lakin, M.B.; J. B. Melson, M.D.; J. V. Solomon, Esq.; W. F. Wade, M.D.

NEW MEMBER OF COUNCIL OF THE BRANCH.

Dr. Fletcher was unanimously elected a member of the Council of the Branch, in the place of the late Mr. Wickenden.

COLORATION OF THE SKIN FROM PANCREATIC DISEASE. BY BELL FLETCHER, M.D.

Dr. Bell Fletcher took this the earliest opportunity of reporting the death of Charles Jarvis, one of the cases related by him in his paper on Disease of the Suprarenal Capsules. (See Association Medical Journal, November 29th, 1856, p. 1013). It would be remembered that he (Dr. Fletcher) had brought the case forward as one in which probably the suprarenal capsules were affected, and in which the coloration of the skin was modified by pancreatic disease. The *post mortem* examination revealed unimportant degeneration of the capsules. But there was lardaceous disease of the pancreas, which, by extension to the surrounding organs, implicated the permeability of the receptaculum chyli and thoracic duct. Secondary deposits of the same material were found in the liver, that organ being in other respects perfectly healthy. The other organs of the body appeared normal.

The President inquired if Jarvis had passed fatty stools, and whether the disease could be assigned to the receipt of some external injury.

Dr. Fletcher replied, that the stools were fatty. The patient had not sustained any external injury. He was a broken-down speculator, who had suffered for many years great anxiety of mind.

THE OPERATION FOR SINGLE CATARACT. BY J. V. SOLOMON, ESQ.

Mr. Solomon called the attention of the Branch to an article by Dr. A. von Gräfe, "On the Mode of Vision in Cases which have been operated on for Unilateral Cataract; and on the Question whether it is advisable to perform Unilateral Cataract

or Artificial Pupil Operation when the other Eye is healthy," which had appeared in the *Medical Times and Gazette* for September 12th. He said the propriety or non-propriety of operating in cases of single cataract was a point in practice to which he (Mr. Solomon) had attempted on several occasions to draw the attention of the profession by the publication of cases and observations in the Journal of the Association. In the spring of this year, and when quite unacquainted with the labours of Gräfe, he had embodied in a short paper his opinions on this important subject. And it was certainly a great satisfaction to him to find that those opinions, which were derived principally from a clinical study of simple cataract operations, coincided to a very great extent with the results of Dr. von Gräfe's experience, which extended over fifty cases. If it were quite agreeable to the meeting, in the absence of Mr. Houghton, who was unavoidably detained at Dudley, and consequently unable to bring a singular case of compound fracture of the jaw before the Branch, he should be happy to read the manuscript on cataract to which he had made allusion.

[This paper will be published in the Journal.]

Dr. Fletcher believed the operation of solution to be applicable to cases of hard cataract. When in practice as a surgeon at Shiffnal, he extracted a hard cataract from a patient of 67 years of age, who was subject to an annual attack of gout. The operation was performed a month after the cessation of one of the attacks. Nevertheless, gout in the feet, inflammation of the globe, and afterwards erysipelas of the head and face, followed. The pupil closed. To a proposal that an artificial pupil should be made, the patient gave an unqualified refusal. But the fellow eye, which had become nearly blind from opacity of its lens, he freely offered for anything to be done to it that Dr. Fletcher might esteem desirable. The operation of solution was performed; but little inflammation followed; and good vision was obtained. The cataract was hard.

Mr. Solomon was not in the habit of selecting the operation of absorption when the lens was of hard consistence (the senile cataract of continental authors), unless the condition of the tissues of the globe was such as to contraindicate extraction through a half-section of the cornea.

Editor's Letter Box.

ON THE ORIGIN OF THE RECENT OUTBREAK OF CHOLERA AT WEST HAM.

Letter from John Snow, M.D.

Sir,—I have no complaint to make of the criticism of my views on the above subject, which is contained in a leading article of the Journal of Oct. 31st; but I shall be glad to be allowed to make a few remarks by way of defending my opinions, and to allude to a case in connection with the outbreak that I was not acquainted with when speaking at the Medical Society of London.

In the first instance, I should like to say that I have not clipped or shaped this outbreak of cholera to fit the bed I had made for it; on the contrary, it came and shaped itself exactly to the conclusions which I had drawn from the observance of previous epidemics. This outbreak at Abbey Row, West Ham, took place in a community supplied by a particular pump-well; the water of this well was distinctly polluted by a sewer, which receives the overflow from the cesspools of this community; the tide flows up this sewer from the Lea, and up the Lea from the Thames. Moreover, there had been one case known and registered of death from cholera on board a ship in the Thames from a port where the cholera was very prevalent, a few days before this outbreak at West Ham. In treating of the early cases of cholera in 1848, occurring by the side of the Thames, and near St. Bride's pump, a few days after the death of a seaman from Hamburgh, I gave an explanation, some years ago, precisely like that which I now offer of the outbreak at West Ham. (See *London Medical Gazette*, vol. xlvii, p. 1051.)

The case connected with this outbreak, of which I was not previously aware, is one investigated by Dr. Ansell. At the time of the cases at West Ham, just beyond the borders of the metropolis, there happened in the whole of London just one case, which, by suddenly attacking a person in good health, and proving rapidly fatal, showed itself to be of the true Asiatic type. This case was that of a boy, aged 14, living at Bromley, about two miles from Abbey Row; he passed this place with his father, on October 7th, on their return from a long walk. He lagged behind, which attracted his father's attention, who looked back, and saw the boy drinking at the pump above alluded to. The boy was still quite well on the evening of the following day, but at five o'clock in the morning of the 9th, he was seized "with diarrhœa, vomiting, great prostration, darkness of surface, thirst, loss of voice," and he died in twenty hours. This case resembles two cases which occurred at West End, near Hampstead, in persons who drank water which was conveyed in a bottle from the pump in Broad Street, Golden Square, in 1854. In such cases there can be no doubt that the very matter which produced the attack was swallowed in the water; and they may well lead to an admission like that made in the Journal of to-day, "that cholera evacuations may be conveyed from one person to another by means of water, and thus spread the disease, under certain circumstances." But this is to let in the small end of the wedge; and when once it is admitted, without pushing it to the Feejee Islands, it is difficult to prevent its going as far as circumstances require and permit. In the inquiry into the effect of water supply in cholera in the south districts of London, which I alluded to in a recent paper, I found that in the early part of the epidemic of 1854, nearly all the cases of cholera occurred amongst persons having the impure water of the Southwark and Vauxhall Company. But if like causes act in the same manner when they produce like effects, on comparing the action of the polluted pump-wells with that of the Company's water, we must conclude that, in the latter case, the cholera evacuations passed first down the sewers, then up the Thames to Battersea, and afterwards through the water-pipes to the distance often of several miles. This, however, is a route quite as long and as circuitous as from a ship at Horsleydown to the pump-well at Abbey Row; and for my own part, if it is acknowledged that the morbid matter of cholera can be mixed with the water of a pump-well, and remain for even a few hours without being destroyed, I see no difficulty in its passing a few miles with the tide, which moves in the river almost as fast as a person walks.

There may have been other cases of cholera in the shipping in the Thames, from the Elbe and the Baltic, besides the one registered at Horsleydown, but if there were not, it is unnecessary to suppose that the quantity of cholera poison was so limited that it all required to go up the Lea and the tidal ditch to Abbey Row; or, on the other hand, that it was so plentiful as to be distributed in every pailful of water in the Thames; something between these extremes is what the circumstances of the recent outbreak and former epidemics suggest. I am ready to admit that the greater part of any impurity emptied into the Thames might go straight up and down with the tide, and reach in a few days the salt water, which nobody can drink; but it is a fact that a part of the water of the Thames does flow up the Lea, and a part of this also up the tidal ditch to Abbey Row, carrying with it more or less of every kind of impurity which enters the Thames.

In an inquiry which the Rev. H. Whitehead made, in continuation of that which I commenced, respecting the water of the pump near Golden Square, he was led to conclude that, at one period, hardly anyone drank of the water without being attacked with cholera. The evacuations of one patient in that instance appeared to occasion above 600 fatal attacks within the space of a very few days. When the cholera evacuations enter a large river like the Thames, the result, as might be expected, is different. In the autumn of 1848, the first case imported was followed, in a few days, by several cases at different parts of the river's banks, amongst the population using water obtained directly from the river; and these cases were followed by others more numerous, chiefly amongst the population supplied with water obtained from the Thames at Battersea and Chelsea; and the fresh cases again supplied the morbid poison for a large number, and so the epidemic went on increasing. The like events followed in 1853, but in the present year, when few persons use water which is in any way connected with the tidal part of the river, the first imported case of cholera has been followed by other cases at one point only, and the disease has not spread further.

Since the last epidemic of cholera, the water supply of a great part of London has been entirely altered. At present no water company draws its supply from any part of the Thames which is within reach of pollution by the shipping, or the sewers of the town. The water supply of London is now different from its condition at any former period, and that has happened now which has not occurred before in the history of cholera in this metropolis. On every former occasion, when cholera prevailed in Hamburgh and other ports in the north

of Europe, it extended to London, and the first cases were followed by others, and these again by more, till the disease was epidemic. This last summer and autumn cholera has again prevailed in the ports in the Baltic and the Elbe; it has again extended to London, and one well marked imported case has been followed by a group of cases on the borders of London, so well marked as to leave no doubt of their nature; but here the disease has left off for a period of already eighteen days, and, whatever may follow, this is a halt which occurred on no former occasion.

So far from its being my opinion that the morbid matter of cholera is indestructible, I have from the first considered that it is very perishable, and that when mixed with water it cannot preserve its powers more than a few days; this being one cause why an epidemic often dies out so quickly. Dr. Wm. Budd advocated the same view in his able articles in the Association Medical Journal in 1854 and 1855. I believe that the cholera poison, destructive as it is in certain circumstances to the human species, has many enemies, is easily destroyed, and, what is of more importance, is still more easily avoided.

I regret that I cannot enter fully into my views regarding the pathology and history of cholera in the short space to which it is necessary to confine this article; and I beg the reader to remember that, although I find it necessary to write most on that part of the subject which concerns the communication of cholera through the medium of water, its propagation by swallowing the morbid poison without this medium, plays a very important part in its progress, more especially in the crowded habitations of the poor.

I am, etc. John Snow, M.D.

Sackville Street, October 31st, 1857.

CAUSTIC HOLDERS.

Letter from W. B. Kesteven, Esq.

Sir,—In answer to your correspondent, J. A. B., in the Journal for October 24th, I may state that a very convenient form of caustic holder, constructed after the manner of the "ever-pointed" pencil, has, for several years past, been manufactured by Mr. Nash, of Coppice Row, Clerkenwell (late Butler and Co.) I have had one in use for years.

A notice of this caustic holder was published in the late *London Medical Gazette*, nevertheless it has not become as widely known as it merits.

I am, etc. W. B. Kesteven.

Upper Holloway, October 27th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Elin. On October 27th, at Hertford, the wife of George Elin, M.D., of a daughter.

Fowler. On October 30th, at 145, Bishopsgate Street Without, the wife of Robert Fowler, M.D., of a son.

Godden. On October 25th, the wife of *Joseph Godden, Esq., Surgeon, of Sudley House, Claughton Firs, Birkenhead, of a son.

Hare. On October 20th, at Cawood, Yorkshire, the wife of Henry Christian Hare, Esq., Surgeon, of a son.

Thane. On October 31st, at 9, Hart Street, Bloomsbury, the wife of George D. Thane, M.D., of a son.

Thudichum. On November 1st, at 9, Woburn Place, the wife of *J. L. W. Thudichum, M.D., of a daughter.

MARRIAGES.

Adams—Wedgwood. Adams, Richard, Esq., Cornwall County Asylum, to Fanny, only daughter of the late Philip Egerton Wedgwood, Esq., of Burslem, at Liverpool, on October 8th.

Chambers—Woolley. Chambers, the Rev. Walter, to Susan Elizabeth, daughter of George Woolley, M.D., late of Brompton, at Sarawak, on August 17th.

Hassall—Goddard. *Hassall, Richard, M.D., of Richmond, to Alicia, fourth daughter of Charles Goddard, D.D., late Archdeacon and Subdean of Lincoln, at Richmond, on November 3rd.

Lewison—Black. Lewison, P. Emil, M.D., to Elizabeth Easter, widow of Alexander Black, Esq., late 14th Light Dragoons, at Lowestoft, on October 29th.

Lywood—Emmott. Lywood, John, Esq., of Wyke, Hants, to Mary Ann Frances, widow of the late Edward Emmott, M.D., at Charlton, Kent, on October 29th.

Schulhof—Vaizey. Schulhof, Maurice, M.D., of Brook Street, Grosvenor Square, to Frances Ellen, only daughter of George de Horne Vaizey, Esq., of Halstead, Essex, on October 29th.

Thompson—Abbott. Thompson, Theophilus Wathen, Esq., eldest son of Theophilus Thompson, M.D., F.R.S., of Bedford Square, to Maria, eldest daughter of W. Abbott, Esq., of Bath, on October 21st.

Wheeler—Helsham. Wheeler, Edward, Esq., of the Rocks, Kilkenny, to Josephine, youngest daughter of A. Helsham, M.D., of Park Place, at St. George's, Hanover Square, on October 29th.

Williams—Woods. Williams, David William, Esq., Surgeon, to Mary Ann Hawkins, only daughter of George Woods, Esq., formerly of Gibraltar, and late of Chatham, at Llandysilio, Anglesey, on November 3rd.

Wyman—Handy. *Wyman, George, Esq., Surgeon, of Alcester, to Mary Charlotte, second daughter of the late Henry Handy, Esq., of Bradley, Feckenham, Worcestershire, at Alcester, on October 15th.

DEATHS.

Birkett. On October 30th, at 59, Green Street, Grosvenor Square, Adela, infant daughter of *John Birkett, Esq., Surgeon.

Cormack. On October 30th, of typhoid fever, at 27, Ampthill Square, N.W., Daniel Hugh, aged 4 years and 4 months, eleventh and youngest child of *John Rose Cormack, M.D., F.R.S.Edin.

Evans. On August 10th, at Vichy, France, Eliza, wife of G. F. D. Evans, M.D., of Bedford.

Mant, Thomas, M.D., late of Ipswich, in London, aged 86, on October 25th.

Ridley, Porter, Esq., Assistant-Surgeon Madras Army, at Jubbulpore, on September 17th.

Yonge. On October 23rd, at the Royal Medical Benevolent College, aged 80, Elizabeth Sarah, widow of the late James Yonge, M.D.

Young. On October 25th, at Bognor, Ann, widow of the late James Young, Esq., Surgeon, Aylesbury.

APPOINTMENTS.

Byrne, J. A., M.D., elected Assistant Resident Physician to the Lying-in Hospital, Rutland Square, Dublin.

Lyons, R. D., M.D., elected Physician to the Jervis Street Hospital, Dublin, in the room of Dr. Martin, resigned.

M'Donnell, A., M.D., elected Surgeon to the Jervis Street Hospital, in the room of Dr. Harrison, resigned.

Sawyer, James R., M.D., appointed Professor of Midwifery to the Royal College of Surgeons in Ireland, in the room of Dr. Beatty, resigned.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, October 15th, 1857:—

Alcock, John, Cobridge, Stafford
Biddle, Henry Cooper, Upper Edmonton
Davis, William Farquhar, Army
Muskett, Joseph James, Holl, Norfolk
Radley, William Hepworth, Doncaster
Rayner, Thomas, Birstall, near Leeds

Thursday, October 22nd:—

Carher, Alfred, St. Ann's Bay, Jamaica
Sweeting, Thomas, Wakefield
Woodforde, John Howard

Thursday, November 29th:—

Buss, Henry
Earle, John, Ripon
Hughes, Thomas, Holyhead
Lander, James, Glasgow
Tench, Edward Beavan, Hereford

University of St. Andrew's. List of gentlemen on whom the Degree of Doctor of Medicine was conferred on October 24th, 1857:—

Affleck, Robert, M.R.C.S.Ed., Edinburgh
Andrews, Henry Charles, M.R.C.S. and L.A.C., London
Capron, Edward, M.R.C.S. and L.A.C., Guildford, Surrey
Colles, John Armstrong P., M.R.C.S.I., Dublin
Daniell, Cyrus O., M.R.C.S., Late Royal Artillery
Davis, William F., M.R.C.S. and L.A.C., London
Dixey, Augustus E., M.R.C.S., Finchley, Middlesex
Donnet, James John L., M.R.C.S.Ed., R.N.
Elin, George, M.R.C.S. and L.A.C., Hertford
Gillespie, John Williams, M.R.C.S.Ed., Cork
Howard, John Simpson, Madras
Hozier, William Henry, M.R.C.S.I., Greenville, United States
Jones, William P., M.R.C.S., Wellington, Salop
Miller, David, M.R.C.S.Ed., Glasgow
Norton, Selby, L.A.C., West Malling, Kent
Rengifo, Pio, M.R.C.S., New Granada
Robertson, Douglas M. C. L. A., M.R.C.S.Ed., Edinburgh
Skinner, Thomas, M.R.C.S.Ed., Edinburgh
Smith, Frederick Moore, M.R.C.S., Great Hadham, Herts
Smith, William Abbotts, M.R.C.S. and L.A.C., Southam, Warwickshire
Sumpter, Walter, L.A.C., Horncastle, Lincolnshire
White, Charles William, Madras

Queen's University in Ireland. The following candidates were admitted to the degree of M.D., after the examination in September 1857:—

Colahan, J., Galway
Collins, J. W., M.R.C.S.Edin., Cork
Crean, M. J., Galway
Dunlop, A., M.R.C.S.Eng., Belfast
Keely, P. J., Galway
M'Cormac, W., A.B., M.R.C.S.Eng., Belfast
Mapother, A. E. D., L.R.C.S.I., Galway
M'Crevey, J., M.R.C.S.Edin., Belfast
Morris, M. O'K., A.B., Cork
O'Flynn, D. B., A.M., Cork
O'Hara, D. M., Belfast

Eleven gentlemen obtained the certificate of the first Medical Examination.

Examination for Honours.

Mapother, A. E. D., M.D., £20 and Gold Medal; First Prize in Medicine
M'Cormac, W., M.D., £10 and Gold Medal; Second Medical Examination
Dunlop, A., M.D., £20; Second Prize in Medicine
MacCrea, J., £10; First Medical Examination

HEALTH OF LONDON:—WEEK ENDING OCTOBER 31st, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London rose from 988 in the preceding week to 1047 in the week that ended last Saturday (October 31st). The deaths of males were 531, those of females 516. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1008; but to admit of comparison with the deaths of last week, when population had increased, the average must be raised proportionally to the increase, in which case it will become 1109. The deaths now returned were, therefore, fewer by 62 than would have occurred if the average rate of mortality had ruled.

In the present returns, typhus (common fever being included under this head in the table) numbers more deaths than any other zymotic disease, and scarlatina shows an almost equal number. To the two diseases, 56 and 53 deaths respectively are referred. More occurred from scarlatina (17) in the north districts than in any other of the five metropolitan divisions; and only eight from that complaint on the south side of the river. Only 11 deaths from measles are returned; and of these, only one occurred in the numerous population on the south side. At 8, Medburn Street, Somers Town, a commercial traveller and two daughters died of scarlatina within 84 hours. The medical attendant states that the father "was struck down in 28 hours." In this and other instances in which scarlatina or typhus was fatal, bad drainage, offensive gullies, or lower apartments flooded with sewage, are complained of, generally by medical attendants. The deaths from diarrhœa are now reduced to 31; of these, 13 occurred in the south districts, and only one in the west. Three deaths are returned as caused by cholera and "choleraic diarrhœa or fever". On 29th October, a seaman, aged 18 years, died of "cholera", after twelve hours illness, on board a ship in the Commercial Dock. Another case occurred at Osborne Cottages, Lewisham; and the third, in Regent's Road, Mile End.

Fourteen women died after childbirth; eight infants died from inanition or want of breast-milk. Three persons died of diabetes; one of chorea; four of delirium tremens; and three of intemperance. Besides three persons aged 91 years, a labourer is returned who had attained the age of 100 years. He died on 27th October, at 3, Durham Yard, West Street.

Last week the births of 921 boys and 864 girls, in all 1785 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1467.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·774 in. The highest barometrical reading occurred on Saturday, and was 30·02 in. The mean temperature of the week was 51°·6, which is 4°·6 above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily reading was about 6° above the average till Thursday, and continued in a less degree above it till the end of the week. The highest reading occurred on Monday, and was 64°; the lowest was 37°·8 (on Saturday). The range of the week was therefore 26°·2. The mean dew-point temperature was 49°; and the difference between this and the mean air temperature was only 2°·6. The wind, which previously had been generally in the south-east, blew on the last three days mostly from the south-west. Rain was measured only to the amount of 0·06 in.

PARLIAMENTARY REFORM: MEDICAL CONSTITUENCIES.

The following letter has been addressed to the editor of the *Scotsman*:—

"Rutland Street, Edinburgh, October 15th, 1857.

"Sir,—Although there is little discussion of the forthcoming reform measure—for little is known about it—there is much anxiety felt by thoughtful men as to the principles upon which it will be framed. It cannot, I think, be out of place to raise one question of importance to the nation, as a question of principle; and that is, whether the medical science of the United Kingdom is for the future to be heard in the great council of the empire, or to be unheeded as hitherto? Matters touching the medical profession have little interest for the people. For the most part, public attention has been drawn to mere questions of its internal government. These have become identified with the squabbles of corporations for power and income; and amidst the uproar raised by the conflicting voices of twenty different licensing bodies, the immeasurably greater interests of the empire have been wholly lost sight of. Consequently, hardly one man is found, in this age of great cities, to call the attention of the public to the great political interests involved in the application of medical science to legislation and administration.

"I say hardly one. I must mention Lord Stanley as one of the few exceptions. He has read and interpreted the handwriting which has appeared on the wall of the magnificent social structure reared by British genius and power. Not a few medical observers, watching society from the loopholes of their professional privacy, have read it too, and interpreted its silent solemn warning. 'I believe,' said Lord Stanley, at Birmingham, 'that whatever exceptions may be found in individual instances, when you come to deal with men in the mass, *physical and moral decay necessarily go together;* and it would be small satisfaction to know that we had through a series of ages successfully resisted every external agency, if we learned too late that the vigour and energy for which our nation stands confessedly preeminent among the races of the world were being undermined by a secret but irresistible agency, the offspring of our own neglect, against which science and humanity had warned us in vain.'

"'Physical and moral decay necessarily go together.' If so, then moral decay is a sign of physical decay. Now, what is moral decay of a people if it do not consist in an abandonment of great religious truths for sectarian conventionalities, traditions, and superstitious fables? in a substitution of the letter for the spirit? in the preference of appearance for reality? Everywhere are manifested signs of a moral decay in a want of that masculine energy of feeling and will which accompanies

an enlightened understanding in a healthy organisation, and which is the attribute of a sound mind in a sound body. Everywhere we see more abundantly manifested a tendency to frauds—religious, political, commercial—and to the attainment of ends less by a course of honest vigour than by the tricky arts characteristic of degenerate races.

"We thus, therefore, may infer that there is a physical decay from the moral symptoms; but physical decay may be known by its own symptoms. Lately the question has been vigorously agitated in the medical profession—to what extent the abstraction of blood is required, if at all, in the case of inflammatory diseases? The answer to that question has a greater political than medical importance. All sound practitioners had already ceased to prescribe those free blood-lettings which, forty or fifty years ago, were found useful in inflammation. Each had his sufficient reason; but now, when discussion has elicited an expression of it, it is found that the concurrent opinion of the highest authorities, from Professor Alison downwards, is to the effect that a great change has taken place in the vital powers of the people, the consequence of which is that generally they cannot now bear that abstraction of blood formerly practised with benefit.

"I will give two illustrations of the undermining of the national power in consequence of the neglect of medical science by the political economist.

"The nation sent to the Crimea an army of picked men, the flower of its population, to defend international law and the national interests. Never was quarrel more just; never victory more certain. Yet, that fine body perished miserably by regiments, amidst the most terrible sufferings, from causes far more under control than the fire of the enemy, and *easily* removable, if medical science were as freely and fully applied to the art of war as mechanical science. Fifteen thousand British soldiers thus died.

"The nation was under obligations to its allies to maintain a given force in the field. Desperate efforts were made to fill up the place of the dead by fresh recruits. I saw many of those men. They were for the most part pallid half-grown striplings, the dwellers in towns, with no stamina. The medical eye could easily see that they were not physically fit for war. They could and did take the place of the fallen on the muster-roll, and so satisfied the national obligations; but they took also the place of the dying in the hospitals. Hundreds of these youths never even went to the front. Now, I say nothing of the frightful amount of suffering thus inflicted, of the industrial power annihilated, of the treasure wasted; I only ask—Is it creditable to the policy of a great nation, whose boast is to be the first to apply science to every want of mankind, thus to neglect a science upon which its very existence depends, and which renders possible the successful application of all other sciences to the advancement and defence of the common welfare?

"Now, the true remedy for all this is, I think it will be admitted, as easy as it would be efficacious. It consists in nothing more than in giving to medical science its due place in the great council of the empire. Once there, it would flow as an invigorating stream from a common centre into every department of administration throughout the empire. Opinion may differ as to the mode in which this remedy should be applied. Electoral colleges have no place in the British Constitution; but if they had, the medical colleges are close bodies. I would therefore venture to suggest as the shortest and simplest plan, that every qualified medical practitioner should be enrolled as a parliamentary voter, and that the medical electors of a given district should return a representative to Parliament. The candidates need not, and certainly would not, be exclusively professional men. Few medical practitioners, indeed, would aspire to so high and difficult a position. They would rather prefer, on the contrary, to select men of high political standing—men who, like Lord Stanley, are statesmen by birth and profession, and who had specially studied the application of medical science to all branches of administrative government.

"If this plan be determined on, the working would be easy. Already, in the Universities of Oxford and Cambridge, there are similar constituencies. At present, the members of these universities have to attend in person and vote; and this is an onerous tax upon the clergyman or lawyer. In a new Reform Bill, measures will be taken to obviate it; and those measures would apply equally well to the voting of medical constituencies.

"I am, etc.,

"T. Laycock, M.D."

UNIVERSITY OF ST. ANDREW'S:—MEDICAL EXAMINATION PAPERS. OCTOBER 1857.

The following were the questions proposed to the candidates for the degree of M.D. at the recent examination:—

First Examination. First Part. *To be translated into English.* Ante adversam autem valetudinem, ut supra dixi, quædam notæ oriuntur; quarum omnium commune est, aliter se corpus habere, atque consuevit; neque in pejus tantum, sed etiam in melius. Ergo si plenior aliquis, et speciosior, et coloratior factus est, suspecta habere bona sua debet: quæ, quia neque in eodem habitu subsistere, neque ultra progredi possunt, fere retro, quasi ruinâ quâdam, revolvuntur. Pejus tamen signum est, ubi aliquis contra consuetudinem emacuit, et colorem decoremque amisit: quoniam in his quæ superant, est quod morbus demat; in iis quæ desunt, non est quod ipsum morbum ferat. Præter hæc protinus timeri debet, si graviora membra sunt, si crebri ulcera oriuntur, si corpus supra consuetudinem incaluit, si gravior somnus pressit, si tumultuosa somnia fuerunt, si sæpiùs expergiscitur aliquis quam assuevit, deinde iterum soporatur; si corpus dormientis circa partes aliquas contra consuetudinem insudat, maximèque si circa pectus, aut cervices, aut crura, vel genua, vel coxas: item si marcet animus; si loqui et moveri piget; si corpus torpet; si dolor præcordiorum est, aut totius pectoris, aut, qui in plurimis evenit, capitis; si salivæ plenum est os; si oculi cum dolore vertuntur; si tempora adstricta sunt; si membra inhorrescunt; si spiritus gravior est; si circa frontem intentæ venæ moventur; si frequentes oscitationes; si genua quasi fatigata sunt, totumve corpus lassitudinem sentit.—Give the derivations and primary meanings of the following words:—anæmia, cholesterine, cyanosis, dysmenorrhœa, dyspepsia, hypertrophy, stethoscope, teratology.

Second Part. *Chemistry.* 1. What are the leading combinations between nitrogen and oxygen, their chemical constitution, their modes of preparation, and principal properties? 2. State the respective modes of preparation and chemical properties of chlorine, bromine, and iodine, and their analogies. 3. What are the chemical tests for potash, limes, barytes, lead, and copper? 4. What are the natures of fixed oils, and of saponification? 5. What are the chemical changes which attend respiration and the arterialisation of the blood? *Materia Medica.* 6. What compounds of iodine are used in medicine? Describe them, stating their modes of preparation, their uses, and their average doses. 7. What are the pharmacopœial preparations of scammonium, jalapa, digitalis, and colchicum? State their principal uses and average doses. What are the ordinary adulterations of the first named of these drugs, and how would you detect them? 8. Write a Latin prescription (without using abbreviations or symbols) for a mixture suitable for a case of autumn diarrhœa; also for a dozen purgative pills, containing croton oil.

Second Examination: Anatomy and Physiology. 1. Describe the aorta from its origin to its termination, and give a sketch of the distribution of its principal branches. 2. Describe the distribution of the nerves in the hand, and state how the nerve-fibres terminate in the papillæ. 3. What are the principal means of determining the functions of particular nerves? 4. What is the ordinary temperature of the human body, and by what physiological and pathological conditions is it modified? 5. What are the principal arguments in favour of and against the existence of a plurality of species among mankind?

Third Examination. [N.B. In answering the practical questions, the examiners require every candidate to specify the mode of treatment which he is in the habit of adopting, and the doses of the medicines which he prescribes.] *Pathology and Practice of Physic.* 1. What are the most important symptoms of disease presented by the tongue and gums? 2. What is the cause of death in cases of drowning? How long a period of entire submersion can be borne before death supervenes? and what treatment would you adopt in a case of apparent death from drowning? 3. Describe the symptoms and course of an ordinary case of small-pox, and state with what diseases it may be confounded in its earlier stages. What is the treatment to be adopted? 4. Describe the symptoms and treatment of acute rheumatism. 5. A man complaining of chest symptoms, and particularly of oppressed breathing, is found on examination to have a double see-saw murmur very distinctly audible over the base of the heart, as well as along the sternum, and over the arteries at the root of the neck. The murmur is inaudible at the apex. What are the possible or

probable alternatives in diagnosis? What circumstances remain to be observed, in order to determine exactly the nature and seat of the disease? Write a full description of what you might expect to find, upon any given view of the case, consistent with the facts above mentioned.

Fourth Examination: Surgery. 1. What is the pathology, and what are the principles of treatment, of senile gangrene? 2. What are the causes of chronic ulcer of the leg? and how may each variety be best treated? 3. What are the steps of the operation of amputation at the shoulder, and the precautions necessary to be observed? *Midwifery.* 4. Describe the formation and aspect of the corpus luteum, and state the medico-legal conclusion to which its presence leads. 5. What are the signs of the child's having died *in utero?* 6. What precautions are to be observed in administering chloroform during labour? 7. A married woman, about thirty years of age, had for months complained of pain in the lower part of her back, dragging sensation in the groins, and some tenderness in the hypogastrium; symptoms coming on gradually after a miscarriage, and accompanied by excessive menstruation (the discharge being in part clotted), and, in the intervals, by a creamy whitish discharge, now and then tinged with blood. Defæcation was difficult, and accompanied by pain; and, after walking, pain was felt in the left iliac fossa. What was the nature of this patient's malady, and the treatment which cured her?

Proposed National Medical Association in France. For some time there have existed in France local associations of medical men, principally for the purpose of affording aid to their members in case of necessity. Of these, the *Association des Médecins du Département de la Seine* is best known. Lately, a project has been set on foot for establishing a National Medical Association, taking the Seine Association as a centre and model; and a circular, of which the following is a translation, is in course of signature:—"The undersigned are of opinion: 1. That fraternal benevolence and the moral and material improvement of their profession concern all medical men, and ought to produce in them a concurrence of efforts; 2. That local associations, the formation of which is generally impeded by many difficulties, have not the elements of prolonged duration, by reason of the small numbers of their members; 3. That it would be difficult for local associations to realise, before a long course of years, the good which a general association of French medical men would produce; 4. That, in the general scientific manifestation whose recollection still moves all the members of the medical family (the inauguration of the statue of Bichat), it is impossible not to recognise a happy tendency to that generous and fraternal end which we are all desirous to attain; 5. That the Association of Medical Men of the Department of the Seine is an institution whose services and prosperity prove the excellence of its organisation; and that there are no material obstacles to the extension of this Association so as to make it embrace the entire medical body in France. They therefore give their adhesion to the wish of the medical men of the department of the Gironde, who desire the enrolment of the medical men of all the departments in the Association of the Seine, so as to form a *General Association of Medical Men in France.*"

Mortality among Children in Australia. The *Australian Medical Journal* for April 1857 states, on the authority of the Registrar-General's Third Annual Report of Births, Deaths, and Marriages, in the Colony of Victoria, that the total number of deaths of all ages in Victoria, for the year ending June 30th, 1856, was 5,760; of which 2,668 (or about 46 per cent.) were in children under five years of age; and of the 2,668 children who died, 2,420 (or about 90 per cent.) were under two years of age. This excessive mortality is attributed to improper diet; want of exercise in the open air; badly ventilated bedrooms and localities; occupying the same room with the parents; want of due attention to cleanliness; too long continued nursing; the administration of narcotics; unsuitable clothing; and the *ordinary* diseases of childhood, aggravated by one or more of the foregoing causes.

New Lunatic Asylum near Nottingham. The ceremony of laying the corner stone of a new lunatic asylum, on the Coppice Hill, near Nottingham, was performed on Oct. 30th, by His Grace the Duke of Newcastle, in the presence of a great number of highly respectable persons, amongst whom were observed Viscount and Viscountess Newark, Lord Belper, Mr. Paget, M.P., the Mayor and Corporation. The assemblage of both town and country people was very large, and the noble Duke delivered a speech in reference to the objects which the institution was intended to serve.

Mr. Dalrymple, of Norwich. A serious accident occurred to this distinguished surgeon on Thursday week, whilst engaged with a party of friends. It appears that Mr. Dalrymple was reloading one of the barrels of his gun, the other, which had not been discharged, having been inadvertently left on full cock, and while applying the ramrod, the undischarged barrel exploded, the charge carrying away the fore finger of his right hand, severely mutilating his thumb, lacerating the cheek, and one of the eyes and eyelids. We are happy to announce that Mr. Dalrymple is progressing favourably.

Medical Students. The number of students who have entered at the various metropolitan schools this session is rather under the average; the total number being about 1050. In the provincial schools also, we understand, it is below the average.

The Gresham Lectures. Dr. H. H. Southey, F.R.S., will deliver the Lectures on Physic in the Theatre of Gresham College, Basinghall Street, on Friday and Saturday, the 6th and 7th inst., in Latin at twelve o'clock, and in English at one o'clock. These Lectures are open to the public gratuitously.

Curious Fact in Natural History. His Grace the Duke of Hamilton is at present opening up a pit at Auchinheath, that has been closed up for the last sixty years. It has been cropped over where the pit was these last twenty years. The workmen on coming to the old workings were surprised to see a number of light-coloured mice running about in the old workings. The query is, how they have obtained food for the last sixty years; and, even allowing them to have lived off the growth of the old trees, how did they obtain air, as the pit had no communication with any open shank whatever. (*Hamilton Advertiser.*)

Death of Professor Rawlinson. We regret to announce the death of the Rev. George Rawlinson, Professor of Applied Sciences in the Elphinstone Institution, which took place early on the 23rd inst., from abscess of the liver. Mr. Rawlinson has not been long in India, having only arrived in Bombay about ten months ago; but during his short sojourn among us, his excellent qualities endeared him to all those who made his acquaintance. The remains of Mr. Rawlinson were interred on Thursday evening, and were followed to the grave by a numerous circle of his friends and admirers. (*Bombay Times.*)

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from: — Mr. J. S. Gamgee; Dr. Cockle; Mr. J. V. Solomon; Dr. C. Bader; Dr. Hillier; Dr. E. Hodges; Dr. Cossar; Mr. Toynbee; Dr. C. Handfield Jones; Mr. T. Holmes; Mr. Stone; Mr. Edward Moore; Dr. Sieveking; Mr. Haynes Walton; Mr. W. B. Kesteven; Dr. J. B. Sammut; Dr. Snow; Dr. Mayne; Dr. J. Armstrong; Mr. Joseph Godden; Dr. William Budd; Mr. Augustin Prichard; Dr. A. P. Stewart; Dr. John W. Keyworth; Dr. J. Sloane; Mr. W. Newman; and Dr. Thudichum.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Lectures on the Principles and Practice of Physic; delivered at King's College, London. By Thomas Watson, M.D., F.R.C.P. In Two Volumes. Fourth Edition, revised and enlarged. London: J. W. Parker and Son. 1857.
2. The History of the Plague at Athens: Translated from Thucydides. With remarks explanatory of its Pathology. By Charles Collier, M.D., F.R.S. London: David Nutt. 1857.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XLVI.] LONDON: SATURDAY, NOVEMBER 14, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HOSPITAL FOR SICK CHILDREN.

EFFUSION OF BLOOD OVER THE SKULL, PROBABLY FROM ACCIDENT: PUNCTURE: RECOVERY: DEATH FROM TUMOUR PRESSING ON THE ŒSOPHAGUS.

Under the care of WILLIAM JENNER, M.D., and ATHOL A. JOHNSON, Esq.

GEORGE A. K., a child 8 months old, was brought to the Hospital for Sick Children on September 10th, on account of a swelling of the head, which had been noticed the previous day. The child was of unhealthy aspect, and suffering from rickets. It appeared, from his mother's account, that, on August 3rd, he had fallen out of bed, causing a bump on the occipital part of the head, which was of no great size, gave rise to no symptoms, and, as far as she knew, disappeared. The head, before this, was quite natural; but the anterior fontanelle was described as having been open, and as large as a crown-piece. On the day before admission, the child was said to have had a convulsive fit (it was teething at the time); and then the mother noticed the swelling on the head. No injury was known to have been sustained since the one above mentioned. On examination, there was found a considerable effusion of fluid over the anterior part of the occipital bone and the vertex of the skull, reaching as far forward as the frontal bone. An evaporating lotion was applied, and a tonic mixture prescribed. As the swelling, however, continued to increase, the surgeon was requested to see it on September 16th. The effusion was then of considerable size, situated directly beneath the skin covering the anterior fontanelle and a small part of the bone in front of it, and reaching back to the occipital region: it extended downwards on each side to the temporal region, where it ended in a sharp ridge, which at first felt very like bone; but, on more firm pressure, the bone could be felt below the fluid. The child's health was deteriorating; it was restless at night, screamed frequently, and was losing flesh. There was no sickness; the pulse was regular; the bowels rather confined. Next day the tumour was punctured over the left parietal bone in a depending situation, with a fine trocar, and two ounces of pure blood evacuated. Some fluid was still left in the sac. An India-rubber cap, perforated with holes, and made rather too small for the head, was put on to produce pressure. This occasioned rather smart inflammation, causing œdema and redness of the scalp, extending a little beyond the limits of the original swelling. The pressure was accordingly removed, saturnine lotion applied, and a purgative given. The inflammation soon subsided, and the fluid swelling disappeared, leaving, however, a considerable semi-solid deposit (apparently blood-clot) over each temple.

For the next few days, everything seemed to go on well, except that the child was troubled with cough. On September 25th, the mother noticed a difficulty in swallowing; so that the child took some time to get down the milk, which he took, however, readily. The fauces were examined, but nothing was discovered there. There were some enlarged glands in the neck, but not of sufficient size to make pressure on the pharynx or œsophagus. There was a good deal of cough, with muco-purulent expectoration. The effusion on the scalp appeared cured. Emetics were prescribed, but it was found impossible to excite vomiting. This dysphagia went on increasing, and at last, in the early part of October, had attained such a degree that the child could swallow nothing, the fluids passing back out of his mouth and nose. It was said, also, that there was occasionally a copious gush of matter out of the nose, sometimes streaked with blood. As the child was sinking rapidly, it was determined to put him under chloroform, and examine the state of the throat. This was done on October 8th. It was found very difficult to induce anæsthesia, and only partial unconsciousness was produced after as prolonged an administration as was thought judicious. The finger, then passed into the fauces, felt the vertebral column behind quite natural. On the right side of the fauces there was felt some thickening, which gave rise to the suspicion of a solid tumour there; but, in consequence of the child's condition, the examination was necessarily hurried. An attempt was then made to pass a probang down the throat. This was, however, arrested just below the opening of the larynx, and could not be made to pass further without more force than it was prudent to use. The slight attempt that was made caused a temporary suspension of breathing, from which the child was with difficulty rallied.

Next day the child was again brought to the Hospital, in a dying condition. It was thought justifiable to attempt again to effect a passage into the stomach; and, with this view, first a moderate sized bougie, and then a gum-catheter, were introduced. They were, however, arrested at the spot above mentioned. The child expired shortly afterwards.

Post mortem examination showed all the internal viscera in a healthy condition. The body was extremely emaciated. The skull and scalp were firmly united by a dense layer of fibrine, the result of the previous inflammation, except in one or two places, where slight remains of the blood-clot still intervened between the bone and the scalp. This fibrine was mixed in variable proportions with the colouring matter of the blood. Over the temporal region, on each side, it was covered by a false membrane, which gave it at first the delusive appearance of having been effused beneath the temporal fascia. On examining the throat, some thickening was found about the fauces on both sides; but there was no tumour in this situation. Projecting from behind on to the wall of the œsophagus was a lobulated tumour, which surrounded the whole of the back of that tube, and was traced on either side to the thyroid body, with each lateral lobe of which it was in close apposition. Thus the œsophagus was much narrowed at a point somewhat less than an inch below the opening of the larynx. After death, however, it was possible to force the little finger through the obstruction. The mucous membrane was quite healthy.

On examination of the tumour, it was found to be composed of a soft homogeneous granular substance, displaying little trace of any higher organisation. It was very much of the colour of the thyroid body, but was in no other way connected with it than by contiguity, as it could be dissected off that body without any injury to it; and its microscopical characters differed widely from those of the thyroid, which was quite healthy. There were some enlarged glands in the neck, but these also were quite different in appearance from the tumour. The latter had infiltrated or absorbed the muscular fibres of the œsophagus, which were lost upon its substance. The bones of the spine were healthy.

REMARKS. This case was one of great peculiarity in all its principal features. The blood-swelling—which was a very large collection indeed, and separated the scalp from the bone for a very great part of its extent—appeared to have arisen from no adequate cause, and hence there was for some time a doubt as to the diagnosis. There had indeed been a blow of some kind four weeks before, but that seemed insufficient to account for it. There was certainly no pulsation; and its uniform appearance and symmetrical position did not point to the lesion of any single large artery. After death, the parts had been too much altered by the previous inflammation to allow of the examination throwing any light upon the subject. The success of a limited and partial evacuation of the fluid, with subsequent pressure, is worth remembering.

As to the tumour which occasioned death, it was so soft, so

deeply situated, and besides so masked by the enlarged glands, that it was quite impossible to discover it. The microscopical examination, revealing nothing but a congeries of granular matter, seemed to favour the idea that it was of recent origin and rapid growth; but it threw no light on its real structure or relations. It has not occurred to us to meet with a case of death from the pressure of a solid tumour on the œsophagus at this early age.

ST. GEORGE'S HOSPITAL.

LARGE STONE IN THE BLADDER: CRUSHED TWELVE TIMES.

Under the care of P. G. Hewett, Esq.

J. W., aged 60, a shepherd, hale, and strongly built, was admitted under the care of Mr. Prescott Hewett, on July 29th. This patient had always enjoyed good health until about three years ago, when he first began to suffer from symptoms of stone. The pain in the bladder and loins had at times been very severe, and occasionally too he had passed large quantities of blood in the water. He had been sounded several times by different surgeons, but the stone had never been detected.

Shortly after the admission of this patient into the hospital, Mr. Prescott Hewett sounded him, and found a stone lying on the right side of the bladder; the urethra was full sized, and there was no enlargement of the prostate. The lithotrite, a strong one, was used, for the first time, on August 4th. The stone, still lying on the right side, was, after some little difficulty, caught hold of; it proved to be a very large one, and remarkably hard, so much so indeed, that it required great strength to break it. Several fragments, all of a large size and exceedingly hard, were then crushed; this caused a good deal of pain, but the patient bore it very well. About a couple of hours after the operation, a severe shivering fit came on, which lasted some time. Hot brandy and some laudanum were given; after which, he fell asleep. In the evening he was very feverish, with great thirst, and complained much of pain; had passed some water slightly blood-tinged, but no stone. Ordered thirty drops of laudanum. Next day, the feverish symptoms continued; the tongue was loaded; the body covered with nettle-rash, large blotches of which existed about his head and face; eyelids puffed and œdematous. There was great pain in the bladder and loins. He had passed a quantity of water during the night, but no stone. He was treated by free purging. On the following day, some fragments of stone came away. The nettle-rash and fever still continued. He was again freely purged. Thus he went on for several days, suffering a good deal of inconvenience from the nettle-rash, and great pain in the bladder and urethra, with profuse sweating. The urine contained a quantity of ropy mucus, and was most offensive. Several large fragments of stone were passed at different times; they were all remarkably hard and angular (uric acid). He was ordered generous diet and wine; free purging; and morphia at night.

At the end of a fortnight, the feverish symptoms and nettle-rash had disappeared; no stone had passed for some days. The lithotrite was used again on August 18th, and several large fragments crushed. The operation was borne very well. The subsequent irritation was trifling.

From this time, the operation was repeated at intervals of from eight to ten days, when the consequent irritation had subsided, and when no fragments had been passed for a day or two.

During the month of September, Mr. Hewett being absent, the stone was thus crushed by Mr. Tatum. In the month of October, Mr. Hewett repeated the operation at shorter intervals, as the crushing now produced little or no inconvenience, and as the man was most anxious to get back to his work.

On October 24th, a fragment of stone which had been causing some irritation was caught and crushed. Several bits came away immediately after the operation. After this, the man was able to go about without the slightest inconvenience. He passed his urine freely, and without pain. The bladder was carefully examined on the 27th; no stone was detected; and he was allowed to return home on the 28th.

Remarks. The case of lithotrity of which we have given notes will, we conceive, be found to contain several points of interest. In the first place, as to the diagnosis; the stone had been sought for several times before and not detected; although from the great size which it was found to have attained a very short time afterwards, there could be no doubt that it was then in the bladder. The cause of this appeared to be the fact of the stone being fixed in one position, to the right of the bladder: and this probably by a pouched condition of that viscus. Thus, at every succeeding crushing, although the position of the patient was varied in different ways, the stone was never found except in the original position. The failure to detect a stone even of some size when thus situated, is not, we believe, a very uncommon event; indeed, we remember that the largest stone it was our lot ever to see extracted from the living body had been sought for only six weeks before by one of the most experienced surgeons in London, and not found. The history rendered it very probable, in that case also, that it was from the stone having been encysted. It is in cases of this kind that Mr. Coulson advises the reversal of the position of the lithotrite in order to ensure grasping the stone. Most operators, however, have found that a change in the position of the patient is sufficient for the purpose, and leaves them more free to handle the instrument.

Next, as to the symptoms that followed the operation; it is curious to observe the complete contrast that they present to those exhibited by a patient of Mr. Hawkins, whose case we reported at p. 211 of this volume. There the first crushings caused hardly any irritation; but as the treatment became more protracted, the patient's irritability and weakness increased, and he succumbed to an attack of pyæmia. Here, on the contrary, after the first operation, when the bladder resented the contact of the angular pieces of stone so sharply, that very severe and alarming constitutional symptoms presented themselves, no further cause for alarm was given, and at length the man became so tolerant of the operation that it was not necessary even to put him to bed; but after a fragment had been crushed he used to lie still for an hour or more and then be about the ward as before. It seems, therefore, that the dangers of lithotrity vary with the size of the stone to a much greater extent than those of lithotomy. It is certainly not so grave an operation to cut for a small as for a large stone, still it is a very serious operation in any case: in lithotrity, on the contrary, when the stone is small, the operation is, when well performed, an exceedingly mild one. And thus, if patients would apply at the first onset of the symptoms, and the stone could be detected and crushed in its nascent state, while still small, there can be little doubt that the mortality from calculus would reach its minimum: not that some patients already hovering on the verge of death from organic disease of the kidneys would not succumb even under the most favourable circumstances. It is most probably, in consequence of the earlier period at which patients apply in private than in hospital practice, that the results of lithotrity in the former are so much more favourable. More exact information is, however, wanted on this point. In conclusion, we would call attention for a moment to the occurrence of urticaria after lithotrity. This complication is said to be pretty common generally in stone, and especially when the irritability of the bladder is increased by recent crushing.

UNIVERSITY COLLEGE HOSPITAL.

EPITHELIAL CANCER OF THE TONGUE: LIGATURE.

Under the care of J. E. Erichsen, Esq.

[*From notes by* V. Bazire, Esq., *House-Surgeon.*]

John P., aged 85, was admitted on September 23rd. He was an old soldier, and had served through the whole of the Peninsular war and at Waterloo, and always enjoyed good health. Like most old soldiers, he was also an old smoker of pipes, but never to excess. Six weeks before admission he noticed a lump on the tip of his tongue, which never gave him any pain, but was inconvenient in eating, speaking, and above all in smoking; so that at last he had to leave off his pipe on account of the smarting which the smoke occasioned. His general health kept, all the time, as good as usual. About a fortnight before admission a second lump was noticed behind the former. There were no enlarged glands. The anterior of the two growths was about the size of a strawberry, which it somewhat resembled in appearance, after a covering of white mucus was scraped off and its red granulated surface exposed. The posterior tubercle was smaller, and was found to be connected with the anterior, so that the two formed, and were treated as, one tumour. A small piece of the tumour was taken away before it was tied for the purpose of microscopic examination. The "globes" characteristic of epithelial cancer were detected in it.

The tumour was surrounded by a ligature on September 30th. The ligature was formed of a strong double thread, the two halves being coloured white and black, passed first through the healthy tissue a quarter of an inch from one end of the tumour, then twice from side to side beneath the swelling, and then brought out at about the same distance from the other end. The black and white loops were then cut alternately, and the hanging ends tied. Thus the tumour was completely encircled—on one side by black loops and white knots, and on the other by white loops and black knots. With the exception of a little bleeding and pain soon after the operation, no symptoms followed. The man was well enough to be discharged on October 10th; and when last seen, on October 19th, the wound had soundly healed, and no trace of the disease remained.

Remarks. We have cited this case principally as an example of restorative power continuing in an extraordinary degree at a very advanced period of life, and of the occurrence of epithelial cancer at an unusually late age. In this latter circumstance, however, we may see only an illustration of Mr. Paget's observation, that the liability to this form of cancer increases with age, and that the smaller number observed after seventy years of age is only a consequence of the comparative rarity with which such patients come under surgical observation. With respect to the exciting cause of the disease, it would be of course referred to the pipe which he was in the habit of smoking; and the fact that many men who smoke have epithelial cancer of the mouth is undeniable; but do any statistics exist which show that the proportion is greater in those who smoke than in those who do not? The "post hoc ergo propter hoc" method of arguing has gone out of fashion since the "Great Tobacco Controversy" received its quietus at the hands of common sense; and it would now be interesting to have some definite information on a point which seems to have been rather too hastily taken for granted.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

REPORT OF OPERATIONS PERFORMED FROM SEPTEMBER 25TH TO OCTOBER 25TH, 1857.

Communicated by C. Bader, M.D., Curator.

I. Lachrymal Apparatus. The treatment for obstruction of the lachrymal sac by the actual cautery was applied in two cases. Both were of three years duration; in one the surface of the sac was covered by a thick layer of organised exudation. Usually several cauteries are required to touch the whole of the diseased surface.

Two of the former cases have returned the tickets. In one there is no watering of the eyes whatever; in the other, when out in the wind, the tears run over the cheeks. The duration of treatment of the one case was six, of the other five weeks.

Laying open the lower lachrymal puncta was performed in four cases. This operation is extensively practised in the out-patient's room.

II. Eyelids. Small sebaceous tumours were removed from beneath the skin of the upper lid in three cases. In a case of Mr. Wordsworth the tumour was of the size of a hazel nut, and its sac sufficiently transparent to show the sebaceous mass surrounded by dark hairs of the size of ordinary eyelashes.

Of two nævi of the lower lid in children, one was touched with pure nitric acid; the other was ligatured in the manner described in a former report. (Journal, September 5, p. 749.)

In a case of fistulous opening in the skin opposite the middle of the upper orbital edge, the opening was enlarged by an incision. On probing its depth a great quantity of pus escaped, but no dead bone was discovered; a piece of lint was left in the wound, and medical treatment continued.

Grooving of the fibro-cartilage of the upper lid was performed in five cases. The operation tends to save the eyelashes, besides curing the entropium. The skin incision was made about one line from and parallel to the whole palpebral edge. The base of the triangular piece which is removed is nearest the skin, and about one line broad, its apex towards the conjunctiva; many of the eyelashes have been cut across during the operation. To prevent the spasmodic contraction of the lids during the healing, the outer canthus has been divided in some cases. The operation, intended to supersede the entire removal of the eyelashes, has in several cases proved satisfactory; but its value requires more extensive testing.

The edges of a former incision were pared in a case of ectropium, where a triangular piece had been removed out of the thickness of the upper lid. The wound had united, but on removing the needles separated again. To prevent the tedious bleeding during operations on the eyelids, grooving of the fibro-cartilage, removal of tumours, etc., a useful kind of forceps is used. (For its description and sketch, see the second edition of Desmarres, vol. i, p. 602.)

III. Muscles of the Eyeball. Eighteen cases of internal strabismus were operated on subconjunctivally.

The severe case of internal strabismus mentioned in the last report (October 24, p. 881), was, after the operation, followed by abscess behind the globe, sloughing of the cornea, and effusion of blood into the globe.

Of six cases of external strabismus, five were treated by subconjunctival division of the external rectus; one (a case of Mr. Poland) by bringing forwards over *the inner edge of the cornea* the soft parts covering the sclerotic, keeping the eye turned in for the first thirty six hours by a suture drawn through the conjunctiva near the outer corneal edge, and fixing it to the skin on the bridge of the nose.

IV. Cornea and Sclerotic. One case of perforation of the sclerotic opposite the ciliary processes by a piece of steel, and followed by ophthalmitis, was treated by introducing a probe in the track of the wound, and allowing part of the contents of the globe to escape.

One case of staphyloma in a child, in which after purulent ophthalmia, the whole cornea had been lost, and the iris, covered by organised exudation, protruded so as to keep the lids separated, was treated by drawing a thread through the globe at the boundary of the staphylomatous part, so as to steady the eye, and then shaving off the staphyloma close behind the thread.

One case of staphyloma of the sclerotic, which, by a former operation, had been punctured and had reformed, was removed with scissors.

The case of conical cornea mentioned in former reports (Journal, August 22, p. 710, and September 5, p. 749), treated by adhesions of the iris to the cornea, thus forming a transversely oval pupil, is so far advanced as to have the pupillary margin adherent at two opposite points in the lower half of the cornea. At a third operation the cornea was opened at its upper and inner part; and with the blunt hook and iris forceps the corresponding pupillary margin was drawn out, and left in the corneal wound. Some bleeding occurred into the anterior chamber.

V. Iris. Detachment of adhesions of the iris was performed in five cases of Mr. Streatfeild. After opening the anterior chamber with the broad needle, the adhesions were easily detached by bringing the cataract spatula behind them, and lifting them away from the point of adhesion. Of these, one was a case of injury (perforation of cornea, with subsequent adhesions to the cornea and occlusion of the pupil): the corneal adhesions, as well as those in the area of the pupil, were detached. The detachment of the former was followed by some bleeding in the anterior chamber, which was increased by subsequent vomiting. In all cases the pupil assumed a more regular round shape.

Formation of an artificial pupil was performed in three cases. In one case, after opening the cornea with the broad needle the iris was detached opposite the transparent part of the cornea with the blunt hook. In the other two cases the broad needle was introduced through the opaque part of the cornea, and advanced in the anterior chamber to its transparent portion, when the needle was thrust into the iris, and, by moving the handle forwards and downwards, the iris was partly cut, partly torn, so as to form an oblong pupil.

In two cases of prolapse of the iris after injury of the cornea, the prolapse was shaved off by the scalpel, and the bleeding surface touched with nitrate of silver.

In a case of cyst of the iris (a patient of Mr. Dixon), the cyst, occupying all but one fourth of the lower part of the iris, had filled after having been operated on, and caused great pain. A broad needle was introduced through the sclerotic about four lines from the outer and upper corneal edge, and advanced through the posterior wall of the cyst. The fluid of the cyst not escaping, a cataract knife was introduced through the same wound so as to enlarge it; when, after the escape of some yellowish fluid, the cyst collapsed. Graefe's operation for glaucoma has been performed in seven cases (patients of Mr. Critchett and Mr. Bowman). The operation essentially consists in introducing a cataract knife through the semitransparent part of the sclerotic close to the corneal edge into the

anterior chamber, and making the incision from one-fourth to one-sixth of an inch long. When the knife is withdrawn, the aqueous humour and iris follow it: the prolapsing iris is drawn out at one corner of the section, and the drawn out portion is snipped off with scissors, so that about one-fourth or one-third of it is removed. It is supposed that by this means the vitreous and aqueous chambers are thrown into one, that the remainder of the iris atrophies, and that the tension of the globe being diminished, the resorption of the fluid, effused into the deeper tissues of the eye, is encouraged. The retinal vessels admitting more blood, small blood effusions are more frequent on the retina. Mr. Bowman introduces the knife at the upper edge of the cornea, thus allowing the upper lid to cover part of the very large pupillary opening.

The following may, in its symptoms, be considered a type of the above cases. The central part of the cornea was slightly dim (anæsthetic, according to Graefe), the pupil rather dilated and immovable, its area dull, sometimes greenish, the veins emerging in the ciliary region enlarged, and the globe stone hard. There were no other inflammatory symptoms. The patient saw fingers; but there had been repeated occasional loss of vision, complete blindness, with chemosis, pain, and extreme hardness of the globe. These attacks recurring, with periods of temporary relief, ended in complete loss of vision.

One case accessible to the ophthalmoscope showed numerous effusions of blood over the whole retina; another showed atrophy (blueish-white looking disk) of the optic nerve; a third a great quantity of brownish flakes floating in the vitreous humour. No case was followed by bleeding, inflammation, or other bad result.

VI. Crystalline Lens. There were ten cases of extraction. One corneal section was followed by the loss of some vitreous humour, which just sufficed to reduce the tension of the globe. All the lenses were extracted by the upper corneal section; and two of them were cases of double extraction.

A clear lens was extracted in a case of glaucoma, in which Graefe's operation had been performed. In another case of acute glaucoma with opaque lens, the lens was removed with the scoop through a small corneal opening. In one case of soft cataract, at the age of 52, the needle operation was adopted.

Three cases of extraction were performed, where, after iritis, the pupil was blocked up by exudation thrown out in its area.

In two cases of congenital cataract, both lenses were broken up with two needles.

One case of central opacity on the anterior surface of the lens was met with, forming an opaque disk of the size of a pin's head (apparently projecting through the pupil), surrounded by transparent lens substance. On touching the opaque disk with the broad needle, it was easily detached, and was drawn out with the canula forceps. Microscopically its edge was formed by a transparent fringe of capsule, yet I was unable to decide on which side of the capsule the opaque disk was situated.

In five cases a false membrane, which extended behind the area of the pupil, was opened out with one or two needles. In one case the shreds of false membrane were drawn out with the canula forceps. In another case, where an amber-coloured membrane overspread the whole area behind the pupil, the cornea had been opened with the cataract knife; the section was extended with the blunt knife, and the membrane, resisting the needle and canula forceps, was perforated close to the pupillary margin with the cataract knife. The remainder of its adhesions were separated with the canula scissors, and the membrane drawn out in shreds with the canula forceps. There was very little bleeding, as is usually the case in these soft globes. The other eye had been lost by an injury.

One case in which the entire cornea had sloughed away, and the iris bulging forwards presented in its pupillary area a transparent projection (supposed to be the anterior surface of the lens capsule), was treated by puncturing this transparent surface, when some normal vitreous humour escaped. The vitreous humour was left to ooze away, and the globe to shrink gradually.

VII. Excision of the Globe was performed in three cases.

Case I. C. M., aged 12. Melanosis of the globe; the melanotic mass developing within the globe (ciliary processes) had perforated the sclerotic near the outer corneal edge.

Case II. H. C., aged 52. A shrunken globe, whose contents had escaped subsequently to an injury, and had caused much irritation.

Case III. J. R., aged 58. Hæmorrhage into the globe; a cataractous lens having been extracted, considerable bulging of the vitreous humour ensued. On opening the posterior capsule to relieve the tension, the oozing of the vitreous humour was shortly followed by escape of blood. There was no doubt that the bleeding in the interior of the eye continued. Every one knows the painful and tedious after treatment of those cases, lasting from six weeks to two months. The globe was removed as the shortest and safest course for the patient; the central artery continuing to bleed, the orbital cavity was plugged with lint. On examination of the globe, a very small quantity of blood was found in the vitreous humour; a large quantity was effused between the choroid and the sclerotic, detaching the former and pressing the vitreous forwards.

The three excisions were performed by enucleating the globe from its capsule in the usual manner.

Total of major operations, 102.
Total of minor operations, 127.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

I. DISPLACEMENT OF THE PUNCTUM LACHRYMALE, CAUSING THE TEARS TO FALL OVER THE CHEEK: CURE BY OPERATION.

Under the care of Haynes Walton, Esq., F.R.C.S., Surgeon to the Hospital, and to St. Mary's Hospital.

Mr. Walton advises his pupils never to prescribe hastily for any case of epiphora or watery eye, but to seek for the cause, and endeavour to discriminate whether the secretory or the excretory apparatus is at fault. He generally, in the first instance, examines the latter—the channels that convey the secretions away. That which is the most readily surveyed is the position of the lower punctum. In order to perform its destined office, and take up its portion of the fluid that is poured out on the conjunctiva, to be conveyed along the canaliculi to the lachrymal duct, thence to the nose, this minute orifice requires a certain healthy action, whereby, during winking, it is turned inwards on the surface of the eyeball. This is effected alike in both eyelids; and the beautiful mechanism should be examined, so as to be well understood, that an abnormal state might at once be detected. However, it is with the lower punctum only that we are practically concerned. Then he inspects the patency of the aperture; and, lastly, the condition of the lachrymal duct, testing by pressure its healthiness, and recognising disease when there is regurgitation through the puncta, or a sensible escape downwards, of collected materials. But, to an experienced surgeon, an obstructed duct, in an advanced stage, can generally be recognised at sight.

The patient, 50 years old, an inmate of a workhouse (a prolific source of supply to ophthalmic institutions), applied on account of watery eyes. He had been to many medical charities of late, had used many lotions, and undergone the routine of blistering and purging at the union infirmary. Mr. Walton at once pointed out the true nature of the case, and showed that the little prominence of the eyelid on which the punctum is placed—the papilla—was quite dislocated, being turned outwards and downwards; so that the punctum was completely removed from the eyeball, resting in a diametrically opposite state. Some of our readers may be aware that, to remedy this not very uncommon condition, it has of late been proposed to slit up the canaliculus; and the plan has its advantages, as we shall show; but Mr. Walton thinks it far preferable, when it can be done, to keep the punctum intact, and replace it. To him is due the merit of the practice. The changes in the lid were not too great to forbid this. The eversion is always attended with more or less thickening of the adjacent conjunctiva. Here the alteration was but slight. The patient would allow only one eye to be done at a time. Mr. Walton proceeded to accomplish his accustomed operation, which consists in removing a part of the conjunctiva from just behind the lachrymal papilla. For the most part, the contraction which ensues from the loss of which is enough to right the parts. Sometimes it is requisite to remove more conjunctiva, according as the edge of the lid is more or less involved. He took hold of the piece with a pair of fine bull-dog forceps, with projecting teeth; and dissected it away carefully with a small fine scalpel. His practice is to leave the denuded part to granulate, and not to use any applications.

Five weeks later, we saw the patient, when he was about to be operated on in the second eye. There was complete restoration of the papilla to its proper place, and the punctum was nicely adjusted. The test of the operation was the complete manner in which the tears were taken up, the man declaring

that he was no longer troubled with lachrymation. The opposite eye was now done in precisely the same style.

II. ECTROPIUM: TREATMENT: SUBSEQUENT NECESSITY OF OPERATION FOR THE DISPLACED PUNCTUM.

The subject of this was an elderly man. There was complete ectropium, the entire tarsal border being turned out, although not very much depressed. As is usual, all of the exposed conjunctiva was swollen, red, and much altered in structure. The operation which Mr. Walton has introduced for this is the removal of all the diseased conjunctiva by a clean and neat dissection. He made an incision through the membrane close along the tarsal margin, and by another circumscribed what he intended to remove. The isolated piece was then dissected off, just in the manner described for the removal of a small bit of conjunctiva in the above case. In two months, the lid was tucked up in as well as could be desired, and the cicatrix had apparently reached its maximum contraction. But the excretory apparatus was yet deranged; the lower punctum was not brought into play. The contiguous parts, by which we mean the tissues immediately around the canaliculus, were so altered that the required adaptation could not be effected. Mr. Walton then slit up the canaliculus, that the secretions might be conveyed directly to the lachrymal duct, generally a most efficient remedy in these cases, when properly done. A stiff probe, of an appropriate size, was passed through the punctum to the sac, and the canaliculus divided on it with a knife. Some after treatment is here required, for the divided channel should be inspected; and, if closed, as in all probability it will be the day after, the probe should be introduced, and the incision reopened with this instrument alone—a matter that is most readily accomplished. Here it was requisite to do this but once, but it may be requisite to repeat it. Mr. Walton declared the result to be as good as in any instance that he had watched.

BRISTOL ROYAL INFIRMARY.

SUGAR AND DIABETES: A CASE.

By William Budd, M.D., Senior Physician to the Infirmary.

[*Read before the Bath and Bristol Branch,* Sept. 24th*, 1857.]

There are probably few whose attention has been much directed to the subject of diabetes, who have not had misgivings, at one time or another, as to whether the common method of treating this disease by restricting the patient to a purely nitrogenous diet, or, to speak more correctly, to a diet from which sugar and its equivalents are excluded, really fulfils the true indications of the case.

Among the many circumstances that might be referred to as suggesting such misgivings, there comes—

1. The strong and direct opposition in which this method very often stands to the natural cravings of the patient—cravings which, if not indulged, become, after a time, in many instances, so irresistible as to drive the subjects of them to fraud, in default of other means, in order to procure some portion of the proscribed articles.

It has even been laid down as essential to the success of this method, when conducted in hospital, that the patient should be kept in a room to himself, guarded by lock and key for that special purpose, so ineffectual have any less stringent measures been found to bar the diabetic man from the gratification of his desire for saccharine aliments.

The need of such precautions as these is in itself sufficient to raise serious doubts in the mind of any thoughtful practitioner, as to the soundness of the principle on which they are founded. For, although the appetites in disease are often perverted, and are rarely to be unreservedly trusted as guides to practice, yet they are often, as in health, exponents of true wants of the system. In some sense or other, they are very real elements of the case, whatever it may be, and not seldom are much more intimate interpreters of its great cardinal relations than any evidence we may be able to draw from more recondite sources. Their suggestions may require to be modified by the results of experience, or may even be superseded by a higher knowledge; but, in either case, we ought to be very sure of our facts before we venture to act upon them in contravention of strongly declared instincts. In diabetes, it would be difficult to show in either of these quarters sufficient warrant for the little heed which is paid to the natural desires of the patient in the all-important matter of diet. We are certainly very far from having attained, on the one hand, to a perfect theory of the disease; and our experience as to diet, on the other, is too one-sided to enable us to found any certain conclusions upon it.

2. Another circumstance that tends very much to weaken faith in what may be called the orthodox plan of treatment is, that this plan is not only of little avail in most cases in long postponing the fatal event, but often signally fails in insuring for any length of time the specific object for which it is proposed—that, namely, of keeping down the quantity of sugar discharged with the urine.

3. M. Bernard's important discovery, that the liver forms sugar as readily from nitrogenous as from amylaceous compounds, seems to take from this plan the plea of resting upon a scientific basis.

I am aware of all that may be said in reply to these observations, and I also know that they are open to cavil in various ways; but they sufficiently show, notwithstanding, as it appears to me, that the true principles on which the dietetic treatment of diabetes should be conducted are still open to consideration. We shall see how far this view is borne out by evidence of another kind, to be presently adduced.

Many of the points here touched on are illustrated in a very striking way in a paper on *Diabetes* communicated to the French Academy of Sciences by Professor Andral, rather more than two years ago, and published soon afterwards in the *Annales des Sciences Naturelles*. After remarking that a purely animal diet not only fails in a great number of cases permanently to reduce the amount of sugar discharged by the kidney, but that this amount may even go on steadily increasing, in spite of the entire exclusion of saccharine and amylaceous compounds from the food, M. Andral relates the following case in point:—

"One of the most remarkable, and at the same time one of the most conclusive, of facts of this kind, because of the absolute strictness with which the regimen was carried out, is that of a woman who, in the intimate persuasion that an exclusive animal diet could alone cure her, had the courage to subject herself to it during nearly two months, without deviating from it for a single day. During the whole of this time she ate nothing but roast or boiled meat, and drank nothing but water to which a little alcohol had been added. At the end of the two months, she was obliged to give up this regimen, which had become insupportable to her; and, besides, she was not better. At the moment of commencing this plan, her urine yielded 27 *grammes* of sugar to the pint. During the early trial of it, the proportion of sugar fell by degrees to 20, 15, 12, and at last to as low as 10 *grammes* to the pint; then suddenly, and without the remotest ground for supposing that any breach of rule had occurred, the proportion of sugar voided began again to rise. We now saw it progressively mount from 10 to 15, 20, 30, 44, 49 *grammes* to the pint; and there was, moreover, no single day in which this principle was altogether absent. Further, what is particularly worthy of remark, is that, when we first began to mix eggs, milk, a small quantity of bread, and vegetables, with the meat, and to substitute wine and water for the alcohol and water, the sugar, contrary to all expectation, began to diminish anew, falling to 30, 26, and at length to 10 *grammes* to the pint. Then again, after the lapse of some days, the regimen remaining unchanged, the sugar rose once more, until, at the end of three weeks from the first adoption of this mixed diet, the urine contained 54 *grammes* to the pint."

M. Andral adds, that this is far from being the only instance in which he has seen a large amount of sugar continue to be discharged in the urine in this disease, in spite of a purely animal diet; and he cites, among others, the extreme case of a diabetic patient "who lived entirely on flesh, and whose urine contained, notwithstanding, the enormous quantity of 82 *grammes* of sugar to the pint; and, as this man passed eight pints of urine every twenty-four hours, it follows that he expelled from his system, and consequently produced in the same period of time, as much as 656 *grammes* (or more than 20 ounces) of sugar."

In the case of which it is the principal purpose of this paper to give some account, the same general fact was observed. The amount of sugar voided went on largely and steadily in-

* In preparing this communication for the press, one or two minor details have been added, which, for the sake of brevity, were omitted in the original draught.

creasing, in spite of the rigid observance of a diet from which sugar and amylaceous compounds were excluded. But this case exhibited, in addition, the much more remarkable spectacle of a considerable and permanent reduction in this amount occurring concurrently with the recovery of the patient from a state of wasting and extreme weakness to one of good condition and comparative health, on substituting for this diet a scheme which not only included a large proportion of vegetable food, but *more than half a pound daily of sugar in substance.*

Case. The subject of this case, Joseph Snailum by name, an agricultural labourer, 18 years old, was admitted on March 19th, 1857, into Ward 6 of the Bristol Royal Infirmary, where he still remains under observation. At that time, he had already been fifteen months ill. As in most cases of the kind, his malady had stolen insensibly upon him. Frequent calls to make water, by night and day; an unnatural thirst, together with loss of flesh and gradually increasing weakness, were the first circumstances that excited his attention. He had been unable to work almost from the beginning. Meanwhile, these complaints had gone on gradually increasing. For some time before he fell ill, he had been working in wet and marshy ground; but, apart from this, he could assign no distinct cause for his failing health. His immediate relatives appear to have been healthy people.

On admission, his state was very characteristic. A peculiarly dry and harsh skin, a brown and dry tongue, ardent thirst, and a voracious appetite, were the leading symptoms. The pulse was only 68 in the minute. He was much reduced in flesh and strength. For the first week, the quantity of urine passed varied from nine to twelve and a half pints; its specific gravity, from 1039 to 1042. The presence of sugar in the urine was ascertained by the copper test, and by the extraction of sugar in bulk from the secretion. Within a few days after his admission, he was put on a diet consisting entirely of meat, eggs, a carefully prepared diabetic bread, a small quantity of butter, and a few ounces of wine. Under this regimen, contrarily to what usually happens, the diabetic symptoms began to grow worse almost from the first. The quantity of urine passed rose, in the course of a week, from nine to seventeen pints, its specific gravity remaining much the same. The patient's thirst increased, and he became daily thinner and weaker. At the end of that time, an attack of diarrhœa occurred, which lasted, with more or less severity, very nearly ten days. During that interval, he took very little food, and the precise amount of urine passed could not be estimated. When the bowels had become settled, he was found to be voiding from seven to ten pints of urine *per diem*, of specific gravity ranging from 1036 to 1044.

On March 31st, the stomach rebelled so much against the diabetic bread, that six ounces of common bread were allowed in place of it; and these six ounces were soon afterwards raised to sixteen. His health now began to improve somewhat, and he gained a little in flesh and strength. The diabetic symptoms proper remained much as before.

This improvement, however, was not of long continuance. In the beginning of May, he had grown so weak as to be obliged to keep his bed, and I had become very anxious about him. His tongue was very dry and brown; his pulse had become frequent; and he was much harassed by cough and pain in the chest. He seemed, in fact, to be rapidly entering upon the downward course which leads to the fatal event so common in such cases.

Many considerations which I have not now time to detail, but some of which have already been hinted at, had long made me desirous of trying what would be the effect of freely giving sugar in such circumstances.* I was turning the matter in my mind, when I accidentally saw it stated in the *Gazette Médicale* that M. Piorry had already tried this measure in one case with very marked success. I therefore, on May 22nd, entirely reversed my plan of treatment, and ordered the patient to be put on a varied and generous diet, with the addition of eight ounces of sugar candy and four ounces of treacle daily. This change had very little effect at first either on the quantity of urine passed or on its specific gravity. It is worthy of remark, however, that what little there was was in both respects on the side of diminution. But the effect on the general health was marked and immediate. The new articles of diet were taken with great relish, and the patient improved in health and strength from day to day. What is especially worthy of attention is, that, as he became stronger, the diabetic symptoms also gradually lessened—to such a point, indeed, that on July 22nd, exactly two months after the adoption of the new scheme, only three pints of urine, of specific gravity 1032, were passed in the twenty-four hours; and yet, at this very time, the patient was taking, in addition to much vegetable food, as much *as eight ounces of sugar and six of honey daily;* the honey having been substituted, at his own desire, for the treacle previously given. Since that time, the quantity of urine passed has somewhat risen, its present daily average being from four to five pints, of specific gravity varying from 1032 to 1034. In other respects, his state is very satisfactory. He is ruddy, looks in very good condition, and declares himself to be strong and well. His tongue is moist; he no longer suffers from thirst; and his skin, from being dry and harsh in the extreme, has become soft and natural. He has increased in weight from 107 lbs., which was what he weighed shortly before beginning the sugar treatment, to 126½ lbs.

P.S. I have purposely abstained from burdening this narrative by any lengthened comments. There are few maxims in philosophy which are entitled to more respect than that which inculcates caution in drawing deductions from single instances. The striking result here obtained from this new mode of treating diabetes must not only be repeated in other cases of the same kind, but must be sustained for a longer period in this one, before any general inferences can be safely founded upon it. It will be observed, that the effect of the treatment was to palliate only, and not to cure. The patient is still diabetic, and may still, for all I know, die, as so many have done before him, of the disease under which he is labouring. But even although it does not go beyond palliation, I have thought the result sufficiently important to deserve being placed on record. That a diabetic man should not only recover his health by eating sugar, but that his diabetic symptoms should also very nearly vanish under the same treatment, is a fact that stands in startling antagonism to all present views, as well as all prior experience on the subject. If this result should be found to be general, it will not only lead to an entire revolution in the treatment of the disorder, but will help in no mean degree to clear up much that is still obscure in its pathology.

* This idea was first suggested to me by my colleague Mr. Prichard, on the simple ground of supplying to the system the particular article which is running to waste, and the loss of which appears to be the principal cause of the damage sustained by the constitution as the disease advances.

Original Communications.

REMARKS UPON THE TREATMENT OF THREATENED APOPLEXY AND HEMIPLEGIA.

By Thomas Inman, M.D., Liverpool.

I have long entertained great doubt whether the ordinary proceedings recommended in cases of threatened apoplexy and in certain forms of hemiplegia, were those most conducive to the patient's speedy recovery. Few can read Dr. Abercrombie's work on the brain, without concluding that the means adopted to arrest the disease, or to cure it when present, frequently had a very opposite tendency; and few can calmly examine the ordinary plan laid down for the treatment of cerebral hæmorrhage, without feeling that it is more dogmatic than rational. An individual who has had hæmorrhage into the brain and recovered from the first shock, is, as far as the effused blood is concerned, precisely in the position of a person who has ecchymosis. The blood has to be absorbed in both cases by a slow process; and as we cannot expedite the removal of blood effused by a bruise by the use of mercury, so we ought not to expect to do it in another part when effused from a different cause. If apoplexy is to be warded off, and if hemiplegia is to be cured, the only rational plan to follow seems to be, to consider the powers of the system and to act accordingly. I beg to give the following cases as contributions to medical science, with a view to assisting others to work out the same problems on which I am myself engaged.

Case 1. Mrs. J., aged 45, stout and florid, and a tolerably large feeder, complained of pain in the head, confusion, and frequent attacks of vertigo. These came on from walking up hill or upstairs, from suddenly turning the head, or moving round a corner. She had never fainted. The bowels were costive; the tongue clean; pulse 80, natural. Quiet and tonics were recommended; and nothing more. Ten years have since elapsed, and she had a great many repetitions of the same set of symptoms; but experience has shown that the attacks

resulted from mental agitation only, and that they are always favoured by debility.

Case II. Mr. B., aged 40, of short stout build, florid complexion, and of somewhat intemperate habits, consulted me respecting threatenings of apoplexy, from which he had suffered some months. I ascertained that both his father and grandfather had died of that disease at an early age—45 and 50; and that he himself was subject to vertigo, confusion of the head, and double vision; and that occasionally the room in which he was lying appeared to be turning round always in the same direction. He frequently had headache, bilious vomiting, and transient loss of memory. His pulse was regular, 70, but rather feeble. The tongue was curiously chapped, and its mucous membrane thickened. The bowels were regular; the appetite was indifferent; and digestion imperfect. I ascertained that he was in an exciting business; that he was unable to eat much at breakfast, but was in the habit of taking stimulants from time to time subsequently to enable him to get through the day till dinner. He then ate sparingly, and took very little wine. His attacks came on usually in the afternoon, but were commonly relieved by lying down, by vomiting of bile, or by brandy and water. At the time of my visit, he had had a more severe one than usual; he was unable to sit up without vertigo, and even when lying down the room seemed to be turning. The pupils of the eye were large; and a close attention detected both eyeballs in constant circular motion on their axis—a movement of which the patient was unconscious. The sounds of the heart were natural, but very feeble. I considered the case to be one of mental agitation and worry, combined with a weak and possibly a fatty heart. I recommended tonics and a generous diet, and had the satisfaction of soon recognising a great improvement. A week or two afterwards, a relative of his informed me that he had suspended payment, which fully accounted for the symptoms which I had attributed to mental emotion.

Case III. Miss B., aged 30, came under my care for extremely disagreeable symptoms, which led her to anticipate a more serious attack. She suffered from distressing vertigo, and had on several occasions nearly fallen down stairs; she had when mounting them frequently to stay and rest for support on the banisters. She had singing noises in her ears, confusion of head, and loss of memory occasionally; but what gave her most trouble was, that when reading, writing, or drawing, she would suddenly lose her vision. She could see the first half of a word, but not the last; half a picture, but not the whole. This would last for an hour, and then go away. The animal functions were all correct. She was extremely active and of strong good sense; but she had exhausted herself by nursing for five weeks with unremitting attention, both by day and night, a mother, to whom she was devotedly attached. Her rest had been of course greatly curtailed; and her appetite had failed entirely. Fortunately, her charge had now improved in health, and her anxieties diminished. I readily induced her to take some quinine, and at least three glasses of wine daily; and was soon gratified to find that all her troublesome symptoms had left her. But it was not without interest that I learned that on one occasion she had gone shopping without taking wine or other refreshment. She was out for a long time; and when she returned home and mounted the stairs to her own room, she had the sensation of an opaque bar placed right across the eye. This went away as soon as she had lunched and had her wine. Singularly enough, her mother, whom she had been nursing so long, complained of a similar symptom the first day she ventured out for a drive—the exertion proving to be beyond her strength. It soon went off, however.

Case IV. Mr. C., aged 47, of red bloated countenance, and weighing nearly twenty stone, with a harsh husky voice, was supposed to be threatened with apoplexy. He was very drowsy, slept heavily, and snored almost as if comatose. There was mental confusion and headache. For the last week he had been on low diet, and had taken aperients, but was getting steadily worse. The pulse was feeble; the heart's action weak. He was ordered a generous diet and full doses of liquor potassæ. He felt relief in half an hour after the medicine, and was as well as usual in four days.

Case V. Mrs. H., aged 44, of stout build, and occasionally intemperate, had been seized one evening with an alarming apoplectic seizure. She had had a vigorous cathartic on the previous night, which had operated freely during the day. She was taking a walk at the moment of attack. The case was deemed hopeless by those who were called in; but the husband gave her some brandy and water, and she rapidly recovered. I saw her next day, in consultation. There was no paralysis; the head was clear; she had no pain; the pulse was feeble; the heart weak. As she was a devotee of purgatives, a very mild one was agreed upon, but it was to be combined with bitter tonics. I did not see her again; but in three weeks I heard of her. The purging plan had been pushed with vigour; the tonic had languished. A second attack of apoplexy followed, and the patient died.

Case VI. Mrs. B., aged 65, of pallid complexion and spare frame, consulted me for confusion and dizziness in the head, and such an amount of thickness of speech, that it was with difficulty I could understand her. There was difficulty in protruding the tongue, but no other sign of paralysis; the pulse was quiet, about 80; and the bowels were regular. She was strictly temperate. As this was her first attack, and she had a great dread of apoplexy, it unnerved her considerably. I prescribed quiet and a stimulating tonic. She soon recovered. Since then she has had many similar seizures, but is always able to trace them to mental emotion or bodily fatigue. She has recently borne a severe illness, in which she has taken large quantities of brandy, opium, and wine, without any recurrence of the cerebral symptoms.

Case VII. Mr. I., aged 50, complained of pain and confusion in the head, pain in the right forearm, and inability to read or write more than a few lines, without all the letters appearing to run into one. He had previously had two attacks of regular gout, and was in the habit of living somewhat generously. He was of stout build and great activity, but the complexion was pallid. The pulse was 60; the appetite indifferent; the bowels were regular; his sleep was disturbed. I ascertained that he was much harassed by business peculiarly distressing to his feelings, and that he was depressed in consequence. I found out accidentally that the confusion in reading or writing was due to the want of spectacles. The pain in the right arm I could not explain. The treatment was as strengthening as possible; and, as the mental emotion diminished, the symptoms subsided too. Eight years have since elapsed, without any return.

Case VIII. John S., aged 45, a seaman, of robust appearance, was admitted into the Liverpool Northern Hospital with hemiplegia. He was unable to articulate more than one or two words, but seemed to understand what was said to him. The face was drawn slightly; but the loss of power in the arm and leg was complete. He was treated simply by a solution of chloric ether as a gentle stimulant, and full diet. No other medicine was given. He rapidly and steadily recovered; in a week he was able to converse and move the leg; in a month he could walk, and move the finger; and at the end of six months he could raise his arm above his head, and walk with an almost imperceptible limp. He told us that prior to his attack, he had had pain in the head for six weeks; that he had been taken suddenly by the fit, and had been perfectly unconscious for nearly two days. There was no disease of the heart. From the first day after his admission, improvement was perceptible and continuous. I have never seen a bad case in which it was so rapid and complete.

Case IX. James S., aged 35, a seaman, was admitted into the hospital with hemiplegia and loss of speech. We got no history with him, beyond that he had just come from sea, and had been ill some time. He looked very much "out of condition". He was ordered aperients every three or four days, and five grains of quinine three times a day, with generous diet and wine. In four days he was able to tell us that he had been much exposed to cold and wet, and had had very insufficient food. The attack had come on suddenly; but he had not been insensible at any time. In ten days the paralysis had left him, and he was able to walk about the wards. In a few days more he went away of his own accord. There was no cardiac disease.

Case X. A German seaman was brought into the hospital, with whom I was unable to converse. The junior house-surgeon, who spoke German, informed me that the man could only say a few words, with which he answered all questions. He seemed a strong burly man, with a coarse deep red face, aged about 45 or 50. He was hemiplegic, but his face was not drawn. The pulse was natural. He looked, however, as if he had met with much hard usage, and I ordered him quinine and occasional aperients, as in the former case, and full diet, with wine. In a few days he spoke intelligibly; and at the end of the week was able to walk about the ward. In three weeks from his admission, he was discharged cured.

Case XI. William J., aged 35, an engineer, was admitted with incomplete hemiplegia. He was a strong built large

boned man, but had a pallid complexion and dilated pupil. His account of himself was, that he had been working much amongst machinery, and had been exposed for hours together to cold wind, this chiefly on the affected side—the left. The attack had commenced a fortnight ago, with a feeling of numbness running up the arm; and when he awoke the next day, he found himself unable to stand, or to move the left hand. The heart was healthy, and the pulse natural. From deference to "authorities", I commenced the treatment with mercury, but with strict directions to the house-surgeon to administer quinine if the medicine should seem to have a depressing effect. In two days, I found the first indication of improvement. The mercury, a grain of calomel, had acted strongly on the bowels, and depressed him considerably, and the dose administered was then reduced to half a grain twice a day; quinine had at once been adopted. The mercurial was still further diminished the next day; the quinine continued, and wine prescribed; in two days more the mouth was faintly sore, and motion had returned to the hand. Up to this time, about five grains only of calomel, combined with opium, had been taken. It was now entirely suspended, and in three days more the gripe of the left hand was nearly as strong as that of the right. The tonics were continued, and in a few days more he was able to leave the house.

Case xii. John C., aged 40, labourer, addicted much to intoxication, was admitted into the Northern Hospital, on November 1st, under the care of one of my colleagues, with a stab-wound at the outer angle of the scapula. It had penetrated through the bone and penetrated the lung. There was considerable external bleeding and a little hæmoptysis. Next day he was found to have lost the use of the arm on the same side. As it was clear that the wound could not have injured any nerves supplying the arm, the paralysis was attributed to loss of blood. No treatment was adopted specially directed to the loss of power, as there was no indication to point out the condition of the nervous system on which the phenomena depended. In two days, sufficient strength had returned to the arm to enable him to move the fingers close to the hand and flex the arm. At this period he began to perspire freely, and to have other appearances common to men who have drunk hard and lost their usual stimulus. There were no signs of delirium tremens from the first. Alcoholic stimulants were now used, and the patient has steadily recovered up to the present time.

Remarks. It is almost superfluous to add any comments on the above cases, inasmuch as they speak for themselves. I may be asked, however, the grounds on which I have based my views, and why I eschew mercury, blisters, purgation, cupping, and the like, in the so-called threatenings of apoplexy, and the actual occurrence of hemiplegia. I am not able to add paraplegia to the category: for I have only had one case under my care recently, and that terminated fatally, from the supervention of acute disease. The inquiry naturally divides itself into—the condition of the brain at the time of the threatened apoplexy; and the condition of the brain when hemiplegia is actually present.

First of all: What is the probable condition of the brain at the time of the threatened apoplexy? A moment's reflection will show that this condition cannot be an uniform one; for there are no fewer than three well marked forms of the disease. One, in which there is actual effusion of blood; another, in which there is simple softening; and a third, in which there is no perceptible alteration recognised after death. In consequence of the great uncertainty of the real condition of the brain during the attack in the last category of cases, we will leave them out of our inquiry.

We inquire, first, into the probable condition of the brain prior to cerebral hæmorrhage. We can only approximately discover this, and by analogical reasoning solely.

In what complaints can we find an analogue to cerebral hæmorrhage? We find it in the hæmoptysis of the consumptive, and the epistaxis of the aged. What do we know respecting these? That they depend upon an altered condition of the blood-vessels, and possibly of the blood. They are commonly heralded by some or other mark of debility. A microscopic examination of the capillaries shows that they are changed in a very remarkable manner: either their walls are studded with oil-globules, and they are in a state of fatty degeneration, or they are thickened with some semitransparent material, which a little manipulation proves to be very brittle. A similar change is to be met with in the capillaries of the brain in all subjects who are prone to or have had apoplexy.

When fatty degeneration takes place, it fortunately happens that the vessels are usually plugged up entirely by the oil-globules distending their walls. Where this is not the case, as soon as the elastic and resistant wall is replaced by non-resisting oil, it gives way, and allows an exit to the blood. The rupture of course will be favoured by a great stress being laid on the vessel by increased action of the heart or excessive mental emotion; but it will take place equally when there is no greater force than ordinary. This is evidently true; for we find in practice, that while some cases of apoplexy follow some strong effort, others come on when the individual is perfectly quiet. An analogous phenomenon occurs when the capillaries undergo what I will designate, for want of a better word, "brittle" degeneration; the walls give way after a time, either under the natural strain or upon some forcible exertion.

Cerebral hæmorrhage primarily depends, therefore, upon a certain condition of the capillary vessels in the brain. Its extent depends upon the comparative size of the canal which has given way, and on the area of the rent.

It has, however, been remarked, that cerebral hæmorrhage rarely if ever occurs without a certain amount of softening of the brain; and still further, that the same classes of persons are equally obnoxious to both complaints; that there is, in fact, a very close relationship between the two diseases.

We again turn to the microscope to elucidate the subject. Taking the capillaries from a softened brain, we see the same changes that we found in cases of apoplexy: some are blocked up with fatty matter; others are greatly diminished in calibre by the brittle degeneration; some are entirely impervious. A similar change takes place in the capillaries of the lower extremities in elderly people, and is the cause of senile gangrene. The natural result of these alterations is a diminished flow of blood through the vessels; the further consequence of this is deficient nutrition; and this in the brain at least is synonymous with softening. But another cause of deficient local circulation may be present. Some of the large arteries are invariably atheromatous in these cases; and a small atheromatous fragment is occasionally carried into the circulation only to be arrested in some smaller artery, which it completely plugs up.

The changes to which I have alluded are common in phthisis; but they are still more common in old age. They are attended not only with atheromatous arteries, but also with cardiac debility. The degeneration which we have seen in the vessels is also to be met with in the muscular fibres of the heart. Coincident, then, with diminished calibre of the arteries and capillaries, we have diminished power in the heart; and the two combined, materially modify the circulation through the brain.

A diminished supply of blood to the brain will produce symptoms similar to those which are commonly (though probably incorrectly) attributed to an excess of that fluid.

Our next inquiry must be into the causes that produce that change in the capillaries, upon which so much depends. We find it, in phthisical subjects, in men who have deteriorated their constitutions by hard living, and in elderly people whose vital power is low. It is not an invariable product of age, but occurs chiefly in those who have inherited disease. We do not find it in the robust and strong; it is rare in the country—it is common in the town. Whatever, then, the real cause may be, it is unquestionably to be classed amongst debilitating agencies.

We do not know how rapidly it is possible for debilitating agencies to bring about the degenerations we have described; but there is reason to believe that a very short time suffices. We have met with instances in which the hair has turned grey in one single night from intense mental agony. We have cases on record in which fright has produced almost instant death from its operation on the contractile power of the heart. We have met with instances in which a heart has ruptured from excessive grief—the fibres, probably, in some part, having been previously converted into fat. But these are approximative examples only; and we must be content with them as corroborating proofs, that great debility will encourage degeneration.

If then we find in any of our patients evidences of debility, or known that they have been exposed to any deteriorating agencies; if we find signs of a weak heart and languid circulation; it stands to reason that our efforts should be directed to arrest the degenerating processes. This can only be done through the medium of the constitutional or vital forces, and every means is to be adopted to improve the quality of these. Everything that depresses them naturally tends to foster the

progress of the dangerous alteration already begun; and we can thus understand how depletion or venesection may convert a threatening of apoplexy into a real attack, and how it is warded off by quinine and tonics. Of course, under these circumstances, it is of the utmost importance that no unusual strain shall be laid upon the weakened capillaries; and both bodily and mental exertions must be avoided.

It is an interesting question to consider how far vessels which have become degenerate may recover themselves. We cannot answer this satisfactorily; but we know that if they do, it must be through the medium of the systemic powers, and that these cannot act with effect as long as the individual is in a depressed condition. Supposing, again, that we have evidence of cerebral hæmorrhage having taken place, how is the blood to be taken up again? It is clear from the nature of things that it will not return into the vessels again by the same route it left them. It can only be taken up then by the ordinary means that are adopted by nature elsewhere. A clot in the brain is analogous to ecchymosis in the skin, and follows much the same laws. A bruise is readily recovered from in youth, but not so in old age: and, as we often have occasion to remark, the phthisical and the aged have far more extensive ecchymosis from a given injury than the robust and strong. The extent of the effusion evidently depends on more extensive rupture of vessels (most probably caused by degeneration) in the one than in the other. An apoplectic clot then must be taken up by the surrounding healthy brain; but it must be borne in mind that the surrounding brain is probably not healthy—its vessels are degenerate in the same manner as those which gave way, and are themselves obnoxious to be completely closed. The circulation in them, necessarily languid from their diminished calibre, may now be arrested altogether by the *squeezing effect* of the effused blood. This would probably occur constantly, if the heart were not able to propel the blood through them in spite of the obstacle. But when the heart is enfeebled at the same time that the vessels are compressed, however slightly, circulation through the parts surrounding the clot ceases, and the brain softens and dies. Anything, therefore, that depresses the system and diminishes the power of the heart, has in reality a direct tendency to produce softening around the clot; nor would it be difficult to adduce cases from Dr. Abercrombie's works, and those of other systematic writers, in which softening round the clot has been brought on by the means used with the intention of preventing such a catastrophe. (See a case given in Dr. Watson's *Practice of Medicine*, vol. i, p. 511; third edition.)

The effect of mercury, which is very commonly given with a view to "stimulate the absorbents", is generally prejudicial in cases of cerebral hæmorrhage. That it should ever be administered by any one who had read the following observation, is almost incredible. Dr. Porter remarks:—"Almost all the aged people treated with mercury for syphilis have, according to my observation, died shortly after of hæmoptysis or apoplexy. Nor are such casualties confined to the aged; for I have seen several instances of young persons under similar circumstances being seized with hæmoptysis, and dying rapidly of consumption." (*Ranking's Abstract*, vol. v, p. 66.)

Many practitioners do not push calomel far in cases of apoplexy, and use it in simply aperient or alterative doses; but even this is prejudicial, unless there is some special reason for acting on the bowels, and the patient is buoyed up by tonics and generous diet. Few can take, even when in health, a dose of calomel or blue pill without feeling low and good for nothing the next day. The same occurs in the sick; but as they are for the most part in the recumbent posture, it is not equally noticed. Surely, if in the main it is undesirable to depress a patient with apoplexy by such powerful means as bleeding, it ought to be considered undesirable to depress him by more gentle plans. It would sound absurd for a thief to say he had not abstracted a sovereign, because he had only taken it by sixpence at a time. It is true, that a pilferer may abstract many a shilling without being found out, who would be detected at once if he took a five-pound note; and so many a doctor abstracts by driblets an amount of strength which he dare not take at once. The robbery would be too patent both to himself and the patient.

We consider then that a frequent use of mercury is a depressing agent; and that its chief value is when from a combination of favourable circumstances, it promotes the appetite and digestion. Purgatives are obnoxious to the same remarks. Low diet, or an abstinence from a moderate amount of accustomed stimulants, is equally to be deprecated as incompatible with a sustentation of the natural vital or restorative powers.

In all things, the motto of the *medicus* should be:—"Be nature's handmaid—not her tyrant."

P.S.—I may state that the foregoing remarks upon the capillaries are, I believe, original; and that I hope shortly to give to the profession a history of "atheroma in arteries, and the important bearings it has upon pathology and practice."

FURTHER REMARKS ON THE ANALYSIS OF UREA IN URINE FOR CLINICAL PURPOSES.

By J. L. W. Thudichum, M.D.

In a former article on this subject, I endeavoured to define the principles upon which the analysis of urea in urine for clinical purposes was to be based, in order to insure its utility for pathology and patients. I also compared the usefulness to the practitioner of the proceedings for analysing urea by Liebig and Davy. I described some precautions which I had taken for the purpose of making Davy's method more accurate; and then contrasted with these principles the proceeding of Dr. Handfield Jones for analysing urea in urine. It was singular that Dr. Jones should have made use of a method, and termed it a modification of that proposed by Dr. Davy, when the latter author had especially declared this proceeding (upon which he only calculates as the result of accident, not of design), to violate the integrity of his analysis.

From a knowledge, literary and experimental, of the quantity of urea discharged in given times by healthy individuals and by individuals labouring under fever, I came to the conclusion that the quantities of urea alleged to have been discharged by Dr. H. Jones's patients were far below the normal quantities in health, and therefore were opposed to all other analyses on this point, which coincided in finding a larger quantity of urea discharged by fever patients than by healthy persons during equal times. This was ascertained by a comparison of figures, and accounted for by the analytical proceeding. If any reason for condemning the modification was wanted, it has been supplied by the five careful experiments detailed by Dr. Jones in his Supplement to Observations on Elimination in Fever (British Medical Journal, Oct. 3rd, 1857, p. 830.)

In the first of these experiments, one drachm of a certain urine, with diluted liquor sodæ chlorinatæ, yielded 1·29 cubic inch of nitrogen. (I suppose the dilution was effected with an equal bulk of water, as in Dr. Jones's first experiments; but he has not stated the proportions in which liquor and water were mixed.) One drachm, with 1·6 cubic inch of mercury (and liquor sodæ chlorinatæ, I suppose, so as to imitate Dr. Davy's proceeding, from which I further conclude that the liquor was undiluted) yielded 1·52 cubic inch of nitrogen; one drachm, with undiluted liquor sodæ chlorinatæ, yielded 2·1 cubic inches.

If any one of these three results, or all three, are quite unimpeachable, the following conclusion becomes unavoidable. That Dr. Jones's original analysis, with his modification, yielded little more than one-half of the quantity of urea that can be ascertained, by liquor sodæ chlorinatæ, to be present in a drachm of urine. I say little more than half; for 1·29 is little more than the half of 2·1. Dr. Jones therefore affords experimental proof, that I am quite correct in asserting (p. 789 of this Journal) that in his analysis the loss of nitrogen "*must amount almost to one-half of the nitrogen actually contained.*" Dr. Jones acknowledges having arrived at a similar conclusion, for he says (Supplement, p. 830): "The first experiment shows that with diluted liquor sodæ chlorinatæ a less amount of gas is evolved than in the other cases; a like result was obtained in some other trials."

Dr. Jones does not rest satisfied with this result of his analysis; and having accidentally found more nitrogen by an experiment without mercury than was obtained from an equal quantity of urine with the use of mercury, he has performed more analyses, the results of which are intended to show, "that when undiluted liquor sodæ chlorinatæ alone is employed, the amount of nitrogen disengaged is above, or very nearly equal to that which is obtained, when mercury and liquor sodæ chlorinatæ are used in Dr. Davy's original way." This result would drive us to the conclusion (provided again that the experiments were unimpeachable), that Dr. Davy's method is so bad an analytical proceeding, as to cause large quantities of nitrogen to be lost thereby. A comparison of the figures in the following table will make the apparent loss conspicuous.

Cubic inches of nitrogen obtained by Dr. Jones from one ounce of urine.

	EXPERIMENT.				
	1	2	3	4	5
I. By Dr. Davy's method: Cubic inches of mercury used	1.6	1.7	1.7	1.7	1.89
Cubic inches of nitrogen obtained.....	1.52	1.64	1.8	1.59	1.65
II. By liquor sodæ chlorinatæ alone: Cubic inches of nitrogen obtained.....	2.1	1.6	1.9	1.61	2.3
Loss (—) or excess (+) by Dr. Davy's method..	—0.58	+0.04	?	—0.02	—0.65

As, in the third experiment, the amount of mercury used was too small, it must be condemned. In the second experiment, more nitrogen is obtained by Dr. Davy's method than by the modification. There remain, therefore, three experiments, in which more nitrogen was found by the modification than by Dr. Davy's original way.

Dr. Jones does not account for such an extraordinary result. If a drachm of urine contains a sufficient amount of nitrogen, to yield, after complete decomposition by liquor sodæ chlorinatæ, 2·1 cubic inches of the gas, this amount of gas must necessarily be obtained from another drachm of the same urine, if liquor sodæ chlorinatæ and urine are brought together over mercury. Common sense demands this result, and the necessity of this result constitutes the value of Dr. Davy's proceeding. How then is it possible to find more nitrogen by another proceeding, which, under all circumstances, must be accompanied by a loss of mixture of liquor and urine, and of some gas contained therein? I may be permitted to put my construction upon these strange but necessary facts.

In none of his analyses has Dr. Jones proved that the whole amount of urea was actually decomposed. The omission of this caution (which consists in the addition to the mixture in the tube of a new quantity of liquor sodæ chlorinatæ, to see whether any reaction does yet take place, or not, in which latter case the decomposition may be considered to be perfect) greatly diminishes the value of these proceedings. Dr. Jones appears satisfied in having taken more of the decomposing liquor than Dr. Davy prescribes to be taken. This precaution in no case amounts to evidence that enough of the liquor has been used. Evidence is only afforded by the absence of any reaction whatsoever on the addition to the mixture of a new quantity of liquor. This evidence is absolutely necessary for any demonstration of quantity. If a hundred drachms of liquor sodæ chlorinatæ for one drachm of urine had been used, this test would still be necessary for demonstration. The correctness of this proposition will be admitted by everybody.

In the analyses performed by Dr. Jones without mercury, the drachm of urine was mixed with so much more liquor as corresponded to the bulk of the mercury used in the parallel series performed with mercury; namely, to the rough average of 1·7 cubic inch. The urine in the experiments without mercury was therefore mixed with a very much larger proportion of the decomposing liquor. That amount of mixture which eventually was driven out had time to evolve a certain portion of its nitrogen before it left the tube; the rest of the urea was mixed with a larger proportion of liquor than the urea in the tubes with mercury; it was, therefore, more completely decomposed, and yielded more gas, than the urea in the tubes with mercury, which was not entirely decomposed. For, if it had been entirely decomposed, nitrogen to the same amount *at least* as in the experiments without mercury, must, by natural necessity, by the laws of matter, by all conclusions of reason and common sense, have been obtained.

I did not enter upon a criticism of Dr. Jones's determinations of uric acid. But as Dr. Jones challenges proof that his determinations of uric acid are not accurate, I must well consent to give the proof.

Case I. Uric acid on Oct. 10th, 23·76 grains (in 24 hours). Ditto Oct. 23rd, 4·20 grains. Much uric acid was deposited. This deposit should have been added to the 4·20 grains weighed, when the true amount of uric acid from 24 hours would have been apparent. As the observation stands, it is clearly inaccurate.

Uric acid on Nov. 14th. "A trace. There was besides a copious precipitate of uric acid, which fell down spontaneously, and could not be estimated." Dr. Jones had clearly the idea, that a deposit of uric acid had no connection with the uric acid in solution, and must not be added to it. This error is shared by many who assume a deposit to be a sign of excess. The observation on Oct. 23rd may *be turned* to use, as demonstrating that a deposit is a part of the usual quantity of uric acid in the urine.

Passing Case II, which Dr. Jones himself questions at the end of Case III, we find the proceeding regarding uric acid repeated in Case III.

December 9th. Urine of twenty-four hours had a whity deposit, and yielded a total of 5·88 grains of uric acid. In the deposit were masses of uric acid, which were not comprised in the quantity given. If they had been comprised, and had been recovered from the granular and homogeneous casts, from the renal epithelium, and blood, I am quite sure Dr. Jones would have stated so, and how it had been accomplished. The determination in this case also is of no use, because a part of the acid was lost undetermined. The same occurs on December 19th, in Case IV. Cases V, VI, and VII, offer other features, which interfere with the correctness of the analyses for uric acid. The reader, on comparing the quantities of uric acid found in the urine of the respective days, will find that they stand in an inverse proportion to the quantities of urine.

Date.	Urine (ounces).	Uric acid (grains).
Case IV.—Nov. 5th	12	1·56
„ Nov. 27th	74	1·11
„ Dec. 19th	66	3·96, and a good deal of spontaneous deposit.
Case V.—Dec. 2nd	51	1·02
„ Jan. 8th	82	a trace
Case VI.—Dec. 18th	44	2·64
„ Jan. 5th	79	a trace
Case VII.—July 9th	38	1·9
„ Aug. 1st	29	8·245

The largest quantities of urine in twenty-four hours—82 and 79 oz.—yielded only traces of uric acid: the smaller quantities yielded more uric acid, but still very small amounts. It has occurred to Dr. Jones, what occurs to beginners, and what may be learned from books; namely, that dilute urine does not give up its uric acid in a solid state, when treated with acids for the purpose. Dr. Jones forgot, or omitted, to concentrate the dilute urine before adding the acid for the precipitation of uric acid; and thus he only obtained traces where he would probably have found large quantities if the proper mode of analysing had been had recourse to. It will thus be apparent that it was upon the reasoning from experiment and the knowledge of literature that I questioned Dr. Jones's determination of uric acid.

But what am I to say of the assertion, that no boiling is necessary with the soda solution used for determining the amount of free acid in the urine, to obtain a neutral solution? Chemists are in the habit of using a solution of caustic soda, in order to avoid the difficulty of the free carbonic acid, which requires protracted boiling in order to be entirely removed. They direct that even the fluids treated with this caustic soda should be heated, in order to remove the trace of carbonic acid which adheres to this solution with so much pertinacity: and, as I suppose that Dr. Jones ascertains neutrality or acidity of urine by means of litmus papers, it is difficult to understand how his litmus can indicate neutrality as long as any free carbonic acid is contained in the solution, which, in the experiments of other chemists, has a faint though decidedly acid reaction. Let me refer Dr. Jones to authorities in alkalimetrical analyses, and quote Kersting's article in the *Annalen der Chem. und Pharm.*, Bd. xciv, p. 112, where the behaviour of carbonic acid and litmus is fully described; or to Mohr's *Lehrbuch der Chem. Analyt. Titrirmethode*, p. 102, and Supplement to p. 102 at p. 350.

Dr. Jones again asserts that more gas is generated in the upper part of the tube than in the lower part. He only meets my objection with a denial. I will, therefore, explain his erroneous impression. Suppose the column of fluid in the tube to be divided into horizontal layers, each of the thickness of the diameter of one of the bubbles of nitrogen; and suppose an equal reaction to take place in all parts of the tube; that is to say, equal numbers of equal bubbles of nitrogen to be evolved by all layers in equal times, and to rise at an equal rate (which they do not, rising quicker in the higher than in the lower strata), then the following condition would take place: the bubbles

from the lowest stratum would at the second stratum be joined by the bubbles formed here, and at the third stratum by a third set of bubbles, and at the hundredth stratum there would be a set of bubbles together generated in a hundred strata. Thus, in the hundredth stratum, there would be a hundred times as many bubbles as in the lowest stratum; and, if the process went on uninterruptedly, these relative numbers would be constantly present. The phenomenon is best demonstrated on champagne; and the regular followers of science could not resist even my explanation derived from so plausible a material. Now, if Dr. Jones will try the experiment upon a bottle, the last glass will quite convince him of the correctness of my explanation. It requires repeated examination to find that the many bubbles in the upper strata are not all generated there, but have only risen to that position from lower spheres. Dr. Jones is evidently under a misconception when he assumes the drachm of urine not to be thoroughly mixed; for, on the addition of liquor to the drachm of urine, the liquor must sink to the bottom, as being of the highest specific gravity;* and the urine must rise, and permit all subsequent portions of liquor to pass through its substance. And then the tube is inverted, and, should any urine be left unmixed, it would have to go to the top again; hereby, and by the rapid evolution of gas, the fluid is brought into such a commotion that it must be most intimately mixed. Indeed, if neither the different specific gravities nor the commotion caused by the gas did effect an intimate mixture, the mere act of pouring ten, or twenty, or more parts of the liquor down a long tube, to one part of urine, would speedily effect a mixture; and, if that mixture was not effected in the manner I have described, it could not be effected at all, because, if the urine could ever be at the top of a column of the liquor, it must remain there, in virtue of its lower specific gravity, and could not on any account descend in the manner described by Dr. Jones.

I have made only a limited number of analyses by Dr. Davy's method, but never found any inconvenience from the mercury, such as Dr. Jones asserts that he has met with. A friend of mine, who has made many hundred analyses in this way, never observed the mercury being driven violently out and scattered about, and cannot account for this singular mishap to Dr. Jones, which caused him to adopt his first modification.

I hope Dr. Jones will continue his researches with improved methods. He has rare opportunities, and, being a pathologist, might turn them to good account. The fact of such a man applying himself to chemical analysis is an illustration of the turn which medicine is taking. We have had a great deal of pure chemistry: what we want now is chemistry applied. Applied to medicine, chemistry can only be by the profession itself, otherwise there will be no end of conflicts. If, then, the older members of the profession do not find application to quantitative analysis quite easy, they must not be astonished at it, for it took their junior colleagues years of practical study in the laboratory, and not a little reading and headwork, to attain the little which they can call their own. That ground it is their duty carefully to weed and cultivate, in order to come up to the expectations of those well versed in science, who assert that, in a short time, no physician would be able to give an opinion unless he be a microscopist and a chemist.

CASE OF FEMORAL HERNIA.

By Edward A. Brown, Esq., Surgeon, Eastwood.

At 12 o'clock on the night of Friday, June 27th, I was summoned to attend Mrs. G., a near neighbour residing at Eastwood, suffering from strangulated femoral hernia, brought on by sudden and unusual exertion. The symptoms were well marked and severe. The pulse was irritable, about 90. There were anxiety of countenance, vomiting of bile and mucus, and distressing pain referred over the entire abdomen. She was placed in the usual position, with the thigh of the affected side rolled inwards towards the opposite one; and the taxis was applied in the direction downwards, backwards, and upwards, for twenty minutes, ineffectually. An ordinary stimulating enema was then ordered; effervescing medicine, with hydrocyanic acid and an opiate, were prescribed; and the case was left till the following morning.

June 28th, 8 A.M. There was no improvement, though the symptoms were somewhat masked by the anodyne. There had been no evacuation by the bowels. She had obstinate vomiting, increasing pain, anxious and distressed countenance. The taxis was again employed, with the use of warm bath, unsuccessfully, for twenty-five minutes, this being as long as the tenderness of the sac would admit of. Continue medicines.

2 P.M. Reduction was again ineffectually attempted.

8 P.M. There was no improvement; the symptoms were becoming aggravated. The taxis was used half an hour, under the influence of chloroform, unsuccessfully. The patient was left for the night.

June 29th, 8 A.M. There was constant stercoraceous vomiting, excessive pain and dragging all over the abdomen, eructation, hiccough, and tympanitis. The bowels had not acted; the pulse was hard, wiry, 140. It being now high time to afford relief if possible, the operation was proposed, and acceded to.

There being only an old woman and myself present, the inconvenience of giving chloroform and operating can readily be conceived, especially in a cramped up chamber, and with bad light. The patient, moreover, being naturally weakly, and further reduced by suffering, it was not wise to overdo the administration of chloroform; the consequence was, that she occasionally came to, which delayed the steps of the operation. Making the usual incisions, and dividing the several coverings down to the sac, I proceeded at once to open it, numerous adhesions around quite preventing it from being returned. I found the neck tightly embraced; the bowel was of a chocolate colour, and the vessels circulating on its surface were greatly congested. On dividing upwards, and very slightly inwards, a portion of Poupart's ligament, the return of the hernia could not be effected; and the stricture was evidently caused by Gimbernat's ligament. The bowel was also punctured with a grooved needle, and the flatus expelled to afford relief, but without effect. On carefully exploring the opening with the finger-end, distinct pulsation could be felt, from an irregular distribution of the obturatrix artery surrounding the inner part of the neck of the sac; and, being indisposed to risk its division, having oiled the forefinger, I gradually dilated the opening, and was pleased to find the method quite successful, the bowel being returned without much difficulty.

I ordered an enema of warm gruel, a dose of castor oil, and a mild mercurial purge. The bowels were freely acted on. Her symptoms were materially relieved, though peritonitis supervened: this, however, fortunately gave way readily to treatment, and everything progressed to a favourable issue.

November 3rd. Not the slightest inconvenience has arisen since the operation; and she speaks of the affected side being stronger and more comfortable than the opposite one. I have not the least doubt of the obliteration of the weakened aperture. She has for a considerable time been taking her ordinary food, and follows her ordinary avocation, being quite well. One of Huxley's elastic abdominal belts, with air-pad, has been supplied, and affords great support and comfort.

Remarks. The process of mechanical dilatation acted in this case most favourably.

1. The risk of wounding the obturatrix artery was removed.

2. The part itself was not so weakened subsequently as by division with the knife.

3. Although, if too roughly handled, the gut might be bruised, in the absence of this, inflammatory action may take place around the neck of the sac, causing effusion of lymph and a repair of the otherwise weak points of the parietes. In the present case, I fully believe this has actually occurred.

THE TREATMENT OF ACUTE RHEUMATISM.

By Henry William Fuller, M.D.Cantab, F.R.C.P., Physician to St. George's Hospital.

Dr. Inman's article on the treatment of acute rheumatism, inserted in our Journal on October 24th, demands a passing notice. Its quotations are incorrect, its statements of a strangely perplexing nature, and its conclusions at variance with the result of observations in London, Liverpool, and elsewhere.

And, firstly, as to Dr. Inman's quotations, or rather the statements and opinions he puts into my mouth. "Dr. Fuller," he says, "gives as the average duration of his cases *five weeks*." How far this quotation is consistent with accuracy may be

* 1·034, according to the "Dublin Pharmacopœia". The "London Pharmacopœia" gives no determined specific gravity of its preparation. The liquor, obtained from Mr. Morson, of Southampton Row, I found to have the specific gravity of 1·043.

judged by the following passages from my work on Rheumatism. "My own observation has led me to believe that even when unattended by any internal affection, the disease, under *ordinary* methods of treatment, endures from four to five weeks. Of the 246 cases admitted into St. George's Hospital under the care of the physicians during the time I held the office of Medical Registrar, the great majority were convalescent about the end of the fourth or the beginning of the fifth week from the commencement of the attack, and were ready to leave the Hospital about the end of the sixth week; and of 23 other cases, part of which I noted in the Hôtel Dieu at Paris, and part at Addenbrooke's Hospital, at Cambridge, considerably above one half were of about the same duration. Experience, however, has taught me to believe that remedial agents are capable of still further shortening its duration; and to such an extent does this hold good, that as I hope to show *the average duration of an uncomplicated attack may be reduced, by judicious treatment, from a month or five weeks to ten days or a fortnight.*" (pp. 69 and 70, Second Edition). And again at p. 137, after analysing the result of 85 cases, treated after the plan I have recommended, I state, "The articular inflammation subsided altogether within twenty-four hours in 2 instances; within forty-eight hours in 10 instances; within three days in 17 instances; within four days in 12 instances; within five days in 9 instances; within seven days in 6 instances; and in the remaining 12, although it did not wholly subside until a later period, yet it did not display any symptoms of activity after the fourth day."

Dr. Inman's next assertion is: "Dr. Fuller states that he has found those cases progress the most favourably in which the sour smelling perspirations are most abundant." Now this crude statement entirely misrepresents my views on the subject. Those cases, of course, in which profuse sour-smelling perspirations occur, are those which are most severe, and therefore less readily brought under the influence of remedies; but in discussing the effect of the profuse perspirations which do occur in the most severe forms of the disease, and which alone I term "acute rheumatism" or "rheumatic fever", I state, as the result of my observation of the disease under different modes of treatment (p. 65), "The cases of rheumatic fever which have progressed most favourably, which, though severe in their local and general symptoms, have run their course in a fortnight or three weeks, and have left the patient free from pain, have been those accompanied by profuse acid perspirations; whilst those which, in spite of treatment, have lingered on for a period of six or eight weeks, have been those in which the sweating has been less strongly acid, less perfect in its development, or less constant in its continuance, taking place over a portion only of the body, or occurring profusely perhaps for two or three days, and then subsiding or altogether disappearing." In this statement I am satisfied that the profession will bear me out; but of course it applies only to cases of really acute rheumatism, and not to such cases as Dr. Inman speaks of—cases in which he tells us that "a dry skin and comparatively clean tongue was the rule"; but which, nevertheless, he is pleased to term cases of *acute* rheumatism. If such cases as those spoken of by Dr. Inman are to be termed cases of *acute* rheumatism, our whole nomenclature must be altered.

Dr. Inman then proceeds to say: "Dr. Fuller considers it advisable to give a *daily* aperient." My statements are (p. 86): "I must express my dissent from the practice of repeated active purging." Again (p. 88): "In cases in which the bowels are acting freely, and the dejections are healthy and bilious in appearance, purging may be useful as a powerful means of drawing off the poison; but it certainly is unnecessary for the cure of the disease." Again, at p. 109, when discussing my own plan of treatment, I say, "*If the bowels are acting once a day, it is seldom necessary to make a more frequent call upon their activity*"; and in neither of the six cases which I have quoted in detail (pp. 117—133) have I ordered more than an *occasional* aperient. In the first case I ordered an aperient once only throughout the attack; in the second, twice; in the third, three times; in the fourth, three times; in the fifth, twice; in the sixth, once only. So much for my considering "it advisable to give a *daily* aperient."

Dr. Inman, however, is a most successful practitioner. He has had thirty cases of acute rheumatism under his care, has given lemon juice in all, and has "found it do good in all"; indeed, the average duration of his cases "has been about ten days", and "the longest case he has had has been three weeks"! Truly may he say that there must be a wide difference between his cases and those reported in London and elsewhere. It was Dr. Owen Rees who first introduced lemon-juice to the notice of the profession as a remedy for acute rheumatism, and no one knows better how to employ it; yet the cases he has reported, on the average, were twenty-five days under treatment, and were ill for a period of forty days; whereas Dr. Inman, with the same remedy, cures the average of his cases within the space of ten days! But then in Dr. Rees' cases "profuse sweating" was not quite "the exception", nor "a dry skin and comparatively clean tongue the rule". The profession has been taught to regard such cases, whether with or without some swelling of the joints, as instances of subacute or chronic rheumatism; and Dr. Rees would not term them acute rheumatism, even for the sake of reporting them as speedily cured.

THE TREATMENT OF ACUTE RHEUMATISM.

By Arthur B. Steele, Esq., Liverpool.

As my experience of the effects of lemon-juice in acute rheumatism does not coincide with that of my talented fellow-townsman, Dr. Inman (see British Medical Journal, October 24th, p. 883), I am induced to record a brief summary of the opinions and mode of treatment I have adopted in reference to that disease.

Acute rheumatism appears to have a tendency to run a definite course, analogous to that of the exanthemata; and the duration of the attack is probably not so much dependent on the peculiar treatment adopted as has generally been supposed. This, I think, will in some measure explain how it is that similar results are obtained by such very opposite modes of treatment.

When I was a student at St. George's Hospital, the plan adopted by Dr. Seymour was bleeding and purging, followed up by the guiacum mixture of the *Pharmacopœia*, with an opiate at bedtime, if required. This was found very successful, and marked relief was usually obtained on the second day. Various other methods might be mentioned, all apparently affording the same measure of success. I will just name cinchona, nitre in large doses, alkalies, and colchicum, each of which has found its admirers. The course I pursue in the treatment of acute rheumatism, and which I have found to answer my expectation, is this:—first, a dose of calomel, followed by a saline purgative: and then a grain of opium every two hours, until relief from pain is procured, keeping it up at longer intervals as the pain gradually subsides. As soon as the acute stage has passed, iodide of potassium and tonics are commenced. I generally find that the pain is much relieved in from twenty-four to forty-eight hours, and that a considerable abatement of the symptoms occurs from the third to the fifth day. Cardiac complication is rare, and has always yielded to local depletion and mercury, except in one case in which extensive pericarditis and endocarditis existed at the time when the patient came under my care, and which ran a rapidly fatal course. The advantages of the opium plan of treatment are, that it does not depress the patient, and it affords relief to the prominent symptom—pain—with certainty and rapidity; and the recoveries, as far as my observation goes, are as speedy and favourable as under any of the various plans which have been suggested.

I have not been able to obtain any very satisfactory results from lemon-juice, and have therefore ceased to place reliance upon it; but it is important to bear in mind that my patients were chiefly mechanics, iron-moulders, dock labourers, etc., treated at their own dwellings, and therefore under circumstances in every respect much less favourable for testing the efficacy of the remedy than would be obtained in the wards of a hospital.

In several cases I have noticed an affection of the heart which appears to be distinct from the ordinary inflammatory cardiac complication. It is characterised by severe pain in the præcordial region, and is liable to be mistaken for incipient endocarditis. The heart's action is tumultuous, and the sounds obscured; but no *bruit* is heard. I regard it as rheumatic affection of the muscular substance of the heart, unaccompanied by any organic change, but interfering with its action, as we find to be the case in some of the voluntary muscles which become the seat of a mere pain, without any manifest alteration of structure. A few leeches and an opiate have always removed this symptom.

Reviews and Notices.

A System of Practical Surgery. By William Fergusson, F.R.S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital; etc. Fourth Edition. pp. 833. London: Churchill. 1857.

Mr. Fergusson's *Practical Surgery* has now reached a fourth edition, and, according to Mr. Churchill's advertisements, an impression of 10,000 copies from the commencement—evidence enough of its popularity in the profession. The present edition contains about fifty pages of additional matter interstitially deposited here and there; but the volume contains rather fewer pages than the third edition, the author having, judiciously as we think, removed the chapters on Dissection, which formerly commenced each part of the book.

Of the additions made in the new edition, those relating to conservative surgery are the most striking; and if this volume is compared with the first and second editions, or with any surgical works published in the country from ten to fifteen years ago, the advances which have been made by the surgeon towards his true mission—the preservation of limb as well as of life—will be evident. While it must be allowed that conservative surgery has not yet found its true level, and that there is possibly some tendency to exaggerate it, we believe firmly that the future historical glory of British surgeons of the present day will rest on their conservative achievements. It would be difficult to particularise who are in the van in this honourable course; this must be left to posterity, which shall judge of the men when their work is done. But this much is certain; that they are neither few, nor confined to any limited tract of the kingdom of Great Britain and Ireland.

There are one or two points in relation to the subject of excision of joints which call for special notice. In speaking of excision of the elbow-joint, Mr. Fergusson refers to the plan now adopted of aiming to form a false joint (or rather a new joint) after excision, by moving the bones freely during the dressing of the external wound. He attributes this improvement to Mr. Syme; and expresses himself as "so much convinced of the advantages of a false or new joint in this locality after resection, that he now generally uses an instrument, devised by Mr. Heath, a house-surgeon of King's College, which serves to prevent the bones from coming into close contact, and yet permits of flexion and extension."

When Mr. Fergusson published the third edition of his book in 1852, he "had ventured" once to perform the operation of excision of the knee-joint, with a fatal result. But though he allowed this case to weigh with others in proof of the hazard of the proceeding, he then wrote that "he could not see why excision of the knee-joint should not hold the same relative proportion of success to amputation of the thigh as resection of the elbow-joint does to amputation of the arm." In 1857 our author writes in a much more confident strain. After running through the history of the operation from 1850 to the present time, and according their respective shares of merit to Jones of Jersey, Page of Carlisle, Mackenzie of Edinburgh, Pritchard of Hunmanby, Thomas of Manchester, Smith and Price of London, and Butcher of Dublin—with special reference to the able articles on the subject by the last-named surgeon in the *Dublin Quarterly Journal of Medical Science*, Mr. Fergusson says he believes that, within the period referred to, the operation has been performed in upwards of one hundred cases, with results less hazardous and more satisfactory than after amputation of the thigh.

"Notwithstanding the unfortunate result," says Mr. Fergusson, "in my own first case of its revival, the character of the operation, coupled with the success of the cases of Mr. Jones, as related by Mackenzie and others, seemed so much in accordance with the modern practice of surgery in this department that it was speedily repeated by many of the leading surgeons in Great Britain. I know of no new operation, as it may yet be called, in the whole range of surgery which has been so frequently performed in such a brief period as seven years, and I have confidence in stating that I know of none so thoroughly worthy of the attention of the surgeon. Amputation has often been called the opprobrium of surgery. Modern practice has done much to set this axiom aside. It is difficult to say whether pity, amazement, or horror is uppermost in the mind when one hears, now-a-days, of amputation in the arm for disease of the elbow-joint, and such I believe will be the case in a few years hence when some 'statistical table' shows how a patient has fared after amputation in the thigh for 'disease of the knee-joint.' That such a proceeding is never needful in such disease, I am not prepared to say; but I firmly believe that in eight cases out of ten, under the age of twenty or thirty, in whom disease of the articular surfaces of the bones of the knee-joint seems incurable, the operation of resection should be preferred to that of amputation. Whilst I write there are four patients in the wards of King's College Hospital who have within these seven weeks undergone excision of the knee under circumstances where amputation would formerly have been the legitimate operation, and the only reasonable course for each person's comfort. All of them are in a condition, as regards health, strength, and suffering, equally comfortable as if amputation had been done; perhaps much more so, both physically and morally, and each has the prospect of walking comfortably on his own leg at a reasonably early date.

"The wound is less than in amputation in the thigh, the bleeding seldom requires more than one or two ligatures, the loss of substance is less, and probably on that account there is less shock to the system, the chances of secondary hæmorrhage are scarcely worth notice, as the main artery is left untouched; there is, in short, nothing in the after consequences more likely to endanger the patient's safety than after amputation, whilst the prospect of retaining a useful and substantial limb should encourage both patient and surgeon to this practice.

"One of the strongest objections to this operation has been the length of time needful for a cure. Some patients have been twelve and eighteen months under treatment, whilst during the period some who have had amputation performed have been declared cured. But the objection I believe is fallacious, and made without experience or data. I have had a patient on crutches within six weeks after resection; I have rarely seen one about at an earlier period after amputation; and I have seen one walking firmly and nimbly within twelve months after resection, in a style far superior to that which an unfortunate might display with an artificial limb. My impression is, that as we learn more of the after treatment of these cases, the result will be even more satisfactory than that already achieved.

"The treatment after resection of the knee I consider of great importance. Generally it may be said to resemble that which is needful in compound fracture—the nicest and closest possible approximation of surfaces, the utmost steadiness of all the parts, the suppression, if possible, of all undue inflammation, the free escape for discharges, are all points of importance here as in fracture. In King's College Hospital we have almost invariably used Salter's swing, and I strongly recommend it in all such cases. Some additions have been made for these special instances by subsequent house-surgeons, particularly by Mr. Lawson and Mr. Parkinson, who each displayed the utmost assiduity in the management of various cases of the kind which came under their charge." (pp. 456—458.)

The Chemistry of Wine. By G. J. Mulder, Professor of Chemistry in the University of Utrecht. Edited by H. Bence Jones, M.D., F.R.S., Physician to St. George's Hospital. pp. 390. London: Churchill. 1857.

Although this work is adapted chiefly for the chemist, the physician also may, no doubt, obtain from it some useful information which may guide him in prescribing wines to his patients. But, whether for scientific or for merely practical purposes, Dr. Bence Jones has done good service in translating the researches and observations of so sound a chemist as Professor Mulder on so important an article of consumption as wine.

British Medical Journal.

SATURDAY, NOVEMBER 14TH, 1857.

THE RECENT ELECTION OF A SURGEON TO QUEEN'S HOSPITAL, BIRMINGHAM.

The medical professors and officers of Queen's College and Hospital have, very properly, determined not to allow the recent proceedings connected with the election of a surgeon to the Hospital to pass without notice on their part. At a meeting of the professors, held on November 9th, a protest was adopted, and ordered to be sent to each member of the Council. This statement had been drawn up by, and bore the signatures of, Dr. Birt Davies and Mr. Sands Cox, senior physician and senior surgeon to the Hospital, and *ex officio* members of Council, and Dr. Heslop and Mr. Knowles, representatives of the Professors on the Council. The document is based on eight grounds, of which the following is an abstract:—

"1. That there is internal evidence, as well as the clearly expressed declaration of Members of the Council, in the Council Room and elsewhere, that canvassing was actively effected during the period of the election, on the part of Mr. West and his friends. As supplementary to this evidence, the usually unhappy effect of canvassing was observed on the day of election, in observations depreciatory of Mr. Gamgee; but which, both on the day of, and previous to, the election went uncontradicted, owing to the understanding and usage, that the Candidates should not directly or indirectly canvass the Council.

"2. That there is evidence of the most unequivocal nature that at the election of an Honorary Officer to the Queen's Hospital, immediately preceding the present one, no later back than in the month of April last, it was declared to the Candidates that '*canvassing the Council, either personally or through their friends, is strictly forbidden, and will be held an entire disqualification,*' and that the gentlemen now holding office in that Hospital did most rigorously adhere to the practice of the Institution.

"3. That the understanding and usage relative to canvassing were so notorious, that Mr. J. S. Gamgee did not arrive in this town until several days after the election was concluded; and that his conduct as a Candidate was guided by the belief that merit would be the sole basis of the appointment, and that any intervention on his behalf would be 'held to be an entire disqualification.'

"4. That such understanding and usage were well known, is further evidenced by the forcible and formal terms in which they were publicly referred to by the Principal of the College, Dr. Booth, on the occasion of the election by the Council, in May last, of Dr. Fleming to the office of Physician to the Queen's Hospital.

"5. That such understanding and usage are further evidenced by the course adopted by other candidates during the recent election.

"6. That in the recent election of Mr. J. F. West, the Council have manifestly acted in opposition to the spirit of the laws of the College, and to the intentions of the founder, trustees, and chief authorities who framed the said laws—the intention and clear meaning of such laws being, in the opinion of the undersigned, that the Council should not elect any gentleman to an office in the Queen's Hospital, or in the medical department of the Queen's College, of whom the Professors had not previously stated that he was 'qualified,' 'eligible,' and 'best fitted.' The undersigned aver that the name of Mr. J. F. West was *not included* in the Report of the Professors, either as the 'best fitted,' or as one of the 'best fitted' candidates, and, therefore, that the name of the said Mr. West was not before the Council, in the sense contemplated by the law.

"7. The undersigned direct the attention of the Council to the important circumstance that they have only declared in their Report Mr. West's legal qualification and eligibility for the vacant appointment—but that they expressly refrained from giving an opinion upon his 'fitness' in the face of so many candidates of superior claims; and they call the attention of the Council to the fact, that neither the Professors as a constituted body, nor their representatives in Council, were asked their opinion of the fitness of Mr. West for the office of Surgeon to the Queen's Hospital, previous to the announcement that he had been elected. The undersigned, in appending to their Report the observation relative to the age of the candidate whom they recommended, deemed they were presenting to the Council a most important reason for their selection—insomuch, as not merely did 'age, standing, and practical experience' form serious subjects for their consideration in recommending a gentleman as 'fitted' to undertake the duties of Surgeon-in-Chief to a Hospital,—but also, in accordance with the laws of the hospital, the gentleman now elected as Surgeon will be *Senior Surgeon* in four years and a half from this time.

"8. The undersigned do further protest against the election of Mr. West, on the ground that such a proceeding is directly subversive of the fundamental principles which originally produced, and which have, ever since its inauguration, guided the administration of the Queen's Hospital."

We trust that, for the sake of the reputation of Queen's College and Hospital, this protest, at once temperate in language and forcible in argument, will have its due effect. An important question is involved; not altogether with regard to Mr. Gamgee, the special recommendation of whom by the Professors of Queen's College has been so unceremoniously set aside, but also in respect to the passing over of the claims of several other candidates of high professional merit.

SERIOUS CHARGE AGAINST A SURGEON.

Every now and then we find a paragraph in some country paper headed "Serious Charge against a Surgeon", the particulars of which are calculated to frighten into hysterics all the ladies of a certain age in the neighbourhood. Forthwith the poor *medico* is condemned without a further hearing, and by anticipation sent across the water, if not hung, by the gossips who live upon such matters. As we have a very high opinion of the country practitioner, and know how easy it is to get up a case against him on the authority of these aforesaid gossips and old women, and as we also know how remarkably ignorant "crowner's quest" men are in all matters medical, we are remarkably loath to believe in the guilt of the accused until he has had a fair trial. We have seen how such accusations can be lightly brought, in the Tunbridge Wells case, in which a medical man was charged with the dreadful crime of procuring abortion, but of which crime he has been exonerated by the magistrates after a careful examination. The *Hampshire Chronicle* of last week, however, has a long report of another case against a surgeon, which is so imperfectly given that we scarcely know what to make of it; the gist of the matter would seem to be, that he deliberately allowed a young woman to die of exhaustion during the progress of a long-deferred labour. The scene of this occurrence is the village of Cosham, near Fareham, in Hampshire, the alleged victim a young woman named Mrs. Hannah George, and the offending medical man a Mr. Frederick Deane. Either the witnesses must have given their evidence in a very loose manner, or the newspaper reporter must have transcribed it in that slipshod manner peculiar to small country journals. Be that as it may, here it is as we find it in the columns of our cotemporary:—

"From the following abstract of the evidence it will be seen

that the poor woman's sufferings must have been terrible. The deceased, in anticipation of her confinement, had with her a nurse named Mary Ann Moore, from Landport, who, on the 23rd ult., between 10 and 11 o'clock, finding that Mrs. George was suffering from the pains of labour, sent for Mr. Deane, who came to the house, but he assumed that he was not yet wanted, and left. Next day the poor woman was suffering very much, and Mr. Deane was again sent for, between seven and eight o'clock. He came, but soon went away, without administering anything to alleviate the sufferings of the deceased. The surgeon was again sent for on the Sunday, and he then desired that she should be placed in a certain position, and she was moved by the nurse and Ann Budd, the housekeeper. The poor woman appeared to suffer dreadfully, and remained in this position from four o'clock on Sunday morning to Monday night, undergoing thirty hours suffering. The husband naturally became very anxious, and repeatedly inquired how his wife was getting on, and begged of him to have further assistance, regardless of expense. Mr. Deane replied that it was a common case, at which he 'would snap his finger'. On Monday night he ordered the deceased to be taken from her position, as the pains had gone off. The sufferer was then laid in bed, where she remained until Wednesday evening, when the child was partially born. The doctor continued to assure them all was going right. He gave some medicine to his patient, who remained suffering during the night, without any other means being used for her relief. Mr. Deane left on Thursday morning between eight and nine o'clock, as it was supposed for further assistance, but did not return until two o'clock, and then in company with Mrs. Deane, but with no assistance. At the time of his return the deceased was sick and suffocating. The nurse reasoned with the surgeon, who said, 'Oh! nonsense. You must not go on in that way; you must keep your spirits up.' Ann Budd said, 'Don't talk in that way.' Mr. Deane then took hold of his wife's dress, and said, 'Come along, Bess,' and they both left the room. There the poor sufferer lay in agony, but became delirious. The surgeon did not return until four o'clock. The child being partially born on Wednesday night, the poor woman remained from that time until four o'clock in the afternoon of Thursday in this sad state, and no effort was made to assist her while in her pain. The surgeon did not come. She became delirious from agony. It was seen that she was gradually sinking from suffocation, and the sufferer expired at five o'clock on Thursday evening, from want of proper medical assistance, and remaining about twenty hours in the greatest agony."

How long the real labour pains had come on before the unfortunate death of the poor woman took place, we cannot correctly gather from the evidence of the nurse; but it does appear clearly enough that on Wednesday evening the child was partially born. Of course, the only inference we can draw from the fact that the labour was not then completed, is that the presentation must have been that of an arm or foot; in which case, if it is true that the accused stood still and let the poor woman die without any assistance, he was clearly to blame, and brought upon himself the verdict of manslaughter found by the coroner's jury. We cannot, however, believe that any regularly educated man could be found so sadly wanting in a knowledge of his profession, as this "expectant" method of proceeding in the case would imply. Mr. Deane is said to have a considerable practice in the neighbourhood: this would seem to infer considerable experience; and we cannot bring our minds to believe that such a person could have been ignorant of his obvious duty, or that, knowing it, he could have neglected to perform it. If the conduct of the person conducting the labour was such as we find reported, we can only account for it on the supposition that he was no medical man at all. On consulting the *Medical Directory* for 1857, we find no such name as that of Mr. Frederick Deane. It may be, however, that he has some foreign diploma, or he may have become a member of the College since the last issue of the work; but this latter supposition would scarcely agree with the statement that he possessed considerable practice in the neighbourhood.

The report states that Mr. Deane did not wait until the conclusion of the inquest, but at once absconded, and was taken some miles from Cosham, and lodged in Winchester Gaol, where he now awaits his trial. If the charge brought against Mr. Deane should turn out to be true, we devoutly hope that it will appear that he is not a regularly educated surgeon; for a worse case, on the showing of the nurse, we scarcely remember to have heard of.

THE WEEK.

It is with extreme regret that we find no less than five of the surgeons in ordinary of St. Mary's Hospital, Manchester, have resigned their appointments, leaving two only to carry on the routine business of the hospital. The cause of this wholesale resignation we do not yet fully understand; consequently, it would be premature to pass any opinion upon the matter. It is, however, understood that the gentlemen who have resigned have taken offence at some proceeding of the General Board, and that the matter could not be accommodated without the breach being made public. The General Board has, we find, advertised for surgeons to fill the vacant posts. We think, however, that no medical man should dream of accepting one of these appointments before clearly understanding the rights of the dispute: by proceeding otherwise, he may be acting against the interests of his professional brethren, and playing into the hands of men who may be attempting to degrade them. As we before said, the medical public are not yet acquainted with the circumstances of this dispute: it is, therefore, the duty of candidates to hold their hands until the case is clearly understood by the profession.

The Secretary of the Medical Society of Liverpool has forwarded to us an account of proceedings adopted by the Liverpool Humane Society respecting the Marshall Hall method of treatment in asphyxia, "in the hope that the example of the Humane Society may be followed by other similar societies". The rules laid down by Dr. Marshall Hall having been brought under the notice of the Committee of the Liverpool Shipwreck and Humane Society, the members of that committee gave the subject their careful attention, and, feeling some difficulty in deciding a question which could be determined only by medical evidence, requested the opinion of the Liverpool Medical Society on the merits of the Marshall Hall method, as compared with that recommended by the Royal Humane Society. The subject was brought before the Medical Society by Mr. Waters, on October 15th, when a resolution proposed by him, and seconded by Dr. Inman, was carried unanimously:—"That this meeting approves of the plan proposed by the late Dr. Marshall Hall for the restoration of suspended animation, and begs to recommend its adoption by the Liverpool Shipwreck and Humane Society." A copy of the resolution, and of the rules referred to, were forwarded to the Chairman of the Shipwreck and Humane Society; and a reply was received from him, stating that the Marshall Hall rules would be printed and circulated with the forthcoming Report of the Society, in place of those formerly recommended.

The Cardinal Archbishop of Vienna, according to the *Times* correspondent, is evidently doing his best to destroy the reputation of that school to which Rokitansky and his colleagues have given an European reputation. Two or three weeks ago, we noticed the report that Catholic professors alone were to be allowed to occupy professorial chairs in the University of Vienna. That was a sufficiently reprehensible proceeding, only to be accounted for on the grounds of that ignorance and narrow prejudice which would, as it were, make religious creed an index to scientific ability. But what is to be said of the new regulation by which, in spite of the order of Joseph II that the bodies of all persons dying in the public hospital of Vienna shall be opened or dissected, the bodies are ordered to be buried without *post mortem* examination? As a consequence of this, it is said that there had been only one subject in the medical school during ten or fifteen days. Pathological science has had, in a manner, its head quarters at Vienna; but it is in a fair way of being put to the rout from that city—thanks to the Archbishop and the Concordat. The liberal minded Catholics of this kingdom, some of whom hold a high position among pathologists, will, we are sure, look on the recent interference with the teaching in the Vienna medical school as a disgrace to the church to which they belong.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Saturday, October 24th, 1857.

Francis Hird, Esq., President, in the Chair.

EPITHELIAL CANCER: NEW CAUSTIC. BY HENRY THOMPSON, ESQ.

Mr. Henry Thompson directed the attention of the society to the case of a woman, aged 70, who was present. In July last, he saw her for the first time, with an epithelial growth, of the size of a large walnut, close to the right eye. It was too close to remove entirely with the knife. He therefore employed a caustic, which, after six applications, had destroyed it completely. On examining the woman, a healthy cicatrix alone remained, and no trace of disease was seen. The escharotic employed was the strong sulphuric acid of commerce, made into a paste with the exsiccated sulphate of zinc. Mr. Thompson believed that the employment of the escharotics for the removal of cancerous growths could only be justified in exceptional cases, but that this was, from the circumstances named, one in which it was decidedly preferable to the knife.

Mr. Hancock had removed many cases of a similar kind with the knife, but he never saw so perfect a cure by any means as the present case exhibited. There was scarcely any scar.

Mr. Poland could not regard the case as one of cure, and related an instance in which a similar growth had successively attacked the neighbourhood of the eye, involving the conjunctiva. Escharotics were applied on several occasions, but the disease returned. The disease was eventually removed by the knife, and at present all seemed doing well.

INKOMANCOMO. BY W. HUGHES WILLSHIRE, M.D.

This is an agent in great repute amongst the Zulu Kaffirs in the treatment of tapeworm. The drug in question is the rhizoma of *Aspidium athamanticum* of Kunze, a fern closely allied to the *Lastræa filix mas*, from which the etherial solution of the oleo-resin now getting into use amongst ourselves is manufactured. Dr. Willshire stated that he was indebted to the kindness of Mr. Perkins, of Exeter, for the specimen, who received it from one of his pupils resident for some years at Port Natal. According to the latter, "the Zulu Kaffirs take one teaspoonful of the powder in some fluid, fasting, with great efficacy." Reference had been made by Dr. Willshire to this agent in a paper he placed before the society last year.

Dr. Headland remarked that the root had been described in the *Pharmaceutical Journal* some time since.

Dr. Routh said that turpentine had been found more efficacious than the root in question amongst the Zulu Kaffirs.

Dr. Willshire said turpentine was superior to the root uncombined, but the ethereal preparations of the root were superior to turpentine.

PRACTICAL ILLUSTRATIONS OF THE TREATMENT OF SOME CASES OF INJURY TO THE HANDS. BY JOHN BIRKETT, ESQ.

The main object of the paper was to illustrate the bad effects of applying adhesive plaster to wounds and injuries of the hands, and to recommend the treatment of these cases by the use of slips of lint, kept constantly wet by means of an instrument called an "irrigator", placed at the head of the patient's bed. Several practical illustrations of this mode of treatment were given, it being especially advocated in every kind of injury of the hand or fingers, except the purely incised wound inflicted with a sharp cutting instrument. In such, the careful adjustment of the lips of the wound with adhesive plaster may be admissible. In other injuries complicated with wounds, the author's experience induced him to recommend the thorough cleansing of the hand by soaking in lukewarm water, and narrow strips of linen or lint wetted in tepid water to be lightly applied around the injured fingers, commencing from their ungual phalanges. When severe lacerations of the hand or palm are present, they are to be treated by pieces of lint with a slit in them, the arm to be supported and raised upon a pillow, and irrigation used. A drawing of the irrigator employed in Guy's Hospital was exhibited, and its advantages pointed out. The following is a classification of the injuries to which the treatment described is especially adapted:—

1. All incised and lacerated wounds of the integuments.
2. The same wounds complicated with similar injuries of the muscles or tendons.
3. Incised and lacerated wounds by which the joints are cut open.
4. Compound fractures of the bones of the metacarpus and phalanges with severe contusion, and those accidents by which one or more of the fingers are torn off by machinery; leaving—as in the case of the thumb, for example—more or less of the bone of that important organ exposed without any covering of soft parts.
5. Injuries produced by the explosion of gunpowder from firearms, with or without shot, by the force of which the soft parts are more or less lacerated, contused, and destroyed, and the bones fractured.

A discussion of some length followed, in which several members took part. It was admitted, generally, that no exception could be taken to the plan of treatment recommended in the paper. It was not novel; but practical, and such as should be followed by every surgeon in lieu of the old practice of strapping. Mr. Poland remarked that he had seen cases in which, the flexors of the finger having been implicated in the injury, after amputation was necessary, to remove the inconveniences of stiff members.

Saturday, October 31st, 1857.

Francis Hird, Esq., President, in the Chair.

CHARCOAL AS A PURIFIER. BY T. O. WARD, M.D.

Dr. Ogier Ward related some experiments which he had made with vegetable charcoal on some putrid meat. He boiled the meat in some water and acetic acid, in which were some pieces of charcoal, and the meat came from the pot perfectly sweet and edible.

Dr. Routh alluded to the use of vegetable charcoal in purifying the water of marine aquaria. The plan was to take out the animals and put into the water vegetable charcoal, in the proportion of a tablespoonful to a gallon. This was to remain five or six days: the liquid was then filtered through charcoal and fine sand, and the water passed perfectly pure.

THE ACTION OF COD-LIVER OIL IN CHEST DISEASES, AND THE DUTY OF HOSPITAL, DISPENSARY, AND PAROCHIAL MEDICAL OFFICERS IN RELATION TO ITS ADMINISTRATION. BY EDWARD SMITH, M.D., LL.B.

The object of the paper was to show, that whilst cod-liver oil is a valuable remedy, it acts simply as a fat with certain physical qualities, and may be, and ought to be, supplanted by the ordinary fats used in food. The author pointed out the numerous and serious evils which result from public patronage of this remedy by the profession as regards the relation which exists between the public and the profession, and the great expense imposed upon our charities and poor-law surgeons.

He believed that it has tended to lessen the gains of the profession by the indiscriminate employment of it by the public without professional advice, and has tended greatly to lessen the respect for the knowledge of the profession which it is the interest of both the profession and the public to maintain, and, in fact, that it has become, under the especial patronage of medical men, the great quack medicine of the day.

He first considered the chemical constitution of the oil, and then the state of system existing in phthisis, and particularly entered into an inquiry which he had instituted upon 500 cases as to the appetite for the various fats in food, and the appetite for, and effects of, the oil. He found that there was a diminished appetite for fat in phthisis, but that in no case was the dislike absolute; and in all some kinds of fat could be taken when others were rejected. Thus, fat meat was taken by more than half of the patients, and bacon fat by two-thirds; whilst suet in puddings, butter, and milk, were taken by more than nine-tenths of the whole. Afterwards, he stated the result of the effect of cod-liver oil upon 150 in-patients, and proved that in nearly half of them the oil was rejected or of no real service. Of 83 who reported themselves benefited, by far the larger proportion referred the good effect to improved assimilation; whilst of 67 who were unable to continue its use, or who were not benefited, the ill effect was referred to sickness and other circumstances connected with the first acts of digestion. After thus showing the degree of good and harm resulting from the oil, and the degree of appetite for, and dislike of, fat of various kinds in food, he proved that in the large majority of cases there was an appetite for fats when oil did good, and the contrary when it did harm, but this was not universal; and he also proved that in the very cases in which the oil was rejected there was always appetite for some kind of fat food, and in some cases even for the fat of meat. Hence he proved that there was no ground for the assertion that the oil was more easily digested and assimilated than some of the natural fats in food. The inquiry and medical testimony now prove that cod-oil acts beneficially as a nutrient; and he affirmed, from special experience, that the oil has no advantage over the fats in food, provided an increased quantity be taken of such of the nutrient fats as the patient can eat. Hence he urged the profession to distinguish properly between food and physic; and, if the oil is administered as a nutrient, to inform the patient that it is given as food, or, as he preferred, to direct them to increase the nutrient fats in proper quantities and of a suitable kind, and to administer other articles as medicine.

The following were the author's conclusions:—That neither cod oil nor fat of any kind removes phthisis. That the cases of arrest of the disease are very few. That commonly the disease progresses, and is as fatal now as it was before the oil came into general use. That in about half of the cases the rate of progress is retarded. That the patient may be both stronger and stouter, and yet the disease quietly progress. That when the oil disagrees, it is chiefly from its influence upon the digestive organs. That when it agrees, it is chiefly by improving nutrition; but that in many cases it is believed by the patient to have a local influence. That this local influence is most important in the pharynx and other parts of the mucous tract. That it acts almost entirely as a fat, and supplies a defect in the system. That it has no advantage over fats used in food, and may, like some of them, be taken and rejected. That there is a large class in whom it is not beneficial, and it should be used with discrimination. That it is our duty and our interest to dissociate food and physic. Lastly, that it leaves the essence of the disease untouched; but that the great good which it often does temporarily, proves the importance of fat in the animal economy.

Dr. Smith showed how much more frequently there is appetite for fat in bronchitis than in phthisis and mere debility, and particularly in liver diseases; but he deferred the discussion of the question, and of the use of fats in general, to another occasion. He urged upon the profession the impropriety of Poor-law surgeons being compelled to supply the oil, when the guardians ought to give fat in food; and of the medical officers of hospitals and dispensaries taxing the overburdened funds to supply so expensive a food.

Dr. Payne Cotton remarked that the opinions of the author respecting the virtues of cod-liver oil were not those entertained by the other physicians of the Hospital for Consumption. He himself was an advocate for its employment in all cases. He did not pretend to explain why it did good, but that it was of benefit was sufficiently evident by its effects. Under its use a great number of patients improved; and though it failed in some instances, it did not do so so frequently as Dr. Smith stated. He could only say he had undiminished confidence in its effects. He had tried other oils with a view to determine whether they could be substituted for it; but they were all inferior to it. Amongst those he had thus tested were train oil, neat's-foot, almond, olive, and cocoa-nut oil. That which most nearly resembled the cod-liver oil was the neat's-foot. When cod-liver oil was given in the earlier stages of phthisis, in many cases it arrested and retarded the disease, and prolonged the life of the patient. He had employed glycerine, but it did act beneficially.

Some further discussion took place, in which Dr. Semple, Dr. Webster, Mr. Streeter, Dr. Willshire, Dr. Camps, and the author of the paper took part.

Editor's Letter Box.

THE CHOLERA AT WEST HAM.

Letter from W. Budd, M.D., Senior Physician to the Bristol Royal Infirmary.

Sir,—I have always thought it can answer no good purpose to endeavour to trace the individual succession of cases of contagious disease, unless where the evidence of actual connexion is clear and unequivocal, and is of a nature to be easily verified. Under any other circumstances, such an endeavour is, at the best, a very futile proceeding. This remark seems to me to be strikingly illustrated by the result of the recent discussions on the origin of cholera at West Ham.

Attempts of the kind are still more to be deprecated where knowledge already acquired has rendered them superfluous. Thus small-pox, for example, springs up in a large number of cases in persons who have held no communication with infected subjects. But no one, I suppose, who has given any thought to this matter, considers it at all necessary to give an account of the precise origin of such cases, or allows his inability to do so in any degree to unsettle his notions as to the way in which small-pox propagates. Having already learnt by direct observation where the poison breeds, and in what way it multiplies, we can afford to be very careless as to the manner in which, in any particular instances, its germs have become disseminated. The same principle applies in all analogous cases.

On the table at which I am now writing there stands a glass half filled with an organic liquid. Although the glass is hermetically sealed, the surface of the liquid is covered with a rich crop of mildew. To attempt to trace this mildew back to the identical mildew plants whose offspring it is, would be a very hopeless as well as a very vain undertaking. Any conjecture we might be able to form on the subject would be much more likely to be wrong than right. Formerly, the springing up of minute organisms under such conditions led people to believe in spontaneous generation, and other equally empty notions. In natural history, such superstitions have long since vanished, but in physic they appear to be rife as ever. Having ascertained by clear and positive evidence the mode in which mildew propagates, we may be quite sure that this individual specimen in the sealed glass (and which is itself, by the way, in full fructification) has come there by legitimate descent from other mildew, however unable we may be to trace its exact lineage.

As it is with small-pox and mildew, so it is with cholera. The true mode of propagation of cholera has long since been ascertained, and is now well known. In cholera times, it is in the nature of things that cases in abundance should spring up in wide separation one from another. To trace the exact parentage of such cases is not only not required of us, but, unless we have very sure grounds to go upon, the attempt to do so can be of no scientific use. The most that can come of such an attempt is to give point to the satire of a facetious editor, or to prejudice a great truth in the minds of unthinking persons. Dr. Snow has already proved, by evidence the most clear and decisive, that cholera is often propagated by water tainted with choleraic discharges. I desire to speak with all deference, but it appears to me that, with this evidence already on record, this distinguished physician is only weakening his case by bringing forward, in further support of his views, an instance like that at West Ham, where, as far as the first origin of the disease is concerned, the evidence is certainly neither clear nor de-

cisive, and is not at all likely to be accepted by the public generally.

I am, etc.,
William Budd.

Bristol, November 5th, 1857.

P.S. I need scarcely say that these remarks were only intended to apply to Dr. Snow's theory of the *first origin* of cholera at West Ham. The after-spread of the disease among the cottagers is another matter. *Mutatis mutandis*, it is the case over again of the mildew in the sealed glass, which, although not to be traced back to its progenitor, is *itself in full fruit*, and bears, in this mode of providing its heirs by the law of specific propagation, present witness of its own manner of descent.

SEMINAL DISCHARGE DEPENDENT ON IRRITATION OF THE RECTUM.

Letter from J. W. Keyworth, M.D.

Sir,—Your "Anonymous" correspondent, in a late number of the Journal, has indicated a class of cases which, I believe, are not unfrequent; and I have myself met with patients who presented precisely similar symptoms. I think, however, that he has scarcely indicated the entire explanation, and with it the remedy, which is frequently, if not always, attainable. In one patient, the condition was found to depend upon the existence of hæmorrhoids; in another, on the presence of ascarides; in another, merely upon the unhealthy condition of the rectum, coincident with constipation; whilst in another, the only unnatural symptom was a morbid sensibility of the urethra.

I believe that in cases of the class in question there generally exists some eccentric irritation, the removal of which will remove the disease, as in those instances to which I have referred.

I will only add, that nothing in my experience relieves constipation so completely as cathartic extract, with nux vomica; and that cold affusion of salt water to the lower part of the spine is an indispensable aid in allaying undue reflex excitement.

In other cases occurring in nervous imaginative persons, the essential remedy is that indicated by Professor Miller, when speaking on an allied subject at the Association for the Promotion of Social Science—purity of thought and action, with the energetic devotion of the mind to active and worthy pursuits.

I am, etc.,
John W. Keyworth.

Birmingham, November 4th, 1857.

PHTHISIS AS A COMPLICATION OF THORACIC ANEURISM.

Letter from John Sloane, M.D.

Sir,—The statements of Dr. Rogers in the Journal of Oct. 31st, tend to convey an erroneous impression regarding the views which my former teacher, Dr. Stokes, holds respecting phthisis as a complication of thoracic aneurism. The real opinions of Dr. Stokes may be learned at page 644 of the second volume of the *Medical Times and Gazette* for 1856. Dr. Stokes has never maintained that the combination of pulmonary tubercle with thoracic aneurism is of frequent occurrence; in fact, the very contrary may be inferred from his words, which are as follows:—

"As might be expected from thoracic aneurism being so often met with in men of strong constitutions, the class of associated or preceding diseases is but limited; and there are no local affections of organs distinct from the aorta which appear to have any frequent association with aneurism.

"It is true," he adds, "that the morbid condition which most often accompanies aneurism is that of tubercle; but this is far from being a statement that such a complication is common—it merely conveys that aneurism coincides with tubercle more frequently than with other diseases of the lungs. The statement that the combination is more frequent than has been supposed, is to be taken as the opinion of the author, and as differing from that of some pathologists who have held that the two diseases are incompatible."

I am certain that these statements must have escaped the notice of Dr. Rogers, who, I hope, will excuse my directing attention to them.

I am, etc.,
John Sloane.

Leicester Infirmary, November 2nd, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Blackman. On November 8th, at 18, High Street, Whitechapel, the wife of Charles T. Blackman, Esq., Surgeon, of a son.

Campbell. On October 13th, at Gibraltar, the wife of John Campbell, M.D., Staff Assistant-Surgeon, of a son.

Collier. On October 31st, at 10, Worship Street, Finsbury, the wife of Thomas Poole Collier, Esq., Surgeon, of a son.

Keys. On November 8th, at Warwick Street, Regent Street, the wife of George Francis Keys, Esq., Surgeon, of a son.

Monckton. On November 5th, at Brenchley, Kent, the wife of Stephen Monckton, M.D., of a son.

Worship. On November 2nd, at Riverhead, Sevenoaks, the wife of *J. Lucas Worship, Esq., Surgeon, of a son.

MARRIAGES.

Day—Covey. Day, Francis, Esq., Madras Medical Service, to Emma, eldest daughter of Edward Covey, Esq., of Basingstoke, on November 3rd.

Davidson—Lascelles. Davidson, Alfred A., Esq., Lieut. 4th Regiment Madras Native Infantry, second son of Thomas Davidson, M.D., of Bayswater, to Dora, youngest daughter of the late James Lascelles, Esq., of Doncaster, at Hythe, on October 22nd.

Palmer—Scott. Palmer, F. A., Esq., Surgeon, of Landport, to Amelia Sophia Sultana, only daughter of the late Robert Scott, Esq., at Kingston, on November 4th.

Strachey—Symonds. Strachey, Edward, Esq., of Clifton, to Mary Isabella, second daughter of *John Addington Symonds, M.D., of Clifton, on November 3rd.

Williams—Powell. Williams, John James, M.D., of Brecon, to Margaret, youngest daughter of the late Llewellin Powell, Esq., of Cwmpadest, Brecknockshire, at Devynnock, on November 4th.

DEATHS.

Angus. On November 4th, aged 20, after a protracted illness, Alexander, son of Alexander Angus, Esq., Surgeon, Frith Street, Soho.

Freckleton, George, M.D., late of Liverpool, at Cheltenham, aged 65, on November 3rd.

Garbett, Christopher, Esq., Acting-Superintendent Surgeon at Cawnpore, from wounds, aged 51.

Knapp, John, M.D., at 55, Inverleith Row, Edinburgh, on November 8th.

Lorimer, Gordon, Esq., late Medical Staff H.E.I.C.S., St. Helena, at Chichester, aged 67, on October 4th.

Penhall. On November 5th, at Hastings, aged one year and four months, Richmond, infant son of John Penhall, Esq., Surgeon.

APPOINTMENTS.

*Cadge, William, Esq., elected Surgeon to the Norfolk and Norwich Hospital.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, November 6th, 1857:—

Butterfield, Harris, Nantyglo, Monmouthshire
Clarke, Arthur, Westcott, near Dorking, Surrey
Coulson, Walter John, St. Mary's Hospital
Cuppage, James Greer, Lurgan, co. Armagh
Faxon, Samuel Walton, Westminster Hospital
Hyde, William Edward, Ledbury, Herefordshire
McMullin, John, Castle Dawson, co. Derry
Millar, William, Army
Spence, Richard George Clark, Otley, Yorkshire
Walters, John, Hyde Park Gate South

Naval Surgeons. At the same meeting of the Court, the

following gentlemen passed their examinations for full surgeons in the Royal Navy :—

Govett, Philip William, of the Royal Naval Hospital, Plymouth: a member of the London College, July 16th, 1849

Crabbe, Benjamin, Greenwich Hospital: a member of the Edinburgh College, March 7th, 1854

Porteous, David, of Plymouth Hospital; and

Willis, Simon Armstrong, of H.M.S. *Victory;* both Licentiates of the Faculty of Physicians and Surgeons, Glasgow: their diplomas bearing date respectively March 2nd, and March 5th, 1852.

Licentiates in Midwifery admitted at a meeting of the Board, on November 11th :—

Braden, John George, Commercial Road East: diploma of membership dated October 9th, 1857

Carey, Francis Edward, Guernsey: July 24th, 1857

Carter, Alfred, St. Ann's Bay, Jamaica: April 3rd, 1857

Davison, George William, Tynemouth: August 3rd, 1857

De la Garde, John Lempriere, Exeter: April 16th, 1855

Gould, William, Denton, Manchester: April 17th, 1857

Keene, Alfred William, Guildford, Surrey: May 2nd, 1854

King, David, Ayr, N.B.: April 24th, 1854

Lowe, John, Lynn Regis, Norfolk: October 9th, 1857

Tench, Edward Beavan, Hereford: October 9th, 1857

Warden, Thomas Messenger, Coleshill, Warwickshire: July 10th, 1857

Apothecaries' Hall. Members admitted on Thursday, November 5th, 1857 :—

Chipp, John, Shrewsbury

Chippendale, Walter, Tonbridge

Gould, William, Denton

Williams, Charles Rice, Birmingham

Royal College of Surgeons of Ireland. The following gentlemen have obtained the Fellowship and Diploma of the College during the present year:—

Fellows, 1856-57.

White, Robert P., Roundtown, co. Dublin

Reynolds, Francis

Kirkpatrick, John R., Dublin

Morgan, John, Dublin

Doyle, James Thomas Joseph, H.E.I.C.S.

O'Doherty, Kevin Izod, Dublin

Licentiates.

Ashton, William, Doneraile, co. Cork

Burke, John Owen, Headford, co. Galway

Barber, Thomas, Dublin

Boyd, William Cathcart, Dublin

Bradshaw, John, Thurles

Bennett, Thomas, Oldtown, Templemore

Bagot, Charles, Fontstown Glebe, co. Kildare

Creagh, William, Dublin

Chapman, William Samuel, Rathgar, co. Dublin

Colahan, Thomas Nicholas Whistler, Galway

Comyn, John Sarsfield, Woodstock, Galway

Cardiff, J. B., Bridgetown, Wexford

Dyas, William, Kells, co. Meath

Daly, John Joseph, Tuam

Eames, Chatham, Booterstown, co. Dublin

Fleming, William, Finch Road, Douglas

Farrelly, James, Bailieboro, co. Cavan

Fagan, Richard, Rathfriland

Ffolliott, Frederick, Oldcastle, Westmeath

Fitzmaurice, Edward, Duagh House, co. Kerry

Ferguson, Austin J., Dublin

Gardiner, W. A., Park View, Salford, Manchester

Gray, John, Calcutta

Greene, Francis, Urlingford, co. Kilkenny

Gray, Nicholas L., Tinny Park, Kilkenny

Hanly, William Francis, Nenagh, co. Tipperary

Hessian, Thomas Oliver, Tuam

Helsham, John James, Kilkenny

Irvine, Alexander, Lisnagore, Lowtherstown

Keogh, Joseph Richard, Dublin

Kearney, Edward Barrett, Dublin

Kinahan, C. James, Scariff, co. Clare

Lane, J. W., Newtownlimavady, co. Derry

Lamb, John Alexander, Dublin

Leonard, Lucas, Dublin

Matthew, Charles James, Cork

Murray, Henry, Hillsborough, co. Down

McNalty, G. William, Sandymount, co. Dublin

Macgrath, Edward John, Ennis

Macky, Alexander, Dublin

McDonough, John, Killarney

McCormack, John, Donegal

Morris, T. J., Lifford, co. Donegal

Maxwell, Huston, Bailieboro

Maccrossan, Thomas, Omagh

Mullan, W. J., Dungannon, co. Tyrone

Nowlan, James Joseph, Ballina, co. Mayo

O'Brien, T. M. C., Newcastle West, Limerick

Oliver, W. S., Brookville, Limerick

Power, W. J. C., Killenaule, co. Tipperary

Potter, John, Kilkenny

Quinlan, Michael, Castleisland, co. Kerry

Richmond, Alexander, Poyntz Pass, co. Armagh

Switzer, Bamlet Walker, Kildare

Taylor, Joseph M., Hillbrook House, Castlenock

Tandy, Edward, Dublin

Tate, Robert, Manorhamilton, co. Leitrim

Walker, David, Belfast

Wade, Frederick William, Belturbet, co. Cavan

Wilson, Thomas George, Fivemiletown

Wills, Caleb, Carrick-on-Shannon

Whittaker, John Henderson, Ballina, co. Mayo

Yorke, Christopher Francis, Galway

HEALTH OF LONDON:—WEEK ENDING NOVEMBER 7TH, 1857.

[From the Registrar-General's Report.]

The returns now exhibit that increase in the mortality which usually begins in the eleventh month of the year. In the present instance, the increase is considerable; the deaths registered in London, which in the two preceding weeks were 988 and 1047, having risen in the week that ended last Saturday (November 7th) to 1166. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1039. But population has increased, and the same rate of mortality would have produced last week 1143 deaths. The actual number is slightly in excess of the estimated number, a result which is not so favourable as those that have been recently obtained.

The births returned in the same week exceed the deaths by 516.

In comparing the deaths now returned with those of the former week, and distributing the ages at death in five vicenniads, it will appear that the increase above mentioned occurred in every period except that which extends from forty to sixty years. Amongst persons sixty years old and upwards, the deaths increased from 184 to 259. From diseases of the respiratory organs (exclusive of hooping-cough and phthisis), the number of persons who died at all ages in the previous week was 190; last week it was 261. Influenza showed itself; and though only four cases are referred to it in the tables, part of the increase, found under some other complaint, is probably due to its influence. The deaths from diseases of the digestive organs rose from 55 to 79. Under other heads the fluctuations are unimportant. Three children and two adults (the latter in the Small-Pox Hospital) died of small-pox. Twenty-three children died of measles: and five of these died in the sub-district of White Cross Street. In that sub-district, 9 out of the 18 deaths returned were from measles, scarlatina, and fever. Diarrhœa continues to decline; and the deaths from it last week were only 27. There were two deaths from cholera: a widow, aged 66 years, died on 4th November, at 117, Gravel Lane, Aldgate, of "cholera, typhoid fever" (three days; and a man, aged 38 years, died on 6th November, at 2, Goulston Street, Whitechapel, of "cholera", after fourteen hours illness.

It deserves to be noticed that four children died from want of breast-milk in St. George's Workhouse, Little Chelsea: three on the 1st instant, and one on the 2nd. Three of these infants were foundlings. The total number of deaths from want of breast milk or inanition in London was 13. Six nonagenarians died in the week: the oldest of these was a widow, aged 96 years, who died at 7, Little Denmark Street, St. Giles; she received the Queen's Bounty, and in part supported herself, till within a year of her death, by needlework.

Last week the births of 859 boys and 823 girls, in all 1682 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1537.

At the Royal Observatory, Greenwich, the mean height of

the barometer in the week was 29·748 in. The mean reading on Saturday was 30·072 in. The mean temperature of the week was 53·8°, which is 7·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was considerably above the average throughout the week, and on Tuesday the excess was so much as 12·7°. The highest reading of the thermometer in the shade occurred on Tuesday, and was 64·3°; the lowest was 43·9°, on the previous day. The mean daily range of the week was 10·1°. The greatest range occurred on Monday, and was 15·8°. The mean dew-point temperature was 52·1°, and the difference between this and the mean air temperature was only 1·7°. The temperature of the water of the Thames ranged from 50·2° to 54·7°. At the beginning of the week the wind was in the south-east; on the last four days it blew generally from the north-east. Rain fell to the amount of 0·49 in., nearly all of which fell on Wednesday.

The Sanitary Commission on the Seat of War in the East. A thick blue-book, of 300 pages, lately issued, contains the report of the proceedings of the Sanitary Commission despatched by Lord Panmure to the seat of war in the East (1855-56). It is, of course, impossible to give more than a cursory notice of this valuable and interesting document. The practical conclusions of the commission are these:—that the defective ventilation, and consequently foul atmosphere of the hospitals on the Bosphorus, were sufficient to account for a large proportion of the excess of mortality among the sick and the outbreak of cholera among the troops in November 1855; that the bad sanitary condition of the town and harbour of Balaklava and the vicinity was the cause of much sickness, and that the local causes of disease were essentially the same as those which are observed to predispose to epidemic and pestilential diseases elsewhere; that, as regards transport ships, the best course to be pursued when sickness prevails on board is to remove the infected vessels into the open sea, and out of the vitiated atmosphere of the port; and that by far the greater part of the disease and mortality existing in the camp when the commissioners arrived out in the Crimea, was due to zymotic maladies, such as cholera, fever, dysentery, and diarrhœa, the causes of disease being chiefly damp, impure air, and (in a minor degree) impure water. A wet subsoil, a retentive (of wet) surface soil, and a confined locality, were always connected with attacks of zymotic disease, and the evils arising from local causes of dampness were often aggravated by the manner of pitching tents and erecting huts. As the result of their whole experience, the commissioners express their opinion that, inasmuch as the neglect of military *hygiène*, whether as regards the soldier personally, or the sanitary state of camps, barracks, and hospitals, has hitherto, in all countries, climates, and seasons, been the cause of the largest amount of loss in armies, the whole subject demands in future a practical development commensurate with its importance to the public service. The appendix to the report contains papers on the topography and geology of the seat of war, and on cooking and clothing, besides abstracts of diaries and journals from the pens of Dr. Milroy, Dr. Sutherland, Mr. Walling, Dr. Smart, and Messrs. Newlands, Freeney, and Aynsley.

The "Baby Tower." The China Correspondent of the *Times*, in a recent letter, has the following curious illustration of the customs of the celestials. He has been asking the Vice-Consul to explain to him the meaning of a curious looking building at a short distance, from which a not very pleasant odour reaches his olfactory organs. "Undismayed, the energetic Vice-Consul, who sometimes acts as guide, philosopher, and friend, advanced through a vapour so thick that I wonder the Chinese do not cut it into blocks and use it for manure—and at a distance of five yards from the building puffed hard at his cheroot, and said,—'That is the baby tower.' 'The ——?' said I, inquiringly. 'The baby tower. Look through that rent in the stone-work—not too close, or the stream of effluvia may kill you. You see a mound of whisps of bamboo straw. It seems to move, but it is only the crawling of the worms. Sometimes a tiny leg or arm, or a little fleshless bone, protrudes from the straw. The tower is not so full now as I have seen it; they must have cleared it out recently.' 'Is this a cemetery or a slaughterhouse?' 'The Chinese say it is only a tomb. Coffins are dear and the peasantry are poor. When a child dies the parents wrap it round with bamboo, throw it in at that window, and all is done. When the tower is full, the proper authorities burn the heap, and spread the ashes over the land.' There is no inquiry, no check. The parent has power to kill or to save. Nature speaks in the heart of a Chinese mother as in the breast of an English matron. But want and shame sometimes shout louder still. There is a foundling hospital in the Chinese city with a cradle outside the door and a hollow bamboo above it. Strike a blow upon the bamboo, and the cradle is drawn inside. If it contain an infant, it is taken and cared for, and no questions asked. There is also a system of domestic slavery in China. At an early age a child is worth dollars, a father or mother may for money delegate their own absolute power—delegate without losing it; for, although the father may have sold his son to a stranger, or although a mother may have sold her daughter to prostitution—and concubines in China are only thus to be obtained—the duty from child to parent remains unimpaired, and is strictly performed. The incentives thus offered by Mammon and the alternative proffered by native charity may save lives that would otherwise be destroyed; but this baby-tower is a terrible institution. It stands there, close to the walls of a crowded city, an intrusive invitation to infanticide."

Religious Intolerance versus Medical Science in Austria. During the last fortnight, the medical professors and students at the General Hospital of Vienna have been in a state of excitement and irritation. The Archbishop of Vienna not long since gave orders that all the persons who died in the various hospitals, and in the lying-in and foundling establishments, should be buried without either *post mortem* examination or dissection; and the consequence of the measure is, that, during the last ten or fifteen days, there has only been one "subject" in the great dissecting-halls of the General Hospital. Vienna was proud, and had good reason to be proud, of its medical school; but the Concordat has given into the hands of the clergy the power to ruin its reputation. According to a decree of Joseph II, the body of every person who died in the public hospital was to be opened or dissected, as the case might be; but the Imperial ordonance has, *de facto*, been abrogated by the Cardinal Archbishop of Vienna. (*Times* Correspondent, Nov. 10th.)

Association of the King and Queen's College of Physicians in Ireland. The following officers have been elected for 1857 and 1858. *President*, Sir H. Marsh, Bart., M.D., M.R.I.A. *Vice-Presidents*, Dr. Stokes, Regius Professor of Physic, T.C.D., Dr. Croker, M.R.I.A. *Council*, Dr. Fitzpatrick, Dr. Henry Kennedy, Dr. McClintock, Dr. E. B. Sinclair, Dr. Atthill. *Treasurer*, Dr. George A. Kennedy. *Secretary*, Dr. Moore.

The first open meeting of the Association was held on Wednesday Evening, November 4th, the President in the chair. Several valuable papers were contributed to a numerous audience, including most of the distinguished members of the profession in Dublin.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

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BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Guide to the Treatment of Diseases of the Skin: for the Use of the Student and General Practitioner. Illustrated by Cases. By *Thomas Hunt, F.R.C.S. Second Edition. London: Churchill. 1857.
2. A Case of Fibrous Tumour of the Uterus, accompanied with excessive Hæmorrhage, successfully treated by Excision. By D. Fordyce Barker, M.D. From the American Medical Monthly.
3. The Grasses of Great Britain. Illustrated by J. E. Sowerby: described by Charles Johnson. Part II. London: J. E. Sowerby. 1857.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LEICESTER INFIRMARY.

CASES OF DISEASE AFFECTING THE CRANIAL NERVES.

By JOHN SLOANE, M.D., House-Surgeon to the Infirmary, etc.

[*Read before the Leicester Medical Society, November 3rd*, 1857.]

WITH the exception of cases of paralysis of the portio dura, and of amaurosis when caused by lesion of the optic nerve, one very rarely sees a patient in whom there is complete loss of function in a cranial nerve. I therefore thought it might prove interesting and instructive to the members of this Society to submit to their examination patients with loss of function in the fourth, fifth, sixth, seventh, ninth, and spinal accessory nerves, and to read my notes of these cases. I have, in addition, notes of a case in which some lesion affected both the second and third cranial nerves, which fell under my observation at the Nottingham General Hospital, to which I shall first direct attention.

CASE I. Jos. Simpson, aged 48, residing in Nottingham, came to the Hospital there on Jan. 31, 1854. I took the following notes at the time. He is a boatman, married, who, on an average, takes two pints of beer daily. When a youth, had "typhus fever", from which he made a good recovery. Three years ago he was treated at Boston, in Lincolnshire, for a disease of his eye, which got well in a week. He had loss of vision, but no ptosis nor inflammation. He suffered much from headache at the time. After his recovery, he continued well till last week, when severe headache again came on; and in two or three days ptosis, with loss both of vision and of power of normally moving the eye. For these symptoms he has consulted a chemist at Newark, who ordered leeches to his temple.

He appears to be a strong healthy man. The levator palpebræ, the superior, internal, and inferior recti, and the inferior oblique muscles are completely paralysed: The external rectus acts well. On separating the lids, the eye is seen to be slightly drawn outwards; the pupil is dilated, and does not contract even on the approach of a lighted candle. The left eye only is affected; the right remains unimpaired. The headache still continues, and is located in his forehead. He is not subject to headache, except when his eyes have been disordered. Pulse 110. He has been thirsty lately, with heat of skin at night; appetite good; bowels regular; tongue clean and moist. The other organs appear to be healthy. He cannot account for this attack.

REMARKS. The man was supplied with some medicine, and he did not again present himself at the Hospital. This was unfortunate; because at the time of his visit I was very much occupied, and unluckily neglected to ascertain whether he was able to see with the left—the affected eye. It is noted that there was loss of vision; but this is caused in cases of paralysis of the third nerve without any lesion of the optic by the orbicularis palpebræ, supplied, as you know, by the portio dura, preserving its power, and producing constant closure of the lids when the action of the levator palpebræ, supplied by the third, cannot be excited. When the oculomotor is suddenly paralysed, and the optic nerves remain unimpaired, there is always double vision caused by the image of objects falling upon parts of the retinæ unaccustomed to act in concert. If this man had been the subject of diplopia he would scarcely have failed to acquaint me with a circumstance so likely to arrest his attention. In addition to the local ailment, he was suffering from symptoms of slight inflammatory fever; and three years previous to his present attack he suffered from some lesion involving the right optic nerve, but not the oculomotor, as he had loss of vision, but no ptosis. Mackenzie states that, "in cases of paralysis of the oculomotor, the vision of the eye, which lies behind the palsied lid, may or may not be affected. We find, from the commencement of the acute form, the pupil dilated, the iris partaking in the paralysis of the other muscles supplied by the third nerve; and this dilatation of the pupil is accompanied with the usual obscurity of vision met with in mydriasis. Generally it happens in the cases caused by disease within the cranium that vision becomes gradually affected; but sometimes it is suddenly so from the first."

From the facts before us I think we are justified in concluding that the symptoms in this case were caused by a lesion of an acute inflammatory character, situated within the cranium anterior to the optic commissure, so involving both the second and third cranial nerves as to cause loss of their functions, and amenable, in all probability, to prompt and active treatment. That the lesion was of an acute inflammatory character, is indicated by the suddenness of the attack and by the presence of inflammatory fever; that it was situated anterior to the optic commissure is shown, by one eye only being affected, as owing to the free decussation of nervous fibres at the commissure; had this lesion been located posterior to this point, both eyes would obviously have been involved; that the site was within the cranium is probable, inasmuch as the parts supplied by both the divisions of the third nerve were paralysed; and as this nerve divides before it enters the orbit, as within the orbit these branches pursue a very different course, and as at their entrance through the sphenoidal fissure they are placed in close contact with the nasal of the ophthalmic and the sixth nerve, neither of which appears to have been involved, it is fair to conclude that the disease was situated at the left anterior clinoid process, affecting the third nerve as it lay uppermost in the outer wall of the cavernous sinus, and the optic before it passed through the optic foramen. That the function of the third nerve was lost is indisputable; and that the function of the second was lost is rendered likely by the probable absence of diplopia, by the previous attack in which the right optic alone was involved, and by the statement of Mackenzie, from which we may infer that in the lesion of the oculomotor now under consideration the second nerve is not unfrequently affected. The dilatation of the pupil indicates disease of the second nerve; but it also indicates disease of the third, as in paralysis of the muscles supplied by the oculomotor we generally find great dilatation of the pupil, owing to paralysis of the circular muscular fibres of the iris supplied by branches from the third through the ciliary ganglion. From the presumed acute inflammatory nature of the disease, limited in extent, we should expect that it would yield readily to judicious treatment.

There are two most ingenious devices for the relief of ptosis, one of the unsightly and annoying results of disease of the oculomotor nerve. Mr. Hunt, of Manchester, has proposed an operation for bringing the upper eyelid under the control of the orbicularis palpebræ in cases of ptosis. The integuments between the eyebrow and lid are raised into as large a fold as possible, allowing the patient to retain the power of closing the lids, and the fold is removed, leaving an elliptical wound, the edges of which are brought together. Mr. Curling has described a case in which he had recourse to this operation, with the result that the patient was able both to open and close the lids, and without any ectropium or deformity having been produced. In double paralytic ptosis, caused by disease affecting both oculomotors, one might resort to this operation; but where the lesion was confined to one side, the immediate result would be double vision, and the probable ultimate result injury to the retina, because of the admission of the rays of light being uncontrolled, owing to the paralysis of the circular

muscular fibres of the iris. Dr. Mackness has described a useful instrument which he devised for a case of single ptosis, the result of the removal of a tumour in the eyelid, and which might be applied in cases of paralytic ptosis with advantage. He describes it as follows:—"A very thin and narrow piece of ivory, forming the segment of a circle, was riveted upon a narrow piece, about eight inches long, of the mainspring of a watch; the loose end of the spring was carried through the hair over the crown of the head to the occiput. The piece of ivory was then placed upon the eyelid so as to keep it open, and being very narrow was completely hidden in a fold of the eyelid. The spring was painted accurately to imitate the colour of the skin; and by the skilful adjustment of a ringlet which I observed my fair patient always allowed to fall furtively in that direction, it could not be observed unless the observer was very near. As the eyelids occasionally required closing in order to keep the eye moist, she soon acquired a knack of raising the spring, allowing the eyelid to fall down, and then replacing it again without anyone perceiving that she was doing more than just touching her eyelid."

Case II. June 24th, 1857. Abraham Tailby, aged 43, residing in Free Lane, has been for several months an in-patient, and afterwards an out-patient, under the care of Mr. Benfield. His parentage was healthy; he has been always in comfortable circumstances, and temperate. About three years ago he had a diarrhœa for three weeks, but has had no other illness. About nine months ago he was seized with facial paralysis on the left side, without pain anywhere. Three weeks afterwards his left eye became inflamed; and in three weeks more the sight was lost. He has been unable from his seizure to close the eyelids on the left side. Ever since three weeks after the paralysis came on he has had a slight pain in the left side of the forehead, and in the left temple. He has had otorrhœa for the last nine months from the left meatus; the membrana tympani on this side is seen, on examination with the speculum, to be bright red. He cannot hear the ticking of a watch when touching left ear; hearing in right good. The left cornea is opaque, and conical; there is considerable conjunctivitis; the eyeball is somewhat collapsed, and is drawn upwards and inwards; there is some watery purulent discharge. The levator palpebræ acts well, and he can draw the pupil upwards, downwards, and inwards, but not outwards, nor outwards and downwards combined. He can see quite well with the right eye, which in every respect seems to be normal. The sense of smell is somewhat impaired. The sense of taste is impaired considerably. There is complete loss of sensation in the left side of the face. When he is ordered to bite, with a hand upon each of his temples, I can feel the temporal muscle on the right side acting, but not that on the left. When ordered to blow, keeping his mouth closed, the left cheek bulges out loosely, whereas the right bulges only to a slight extent comparatively. The tongue is small; decidedly smaller on the left than on the right side; he protrudes it in the left angle of the mouth, and he cannot depress the tip so as to bring it into contact with the lower jaw. There is perfect anæsthesia of left half of tongue from tip to base; sensation is normal on the right side. His appetite is not good; he has some cough; no *râle*. He has had no vomiting nor convulsions. His mental powers are as perfect as before the seizure. When in the Infirmary he had hemiplegia, having lost sensation and the power of motion in the right side; but by purging and blistering these symptoms quite disappeared in four days. His speech is slightly impaired. His health in other respects is good.

August 8th. The gums are spongy, swollen, and red on the left side. There is no difference in the growth of left whisker, nor in the colour of the left nostril as compared to the right. The lower lip drawn to the left side, and slightly depressed towards the left angle, allowing the escape of fluids from the mouth. The uvula is slightly curved to the left.

October 21st. He is now able partially to close the left eyelids. The cornea is staphylomatous. There is less conjunctivitis than at the date of the first report. When ordered to blow, the right cheek bulges, the left not. A sequestrum can be felt in the left meatus auditorius.

Remarks. The left superior oblique muscle of the eyeball supplied by the fourth cranial nerve seems to be paralysed, as the patient is unable to draw the pupil downwards and outwards towards the lower and outer angle of the orbit, a movement effected by this muscle, but which might also be effected by the combined actions of the inferior and external recti. The external supplied by the sixth is paralysed, therefore the pupil cannot be carried in this direction by its agency conjoined with that of the inferior rectus; but as the superior oblique alone could effect this movement which Tailby cannot perform, it is clear that there is paralysis of the trochlear muscle. It is evident that there is facial anæsthesia, and paralysis of the temporal, masseter, buccinator, and other muscles supplied by the fifth from loss of its functions; and that there is facial paralysis from loss of function in the portio dura. Loss of function in the portio mollis is indicated by deafness in the left ear, which may, however, be accounted for by the disease observable in the membrana tympani and meatus auditorius, an improbable supposition, as will be more easily seen afterwards. The protrusion of the tongue in the left angle of the mouth and inability to depress its tip, show paralysis of the left genio-hyo-glossus and lingualis, two of the muscles supplied by the ninth nerve. The loss of vision is caused, doubtless, by the opacity of the cornea, the result of inflammation induced by the paralysis of the orbicularis palpebræ, preventing the closure of the eyelids, and consequent lubrication of the eyeball with the secretion of the lachrymal gland and removal of particles of foreign matter. In many cases of facial paralysis, however, the eye itself remains unimpaired; and as in facial anæsthesia caused by disease within the cranium, as far as I know, the eye invariably becomes disorganised, we may therefore justly ascribe the changes observable in Tailby's eye less to the paralysis of the facial than to a lesion of nutrition caused by loss of function of the fifth. This view is strengthened by the experiments of Magendie and Valentin. Sixteen hours after the division or contusion of the fifth pair within the cranium in a rabbit there is injection of the conjunctiva, with loss of sensibility. After twenty-four hours the cornea is opaque, and after thirty-eight hours there is an exudation in the middle of the cornea. After sixty-two hours there is a milky opacity on the centre of the cornea, with congestion of the iris and conjunctiva. After eighty hours a copious secretion of a viscid purulent fluid is observable, and in twenty four hours afterwards the cornea has become so opaque as to conceal the iris; the secretion of pus continues. One hundred and twenty-eight hours after the operation the purulent discharge has ceased, and a small ulcer has formed on the cornea; twenty-four hours afterwards the congestion continues, the ulcer has enlarged, and is covered with a dry yellowish crust. After death the cornea is staphylomatous, the anterior chamber is filled with exudation matter, found under the microscope to consist of granular and pus corpuscles, and the cornea is opaque. The lens, retina, and other parts of the eye are normal.

Notwithstanding the statements of Sir Charles Bell and others, Magendie, till his death, maintained, doubtless erroneously, that the fifth was the nerve of smell, and that we were still ignorant of the functions of the olfactory. With the view of elucidating this point, I closed the right nostril in this patient, and made some experiments to ascertain the power of smelling which he retained in his left. I also tried the effect of fragrant smells and irritating vapours, as the latter are considered to cause sneezing and other symptoms of irritation, not through the first, but through the fifth nerve.

I closed the right nostril, and allowed him to smell tincture of assafœtida, when he declared it to be pleasant; with the right open, he declared it to be disagreeable. With the left nostril, he thought essence of lemon a nice smell: with both, he at once declared it to be essence of lemon. He states that with the left alone he could not have told what the fluid was. With the left nostril, he pronounced oil of peppermint to be pleasant, and arrived at the same conclusion when he smelled it with both; but could not say what the substance was. With the left nostril, he said he could only perceive a slight fragrant odour from tincture of orange-peel, and gave a similar opinion when he used both nostrils. With the left nostril, he considered sulphuretted hydrogen rather strong and unpleasant, and came to the same conclusion after examining it with both. With the left nostril alone, he said strong liquor ammoniæ of the London *Pharmacopœia* was strong, but not unpleasant; with both, he said it was very strong. With the left, he could not smell veratria; when he snuffed it up, no sneezing was caused, but he coughed five or six times; on inhaling a great deal of the powder with both nostrils, he coughed for several minutes, but had no sneezing. In all these experiments, the mouth was closed; and his opinion regarding the odour received before the right nostril was opened. The closure of the nostril was effected by careful pressure with my thumb. After examining with the left nostril the preparations of lemon, peppermint, and orange-peel, the three fragrant substances experimented upon, he came to correct conclusions, showing

that, in this class of odours, the sense of smell remains almost perfect, although there appears to be complete loss of function in the fifth. His power of smelling the lemon appeared to be less with the left than with the right nostril. Contrary to my expectations, he gave a correct opinion regarding the odorous properties of sulphuretted hydrogen, and of ammonia after examination with the left nostril: these substances, however, produced a stronger impression when examined with both. The irritating effects of veratria were equally evinced by each nostril. Assafœtida was declared pleasant with the left, but with both he found it disagreeable. We may state that the results of these experiments tend to prove that it is by the olfactory we smell not only fragrant odours, but irritating vapours; and that the sense of smell appears to be weakened by loss of function in the fifth nerve. The slight loss of this sense may be explained by changes produced in the nose by loss of function in the fifth and in the portio dura. We know that the section of the fifth exerts a considerable influence over the secretions; and, when the nasal mucus is abnormal in amount, the sense of smell is blunted, as we perceive in the first stage of catarrh, when its secretion is diminished, or in a later stage, when it is augmented. As animals in which the facials have been divided are no longer able to follow scent, owing to the immobility of the nares preventing a free current of air through the nostrils, we may reasonably infer that in man the sense of smell is more or less impaired by paralysis of the portio dura.

It is still undecided how far the glosso-pharyngeal and the lingual branch of the fifth respectively minister to the sense of taste. I determined, therefore, in this case, to ascertain what difference of taste existed in the part of the tongue supplied by each of these nerves.

By experimenting with salt, sugar, infusion of quassia, and powdered ginger, I satisfied myself that the sense of taste was lost in the anterior part of the left half of the tongue, and that it was retained in the corresponding part of the right half. In my experiments, when the tongue was protruded, I placed successively a little of each of these substances upon the left side; he was then ordered to draw his tongue into his mouth, and to close his lips; and, after the lapse of a minute, he was asked whether he perceived any taste. His mouth was washed by drinking some beer, and then the process was repeated on the right side. In every instance, on the right side the taste was correctly described; whereas, on the left side, he invariably perceived no taste whatever. I found it very difficult accurately to reach the region of the papillæ circumvallatæ upon the tongue—the part to which the glosso-pharyngeal is supplied; and, as I was seldom satisfied that a little of the agents used as tests did not get dropped upon the parts supplied by the fifth, I could arrive at no results of any value with regard to the degree in which the glosso-pharyngeal is subservient to the sense of taste. That the lingual branch of the fifth ministers to the sense of taste, was proved.

Magendie has observed in dogs, after the division or contusion of the fifth pair within the cranium, in addition to other lesions of nutrition, that the gums become spongy and bleed, that the teeth drop out, and that the whiskers come out. By referring to the report of August 8th, it will be seen that Tailby's gums on the left side were spongy, but that his whiskers were quite as luxuriant on the left as upon the right cheek. I am unable to account for the difference in the appearance of the cheeks when blowing forcibly, which I observed in June, and that mentioned in my last report. The distension of the left side at first was caused by the paralysis of the facial; and the distension of the right cheek, observable at present, probably arises from atrophy of the tissues on the left side of the face, perceivable in a marked degree in the tongue—a result of impaired nutrition, consequent upon the lesion of the fifth.

The slanting of the uvula is an interesting appearance, of which Bidder was the first to give a physiological explanation. He considers the nervus petrosus superficialis major to be a motor nerve passing from the facial to the spheno-palatine ganglion, destined to move the velum palati. Loss of function in this nerve therefore causes unilateral paralysis of the velum palati, which gives the uvula a slanting direction towards the paralysed side. Romberg has noticed this slanting of the uvula in four cases of palsy of the facial. The staphylomatous condition of the cornea which exists at present, resembles the results observed in the eyeballs of the rabbits in which the fifth pair had been divided within the skull, and to which I have previously alluded.

There can be little doubt that the lesion in this case is some tumour or disease seated at the left side of the pons Varolii, involving the fourth, fifth, sixth, seventh, and ninth nerves, not extending so far forwards as to impair the functions of the third, nor so much outwards as to affect the eighth, but reaching backwards so as to involve the hypoglossal before it passes through the anterior condyloid foramen. That the temporal bone is diseased, is indicated by the sequestrum in the meatus; and the otorrhœa and congestion of the membrani tympani may be regarded as consequences of this disease.

Case III. October 27th, 1857. Catharine Sylvester, aged 39, residing in Bass's Yard, Leicester, is an out-patient under the care of Mr. Paget, for an atttack of scabies. She is a shoebinder, who has suffered many privations lately. Her health has been rather delicate. She sleeps well, and has no pain anywhere. The left eye and the left side of the face seem normal in every respect. She is able only partially to close the right eyelids. When requested to blow with the cheeks distended, the right is more distended than the left, and wind escapes at the right angle of the mouth, where the lips become slightly apart. In laughing, the right angle of the mouth is drawn more towards the ear than the left. There is no loss of sensation in the face. Hearing is good in both ears. The tongue is protruded in a straight line. The uvula is conical, very short, not more than a quarter of an inch in length. She is unable normally to corrugate the right eyebrow. The right eye appears larger than the left. The symptoms I have detailed she believes to have existed since birth.

Remarks. The most interesting point in this case is, that the disease seems to be congenital. The presence of scabies, for which I have a decided aversion, has hitherto prevented me from making a very careful examination. The right eye being apparently larger than the left is explained by the action of the levator palpebræ not being normally counterbalanced by the orbicularis palpebræ, causing the upper eyelid to be raised higher than natural; and thus more of the eyeball is exposed on the right than on the left side.

Case IV. June 15th, 1857. Philip Needham, aged 55, Barwell, is an out-patient under the care of Dr. Shaw, having for a month lately been an in-patient. He is a framework-knitter. His mother is "dropsical"; his father is dead, but was very healthy. He has suffered no privations. During the last two years he has been very temperate, but previously was rather drunken. He has had no previous illness.

About two years ago, he was suddenly seized with a pain in the right shoulder-joint, which was very severe; it has continued ever since. About three months ago, on five different occasions, it shifted to the right elbow for an hour or two. During these periods, the shoulder was quite free from pain. Three months ago, his head began to be twisted towards his right shoulder; since then this twisting has been gradually becoming worse. At present he complains of pain in the right shoulder. His left hand is engaged in holding his head straight: when he lets go his hold, the face is drawn slowly by jerks round towards the right shoulder, while the head is slightly drawn downwards towards the left; and he states that it feels as if it never ceased to be twisted in that direction, no matter how far it may have already gone. His neck is sometimes so much awry that he breathes with difficulty. He is sometimes scarcely able to pull his head round into the natural position. Sensation and mental powers are not impaired; voluntary motion is imperfect only to the extent described. There is no spinal tenderness. No organic lesion whatever can be detected in the shoulder or neck. When the head is twisted round, the sterno-mastoid of the opposite side is prominent and rigid, while the muscles on the right side of the neck are perfectly relaxed. When the head is drawn round as far as possible to the left side, he has no difficulty in retaining it there. His health in other respects is good.

August 10th. He complains of pain when gently struck at the upper part of the cervical portion of the spine. The left sterno-mastoid muscle is considerably larger than the right.

September 12th. There is no spinal tenderness.

November 2nd. Decided tenderness is evinced on percussing the upper part of the cervical region of the spine. He is able voluntarily to move the right sterno-mastoid.

Remarks. The cause of these distressing symptoms must be some lesion affecting the spinal accessory nerve, which is, as you know, a motor nerve distributed to the sterno-cleido-mastoid and anterior part of the trapezius. If you will reflect for one moment on the attachments of these muscles, you will readily perceive how their contraction upon one side causes the

movements observed in Needham. The sterno-cleido-mastoid, as you well know, arises from the sternum and sternal end of the clavicle, and is inserted into the mastoid process, and into the superior curved line of the occipital bone; and from this line also arise the anterior fibres of the trapezius, which are inserted into the scapular end of the clavicle. The combined action of the muscles supplied by the spinal accessory nerve on the left side would clearly be to draw the face towards the right shoulder, and to depress the head towards the left shoulder—the very movements we see in this case. Paralysis of the muscles supplied by the spinal accessory on the right side might also induce these symptoms; but that the disease is not paralytic, is shown by the patient being able voluntarily to move the right sterno-mastoid. The tenderness complained of on percussing the upper part of the spine indicates that the disease is located in the neck, near the origin of the spinal accessory. The lesion is one which causes irritation of this nerve on the left side. The experiments of Volkmann prove that irritation of the spinal accessory, at its entrance into the foramen lacerum, causes contraction of the sterno-mastoid and trapezius.

The treatment has consisted in the use of the liquor hydrargyri bichloridi, in drachm doses three times a day, in decoction of cinchona, with counterirritation by blistering at the nape of the neck. No marked benefit has resulted. Mr. Hardwicke, the intelligent house-surgeon of the Leeds Infirmary, told me of a case at Guy's Hospital in which he galvanised the sterno-mastoid on the side to which the face was turned, and which was thus cured in a week. We tried this plan upon Needham, but it made him worse. According to Romberg, the treatment hitherto adopted in this affection has been unsuccessful—a result which accords with the observation of Sir Benjamin Brodie, "that, in muscular spasms, remedies are of little avail". One case under Romberg's care recovered while taking the sulphate of zinc. Dr. Bright cured a case by giving carbonate of iron in doses of two and a half drachms, and by applying a moxa to the nape of the neck. Dr. Bujalsky, of St. Petersburgh, attempted to divide the spinal accessory; but this operation was not followed by any permanent results. Division of the affected sterno-mastoid has resulted in a permanent cure in the hands of Stromeyer and Amussat. Dr. Little speaks in laudatory terms of this plan of treatment, which appears to me to be the most promising. He says, "In severe spasmodic cases of wryneck, *subcutaneous* tenotomy is especially useful; it does not always effect a complete *cure*, because the disease resides in the central organs of the nervous system, which tenotomy cannot affect. But the operation, succeeded by appropriate treatment, lessens the power and energy of the muscular contraction, relieves the distressing neuralgia and other pains accompanying this form of deformity, and renders more effectual the use of the mechanical means that may subsequently be required." Stromeyer observes, "that tenotomy relieves spasm in about the same manner that opium relieves other cramps"; and Romberg states, "For certain forms of spasm, modern surgery has introduced myotomy—a proceeding which not only removes the residuary effects of spasm—contraction of the muscle—but may also exert a beneficial action in calming the nervous irritation during the persistence of the spasm." It is only fair to add, that one case is recorded in which the spasm was very severe, in which repeated division of the sterno-mastoid by Dieffenbach was utterly ineffectual.

ST. GEORGE'S HOSPITAL.

CASE OF FEMORAL HERNIA, WITH DIVERTICULUM OF THE SAC.

Under the care of Prescott G. Hewett, Esq.

Eliza M., aged 37, was admitted on July 14th, under the care of Mr. Prescott Hewett, labouring under strangulated femoral hernia on the right side. The hernia had come down three days before, without any violent effort, but after an attack of diarrhœa. She made some ineffectual attempts at reduction. Sickness soon after came on, and had continued ever since. An enema had brought away a small quantity of fæces; otherwise there had been no action of the bowels. The countenance was anxious and depressed; the pulse weak and fluttering; the abdomen was swollen and tender. The hernia itself presented a very peculiar appearance; it was of an oval shape, and spread upwards much more than usual, was remarkably flat, and appeared to be divided into two parts by a sort of constriction. The outer portion was soft and doughy; the inner hard and tense, and much the more painful of the two—so much so, indeed, that she could hardly bear it touched. Several attempts at taxis had been made during the period of strangulation. The hernia had existed a year, and a truss had been worn. There had been no difficulty before. The patient was of spare frame, and had of late been much out of health.

She was at once put under chloroform; and, after a careful examination of the parts, Mr. Prescott Hewett came to the conclusion that the peculiar appearances of the tumour in this case were dependent on a diverticulum of the sac, extending outwards.

At the operation, several large glands were found over the sac; the sac itself was freely laid open; and a knuckle of small intestine, of a dark colour, but otherwise apparently healthy, first came into view, and behind was a portion of intensely congested omentum. The knuckle of intestine corresponded to the hard tense portion of the tumour; and the omentum not only passed down behind the bowel, in the sac proper, but a portion of it also passed outwards into a kind of diverticulum. A small quantity of bloody serum was also found in the sac. Gimbernat's ligament was divided, and the bowel easily returned. That portion of the omentum which was in the diverticulum formed the doughy portion of the tumour, which had been felt before the operation. It was pulled out of its bed; and the opening of the diverticulum was then found to be much constricted, and its cavity dilated. The middle finger passed easily into it, and could be pushed some distance outwards. The cavity both of the sac and diverticulum was perfectly smooth, and presented the appearance of a continuous serous membrane. The whole omentum was of a dark livid colour, with spots of extravasated blood in various parts; and, as it was adherent to the outer part of the ring, the greater portion of it was cut off, a ligature having been tightly tied round its thickened pedicle. A grain of opium was given immediately after the operation. The bowels acted two days afterwards. Everything went on well, and she was discharged on August 5th.

Remarks. Cases of femoral hernia similar to the preceding are met with every now and then, in which the unusual form, size, and situation of the tumour, cause some doubt in the diagnosis, and a little hesitation sometimes, at first, as to the proper mode of performing the operation. The symptoms, indeed, of strangulation will show that part of the tumour is hernial, but the remainder may be enlarged glands, or an independent tumour of some other kind, or it may even raise a suspicion of double hernia. Mr. Prescott Hewett was led to the correct diagnosis in this instance by the recollection of a similar case on which he had operated previously, where, as in this case, there were two distinct portions to the tumour, which was itself remarkably flat, and extended outwards much more than usual. There also a diverticulum was found, with a narrow neck and expanded body.

In South's *Chelius* (ii, 75) will be found a detailed account of three cases which appear to have been similar to the preceding. All were women. In the first of these, "a large oblong tumour extended from the pubic spine to within an inch of the upper front iliac spine, about three fingers in breadth, covering Poupart's ligament, and having the appearance of an enlarged mass of inguinal glands, very firm and unyielding. A second swelling occupied the place of femoral rupture, not exceeding the size of a walnut, separated from the former by the crease of the groin. This seemed without doubt a femoral rupture. I was in much doubt of the character of the larger swelling, whether it were a mass of enlarged glands, or an encysted tumour, or whether a rupture; but neither its history nor situation led to the latter supposition." At the operation, the sac was opened in the situation of the smaller part of the tumour, which contained a small piece of omentum only. Then, "on carrying my finger round the hernial cavity, it suddenly passed into an aperture on the outer side, and being pushed onwards entered the large swelling, and passed up nearly as far as the iliac spine." This diverticulum also contained omentum. In the second case, "in front of Poupart's ligament there was a large swelling, extending to within two inches of the iliac spine, but not much elevated; and from its inner extremity a second swelling descended in the usual situation of femoral rupture. A distinct indentation existed between the two swellings as if they were separated beneath the skin." At the operation, the sac is opened at the inner part, which is found to contain omentum and a small knuckle of intestine. The latter is easily reduced. Then the hernial sac is examined, with reference to the remaining tumour, and an opening found in its external wall, communi-

cating with a large cavity which contained nothing but soft omentum, which was left there; the other portion of omentum in the sac proper being altered in structure was cut off.

The third case presented "upon Poupart's ligament a large tumour of an oblong shape, extending from about three fingers breadth inside of the iliac spine into the labium pudendi. . . . The appearance of the tumour, which was such as might be supposed to depend on femoral and inguinal rupture existing simultaneously, rendered diagnosis puzzling. But, finding it possible to put my fingers under both ends of the swelling, though I could not pass them under the centre, I concluded that the case was one of femoral rupture, accompanied with variety. This view was supported by the patient's statement, that till this morning, though often very large, the swelling had always been in the thigh alone, and not in the labium, where it first appeared only that day." Our space will not allow us to copy this interesting case in full. On the sac being opened, a quantity of omentum burst through the opening, and the swelling in the labium subsided. An aperture was found in the inner wall of the sac, through which the finger passed easily into a cavity in the labium; but whether this latter had a peritoneal lining, Mr. South did not observe. All the patients recovered.

Mr. South's explanation of these cases is, "that the hernial sac had burst at some former period, and that the protruded bowel and large portion of omentum had no proper sac, but had merely formed themselves a cavity in the cellular tissue." There is, however, nothing in the history or appearances which he so carefully describes to lead to the belief that any recent lesion existed, such as is sometimes found after falls or blows upon hernial tumours, abuse of the taxis, etc.; nor does the hypothesis of an old lesion appear to us so probable as that there was some accidental band or puckering in the peritoneal sac which prevented it from yielding, as it usually does, equally in all directions, and thus forced its contents into an unusual direction. The shape of the appended portion of the tumour, and the absence of adhesion between the sac and its contents, will be found, we apprehend, strongly in support of our view.

The occasional existence of these pouches is a fact which ought to be especially remembered in applying the taxis to such swellings. The process is described by Mr. South (whose third patient returned some time afterwards with the tumour strangulated): its principle consists in emptying the diverticulum into the proper hernial swelling, grasping the opening between them, and then attempting the reduction of the latter.

ST. MARY'S HOSPITAL.

ACUTE RHEUMATISM TREATED BY LARGE DOSES OF OPIUM.

Under the care of F. Sibson, M.D., F.R.S.

[*From Notes by* E. A. Hart, Esq., *House-Surgeon.*]

Several cases have lately been under treatment in St. Mary's Hospital, under the care of Dr. Sibson, which show the extraordinary tolerance of opium displayed by patients suffering from acute rheumatism. By Dr. Sibson's kindness, we have been favoured with a long series contained in his case-books for the last three years. These we have tabulated, and shall lay the general result of this method of treatment before our readers very shortly. Meanwhile we give in some detail the notes of five cases which occurred last year, and in which the exact amount of opium given was accurately noted. No one, we think, on reading the details of these cases will be inclined to question the modest assertion which we have made—that they prove a very extraordinary tolerance of the drug; and with this we shall be contented at present. When we have generalised for our readers the other cases, we shall be better able to attempt an answer to the many other questions connected with any given treatment of this painful and obstinate disease.

Case i. George W., aged 30, was admitted on September 12th; and discharged convalescent on November 20th. He had had two previous attacks of acute rheumatism, but without, as it seemed, any cardiac symptoms. The present attack had lasted two months, during which time he had been confined to bed, and treated apparently with purgatives and Dover's powder. The pain had been extreme, especially in the knees and feet. This, however, had somewhat mitigated at the time of his admission. He was treated principally by means of iodide of potassium, and continued to improve for a few days.

September 21st. The acute pain returned in the knees and in the metacarpo-phalangeal joints. He was sleepless; the urine deposited a copious sediment of lithates; the joints were affected, very red and tender. He was ordered to have a grain of opium, and two grains of ipecacuanha every two hours. He passed a restless night, but on the following afternoon had come under the influence of the opium, and had many hours of sound sleep. Next morning, when he woke, the pain was undiminished, and the effusion greater; the tongue brown and dry; great thirst; much acidity of the urine, and perspiration. The pills were resumed; a mixture, with bicarbonate of potash, nitric æther and hyoscyamus was ordered, and mercurial ointment rubbed into the knees.

September 24th. The pains were much relieved, and continued to be of a slight nature till October 3rd; when, as they had recurred with sufficient violence to keep him from sleeping, he was ordered to take two grains of opium at bedtime, and a grain of opium and half a grain of extract of colocynth every two hours. This was persevered in till October 7th; when, as the pain was not relieved, three grains of opium, instead of two, were given at night. During this time he slept frequently, but only for short periods. The tongue was dry and brown, and he was weak and anxious.

October 10th. The pain was somewhat relieved, and the effusion into the knee-joints much lessened.

October 14th. He was ordered iodide of potassium, and potassio-tartrate of iron, of each six grains three times a-day. The opium was continued, and increased next day, so that he took ten grains of opium on the 15th, and eight on the 16th. Notwithstanding this large dose, the tongue was clean, and no symptom of narcotism, except drowsiness and dulness of manner, was present.

October 17th. The pain and effusion were sufficiently relieved for him to be allowed to leave his bed; but the pain soon recurred, and the opium treatment was continued: it did not affect his appetite, nor did he sleep more than natural.

October 30th. As the left knee and shoulders had become more painful, the pill was given every hour. He thus took on that day seven grains of opium in as many hours; nineteen on the 31st; fifteen on November 1st; thirteen on the 2nd; and ten on the 3rd. The opium was omitted next day, when he had lost his pain, and could move his shoulders without difficulty. From this time he continued to mend, and was discharged convalescent a fortnight afterwards.

Case ii. George W., aged 17, baker, a healthy lad, was admitted on October 6th, and discharged cured on November 16th, with acute rheumatism of about a week's duration: the first attack, in the legs, arms, and shoulders. The pains were rather severe, and there was great tenderness, but not much swelling. He had a little difficulty of breathing, and the heart's sounds were diffused; otherwise there was nothing unnatural about the chest.

October 7th. He was ordered to take a grain of opium, and half a grain of extract of colocynth every hour, and this was continued till, on the 8th, he had been brought well under the influence of the drug, when the pills were omitted for the present. In the afternoon, as the effect of the narcotic had passed off, he was restless, and complained of increased pain; the pills were again ordered every hour.

October 9th. Symptoms of cardiac affection appeared, and a creaking sound could be produced over the præcordial region by pressure. Leeches were applied. The evidences of extensive pericarditis became more distinct during the next few days. The opium treatment was now pressed vigorously, so that in the eleven days, Oct. 11th to 21st inclusive, he took the extraordinary quantity of 166 grains of solid opium. The treatment was continued one day longer, but the quantity on that day is not noted. It would be tedious to give the symptoms of the disease from day to day. Suffice it to say that the signs of inflammation of both the pericardium and endocardium were distinct; and there was at one time evidence of pleural effusion. The effect of the opium was shown from time to time in contraction of the pupil and drowsiness; the appetite was generally good; the tongue clean; perspiration free; and there was no complaint of constipation. The friction sound soon disappeared; but the endocardial bruit remained, though much weaker, and evidently receding, up to the time of his discharge. This took place one month after his admission, and somewhat less than six weeks after the commencement of the disease. He was then in perfect health (though rather feeble), except for the state of the heart above indicated.

Case iii. William R., aged 39, a barman, was admitted on Oct. 27th; and discharged cured on Dec. 15th. He had been labour-

ing under acute rheumatism for about a fortnight. The pain was severe in the knees, shoulders, and knuckles. There were no heart symptoms. His general health seemed to be pretty good. He was put at once on the opium treatment; a pill containing one grain of opium with a small quantity of colocynth being given every hour. He took six pills that day, in the course of seven hours, with manifest relief to the pain, but without their procuring sleep. During the next three days the pills were continued regularly (he took fifty-two in this time); when, as he was becoming delirious, they were ordered every third hour, and then discontinued. He had thus taken sixty-two grains of opium altogether in five days. The principal effect appeared to be the relief of the pain, so that he could soon sit up easily in bed, whereas, on his admission, he could not bear to be raised. He did not sleep inordinately, and was always easily roused. The delirium noted above soon subsided on the omission of the narcotic. He was ordered to have an effervescing saline draught with ammonia.

On November 4th, however, cardiac symptoms supervened; a friction-sound and systolic murmur were heard. Leeches were applied; and the opium was again ordered as before, and again pushed till he began to show symptoms of delirium. This was on the 11th. In the interval, the symptoms of pleurisy had been added to those proceeding from the affection of the heart. He was now ordered to take the pills every three hours; and, in a few days, this was diminished to every four hours. This treatment (he had been taking the saline mixture at the same time) was continued till December 1st; when, as his pains had subsided, and he was well enough to walk, it was abandoned. The murmur had almost disappeared; the chest seemed free from fluid; and he was advancing rapidly to convalescence.

He left the house, in every respect well, on December 15th; thinking himself in no respect weaker or less healthy than before the attack.

Case iv. George F., aged 26, a huckster, was admitted on Nov. 14th, and discharged on January 5th, with acute rheumatism (the second attack) of six days standing. The pains were seated principally in the wrists and ankles. There was no heart affection. The progress of this was very like that of the other cases. He was ordered four ounces of lemon juice a day, and the same pill as in the previous cases every hour. This was continued for twelve days, and during nine of them the doses were accurately noted; they amounted to a hundred and forty-one grains of opium. Murmur, both exo- and endo-cardiac, occurred on the fourth day of the opium treatment. The latter never produced any narcotism or delirium. There was effusion, also, in the pleura here, as in the last case; and he suffered from slight bronchitis. The pains were soon subdued; and the cuticular symptoms altogether subordinate to those affecting the chest, to which the treatment was afterwards directed.

Case v. John W., was admitted on account of a slight accident, and transferred on account of rheumatic pain and stiffness of the wrists and ankles, and some pain in the chest, on November 10th. These symptoms had existed three days. A systolic murmur was heard. In this case the same treatment was at first employed, and he took a hundred and twenty-seven grains of opium in nine days; when, as he had been brought fully under the influence of the drug, and was slightly delirious, its further use was suspended. It did not seem to have produced any marked benefit.

Grosvenor Place School Medical Society. The first meeting of this Society took place on Thursday evening, November 12th, W. Adams, Esq., in the chair. The President opened the proceedings with a brief and energetic address, complimenting the students on the success which has attended the formation of their society; pointing out to them the advantages, social, scientific, and professional, which arise from such *réunions;* and giving some general instructions as to the course which should be pursued in the preparation of papers for the society. Mr. T. A. F. Scott, surgeon, read a paper on Excision of the Knee-joint. In this paper he defended, from statistical evidence, the operation of resection; and showed, from an analysis of all the cases that had been performed, that the mortality from this operation was not greater than 20.95 per cent. He then contrasted this favourably with the mortality from amputation of the thigh; and concluded by answering the objections which have been brought forward against the operation. After the paper an interesting discussion took place, in which Drs. Richardson and Halford, Mr. W. Bloxam, the President, and others, took part.

Original Communications.

CASE OF TRAUMATIC TETANUS: RECOVERY.

By Samuel Taylor Chadwick, M.D.Edin., M.R.C.S.Eng., Bolton-le-Moors.

G. Orrell, a strong healthy youth, aged 14 years, employed in a cotton-mill, on August 3rd last accidentally got the index finger of the right hand caught in the machinery, whereby an extensive laceration of the integuments and tendinous structures of the whole palmar surface was produced. The case was treated in the usual way. On the tenth day succeeding the accident, the wound was suppurating, and filling up with granulations. The following day, his mother called to inform me that he was indisposed, which she attributed to his having taken cold.

When I visited him, on August 13th, I found him complaining of sore throat, pains about the neck and epigastrium, difficulty of swallowing, and inability to open his mouth; he had also great heat of skin, quick pulse, and pain in the loins, besides that peculiar but characteristic expression of features, known as the tetanic face, was well marked. On the preceding day, he had complained of great lassitude, shivering, and pain in the limbs; and the night had been passed in a restless manner. As there was constipation, I ordered one of the following powders to be taken every three hours, until a free action of the bowels was produced.

℞ Hydrargyri chloridi gr. ii; pulveris jalapæ gr. viii. M. Mitte tales iv.

Afterwards a pill, containing two grains of compound soap pill and three grains of camphor, was ordered to be taken every four hours, if the pains continued urgent.

August 14th. On visiting him this morning, I found him much worse. He opened his mouth with greater difficulty; the pains at the back part of the neck were more severe, and that of the epigastrium extended from the ensiform cartilage along the diaphragm through to the spine. The second powder had produced free purging; but, in consequence of the trouble he had in swallowing, not more than two or three of the pills had been administered; they were therefore directed to be omitted, and the following mixture to be given in their stead during the paroxysms.

℞ Tincturæ opii, ætheris chlorici, āā ʒii; misturæ camphoræ ad ℥i. M. Sumatur cochleare parvum tertiâ quâque horâ.

Turpentine stupes were ordered to be applied to the back and chest. He said he could eat if he dare, but the effort of speaking or swallowing brought on a violent paroxysm. He was directed to take tea, gruels, and broths *ad libitum.*

August 15th. There was no improvement. The muscles of the neck, masseters, and recti abdominis, were more rigid; the jaws completely fixed; the head and shoulders bent forcibly backwards. Both trismus and opisthotonos were fully developed. The pulse was 120; the breathing laborious and hurried; the skin moist. He had to be prevailed on to take both food and medicine. Last night, on their own accord, the attendants applied mustard cataplasms. The bowels were open; he had some thirst. The mental faculties had been undisturbed throughout. The mixture was continued, and he was ordered to have two grains of calomel three times a day.

August 16th. The symptoms, if possible, had increased in severity. His parents expected him, two or three times during the night, to die of suffocation. For two days past he had been much harassed by short cough and a tenacious kind of mucus, which he can scarcely eject from the mouth: the tongue had also several times got entangled between the teeth, from which position it had with great difficulty been liberated. Wedges of wood and thick pieces of leather had been used, to obviate or prevent its recurrence; but, notwithstanding these means, the tongue was severely lacerated. The anodyne, with antispasmodics, was ordered to be given more frequently. The mercury was omitted on the sixth day, as its action on the bowels was severe.

It was not before the eighth day from the accession of the tetanic symptoms that the boy had any amelioration of his sufferings; after this time the intermissions became gradually longer, and the paroxysms of less severity. On the fifteenth day they had altogether ceased, at which period the wound was nearly cicatrised. The painful parts have been fre-

quently rubbed with a powerfully stimulating embrocation containing opium.

Oct. 1st. He is now going about, rapidly regaining strength, though still complaining of extreme tenderness about the muscles, especially those which were principally subjected to spasm; and the features have not regained their wonted appearance, inasmuch as he presents a peculiar *grin*, which gives him a highly ludicrous appearance.

Remarks. Although this case is to be considered a recovery, I by no means entertain the idea of its being a cure. There is nothing in the treatment but what has been practised over and over again. I must, however, confess my astonishment at the result, especially after my almost invariable ill success in these cases. The *vis vitæ* here was sufficient to sustain him until the violence of the morbid action was exhausted. In my practice, numerous cases of tetanus have come under observation, all of which, however, with the exception of this and another, have proved fatal. The other recovery to which I allude, occurred a considerable time ago to a girl who received a contused wound on the radial side of the forearm, near the elbow. In about three weeks after the receipt of the injury, a severe form of tetanus set in. After freely evacuating the bowels, I treated her on Dr. Elliotson's plan, viz., the admininistration of large doses of the sesquioxide of iron. On the fifth day, the malady had passed off.

A similar case occurred soon afterwards, and I adopted the same plan of treatment, but not with the same fortunate result: the case terminated fatally.

The cannabis Indica or Indian hemp, so highly extolled by Dr. O'Shaughnesey, I saw submitted to a fair trial in the year 1845, by the late Mr. Maurice Colles, at the Meath Hospital, Dublin. The patient was in the hospital for treatment of a lacerated wound of the leg, during which period tetanus came on; and, although the remedy had a careful trial, the case ran on rapidly to a fatal termination.

I have never used chloroform; and, from what I have seen of the practice of others, I feel no inclination to do so. In the Royal Infirmary of Edinburgh I witnessed its inhalation, but with no advantage further than a temporary alleviation of the spasms.

About two years ago, there was a vigorous young Irishman brought into the City of Dublin Hospital, in consequence of a severe injury of the hand, produced from the bursting of firearms. I was present at a clinical lecture given by Dr. Hargrave, Professor of Surgery to the Royal College of Surgeons, Dublin, also the author of a valuable manual on operative surgery, when he referred to this case, and spoke of its being a wound of that character in which lockjaw might supervene. In that institution, they have a remedy, which is designated their "anti-tetanic pill", the composition of which, if my memory serves me right, is colocynth, scammony, calomel, tartar emetic, and henbane: one of these pills is directed to be taken every six hours. Dr. Hargrave expressed his confidence in the prophylactic efficacy of the medicine, as it keeps up free intestinal action, besides correcting the secretions. The patient made a good recovery, without any tetanic manifestation.

As to the inutility of attacking the spine with counterirritants, I may relate the following case:—A hale strong man, employed on the station of the London and North-Western Railway Company, got his hand jammed between the buffers of two waggons. The integuments of the hand were much bruised, and the muscles of the ball of the thumb considerably lacerated. When the poor fellow had almost recovered from the casualty, he became the subject of the severest attack of trismus and opisthotonos I had ever the painful opportunity of witnessing. I bled him to sixteen ounces, purged him freely, gave calomel, opium, and tartar emetic, with antispasmodics; turpentine dressings to the wound. On the day succeeding the attack (owing to the man being an old and trustworthy servant), his employers requested that I should take along with me a gentleman who at the time stood at the head of his profession in this town, but has since removed from among us. On being informed what means had been adopted, he concluded that he could only make one suggestion, viz., a free application of the actual cautery along the whole course of the spine. This was done about noon, and the formidable operation was borne with great fortitude. Immediately after the application of the cautery, the jaws could be more opened, and the extremities became more flexible. This state of matters, unfortunately, was but of short duration; the patient relapsed into his old state, and death put an end to his agonies about the following midnight.

INTRAUTERINE INJURIES AND DEFORMITIES, WITH A CASE OF COMPOUND DISLOCATION OF VERTEBRÆ (?).

By R. U. West, M.D., Alford, Lincolnshire.

The perusal of the accounts of some curious cases of intrauterine fractures, recently published in the Journal, and especially of Dr. Barker's elaborate paper on the subject, reminds me of a case of some singularity, which I met with in my practice some years ago, and concerning which I have the following brief note and rude sketch in my register:—

"No. 967. November 10, 1844. Primipara. Delivery with vectis. Fœtus hydrocephalic, at the full time. Spinabifida; vertebræ quite dislocated; club feet; left knee stiff, and bent forwards. There was a considerable quantity of fluid between the chorion and the amnios. The child lived three days, with inability to retain urine or fæces."



To the above extract from my note-book, I may add from my recollection that the women present at the labour at once attributed the miserable condition of the child to repeated injuries received by the mother from its father, who had frequently kicked her on the back and abdomen. No doubt the complication of hydrocephalus, distorted knee and club feet, were of the kind frequently seen either associated with, or caused by, spina bifida. How far the spina bifida could be the direct effect of an injury or blow inflicted on the mother's *abdomen*, in the manner so distinctly described by Mr. Davies, of Pershore, in the account of his case, or the indirect effect of the mother's imagination after having been kicked on the *back*, must remain doubtful. After Mr. Davies's very distinct statement, and other analogous accounts, it would seem that it is just possible that the child *may* be wounded by a stroke on its mother's abdomen; while, on the other hand, examples of the effects of the maternal imagination on the fœtus are so numerous and so well authenticated, that we may perhaps, to some extent, admit the latter supposition as accounting for the injury to the child's back. A spina bifida once in existence, the distorted knee and club-feet are easily accounted for, being the effects of spinal irritation. But the coincidence of a large hydrocephalus, which this was, with an open and discharging spina bifida, is not so intelligible to me when I reflect on the following case; I again copy from my register:—

"No. 1353. May 9, 1848. *A natural labour at the full period.* Fœtus with spina bifida on lumbar vertebræ. The tumour had burst, and was partially covered with a thin, livid, unhealthy-looking skin. Inferior extremities paralytic; fæces and urine not retained. In this case, at the end of about two months, the opening in the tumour closed up; the skin over it, however, still retaining its livid appearance. Up to this time the discharge of watery fluid had been abundant. On the cessation of this discharge, consequent on the healing or closing of the opening, the head began to enlarge. For a long time the child appeared to be conscious of its sufferings; but as the hydrocephalus advanced it became more and more unconscious, although it was continually crying. At the end of the fifth month, the head being enormously enlarged, the eyes were found to be destroyed, partly through distension by excess of their fluid contents, the iris being no longer distinguishable, and partly because the integuments of the head were so stretched that the eyelids could not be closed. The child was about six months old, when it died—a miserable object. The feet were perfectly formed at birth, but gradually became affected with *inversion.*"

In this case, so long as the spina bifida was open and discharging fluid—(qy. the *cephalo-spinal fluid* of Magendie?)—there was no development of hydrocephalus; while in the other case there was hydrocephalus co-existent with an already open spina bifida. The second case possesses some interest from the fact that it affords an example of certain processes which are usually intrauterine, not going on or developing themselves until after birth—the physiological consequences of an intrauterine pathological condition. It is instructive, as showing visibly in operation the processes by which so frequently certain deformities are produced within the uterus.

But these remarks are perhaps irrelevant to the subject of intrauterine injuries. Reverting to that subject, then, let me remark that at the last moment a third possible mode of accounting for the displacement in the case of dislocated vertebræ suggests itself to me. Could it by possibility have been caused during the labour by the violent expulsive force of the uterus at its fundus, in vainly trying to push a large hydrocephalic head through the pelvis in a primiparous case? I have not mentioned, but I now do so from recollection, that the overlapping lumbar vertebra was, at the point marked with an asterisk, ragged and covered with nasty livid, unhealthy granulations, with a few small, almost black, coagula upon them. Well, then, assuming that there was already an open spina bifida, would it be possible, by pushing forcibly at the breech of the child, doubled up as in the usual position within the uterus, for the muscles of the uterus itself to produce the deformity and displacement shown in the sketch?

The subject of maternal impressions to which I have cursorily alluded is an interesting one. I have records of cases in which the effect, which corresponded with the fears, anxiety, or horror of the mother, was itself secondary to some pathological state of the fœtus, which had no relation whatever with the maternal impression—as if nature went to work in a round-about way to produce the "mother's mark". Thus, in one instance, where the mother had been frightened by an owl, she was confined prematurely of a monster with eventration of the *abdominal viscera*—absence of skull and eventration of *brain*—absence of spinous processes and other parts of vertebral column, exposing, and producing eventration of, *spinal marrow;* all this conducive to, or coincident with, a face exactly like an owl's.

Surely, when we see all this complication of arrested development merely subsidiary to a certain owl-like appearance of the whole face and figure of the fœtus in question, which alone could be connected with the maternal impression, we may doubt altogether the influence of these impressions. The subject is, however, one for study and reflection.

I append a more full description of this monster as it stands in my note book:—

"No. 1607. May 30th, 1850. Still-born girl. An 'exencephale' monster. Premature. *Note.* There was eventration of all the abdominal viscera, though a round opening in front, and towards the right side of the abdominal walls. The sac of the eventration had burst, and all the viscera were exposed, the most conspicuous being the liver, very much rounded. But perhaps the most remarkable anomaly consisted in the condition of the brain and spinal marrow, constituting the monstrosity named by St. Hilaire 'exencephale' (*Anomalies de l'Organisation*, tome iii, p. 313.) Thus, there was absence of the whole of the cranial vault, commencing just above the orbits, the whole of the occipital bone being wanting, with the upper parts of the parietal and frontal bones. The brain was consequently exposed, and from want of support was very large, and the two hemispheres widely separated. The right hemisphere was covered only by its pia mater; the left was enclosed in a loose bag of dura mater, which hung to one side like a night cap. The cerebellum and medulla oblongata were wanting, the large cerebral hemispheres resting immediately on the spine, which was, itself, much distorted, and as far as the sacrum, was so far deficient that the spinal marrow, or the rudiments of it, was exposed. This rudimentary spinal marrow consisted merely of two columns of membrane separated widely from each other and containing a reddish fluid; but the nerves were seen proceeding from it and passing through the theca vertebralis to their distributions. The double origins of these nerves were beautifully distinct, with the ganglion on the posterior root of each of them. The theca vertebralis itself was open posteriorly, thus more effectually exposing the abortive vertebral columns. The bony spine consisted of nothing, therefore, but the *bodies* of the vertebræ with a sort of gutter posteriorly. It was much widened between the shoulders, and at that part projected backwards like a hump, so that the head and face were sunk deep between the shoulders, and the front of the throat thrust forward to a level with the chin and sternum. At this hump-like portion of the spine the medulla was still more rudimentary, being reduced to a few scattered nervous fibres continuous with the brain, which lodged upon it, and most likely prevented its development by pressure. The fœtus itself was very small, about a foot long. Both feet were distorted—inverted. The placenta was the largest I ever saw. The funis was not more than two and a half inches long, and was inserted into the edge of the placenta. It was given off from the left side of the ventral opening, the eventrated viscera lying on the right side of it. The sac of the eventration seemed to have consisted of one of the coverings of the funis, which had burst on the right side. The liquor amnii was amazingly redundant, and the birth of the monster was followed by considerable hæmorrhage. The fœtus and placenta were expelled in one mass some few minutes before my arrival.

"Compare with case 1405, which gives an example of what may be the first step of abdominal eventration. Compare also with cases 967 and 1353 for distorted feet depending on spinal irritation; and with case 1041 for hypertrophy of placenta as coincident with imperfectly developed fœtus; also with cases 1254 and 1134 for redundant liquor amnii, coincident with disease or death of fœtus."

Now, in this case I made a blacklead pencil sketch of this monster before leaving the house of the patient; and on getting home I found I had sketched a *fac simile* of one of St. Hilaire's plates, where he gives a portrait of an "exencephale", that being the term applied by him to the peculiar exposed condition of the brain shewn in my monster: the owl-like character of the face being the usual physiognomical characteristic of that kind of eventration, and being therefore *secondary.* And yet *that* was the mother's impression. In another instance, which was still more remarkable, we had not only the effect of the maternal impression secondary to a previously existing pathological condition, but we had that effect developing itself only after the birth of the child. I again extract from my note-book:—

"No. 768. September 16th, 1842. A natural labour. *Note.* The child's eyes had a strange staring unwinking appearance; so much so, that I apprehended convulsions. None, however, came on. When I called on the woman again, no remark was made to me about the child's condition. About five weeks after, as I was riding past, I was called in to look at the child's eyes, and was horrified to find them both quite disorganised. A portion of the iris was hanging out of one of them, and they both seemed to have burst. Luckily, the child did not live many days after this. I was told that the child had never closed its eyes from its birth. The lids appeared to be natural in conformation. The mother attributed the misfortune to a species of fright. On one occasion, while pregnant, when she was milking, the cow had lashed its tail across her eyes, causing great pain, and a sensation that her eyes were destroyed."

We had thus, as I have said above, visibly in operation, after the child's birth, the process by means of which the imitation of the maternal impression was produced. It was the extrauterine development of an intrauterine pathological condition—the latter having no resemblance to the maternal impression. Indeed, the effect was one which could be produced by such a cause only after birth, being the inevitable result of a constant

exposure of the eyes to the light, similar to what took place in the second case of spina bifida quoted in this paper, in which the scalp was so distended by the development of hydrocephalus, that the eyelids could not be shut.

But I am wandering again from my immediate subject. I will wander still further, concluding by observing, *à propos* of the circumstance mentioned in the description of the case of dislocated vertebræ, viz., that there was redundancy of fluid between the chorion and the amnios observed during the labour, that I have on other occasions observed a similar coincidence of redundant fluid in the ovum, with a dropsical condition of some part of the fœtus.

TREATMENT OF CYNANCHE MALIGNA.

By W. A. Bryden, M.D., Mayfield, Sussex.

The invariable success which has attended the following method of treating an epidemic, of a very severe character, that has for some time been raging in this neighbourhood, induces me to communicate it to my professional brethren, in the hope that it may, in their hands, prove the means of saving many a valuable life. Out of between twenty and thirty cases of the disease, I have not lost one, where I have had an opportunity of putting this plan of treatment into execution.

The symptoms presented by the majority of cases were those described by Fothergill, Bretonneau, and others: varying from slight diphtheritic tonsillitis to nearly complete obstruction of the throat, with whitish or gray coloured specks and patches on the palate, tonsils, and uvula; accompanied by fever of a low typhoid type, and great prostration of the powers of life. In only one of the cases did I notice any rash, and in that it was of a papular character.

The treatment which I have found most successful has been to give powdered guaiacum in combination with chlorate of potassa; to support the strength with beef-tea, mutton-broth, etc.; and to cause the patient to frequently gargle the throat with a solution of chlorinated soda; or, if he be too young, or unable from any cause to use the gargle well, to cause his throat to be mopped or sponged with it. The secretions, of course, must be attended to; and in the later stages of the disease, tonics, such as quina, or bark, and nitric acid, will be beneficial.

I was led to use the guaiacum in this disease from having frequently seen the benefit derived from it in the ordinary cases of cynanche tonsillaris—a circumstance which, if I mistake not, was first pointed out by Mr. J. Bell, of Barhead, twelve or fifteen years ago. The more *sthenic* character of the cynanche tonsillaris, however, renders the addition of nitrate of potassa to the guaiacum preferable to the chlorate.

CASE OF MALIGNANT DISEASE OF THE LIVER.

By W. Newman, Esq., Fulbeck, near Grantham.

The following case of malignant disease of the liver may present some points of interest.

M. N., a female, age 59, applied to me in January 1857, with various symptoms of hepatic derangement, dyspepsia, etc. The treatment adopted gave but little relief; and hence accurate examination showed the existence of a hard lobulated enlargement of the liver, occupying the right hypochondrium, and encroaching on the middle line.

The swelling increased rapidly, especially in the epigastric region: ascites supervened, and, as there was much suffering from dyspnœa, etc., paracentesis abdominis was performed in May 1857, and nine gallons of thick albuminous fluid were drawn off with much relief. The removal of the fluid showed that the tumour had increased much; it occupied the whole of the epigastric, and part of the left hypochondriac regions: encroaching on the umbilical region, and reaching nearly to the crista of the ilium. It was softer in some parts than in others; and was singularly lobulated throughout. The fluid collected again, and six weeks after the tapping, a repetition of it was proposed, in June 1857. Before any time was fixed the cicatrix of the puncture gave way during a sudden movement, and the fluid escaped from the abdominal cavity through this opening. The puncture remained open, and from that time, up to the patient's death, in Sept. 1857 (a period of nearly four months), a discharge of serous fluid, to the extent of a pint or more, took place every, or every other day. This of course was a great relief after the prior distension, dyspnœa, etc. She sank at last from complete exhaustion.

An external *post mortem* examination showed the tumour occupying the whole of the abdomen on the right side, extending downwards quite into the pelvic cavity; and also encroaching on the left side: it was hard and lobulated in parts, soft and very yielding over the region of the liver: the puncture opened direct into the peritoneal cavity, and was still patent. I could not obtain leave to make any more accurate examination.

The history points to the case as one most probably of soft cancer. The existence of the peritoneal fistula is, to say the least of it, a novel feature, and induces the idea that the case may on that account deserve a record.

Reviews and Notices.

Transactions of the Medical Society of King's College, London. Vol. I. Winter Session—1856-7. Edited by Alfred Meadows, House-Physician.

We have perused this volume—the first publication of a Students' Discussion Society which has existed for more than twenty years—with much interest, and, we are bound to say, with considerable satisfaction. The society is, as it would appear, almost limited to students, or those who have recently passed some examining board, and are serving as resident officers in the hospital. Hence the same mastery in treating, and freedom in selecting, their subjects can hardly be expected from the authors of the papers before us, as from the distinguished men who are contributors to *Guy's Hospital Reports*. What they profess to do, however, they have done well; and that is, to give a careful and clear statement of the practice and teaching of the school to which they belong, supported and illustrated by cases under the eyes of their audience at the time. The principal feature of all the papers is this, of practical hospital work; so that, of the nine papers of which the body of the work is composed, only one is devoted to other than a clinical subject ("The Voice," by Mr. Meeres); and even this has a direct bearing on anatomy and physiology.

We would especially call the attention of those interested or engaged in the management of such societies to the paper of Mr. Lawrence on the Morbid Anatomy of the Heart, as a model of what such papers ought to be, treating an every day subject in a lucid and matter of fact manner, and illustrating every point of the description by a reference to cases which the hearers are or ought to be in the daily habit of visiting. The importance and advantage of such a society to the education of the student for the time being cannot, we think, be spoken of too highly.

If the further question be asked, whether it is advisable to print and publish such collections, our answer would be in the affirmative. It may be true that they contain little that has not been said before, and nothing that may not be known by the accomplished medical practitioner (though we, for our own part, are not ashamed to own having derived several new facts from the little volume before us); but we must remember that all medical practitioners are not accomplished, and that to the juniors and the students a publication which in a small compass gives the results of the practice and teaching at a large London school for a year, together with a record of the most important cases which have occurred in it, is of no small value. Besides, even if such a publication contained no other interesting or important fact, it proves this at least, which is neither uninteresting nor unimportant, that one of our chief schools is worthily performing its highest function—that of leading its students to the wards of the hospital, and teaching them how to recognise and how to treat disease. Admission into the *Transactions* is also a stimulus to study and elaborate the subject of the paper; for no paper is received without a report in its favour from referees.

It would be invidious to select individual papers for commendation on account of greater elaboration or better style; some, however, have the advantage of more originality in their subject, such as that by Mr. Anstie on Syphilitic Paralysis, where the symptoms, causes, and varieties of an affection unfortunately common enough, but little studied or dwelt upon, are well arranged and clearly stated. The editor, Mr. Meadows, has contributed a paper on Functional Disorders of the Uterus, valuable as embodying the result of much hard work in the obstetric department, and which contains (besides a good deal of sensible advice on the treatment of these very common affections) the following interesting account of the phenomena of menstruation, as seen by him in a case of procidentia uteri.

"The body of the uterus was completely protruded, the os being the most depending part; and from it, during the menstrual period, which lasted about three days, there was a constant discharge of sero-sanguineous fluid, presenting all the ordinary characters of healthy menstruation. . . . . I succeeded in procuring some of the menstrual fluid by gently squeezing the organ. It was a thick, highly viscid, and tenacious fluid; semi-transparent and amber coloured, when it could be seen pure; but was considerably interspersed with streaks of arterial blood. This blood I observed coming from parts looking more congested than others; and I am of opinion that, as the amount of colour (in other words, the quantity of blood) is subject to much variation, it may be looked upon as a mere accidental circumstance, not at all essential to, though a most common attendant on, healthy menstruation. I also incline to the belief that the true secretion—for such, in my opinion, it is—consists of that amber coloured fluid to which I just now alluded."

Then follows a more minute description of the fluid, which our space forbids us to insert.

We would willingly spend more time in criticising in detail the contents of this volume, but the exigencies of space, which press so severely on newspapers, forbid it. We must, however, call attention to the valuable "Clinical Records" which form an appendix to the book, and in which short notes of the most important cases occurring during the period are registered. There would be no difficulty in joining issue with the authors on several of the points handled in their papers; but our duty on this occasion is a more agreeable one—viz., to admit freely the general good sense and information of all of them, and to hope that the promise of future excellence contained in these maiden efforts will be kept by many of the authors in the grave labours of mature life. Nor can we conclude without earnestly wishing prosperity to a society on which we bestow the highest praise possible when we say that it is fully worthy of the distinguished school with which it is connected.

Cranial Presentations and Cranial Positions: Suggestions, Practical and Critical. By R. U. West, M.D. pp. 60. Glasgow: William Mackenzie. 1857.

This little treatise, which originally appeared in the pages of the *Glasgow Medical Journal*, is the result of a most laudable endeavour on the part of Dr. West "to make a large clinical experience available for the purposes of settling and explaining certain vexed questions which have been discussed by obstetric writers." Dr. West has an extensive midwifery practice in a country district; and this is not the first occasion on which we have found him giving to the profession the results of his experience thus obtained.

In carrying out the maxim of the poet, that

"The proper study of mankind is man,"

obstetricians have begun at the beginning, and have debated much, and sometimes rather warmly, as to *how* the human being presents his cranium when about to emerge into the world. Some say that he may "present" his head in eight different ways; others, in six; others restrict the number to four; and others still further limit the presentation portions to two. Nägele is the principal advocate of *two* positions; and it is the views of this eminent obstetrician especially which Dr. West has undertaken to criticise.

In the course of his remarks, the author gives the following cranial presentations as those which he has found to occur in his practice. It will be observed that the classification is founded in a great measure on the position of the *ear*.

"*First position of the Cranium.* Right ear near symphysis pubis, occipital end of head descending, first in the axis of the brim, and finally coming round to the arch of the pubes by the *left* side.

"*Second position of the Cranium.* Left ear near symphysis pubis, occipital end of head descending, and coming round to the arch of the pubes by the *right* side.

"*Third position of the Cranium.* Left ear near symphysis pubis, frontal end of head descending in the axis of the brim, and finally coming round to the arch of the pubes by the *left* side.

"*Fourth position of the Cranium.* Right ear near symphysis pubis, frontal end of head descending, and finally coming round to the arch of the pubes by the right side.

"Of 715 children, born in my practice since 1st of January, 1852, 682 present the cranium. With 201 of these births I had not the opportunity of ascertaining the original position, for various reasons. Of the remaining 481—

306	presented	the	cranium	in the first position
151	„	„	„	second „
15	„	„	„	third „
9	„	„	„	fourth."

Of these presentations, the first and second are of the vertex; the third and fourth of the frontal bone. Dr. West alleges that Nägele is right in stating that there are only two *vertex* presentations: but that he is clearly wrong in asserting that there are only two cranial positions ordinarily met with in practice. He also disputes the statement of Nägele that these "face to pubes" cases are exceedingly rare, and that labour is not more difficult in these cases. We have not space to follow Dr. West through his elaborate criticism; but we give his summary:—

"The chief points which I am anxious to suggest are briefly, and by way of summary, the following:—1. A more correct appreciation of the diagnostic value of the presence of the ear at the symphysis pubis; the ear in the great majority of cranial presentations lying in that situation during the whole progress of the head into the pelvis. 2. That in *vertex* positions, the presence of the ear at the pubes proves that the head is already in a favourable oblique occipito-anterior position, becoming more and more so as the os occipitis comes more and more within contact, although the ear may not have left the symphysis. 3. When the occiput is fairly under the arch of the pubes in the last stage, the long diameter of the head will be found to be accurately in the long diameter of the outlet; the two lambdoidal sutures being evenly one on each side of the symphysis, and the anterior fontanelle exactly on the raphe of the perinæum, as described by all writers except Nägele, and those who follow him. 4. That in this last position the ears are at each acetabulum, rather than at each ilium, as taught in books. 5. That the first and second most frequent positions of the vertex are, in the majority of cases, the converse of each other, as taught by nearly all writers, except Nägele. 6. That in his grand discovery of the universality of *bregmato-cotyloid* positions in the second position, he has deceived himself, by not reversing all the conditions, both of the patient in her position, and of the examining hand of the accoucheur. 7. That Nägele, in maintaining that his predecessors are all wrong in this matter, has deliberately confounded mere bregmato-cotyloid with *fronto*-cotyloid positions, the latter being always intended by writers, though they may have loosely denominated them presentations or positions of the *vertex*. 8. And that, therefore, Nägele is right in maintaining that the normal progress of the labour in bregmato-cotyloid positions, as in all true *vertex* ones, is for the occiput to make its way to the arch; and that quite as easily, *cæteris paribus*, as when the occiput lies originally most forward. 9. That there are only *two* positions of the *vertex;* that is, only two ways in which, in *vertex* presentations, the head enters the pelvis, and makes its way to

the outlet. 10. That in all, or nearly all, presentations of the *vertex*, the occiput will surely come to the arch of the pubes by a natural and necessary process; and that whether the vertex presentation be bregmato-anterior or bregmato-posterior originally. 11. That the cases which terminate with the face or forehead at the pubes, are originally positions in which the uterine efforts are so perversely directed, that the forehead gets down into the pelvis during the first stage. 12. That, in that first stage, the ear is usually at the symphysis, as it is also in vertex presentations. 13. That in these perverse cases, which are usually *bregma* presentations, the ears will really occupy opposite parts of the pelvis, the head lying at first with its long diameter in a transverse position across the pelvis. 14. So that some of them may terminate with the occiput at the arch, after a very hard labour. 15. But the original perverseness in the direction of the uterine efforts, which has placed the head in this unfavourable position, continuing, the anterior or frontal end of the head will frequently pass first to the floor of the pelvis, and then come forward to the arch of the pubes. 16. That Nägele, on his own showing, had never seen a genuine case of true *fronto*-anterior position, incredible though it may seem; at any rate, such a case as is described by nearly all writers, and as is met with continually in practice. He decidedly ignores all such cases. 17. That Nägele is quite as wrong in maintaining that all first positions are originally *occipito-cotyloid*, as that all second positions are originally *bregmato-cotyloid;* bregmato-cotyloid positions, in the former class of cases, being common enough, and having been overlooked through the method of examination. 18. But that most of the bregmato-cotyloid positions met with are merely instances of a kind of *deceptio tactûs*. 19. For it is only necessary to place the patient on her other side, and to use the other hand in examining, in order to be convinced that the first and second positions of the vertex are the converse of each other in *every respect*. 20. And that, although there may be quite sufficient in the patient's position to account for this *deceptio*, we may be justified in taking into consideration, also, the deceptive impression conveyed to the finger, when it is passed *blindfold* from one point to another of a globular surface, along a line ordinarily looked upon as a straight one, lying over that *globular* surface. 21. That it is no wonder that disputes and discrepancies should have arisen among authors, when we find one set speaking of presentations of the 'vertex,' and meaning presentations of *any part of the whole cranium;* while another set, like Nägele, speak of '*cranial* positions', meaning positions of the *vertex* exclusively. 22. And, finally, that the dispute between Nägele, and those whom he so utterly condemns as guilty of *ignorance* (*Unkunde der Art und Weise*, etc.), is something like the quarrel between the two knights about the shield which was gold on one side, and silver on the other."

In a second part, Dr. West examines certain unclassified and abnormal positions which he has found to occur.

From the brief outline we have given of Dr. West's little book, it is evident that it is a valuable contribution to obstetric literature, and entitles its writer to take rank among the standard authorities on the subject of which he has treated.

Pathological and Practical Observations on Diseases of the Alimentary Canal: Œsophagus, Stomach, and Intestines. By S. O. Habershon, M.D.Lond., Fellow of the Royal College of Physicians, Assistant-Physician to Guy's Hospital, etc. pp. 387. London: Churchill. 1857.

Medical literature in England has been rather rich within the last two or three years in works on Diseases of the Alimentary Canal. Drs. Brinton, Budd, Chambers, Reeves, and Turnbull, have each published their volumes; and now Dr. Habershon comes forward with a practical work, not to supersede those of his predecessors, but to confirm points already mentioned, and to supply new facts. Surely, with all these works, and some on the liver and other internal organs, dyspeptics ought to rejoice—certainly not become hypochondriacal—at the prospect of better days.

The book is divided into sixteen chapters; viz.: I. Introduction; II. Diseases of the Œsophagus; III. Organic Diseases of the Stomach; IV. Functional Disease of the Stomach—Hæmatemesis; V. Disease of the Duodenum; VI. Muco-Enteritis and Enteritis; VII. Strumous Disease of the Alimentary Canal; VIII. Diseases of the Cæcum and Appendix Cæci; IX. Diarrhœa; X. Colitis and Dysentery; XI. Typhoid Disease of Intestine; XII. Colic; XIII. Constipation; XIV. Internal Strangulation—Intussusception—Carcinoma of the Intestine; XV. Intestinal Worms; XVI. Perforation of Intestine from Without—Abscess of the Abdominal Parietes, extending into the Intestine—Fæcal Abscess.

The greater part of the chapters on Diseases of the Œsophagus and on Organic Diseases of the Stomach have already appeared in the pages of *Guy's Hospital Reports*.

Dr. Habershon abstains, as a rule, from speculations, and confines himself mainly to the record of facts relating to symptoms, morbid changes, and treatment. His remarks are illustrated by the histories of one hundred and sixty-three cases, recorded in the case-books of Guy's Hospital, descriptive of the numerous forms of disease of the alimentary canal. The book is therefore essentially practical; and on this ground, and bearing evidence of being the work of a careful observer, it forms an addition of value to the already existing literature of *Diseases of the Alimentary Canal*.

The Grasses of Great Britain: Illustrated by John E. Sowerby; described, with Observations on their Natural History and Uses, by Charles Johnson, Botanical Lecturer at Guy's Hospital. Parts 1 and 2. London: John E. Sowerby. 1857.

The prospectus of this work announces that it "will contain about 140 plates, each representing a species, with magnified views of its flowers, executed from drawings made expressly for the monograph. It will be completed in thirty monthly parts, corresponding with the *Ferns of Great Britain and their Allies*, with the plates full coloured, at one shilling per part." If the two parts which we have received are a fair specimen of all that is to come, Messrs. Sowerby and Johnson will deserve well of the naturalist for their cheap and beautiful work. The illustrations are excellent representations of the natural objects.

British Medical Journal.

SATURDAY, NOVEMBER 21st, 1857.

ST. MARY'S HOSPITAL, MANCHESTER.

Since our remarks last week relative to the resignation of no fewer than four medical officers of St. Mary's Hospital, we have received the *Manchester Guardian* of November 7th, in which these gentlemen afford to the trustees of the charity their reasons for resigning. In the absence of one word of explanation from the Board of Management, this document can only be considered *ex parte*; nevertheless, it contains statements so humiliating to the medical staff, that there can be no further doubt that our advice of last week to all candidates, "to hold their hands" until the full particulars of the circumstances which have led to these resignations were known, was sound and necessary. At a moment when the privileges and duties of the medical officers of hospitals are being canvassed by medical opinion, and when that opinion is becoming favourable to a more remunerative return for their ordinary services—since there is no reason why the duty of ministering to the infirmities of the poor should be thrown ex-

clusively upon the shoulders of medical men, without any pecuniary return whatever, but with a great loss to them of very valuable time—at such a moment, we say, it does strike us that the new regulations of St. Mary's Hospital seem calculated to lower the status of its medical officers in their own eyes, and to impose duties upon them which no Board of Management ought to impose upon gentlemen whose health and time are given gratuitously to their charity. If there is no other side to the black shield presented by the resigning medical officers of St. Mary's Hospital, there can be no doubt that they have ample warranty for their resignation in these rules, which appear to us to be conceived in a spirit of jealousy and distrust which must be galling to honourable and scientific men. We give these reasons as they stand, and shall comment upon them as we go on.

"1. That, having been deprived by the Board of Management of our privileges as trustees *ex officio*, and as members of the Board of Management, we were thereby prevented from being present at any weekly or special meeting of the Board of Management, or any annual or special general meeting of the trustees, although, at any such meeting, the medical affairs of the hospital might have come under consideration—affairs which the non-medical members of the Board of Management were totally incompetent to understand."

It does seem strange that a regulation depriving the medical officers of their privileges as trustees *ex officio*, should ever have been framed. If wealth has its duties as well as its rights, charity has its rights as well as its duties. If medical men are asked to give up a certain portion of their time to a public charity, surely they should have a voice in the management of that charity. We will venture to say that no subscriber, however large may be his annual donation towards the maintenance of the charity, pays one-tenth of the value of the time voluntarily rendered up by the medical officers to the poor who flock beneath its roof. If medical men are to give everything, and to receive nothing either in honour or in profit, we apprehend that medical charities will soon find out that charity begins at home. It seems to us that medical men should never submit to rules such as this, for by so doing they become the mere servants of unthankful taskmasters.

The second reason for resignation is as follows:—

"That, by rules 2 and 172, we should, in future, have been compelled to attend children of any age and in any disease, whether infectious or otherwise, at any time during day or night, and at any distance within the extreme hospital boundaries,—with which boundaries the subscriber may acquaint himself by referring to the back of the recommendation papers, including a population of nearly 300,000."

We are told by the Registrar-General that more than 50 per cent. of the population of Manchester die under the age of one year! By this light we may read the effect of this rule upon the medical officers of St. Mary's. It is so glaring an attack upon their time and health, that we do not wonder at their resignation. This rule must either prove inoperative or grossly unjust. It is bad enough to ask a professional man to give up gratuitously no small portion of the working day; but to ask him, in addition, to put himself at the beck and call of sick children, in the city notoriously the most rife in such cases in the empire, at all times of the day and night, is to ask a most unreasonable and unjust thing.

"3. That by rule 53, in all cases of disease which do not appear to yield to a plan of treatment pursued for fourteen days, the surgeon in attendance must summon a consultation. This rule is a direct reflection upon the professional ability of the surgeon; and rule 78 appears equally objectionable."

We really do not know what to make of this rule; and we confess we looked at it with much the same puzzled air as the mastiff looks at the tortoise in a popular French tale. Why, what kind of a *veni, vidi, vici* rule is this, which gives a medical man just a fortnight to make disease yield to his caducean wand, or, in default, calls in a kind of jury to see that he knows what he is about? In the days of the Convention, French generals had to fight battles under the fear of death; but here we find medical men asked to fight disease under fear of a reflection upon their professional abilities. The working of this rule would be to have consultations upon the majority of cases; and just as councils of war don't fight, consultations would, we fear, act very inefficiently. The meaning of this rule was, of course, to favour the patient; but we fear it would have the very reverse effect as a *rule*, at the same time that it would unjustly reflect upon the medical officers in attendance.

"4. That by rule 94, the fees paid by medical students for attendance upon lectures and hospital practice, are to be received by the treasurer; whilst, in all other hospitals, the medical officers are entitled to such fees."

If the meaning of this rule be to transfer the fees from the pockets of the lecturers and staff to the general account of the hospital, without covenanting with them in any way for their loss, there can be no doubt that it is extremely unjust. To ask them to do double work, and then to cut off their only legitimate source of profit, is to do what men will do in their corporate capacity, but which they would shrink from doing as individuals.

"5. The following portion of rule 16:—'That any officer of this institution may be suspended by the Board of Management for any cause which the Board of Management consider injurious to the hospital.' No such power should be entrusted to any Board where three are competent to form a quorum, and where the average attendance at such meetings does not exceed five."

As the medical staff have not a voice in the general management in virtue of their office, this rule does seem most arbitrary. Three governors may at any time suspend an officer without his colleagues having the power of defending him. Other rules are considered objectionable; but as they are not specified we can take no notice of them.

The resigning medical officers having thus given the reasons for withdrawing from their duties at St. Mary's, the Board of Management are imperatively called upon to answer them before proceeding to any new election. These "reasons" may or may not be reasonable; at all events they are boldly put forth, and should be as boldly answered. It is but right to say that Dr. Radford still continues one of the medical officers of the charity; and the highly honourable character of this gentleman leads us to infer that the matter may be viewed in another aspect. Indeed, a communication from him, to be found in our letter-box, intimates as much. We have no doubt whatever that the General Board were actuated with the "best intentions" in forming these rules; but in the face of the statement made by the resigning members of the staff, we cannot say that we think they are justified in meeting in

silence. Dr. Radford does indeed say that the Board have not sought to explain any part of this business beyond the walls of the hospital, but are ready at any time to vindicate their conduct when rightly called upon. We know not what is the just weight of the word "rightly" in this paragraph; but if the feeling of the majority of the profession in Manchester is considered worthy of regard, we can assure the managing Board that at the present moment the verdict of that opinion is against them, if we may judge from the letters we have received from gentlemen so placed as to be beyond bias in the matter.

THE WEEK.

The disputed election of a surgeon to the Queen's Hospital in Birmingham was finally settled by the Council of Queen's College, on the 13th instant. Mr. West's election was, we learn, declared null and void on account of canvassing; and Mr. Gamgee was elected, and entered next day on the performance of his duties. This result is most satisfactory; and we feel the utmost confidence that the surgical reputation of the Queen's Hospital in Birmingham will be fully maintained by Mr. Gamgee's appointment. The situation of Mr. West is one which calls for pity rather than for exultation. He was raised by illegal means to a position which he could not otherwise have attained; and he has been consequently obliged to descend. Whether Mr. West himself or his friends were most active in canvassing, we do not know; but if he himself were comparatively passive, he has good cause to cry, "Save me from my friends." We trust that the recent course of events will prove a salutary lesson, and not a discouragement, to the disappointed candidate. We hope to see him, in the course of a few years, raised through a then established professional reputation, and on the strength of that and of moral worth alone, to a position of the kind for which he has lately competed, but for which he is scarcely yet —especially when put in comparison with his late fellow candidates—"the right man in the right place."

In directing attention to the advertisement of the Jenner Monument Committee which appears in this day's Journal, we have to express the pleasure with which we have learned that the Statue of Jenner, by Mr. Calder Marshall, is completed in bronze, and that it is considered to be most satisfactory both as a likeness and work of art. Her Majesty's Board of Works has granted a most eligible site in Trafalgar Square; and the Jenner Monument Committee have entered into a contract for furnishing and erecting the pedestal within four months. The Committee, however, find it necessary to appeal for more funds; and in order to give a final opportunity of joining in the act of honour to the discoverer of vaccination, they have resolved that the subscription lists shall continue open till the 1st of February next, on which day they will be finally closed.

The remembrance of the late Assistant-Surgeon James Thomson, celebrated for his heroic conduct in the Crimea, is to be perpetuated by a granite obelisk erected in a conspicuous position near his native place, Cromarty, and of a bursary in the parish school. The following is to be the inscription on the obelisk: "To the Memory of Assistant-Surgeon James Thomson, born at Cromarty on the 8th of March, 1823, and deceased in the Crimea on the 5th of October, 1854. He served with the 44th Regiment at Malta, in 1850, when the cholera broke out, and shortly proved fatal to all the surgeons of the corps, himself alone excepted. The skill, fortitude, and humanity, displayed by him in arresting the progress of that disease, gained for him the praises of the Commander-in-Chief. He was present with the same regiment at the battle of the Alma, in 1854; and a few days afterwards, when the British were leaving the field, he volunteered to remain behind with seven hundred desperately wounded Russians. Isolated from his countrymen, and endangered by the vicinity of large bodies of Cossacks, ill supplied with food, and exposed to the risk of pestilence, he succeeded in restoring to health about four hundred of the enemy, and embarking them for Odessa. He then died from the effects of excessive hardship and privation. This public monument is erected as a tribute of respect for the virtues of an officer whose life was useful, and whose death was glorious."

The Courts of Law constantly afford proofs that among young children there is a form of insanity, which, beginning in what might be termed mischief-disease, ends in offences against human life of the most fearful kind. The newspapers this week afford some examples of offences of this kind, committed apparently without the slightest provocation. The first and most extraordinary instance we find quoted in a continental journal. A little boy, not more than nine years of age, having enticed five of his companions into a large box, shut the cover down, and sat cross-legged upon it, seeming to enjoy the groans of his expiring playmates. After he had discovered by inspection that they were all dead, he proceeded to a field and flew his kite, apparently without one pang of remorse for the dreadful murder he had just committed! In the Lambeth Police Court, on Tuesday, an inquiry took place respecting a similar unpremeditated and unmeaning attack upon human life, made by a lad named James Reynolds, sixteen years of age. It appears that a fortnight since he was seen, without the slightest provocation, to take up a child of seven years of age, and throw it into the Surrey Canal; and then, as if to make the crime more marked, he went to the person who had charge of the little one, and informed her that it was drowned. The child was fortunately rescued; but the act was completed as far as lay in the power of the lad. We do not know what course will be taken with the perpetrator of the fivefold homicide, for we cannot call it murder; but in the latter case the lad was fined £5, and in default, two months hard labour! Now there can be no matter of doubt that both offenders were labouring under a certain form of madness; and to fine, or to punish them by a slight term of incarceration, is absurd. They should be removed permanently from society; if not, we may expect to hear of a repetition of these fearful acts. It is one of the maxims of law, that it is necessary to prove some motive for the perpetration of an extraordinary offence; but the insane perform the most extraordinary acts without the slightest shade of motive, speaking in a natural sense; and in the latter of these two cases we have an apt example of the errors lawyers may commit, unenlightened as they are by the truths of psychological medicine.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 10th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

CASE OF ARTERIO-VENOUS ANEURISM, TREATED BY LIGATURE OF BOTH THE ARTERY AND THE VEIN.

BY CHARLES H. MOORE, ESQ.

A labourer, aged 60, was admitted into the Middlesex Hospital on September 30th, 1857, pale and much depressed by loss of blood. Thirty-six years previously he had been bled in the left temporal artery, and he had ever since had a pulsating swelling in the site of the lancet-puncture. In the course of years it enlarged to the size of his fist; the pulsation continued, and could be stopped by pressure with his finger in the parotid space. He had no pain in the tumour till August last, when it enlarged still more. One month ago it burst, and he at once lost two quarts of blood. Hæmorrhage recurred a fortnight ago, which greatly reduced him, and large "lumps of flesh" were removed from the aneurismal cavity. On his admission to the hospital, there was an ulcer in the left temple as large as a crown-piece; a clot of adherent blood near its anterior part; a large abscess above the ear, from which pus issued in a stream through the ulcer; and extensive œdema of the left half of the scalp. Moreover, a cluster of enormous tortuous, soft, pulsating vessels could be seen and felt above, below, beneath, and in front of the ulcer. There was no purring tremor in the veins of the scalp; but the left external jugular vein was greatly enlarged, and had a visible arterial pulsation, together with a continuous vibratile thrill. No other vessels were enlarged. The enlarged vessels being extremely thin, it was determined not to place a ligature upon them, and the temporal artery was sought for at the highest point at which it was presumed to be healthy. By means of a vertical incision over the parotid space, a pulsating vessel was reached, and a ligature passed under it. Pulsation ceased in the temporal vessels when the finger was pressed into the loop of the ligature, but continued after the knot was tied. Upon examination, the pulsation was found to continue only on the distal side of the ligature, and the tied vessel proved therefore to be the vein. The temporal artery, by communication with which the vein received its pulsation, was then found in a situation where it might have been compressed by the finger when introduced into the wound. Upon tying the artery, the pulsations in the temple and in the distal part of the vessel previously tied at once ceased. The pulsation and thrill of the external jugular vein disappeared, the wound contracted, the temple shrank, the abscess closed, and the man left the hospital on the 19th of October, convalescent, though still weak. The author briefly reviewed the effects of the treatment by compression and by ligature, which had been adopted in cases of permanently circumscribed arterio-venous aneurisms.

1. A cure had been obtained by the complete closure of either the artery or the vein at the site of the unnatural aperture.

2. The obliteration of one end only of either vessel had never proved successful, the disease continuing or gangrene of the limb ensuing if only the cardiac end of the artery were tied, whilst the closure of the distal orifice only of the vein had but moderated the symptoms of the disease.

3. There was reason to think that the operation just related would prove permanently successful, since all direct access and return of blood through the main vessels was cut off by the ligatures; and the orifice of communication, being beyond both ligatures, was reduced in importance to that of a passage between vessels, whose circulation was only collateral.

CASE OF DISEASE OF THE SUPRARENAL CAPSULES.

BY G. S. WILKS, ESQ.

[*Communicated by* Dr. Addison.]

The patient first came under the care of Mr. Wilks in 1854, in her sixteenth year, suffering from chronic rheumatism. She was of a fair complexion, fat, round figure, and a particularly happy, joyous girl. In the following year, she suffered from general debility, for which quinine and iron were prescribed. In the summer of 1856 she made a tour in Wales, and then for the first time the change in her complexion became striking; but she had for some time been using simple washes for what was still only regarded as severe sunburn. The colour continued to increase in depth as winter advanced. She began to suffer from great lassitude; and after a long walk in March of the present year, she was attacked by violent sickness, which lasted for three or four days. The tongue was clean, pulse quiet, but very feeble, skin soft, and appetite bad. Quinine and iron were again prescribed with advantage. On the 5th of May the sickness returned violently, continuing incessant for several days and nights, and lasting, with very short intervals, during seven weeks, when she died exhausted, on the 22nd of June, in her nineteenth year. Latterly, the skin had darkened very considerably, and had acquired a bronze tint.

Examination twenty-four hours after death. Body greatly emaciated; breasts atrophied, areolæ quite black; face olive brown, chin shining like bronze. About an inch of fat on the abdomen; none anywhere else throughout the body. The viscera generally were quite healthy. The kidneys were small, and rather flabby. The suprarenal capsule on the left side was the size of a large egg, and intimately connected with both spleen and kidney; it contained a large quantity of purulent matter. That on the right side was similarly adherent, but was smaller, and the matter contained in it was less fluid, and gave in the fingers a gritty sensation, as if of calcareous substance.

CASE OF GUN-SHOT WOUND IN THE FACE: WITH A DESCRIPTION OF THE MECHANICAL MEANS SUCCESSFULLY APPLIED FOR THE REMEDY OF THE SUBSEQUENT DEFORMITY, ETC.

BY EDWIN SERCOMBE, ESQ.

This was the history of the case of an officer of the British army, wounded in the attack upon the Redan. A musket-ball had carried away the whole of the alveolar ridge of the upper jaw and teeth, with the exception of the tuberosity on the right side, in which the wisdom-tooth was left. The bony palate was also destroyed to an extent the size of a florin. The consequent inconveniences were very great, not only from the passage of the food into the nose, but also from the descent of mucus into the mouth, and the extreme irritation from the exposure to the atmosphere of parts naturally covered and protected causing frequent bronchitic affections, all which, however, were slight in comparison with the inability to articulate the word of command, and which last difficulty threatened the necessity for the patient's leaving the service. The apparatus contrived by Mr. Sercombe (which was exhibited) was quite successful in remedying all these inconveniences, and the officer is now about to proceed to India on service. The apparatus was of gold, with mineral teeth, mounted upon a mineral base. The main difficulty in its construction arose from the fact of the soft parts having become contracted so very much as to reduce the oval opening to a very small size, and almost completely prevent the motion of the lower jaw.

MEDICAL SOCIETY OF LONDON.

Saturday, November 7th, 1857.

Francis Hird, Esq., President, in the Chair.

ASCARIS LUMBRICOIDES. BY R. BARWELL, ESQ.

The worm had been expelled from the intestinal canal in consequence of having got entangled in the small circular loops of a brass eye used to fasten on ladies' dresses, which had by accident been swallowed by the child the day previous to the expulsion of the worm.

LAMPS FOR FUMIGATION. BY H. LEE, ESQ.

Mr. Henry Lee showed two lamps, one being especially adapted for fumigating patients affected with venereal complaints with the vapour of calomel. Mr. Lee entered into the mode of fumigation, and expressed his opinion that calomel so affecting the system has not the same injurious effects as when exhibited by the mouth.

APPARATUS FOR THE DETERMINATION OF THE CARBONIC ACID IN THE EXPIRED AIR. BY EDWARD SMITH, M.D., LL.B.

Dr. Edward Smith exhibited the apparatus which he had prepared for his experiments upon the quantity of carbonic acid exhaled by the lungs. He explained that previous observers, with the exception of Scharling, had been compelled to limit the quantity of air operated upon, in consequence of the absence of an apparatus by which the carbonic acid may be abstracted at the rate at which the air is expired, and hence that serial observations at frequent periods of the day had been hitherto impossible. By his apparatus, the carbonic acid is abstracted from the air during each expiration, and may be continued for hours, days, or any indefinite period. The first part consists of

drying apparatus, to abstract all vapour from the air, and comprises a box of chloride of calcium and a jar of sulphuric acid with pumice-stone. The air thus dried is then passed into a vessel containing a solution of pure potass, of the specific gravity 1·27. This vessel is made of gutta percha, and contains five chambers, each 12 × 12 × ¾ in., all of which communicate with each other. Each chamber is also divided into five compartments, through each of which, and through each chamber in succession, the expired air is directed. By this method, each cubic inch of air passes over more than 700 superficial inches in succession of the solution of potass. Each charging of the apparatus will absorb all the carbonic acid exhaled during one hour. The air having passed through the chamber, and carried along with it some of the vapour from the solution, is again passed through a drying apparatus similar to the one above described; and, lastly, it is directed over baryta water, which acts as a constant test of the absence of carbonic acid. Thus the quantity of carbonic acid is readily determined by simply weighing the box containing the solution of potass, and adding that to the weight of vapour which is retained by the second drying apparatus; and hence almost any number of observations may be made through the day, or the whole carbonic acid exhaled through the day may be collected. It will also be practicable to determine the relation which the carbonic acid exhaled bears to the quantity of air inspired.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from R. Griffin, Esq.

Sir,—I shall feel obliged by your laying before the profession the reply of the Poor-Law Board to the letter I addressed to them about six weeks since, a copy of which you kindly inserted in your Journal; and I beg to call the attention of the Union Medical Officers to that part which refers to the assistance requisite to be obtained to perform a capital operation. I have carried out the advice of the Poor-Law Board, and deeming the aid of three surgeons to be necessary for the safe amputation of a limb above the knee, I called them in, paid them one guinea each, and with the annexed letter to the Board of Guardians, forwarded their acknowledgments. Last Tuesday the Board sent me cheques drawn in the names of the three gentlemen, and requested fresh receipts from them to the Board, thus making it their own act; these gentlemen are unconnected with the Union, which, in this case, was intentional on my part, in order to test our power on that head. I regret much that the Poor-Law Board have left doubtful the result of future applications for payment. I hoped they would say definitely it is right to have assistance to perform a capital operation, and the Guardians must pay for it: but no! the Union Medical Officers must get help if requisite, but it is left open to the Guardians to determine afterwards whether the "case was of such unusual and exceptional character as to warrant them in making a special allowance for the assistance so rendered." Such uncertainty forcibly illustrates the necessity of a legislative enactment; for which I am preparing, and shall shortly be in a position to submit, for the approval of my brethren, the draft of an Act of Parliament. I have made copious extracts from the statutes in force, relating to the poor since the time of Elizabeth, and am also arranging the cases connected with the profession that are recorded in the official circulars of the Poor-Law Board, which I am desirous to lay before the Members, individually, of both Houses of Parliament, in order to prove, as far as possible, by the statements of the Poor-Law Board itself, the necessity for each section in the Act to be proposed. It would also be advantageous to the Union Medical Officers to possess these materials, that each may have it in his power to understand thoroughly the laws, "rules, orders, and regulations" by which he is supposed to be governed: printing this compilation, however, will depend entirely on the pecuniary support the association receives, as 4000 copies will be required. During the last two years, upwards of £500 have been expended; and in the next six months a large amount will be required to enable us to take measures to convince the legislature of the great need of a reform of the whole system; not only for the sake of the Union Medical Officers, urgent as that is, but what is of more importance, for the benefit of the sick poor, and I might add, for the rate-payers also, as the mismanagement of the one must seriously affect the interests of the other.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, November 16th, 1857.

Poor-Law Medical Officers, in communicating with Mr. Griffin, are requested to give the name of their Union in addition to their address.

I. *The Secretary of the Poor-Law Board to Mr. Griffin.*

"Poor-Law Board, Whitehall, S. W., October 15th, 1857.

"Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 29th ultimo, respecting a poor person named Puckett, who is under your care as one of the district medical officers of the Weymouth Union; and the application which you have made to the guardians for an order for three medical men to assist you in the case, in the event of an operation becoming necessary.

"With reference to the statements contained in your letter, the Board desire me to remind you that the fees which, under the General Regulations, were payable to the medical officers of the Weymouth Union in midwifery and surgical cases, have been commuted, and are now included in the fixed salaries of those officers, this alteration having taken place with their express consent. If, therefore, in the case of the poor person referred to, amputation of the limb should unfortunately become necessary, you will not be entitled to any extra payment for your services in performing the operation.

"As regards the application which you have made for an order for three medical men to assist you in the amputation, I am directed to state that the more regular course, under circumstances such as you describe, is, that the medical officer himself (when he deems it needful to do so) should obtain any additional professional aid which may in his judgment be necessary, and, after the operation has been performed, submit the facts to the guardians. It then rests with them to determine whether the case was of such an unusual and exceptional character as to warrant them in making a special allowance for the assistance so rendered. The Board are not aware of any reason why this course should not be adopted by you in the present instance.

"With reference to the alleged inadequacy of the salary which you receive for your services as medical officer, the Board can only refer you to the communications which they have already addressed to you on the subject.

"I am, sir, your obedient servant,

"Courtenay, *Secretary.*

"Richard Griffin, Esq."

II. *Mr. Griffin to the Chairman of the Board of Guardians of the Weymouth Union.*

"12, Royal Terrace, Weymouth, October 26th, 1857.

"Sir,—In consequence of the remarks made by Mr. Inspector Gulson in my district medical relief-book (September 14th, 1857), I wrote to the Poor-Law Board, and received the annexed reply. I have carried out their suggestions, and obtained the additional professional aid actually necessary to enable me to amputate the thigh of Mary Puckett. I inclose the receipts for the fees paid by me to Drs. Brown, Coucher, and Moorhead, and shall feel obliged by your reimbursing me the amount. "I am, sir, etc., "Richard Griffin."

REDUCTION OF FRACTURE OF THE THIGH.

Letter from J. Russell, Esq.

Sir,—As the reduction of dislocations of the thigh by manipulation is rather a new feature in surgery, I beg to submit for publication the following case, thinking that its simplicity may endow it with some interest.

About Christmas last I was called to a collier, aged 20, of fully developed muscular frame, who had his femur dislocated, the head having been thrown into the ischiatic notch. I grasped the ankle with my left hand, to prevent any rotation of the limb, and with my right hand upon the bent knee, pressed it firmly, in a line with the body, towards the abdomen; and at the same time carried the knee outwards, keeping it pressed towards the body as much as possible. In the first attempt, when the knee was opposite the crest of the ilium, the head of the bone slipped into the socket.

I am, etc., John Russell.

Merthyr Tydfil, November 9th, 1857.

THE IMMUNITY CONFERRED BY VACCINATION.

Letter from Thos. Massey Harding, Esq.

Sir,—The General Board of Health have published a report by Mr. Simon on the History and Practice of Vaccination; wherein he advocates the doctrine of the *identity* of the small-pox and cow-pox; and speaks in strong language of the immunity enjoyed by the vaccinated: so that, "on the conclusion of this artificial disorder, neither renewed vaccination, nor inoculation with small-pox, nor the closest contact and cohabitation with small-pox patients, will occasion him to betray any remnant of susceptibility to infection."

I most sincerely wish that these words were supported by the general experience of the profession; but the dream of complete immunity to the vaccinated will not bear the light. And I find it difficult to reconcile the doctrine of the *identity* of the poisons with the following cases now under my care.

I attended a child, aged about 10 years, with confluent small-pox: three younger children, unvaccinated, being in the house. With some difficulty, I persuaded the mother to have these three children vaccinated, which was accordingly done, when the eldest was covered with the eruption of small-pox at the ninth day. The vaccine produced its usual effect upon the three children, and on the eighth day there were on their arms respectively two well formed vaccine vesicles. They were all unwell, and I supposed them suffering sympathetically. On the following day, I visited and found them far more ill than was consistent with the idea of their symptoms being produced by disturbance sympathetic with vaccination; and on the next day—that is, the tenth day from their vaccination—they had the peculiar eruption of small-pox. One has a very slight attack, and there are not more than twenty or thirty vesicles; the other two are very ill—they have now, at this moment of writing, a *copious* eruption of small-pox at the fifth day, and vaccine pustules of the fourteenth day.

If these children were in the incubative stage of small-pox at the time of their vaccination, and the poisons are identical, the vaccination should have been abortive. On the other hand, if they were free from small-pox, and the vaccine lymph produced its specific effect, then, if the poisons are identical, small-pox should have been abortive.

All practitioners are acquainted with cases disproving the immunity of the vaccinated; such as the following:—

I attended a man, aged 40, with confluent small-pox, of which he died. He had been vaccinated twice, according to his own statement. In the house were his sister, her husband, and two children, all unvaccinated. I vaccinated them all, and it took effect. In three weeks from the day of vaccination, the woman, Mrs. G., and one of her children, had small-pox, distinct, but slight.

It is not my intention to throw any doubt upon the general usefulness of vaccination as a protection; but simply to record some facts that have fallen under my notice having an important bearing upon the question.

I am, etc., Thomas Massey Harding.

Stourbridge, November 14th, 1857.

ST. MARY'S HOSPITAL, MANCHESTER.

Letter from Thomas Radford, M.D.

Sir,—In your editorial remarks, under the heading "The Week", on a recent occurrence at St. Mary's Hospital, Manchester, you say "no less than five of the surgeons in ordinary have resigned their appointments, leaving two only to carry on the routine business of the hospital." The truth is, there are only four in this list who are ordinary surgeons. Most likely you are not aware that the medical staff of this hospital consisted of ten in number—nine surgeons, and one physician; and, although two only remained on the ordinary list, yet the others considered it right, both as a duty, and as an act of humanity, to offer their services until other surgeons were appointed.

If candidates should have been prevented from applying for the vacant offices by your remarks, the poor alone would be the sufferers; and I am sure you would not desire such a result, at a time when poverty from want of employment is inevitable during the approaching winter.

If it is no degradation to the five medical officers who are still, and who intend to remain, attached to St. Mary's Hospital, surely it is not to be imagined that any who now become attached to it, only subject to the same laws, can possibly have their professional status degraded. As a member of the Board of Management, I can assure you, that all its members are anxious for the prosperity of this institution, the welfare of the poor, the advancement of medical science, and the promotion of medical education. This Board have not sought to explain any part of this business beyond the walls of the hospital, but are ready at any time to vindicate their conduct when rightly called upon. I am, etc. Thomas Radford.

Nov. 17th, 1857.

SPONTANEOUS GROWTH OF VEGETABLE MATTER.

Sir,—In your serial of to-day I observe a letter from Dr. Budd, expressive of his sentiments on the subject of spontaneous growth of vegetable matter.

The *morale* as well as the philosophy of Dr. Budd seems to me at fault. However wild the medical philosopher's hypotheses may be, they are only on a strict par with those of our priesthood, our engineers, and others. Of all the divines who write on doctrinal matters, how few of them agree. Of all the engineers who give their opinions on the possibilities of a line of railway, or the launching of the *Leviathan*, where do you get unanimity? To them, as to us, an accident drives to the winds all their ingenuity, all their calculations, all their projects, as has been witnessed in the launch of the *Cæsar* from Pembroke Dock-yard. There an accident launched the good ship when their ingenuity was at fault, and their preparations for a more successful issue were being concocted. So it is with us. Had not one thousand hypotheses been eliminated by subsequent discoveries, where would our physiology at present have been?

Let Dr. Budd boil a piece of linen in distilled water; fold it up, and place it in his wardrobe, as hermetically sealed as his bottle of water: he will in a few weeks observe a beautiful specimen of vegetable growth. Let the same piece then be transferred to a drier locality, under similar security, and he will have his linen localised by a moth. Let him exclude all possibility of sporules, or insectorial ova, and yet he will find either to have a spontaneous origin.

Being diffident by nature, I dare not place myself in the lists of controversy with such eminent men as Drs. Budd and Snow, but yet, in my provincial simplicity, I would beg of the former to enlighten me on this subject, feeling assured that his opinions will have their due weight of obligation on your general readers as also on your humble servant,

Newport.

Newport, Monmouth, 14th Nov. 1857.

PHTHISIS IN THORACIC ANEURISM.

Letter from G. G. Rogers, M.D.

Sir,—My attention has just been directed to Dr. Sloane's letter in last Saturday's Journal, wherein he kindly points out a paragraph in the *Medical Times and Gazette* of last November, written at the request of Dr. Stokes. This had previously escaped my observation. I can understand how the statement at page 578 of Dr. Stokes's work is explained, as merely conveying the idea that "aneurism coincides with tubercle more frequently than with other organic diseases of the lungs;" but at page 599, amongst the admirable recapitulations, I find the 38th proposition thus worded: "That of the general morbid conditions which accompany aneurism, tubercular phthisis is the most common." Certainly, without an explanatory note, I do not see that the reader can do otherwise than accept the dictum just as it stands; and in any future edition of this most able work, I trust we may be favoured with fuller details on this subject. I am, etc.

G. Goddard Rogers, M.D.

St. George's Hospital, 19th Nov. 1857.

TREATMENT OF ACUTE RHEUMATISM.

Letter from T. Inman, M.D.

Sir,—The tone of the last paragraph, and especially of the last sentence, of Dr. Fuller's remarks in your last Number (pp. 949-950) is so offensive that I must decline continuing the subject. Should Dr. Fuller, on reconsideration, think proper to retract his words, and confine himself to the proper bounds of scientific debate, I shall be ready to break a lance with him.

He is evidently unaware how much the views he has enunciated are open to severe criticism, or he would have appreciated more favourably the manner in which I introduced my cases to the profession and himself.

I am, etc., Thomas Inman.

Liverpool, November 16th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Adams. On November 1st, at Toronto, Canada West, the wife of Joseph Adams, M.D., of a daughter.

Bassett. On November 2nd, at St. Paul's Square, Birmingham, the wife of *John Bassett, Esq., Surgeon, of a son.

Biddle. On September 14th, at Simla, the wife of Thomas James Biddle, Esq., Assistant-Surgeon 8th Regiment of Foot, of a son.

Ellison. On November 5th, at Windsor, the wife of James Ellison, M.D., of a son.

Gill. On November 15th, at 5, Cambridge Place, Regent's Park, the wife of W. Battershell Gill, M.D.Lond., of a daughter.

Habershon. On November 14th, at 22, Wimpole Street, the wife of S. O. Habershon, M.D., of a son.

Llewellyn. On November 10th, at 9, Mount Place, London Hospital, the wife of Evan Llewellyn, Esq., Surgeon, of a daughter.

Thomas. On November 15th, at Hartland, North Devon, the wife of R. R. G. Thomas, Esq., Surgeon, of a son.

Winter. On November 8th, at Hampstead, the wife of James Winter, M.D., of a daughter.

MARRIAGES.

Jacobson—Brander. Jacobson, Thomas Edmund, Esq., Surgeon, of Sleaford, Lincolnshire, to Emma Augusta, younger daughter of the late William A. Brander, Esq., of Southwark and Greenwich.

Way—Brown. Way, John, M.B., to Caroline Handley, youngest daughter of the late Francis Brown, Esq., of Welbourn, Lincolnshire, at St. Peter's, Eaton Square, on November 18th.

DEATHS.

Bayne, Alexander Fraser, Esq., Surgeon, aged 28, in the wreck of the *Dunbar*, off Sydney, on August 20th.

Boddington, W. E. Esq., Surgeon, formerly of Chesterfield, in London, on November 13th.

Clarke, Sir Arthur, M.D., for many years Physician to the Bank of Ireland and to the Dublin Police Force, aged 83, in Dublin, on November 9th.

*Davies, John, Esq., Surgeon, at Tipton, Staffordshire, aged 48, on November 11th.

Greenhow. On November 11th, at Hampstead, Elizabeth, wife of *Edward Headlam Greenhow, M.D., of Upper Berkeley Street, Portman Square.

Nasmyth, Robert, M.D., late of Brook Street, London, at 5, Charlotte Square, Edinburgh, on November 8th.

Smith. On November 10th, at Park Place, Leeds, Amelia, only surviving daughter of *Samuel Smith, Esq, Senior Surgeon to the Leeds General Infirmary.

Westmacott. On November 14th, at 10, St. Mary's Terrace, Paddington, aged 8 months, Henry Fearon Percy, infant son of John Guise Westmacott, M.D.

APPOINTMENTS.

Beddome, J. R., M.D., elected Mayor of Romsey for the ensuing year.

*Burrows, J. C., Esq., Surgeon, elected Mayor of Brighton for the ensuing year.

*Dixon, Joseph, Esq., elected Honorary Surgeon to the Brighton Dispensary.

*Gamgee, Joseph Sampson, Esq., elected Surgeon to Queen's Hospital, Birmingham.

Hawkins, Cæsar H., Esq., appointed Surgeon-Extraordinary to the Queen.

*Hillier, Thomas, M.D., elected Assistant-Physician to the Hospital for Sick Children.

*Michael, W. H., Esq., Surgeon, elected Mayor of Swansea for the ensuing year.

Procter, Sidney E., Esq., elected resident Surgeon to the Kent County Ophthalmic Hospital.

PASS LISTS.

University of London. M.B. Second Examination, 1857.

First Division.

Anstie, Francis Edmund, King's College
Bond, Francis Thomas, B.A., Queen's College, Birmingham
Brodribb, Uriah Perrin, B.A., Guy's Hospital
Buzzard, Thomas, King's College
Cribb, Arthur John, Middlesex Hospital
De la Garde, John Lempriere, St. Bartholomew's Hospital
Edwards, St. John, University College
Fawcus, James, University College
Fox, William Tilbury, University College
Giles, Samuel, B.A., Guy's Hospital
Jones, William Price, University College
Laurence, John Zachariah, University College
Lawrence, George William, King's College
Meadows, Alfred, King's College
Moon, Frederick, Guy's Hospital
Ord, William Miller, St. Thomas's Hospital
Propert, John Lumsden, King's College
Ramsbotham, Walter Basnett, University College
Sadler, Michael Thomas, B.A., St. Bartholomew's Hospital
Turner, William, St. Bartholomew's Hospital
Walker, Thomas James, University of Edinburgh
Whitford, Antony, King's College
Wilson, Frederick William, Westminster Hospital

Second Division.

Carnley, Henry, Hull and East Riding School of Medicine
Castaneda, Michael, University College
Devonshire, Charles James, B.A., King's College
King, Henry Stavely Thaddeus, King's College
Pont, Augustus, King's College
Smith, Henry Montague Duncan, University College
Way, John, King's College

HEALTH OF LONDON:—WEEK ENDING NOVEMBER 14TH, 1857.

[*From the Registrar-General's Report.*]

In the week that ended on Saturday (November 14th), the total number of deaths registered in London was 1161, which approximates very closely to the number in the previous week. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1068; and in the present population, which has received an increase, the same rate of mortality would produce 1175 deaths. The difference, therefore, between the actual number of deaths and the number as estimated is inconsiderable.

But the returns show that there has been a decided increase of deaths in the last two weeks; for the weekly number in October was only about a thousand. Old persons appear to have suffered from the weather that has lately prevailed; for whereas in the last week of October the number of persons who died between the ages of 60 and 80 years was 152, last week it was 207; and though of those who had attained the age of 80 years and upwards there were in the former period only 32 deaths, the number last week was 50. Diseases of the respiratory organs (exclusive of phthisis and hooping-cough), which in August were fatal in 70 or 80 cases weekly, and in the last week of October in 190 cases, rose last week to 291. Of the number last mentioned, 152 deaths were referred to bronchitis, 108 to pneumonia or inflammation of the lungs, 19 to asthma. At this time when influenza is common, only six cases are returned under this specific designation in the medical certificates. Phthisis attests to some extent the presence of the same atmospheric influence, the deaths under this head having risen from about 130 to 151. There were only 19 deaths last week from diarrhœa; and it is satisfactory to find that no deaths from cholera were reported. Scarlatina is prevalent in the west districts, and in that part of London it was fatal in 22 cases; the number returned in all the metropolitan districts is 56. Typhus (including under this head common fever) carried off 54 persons.

Five nonagenarians are returned as having died in the week: the oldest of these had arrived at the great age of 99 years; he had been formerly a farmer, and he died at 3, Brewer Street North, Clerkenwell.

Last week the births of 907 boys and 830 girls, in all 1737 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1445.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·341 in. The mean daily barometrical reading rose above 30 in. on the 7th instant, and continued above it through the whole of last week. The mean reading on Thursday was 30·569 in. The highest reading in the week occurred on that day, and was 30·61 in. The mean temperature of the week was 45·1°, which is 1·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The smallest range of temperature occurred on Tuesday, and was 5·1°; the greatest on Thursday, when it was 17·2°. On the latter day, the thermometer fell 2° below the freezing point of water. The mean daily range of temperature in the week was 10·3°. The mean dew-point temperature was 44·2°; and the difference between this and the mean temperature of the air was only 0·9°. On four days, the humidity of the atmosphere was 99, complete saturation being represented by 100. The temperature of the water of the Thames fell daily during the week. On Sunday and Monday the highest temperature of the river was 54·7°; the lowest occurred on Saturday, and was 48°·2. The wind was almost always in the north or north-east. No rain fell to an amount measurable by the gauge.

CASE OF RETAINED PLACENTA: DEATH: INQUEST.

An inquiry was opened on Wednesday, November 11th, before Mr. W. J. Cooper, Coroner for Portsmouth, into the circumstances attending the death of a woman named Mary Berry, the wife of a rigger, living in Portsea. The inquiry was, virtually, made for the purpose of ascertaining whether there had been any neglect on the part of the medical gentleman who attended her—Dr. Rolph—and whether her death was the consequence of that neglect.

Hannah Plucknett, a married woman, deposed that she had assisted the deceased, as friend and nurse, in her last confinement. Mrs. Berry was 32 years of age, of general good health. She had seven children. In her last labour but one she had had a rather severe illness, from which she recovered, but complained at times of pain in her right side. The witness was called to Mrs. Berry on Thursday, October 29th, at about half-past six; and on her arrival found it advisable to send for Dr. Rolph. He came as soon as it was possible, a little after seven. The pains were then active and continuous, and the deceased gave birth to a living healthy male child, at a quarter to 8. In three minutes after the birth, Dr. Rolph removed something which he said was the afterbirth; but which the witness did not think like an afterbirth at all. It was, she said, more like a clot; and had no navel string attached to it: it might have been contained in a good sized egg cup. During the night there was some flooding and much pain: but the witness did not send for Dr. Rolph, "although she knew it was dangerous." On Friday the hæmorrhage continued: the abdomen was swollen and very painful. On Saturday, the same state continued; and the witness gave a dose of castor oil, as Dr. Rolph said that the cause of the pain was wind. On Sunday, Dr. Rolph examined the tongue and pulse, and said the former was moist and the pulse good. He gave the patient a draught. About 1 P.M. of that day she had a severe shivering, followed by perspiration. The same recurred in the middle of the night. On Monday morning, about 1 o'clock, the deceased complained of great pain in her "stomach"; and soon afterwards the witness removed what she was sure was the afterbirth. Dr. Rolph came at 10 on Monday morning, and promised to send some medicine, but did not do so, and the witness had to send for it at night. Another attack of rigors occurred on Monday. Dr. Rolph said it was ague. On Tuesday there was an offensive discharge from the vagina, attended with much fever and thirst. On Wednesday Dr. Rolph prescribed quinine; after taking which, the patient began to be purged; on account of which Dr. Rolph next day ordered some laudanum to be added to the mixture.

On Friday morning, Mr. Berry called in Mr. Smith. No medical man saw the after-birth. The witnessed related to Mr. Smith the circumstances relative to Mrs. Berry's confinement and subsequent illness. He said he didn't like to take another gentleman's patient away, but he considered it his duty to attend the present case, as it was dangerous. He did not propose to meet Dr. Rolph, nor did he see him. Mr. Smith sent her half a dozen powders, which were administered as directed. On Saturday the deceased was no better, and she wished to have further advice. Mr. Garrington came on Sunday, with Mr. Smith, about one o'clock. The powders were continued. The deceased became worse, and was frequently delirious. She died about five o'clock on Monday morning, November 9th.

The witness further said that the deceased had had hæmorrhage in her previous pregnancy. She (witness) said that Dr. Rolph had attended her daughter, who had had a "bad bout" of it; and since that time she had not had a high opinion of him.

Mary Ann Butt, a married woman, had also assisted at the confinement of Mrs. Berry. After the labour she was shown some substances by Mrs. Plucknett, which resembled clots, not the after birth. She saw the after birth on the Monday in a putrid state. She perceived an offensive smell in the room on Monday. She went for Mr. Smith in consequence of Mr. Berry not being satisfied.

Mr. Edward Alfred Smith, surgeon, saw the deceased at 10 o'clock on Monday, November 6th. He found her exceedingly weak; pulse about 120, small; tongue flabby and white, not furred; the countenance exsanguineous. The skin was not particularly hot, not so hot as in a high fever; the abdomen was tumid, not tense. She complained of considerable pain in the belly; but it was not increased by pressure. He was informed that she had violent diarrhœa; and there was also a retention of urine of twenty-four hours duration, but he did not use the catheter. There was no hectic flush. On Saturday, when asleep, she moaned, but when awake she did not complain. He saw her thrice on Friday. He did not attend with Mr. Rolph. He prescribed for her calomel and compound ipecacuanha powder. On Saturday morning he thought there was a slight improvement. In the evening she was not so well; there was no hectic flush; there was a continued pallor. He continued the medicine until Sunday morning, but had no recourse to external application. On Sunday morning she appeared very much worse, and her breathing was embarrassed. Her mouth was drawn; and he apprehended that it was something like paralysis, but found that it was not so. He saw her a second time, in company with Mr. Garrington. Mr. Garrington recommended the omission of the calomel and the substitution of camphor and opium. The deceased was hardly delirious, but there was a muttering incoherently sometimes, just as of a person waking from sleep. The last time he saw her alive was Sunday night; she died on the following morning.

On examination by the Coroner, the witness said that he considered the patient, when he first saw her, to be suffering from exhaustion, the effect of hæmorrhage, and this opinion was confirmed by the *post mortem* examination. He did not think there was inflammation of the uterus. He gave the calomel on account of diarrhœa. His practice was never to leave the bedroom or house until the placenta was delivered. If retained, it would be likely to produce hæmorrhage and pain: he did not know of any other effects. The placenta is sometimes indurated and firmly attached to the walls. He thought that, in all his extensive practice, it had not been retained more than two hours. He had read of cases where it has been retained for many days. In such a case he would not lacerate the womb by using great force so as to produce retroversion, but rather leave the placenta there. He would sooner let the patient die than kill her. He had never observed a double placenta to one fœtus. Hæmorrhage would not be a positive indication that the placenta had not been removed. In retention of the placenta, if there were no flooding, he would wait three or four hours, not more; if there were hæmorrhage he would remove the placenta at once. He was present at the *post mortem* examination. There was a very small quantity of blood in the body, and very little external ecchymosis. He believed that the primary cause of death was hæmorrhage; and the secondary very likely the absorption of putrid matter from the retention of the placenta. There was about a tablespoonful and a half of fluid at the base of the brain; but this would not account for death. There were no appearances indicating that death was the result of fever. Diarrhœa for twenty-four hours would not of itself have depressed the patient so much as she was when the witness first saw her. He would not give calomel in putrid fever, because he did not think it right; but

there was a difference of opinion. The calomel was given to correct the state of the bowels; and was omitted at the suggestion of Mr. Garrington. The patient at first improved under the witness's treatment. He did not consult Dr. Rolph—very likely from want of friendship.

Mr. William Hawkins Garrington, surgeon, attended on the deceased Mary Berry, on Sunday, November 8th, at the request of Mr. Smith. He found her lying in a drowsy state, but when spoken to she understood what was said, and gave proper replies. Her countenance was rather pale, and expressive of anxiety. Her pulse was very quick: and her breathing, although for the most part regular, was every now and then interrupted by a gasp. There was not the least tenderness on firm pressure with the points of the fingers on the belly; and there was no peculiarly offensive odour in the room. He considered she would very soon die. He understood from Mr. Smith that he had given her some calomel and Dover's powder for a purging under which she was labouring when he first saw her, but which was entirely removed from her when the witness saw her. He recommended tincture of opium and camphor mixture, and nourishment. At that time she was in a sinking state from some exhausting disease, but what that was he could not tell. She was rather pale, but not of that extreme pallor which persons have who have recently lost large quantities of blood. Her appearance was not inconsistent with the fact of her having lost blood between the 29th of October (the time of her delivery) and the 31st of October. If there had been severe flooding on the 30th and 31st, any fatal effect, the consequence of that flooding, would have occurred at an earlier period. He was not prepared to say that any peritonitis had existed. In any fever, the appearances may, during life and on *post mortem* examination, leave no trace of organic lesion. He could discover nothing to lead him to believe that the deceased was the subject of putrid fever. There had been a good deal of fever at Portsea of a low type; he had had one severe case in the immediate neighbourhood of a typhoid type. He had also attended several other cases in the town of Portsea, and two deaths. He was present at a *post mortem* examination. The appearances were of an almost negative character; and, from the result of that examination, he was of opinion that the death of the deceased was the result of ordinary childbed fever. He thought the appearances would not justify the opinion that the cause of death was uterine hæmorrhage. The only morbid appearances were some slight effusion of serum in the cavities of the chest on each side under the membranes generally, and in the base of the brain. The partial detachment of the placenta left in the uterus would occasion hæmorrhage and pain. If the placenta remained long enough to become putrescent, it might be partially absorbed, and give rise to septic fever. He should consider it an imperative duty to remove the placenta, if possible. He had never met with a case where he was not able to bring it away; but he had read and heard of such cases. Every effort should be used, without undue violence, to remove it. The retention of the placenta in the uterus may be an exciting cause of childbed fever, in common with other causes, such as taking cold, confinement of bowels, improper diet, taking spirits, and cold or damp applications. The retention of the placenta for several days would not necessarily produce a fatal result. He would not be satisfied to leave the placenta in the uterus for twenty-four hours. He found it a constant error on the part of nurses and attendants to present for inspection clots of blood which they believe to be a fleshy substance.

Mr. George John Scale, surgeon, of Landport, made a *post mortem* examination of the body of Mary Berry on Tuesday, November 10th, about two in the afternoon, in the presence of the following medical men:—Mr. Smith, Mr. Garrington, Dr. Engledue, Mr. Wiblin, Mr. Norman, and Mr. Scale, jun. The following report, signed by those gentlemen, is the result of that *post mortem* examination.

"The abdomen being opened, we found an entire freedom from peritoneal inflammation. The womb was about the size which might be expected within a fortnight after delivery. On its being removed from the body with its appendages and a portion of the vagina, and opened, the muscular structure appeared to be perfectly healthy. The lining membrane was rugged, and of a greyish ash colour; free from softening, and of any putrefaction or sloughing. The neck was of a purplish hue, not presenting any other known sign of disease. The kidneys presented no appearance of disease; the liver was healthy. There was an entire freedom from inflammation or disease either of the pleura or the organs contained of the chest, unless it was a certain degree of pallor or flabbiness of the heart. Otherwise that organ was healthy. The head was opened by removing the upper part of the skull and membranes of the brain. There was more fluid at the base of the brain than is observed naturally, without any sign of inflammation or other disease of the membranes themselves or of the brain to account for it. From the whole examination, we conclude that the various organs and structures were generally sound."

The rugged appearance in the womb was not indicative either of disease or strong adhesion of the placenta. The only conclusion he could arrive at from the *post mortem* examination was that death was the result of puerperal fever. There was less blood in the vessels than usual, and a general pallor of the organs. The appearances denoted that the deceased had been the subject of hæmorrhage, but they were not of such a character as to lead him to believe that death was the result of hæmorrhage. If death had been the result of putrid fever, the uterus would not have been free from odour, and he should have expected to have found in some organ of the body purulent deposits, which did not exist.

Mr. John Wiblin, surgeon, residing at Southampton, said he was a fellow, by examination, of the Royal College of Surgeons. He was present at the examination of the body of Mary Berry. There were no appearances which would lead him to form any opinion other than that death was caused by a mixed form of child-bed fever: that opinion being confirmed by the presence of a liquid effusion into the cavity of the chest and within the membranes of the brain. And that mixed form of fever might have been produced totally independent of the retention of placenta or the presence of any foreign body in the uterus. The patient resided in a locality where fever of low type did prevail at the time. He mentioned a typhoid type of fever in contradistinction to the acute form of child-bed fever, with a view to bring prominently forward the total absence of the symptoms observed in that disease, and the marked prevalence of typhoid symptoms. There was no appearance in the body to warrant the opinion that death was the result of hæmorrhage; nor was there anything to warrant the opinion that death was the result of putrid fever. He had had considerable practice as an accoucheur. He considered it to be the imperative duty of a medical attendant to deliver the after-birth as soon as possible after the delivery of the child, in all cases where practicable. There were circumstances which would form an exception to the general rule, in cases, certainly rare, of adhesion of the placenta. There was an appearance on the inner surface of the uterus, pointed out by Mr. Scale, jun., as being somewhat harder or more condensed than the other portions of the uterus, and to which it is possible that a portion of an adherent placenta might have been attached. He had in his own experience had a case where the placenta had been retained for three days. There was no hæmorrhage; at the end of three days the placenta was thrown off by the efforts of nature, and there was what would be called by a nurse a very offensive smell. The woman did well afterwards. He would not hesitate to leave a patient for a reasonable time—five or six hours—being within call, where a placenta was retained by adhesion, if no flooding or other urgent symptoms required attendance. He should not justify the conduct of a medical man in leaving his patient in three minutes after the birth of the child, if the placenta was retained; indeed, he regarded such conduct as impossible. A man must be a madman to do so. He had no hesitation in stating it as his opinion that it was equally as probable that the child-bed fever originated from local causes as from any other cause. It was highly probable that the retention of the placenta for four days, or even a less period, might generate fever of the typhoid type. Smellie gives a case of retained placenta, where the medical man removed it, the patient dying. The same learned authority quotes another case, where an adherent placenta was allowed to remain, and the patient perfectly recovered.

The Coroner summed up, commenting on the conduct and opinion of Dr. Rolph and the medical witnesses; and the jury, after a long deliberation, returned the following verdict, by a majority of twelve to five:—

"That Mary Berry died of child-bed fever; but they must express their condemnation of Dr. Rolph's treatment and conduct, as they consider him chargeable with great neglect during child-birth."

The University of Christiania in Norway. Dr. Lauder Lindsay, in a note to an article in the November number of the *Edinburgh Medical Journal*, says:—"I cannot here resist a slight digression from my subject, in order to avail myself of

an opportunity of recommending to the medical tourist, who has become tired of the beaten and hackneyed track of the Rhine, France, and Switzerland, or of Paris, Berlin, and Vienna, and who pants for 'fresh fields and pastures new'—Norway, as a suitable locality for some subsequent holiday ramble. He will find in Christiania an admirable Medical School, and a comparatively young but model University, with a staff of professors, distinguished no less for their affability and kindness to strangers, than for their eminence in science. Holst and W. Boeck in medicine, Faye in midwifery, C. B. Boeck in physiology, Sars and Esmarck in zoology, Blytt in botany, Munch and Keyser in archæology, and Hansteen in astronomy, may favourably compare with the staff of any continental university. Great pains are taken for the *practical* teaching of the medical student. Rooms are provided for study, and for the prosecution of experimental research; and professors are constantly in attendance, watching over and directing the progress of their pupils more as fathers and friends than as mere lecturers. The university library is most extensive and valuable, and is particularly liberal in its dealings—the citizens in general, as well as the students, having the privilege of consulting or borrowing books. The museums of zoology, human anatomy, comparative anatomy, pathology, etc., though yet comparatively in their infancy, are exceedingly well arranged, and contain the nuclei of most valuable collections. When I visited the Museum of Zoology, I found Professor Esmarck in attendance, for the purpose of affording every information and explanation to the public, to whom the museum is thrown open gratuitously. With me, a perfect stranger, he entered at once familiarly into conversation, exhibiting his new and most ingenious method of so arranging fluid preparations of great size on the museum-shelves, as greatly to economise space; pointing out the most interesting and rarest of his own captures on the Mediterranean coasts; and affording me much valuable information regarding the Norwegian fauna. It was not necessary to be provided with introductions in order to be received with equal kindness by other professors, to whom the mere fact of one's being a stranger, and desirous of seeing this or knowing that, was at once a passport to their friendly offices. The medical visitor will further find the Rigshospital, or City Infirmary, conducted very much like our own city hospitals, and all its physicians and surgeons ready to afford him every facility for visiting it; while the State Lunatic Asylum at Gautsad, the State Penitentiary, and other institutions, are equally worthy of his attention. Again, at Bergen, he may study, under the celebrated Dr. Danielssen, that peculiar and rare affection, endemic on the west coast of Norway—the *elephantiasis græcorum*—with other allied skin diseases."

The Faculty of Medicine in Paris. The session of the Faculty of Medicine in Paris opened on Saturday, November 14th, with an introductory discourse by M. Nélaton. The following are the lecturers for the session now commenced. *Pharmacy*, M. Soubeiran. *Physiology*, M. Berard; his place being supplied by M. Béclard, *agrégé*. *Medical Pathology*, M. Natalis Guillot. *Operations*, M. Malgaigne. *Medical Chemistry*, M. Wurtz. *Anatomy*, M. Jarjavay. *General Pathology and Therapeutics*, M. Andral; his duty being at present performed by M. Lasègue. *Surgical Pathology*, M. Denonvilliers. *Clinical Medicine*, MM. Bouillaud, Piorry, Rostan, and Trousseau. *Clinical Surgery*, MM. Laugier, Jobert (de Lamballe), Velpeau, and Nélaton. *Obstetric Clinic*, M. P. Dubois.

Leeches. M. de Quatrefages has recently communicated to the Academy of Sciences a series of experiments concerning the preservation of leeches. It appears that the Algerian leech is quite equal in quality to that of Bordeaux, provided proper caution is used in exporting it. M. de Quatrefages recommends that measures be taken to regulate the trade in Algeria, to prevent its marshes, which are very rich, from being too soon exhausted. He recommends an apparatus for preserving leeches, invented by M. Vayson, whom the War Department had sent over last year to Algeria to explore the marshes. This apparatus consists in a kind of large earthen pot, in the shape of a cone with its base downwards, pierced with small holes; it is filled with earth taken from the swamps; the pot is placed in an earthen dish containing water to the height of about three inches; this suffices to keep the earth within sufficiently moist. The mouth of the vessel is covered with gauze. In this apparatus leeches are said to have been kept without nourishment for a whole year without any mortality.

Statistics of Suicide. The "European Statistics of Suicide," recently published in France by M. Lisle, show that England is no longer at the head of the dreary poll. The French author proves that France is highest in the scale, and Russia lowest. In London we have one suicide in 8250 people. Paris gives one in 2221. For the whole English population the suicides reckon one in 15,900; France, one in 12,489. The north of France is the most prolific in suicides, that district yielding nearly half of the whole number in the entire empire.

Medical Officers for India. The authorities connected with the medical department of the army having decided on having an additional number of medical officers stationed at Chatham, in order that they may be in readiness to embark for India immediately their services are required, eight additional assistant-surgeons have been directed to be attached to the medical staff, and will perform duty in the Garrison Hospital.

Practical Meteorology. The Academy of Science, Art, and Literature, of Bordeaux, offers a prize of 300 francs for the best essay on the following subject:—"Review the actual state of our knowledge as to the grand phenomena of meteorology: such as the temperature, pressure, humidity, and electricity of the air; the currents of the atmosphere and the ocean; the quantities of water which annually fall in different places, their distribution through the seasons of the year; the moisture which escapes by evaporation from the surface of cultivated or uncultivated soils, etc., and as to the various influences which these phenomena exercise upon living creatures: and deduce therefrom the particular direction which should be given to future observations, in order to aid the progress of this department of science." The essays are to be forwarded to the office of the secretary, No. 1, Rue St. Dominique, before Oct. 21st, 1858.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from: — Dr. R. U. West; Dr. S. T. Chadwick; Mr. W. Newman; Dr. J. Sloane; Mr. T. Holmes; Mr. T. M. Harding; Dr. Bryden; Mr. G. Russell; Mr. S. F. Acton; Dr. Hillier; Mr. Richard Griffin; Dr. C. Handfield Jones; Mr. J. V. Solomon; Mr. John Russell; Mr. W. D. Husband; Dr. T. Inman; Dr. H. Goode; Dr. Camps; Mr. B. Eddison; Mr. S. Smith; Mr. Bassett; Mr. J. S. Gamgee; The Doncaster Chronicle; Mr. G. Southam; Dr. Radford; Mr. W. Webber; Dr. G. G. Rogers; Dr. J. M. Bell; and Mr. W. Walker.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A Manual of the Practice of Medicine. By T. H. Tanner, M.D., F.L.S. Third Edition, revised and improved. London: Renshaw. 1857.
2. Ophthalmic Hospital Reports, and Journal of the Royal London Ophthalmic Hospital. Edited by J. F. Streatfeild. October 1857. No. I. To be had at the Hospital; and of Mr. Churchill, New Burlington Street.
3. Atlas of Human Anatomy and Physiology. By William Turner, M.R.C.S. Eng., Demonstrator of Anatomy in the University of Edinburgh; selected and arranged under the superintendence of *John Goodsir, F.R.SS. L. and E., Professor of Anatomy in the University of Edinburgh. Accompanied by a Handbook fully explaining the Plates. Edinburgh: W. and A. K. Johnston. 1857.
4. Recherches sur les Lois de l'Irritabilité musculaire, de la Rigidité cadaverique, et de la Putréfaction (premier mémoire). Par M. E. Brown-Séquard.
5. Recherches Expérimentales sur les Propriétés et les Usages du Sang rouge et du Sang noir (4me Mémoire). Par M. E. Brown-Séquard. (Extraits des Comptes Rendus des Séances de l'Academie des Sciences, 1857.)

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EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

YORK COUNTY HOSPITAL.

CASE OF PARTIAL RESECTION OF ELBOW-JOINT: BONY ANCHYLOSIS.

By W. D. HUSBAND, Esq., Surgeon to the Hospital.

MATTHEW ROUTLEDGE, aged 8, a pale anæmic lad, but otherwise healthy, and with no decided marks of scrofulous cachexia, was admitted into the Hospital, August 14th, 1856. The right elbow-joint was much swollen, and painful on the slightest motion or pressure. The skin was red and inflamed; and a fistulous opening existed over the external condyle of the humerus, through which that process could be reached with the probe, and carious bone clearly diagnosed.

No account could be obtained of any injury to the joint from a fall or a blow, and he was stated to have enjoyed uniform good health.

September 4th. The boy having improved considerably under the use of cod-liver and ferruginous tonics, with good diet, I proceeded, with the concurrence and assistance of my colleague Mr. R. Hey, to perform excision of the joint. The joint was exposed by Liston's incisions, the ulnar nerve being drawn on one side, when a loose portion of bone, evidently detached from the external condyle, was found in the articulation, and removed with forceps. On careful examination of the humerus and ulna, after the ligaments were divided, the external condyle alone was found to be diseased; and, on the advice of a metropolitan hospital surgeon of eminence who happened to be present, I was induced to deviate from my original intention of excising the ends of the articulating bones, and confine the resection to the external condyle. This was readily done with a small saw; and the soft parts having been brought together, the arm was placed in a splint at an angle of 140°.

September 28th. The wound has entirely healed, having progressed most favourably each day since the operation. Passive motion was now ordered to be attempted, and the elbow to be gradually brought to a more acute angle; so that, should anchylosis follow, the joint may be anchylosed in a position more favourable for its use.

October 25th. After every effort to obtain some movement at the elbow, the most perfect anchylosis appears to have taken place; but the arm is fixed in a position most advantageous to its utility.

June 1857. I had an opportunity of examining the arm. There was not the slightest motion in the joint, which appeared able to resist any amount of reasonable force, on an attempt being made to extend or flex the arm. There had been no further disease; and the boy stated that he found no inconvenience from the loss of motion in the joint.

REMARKS. Excision of the elbow-joint, whatever difference of opinion may exist as to that of the larger and more important knee-joint, is now an established operation, and is one of the most successful results of conservative surgery. Seldom fatal, or requiring a secondary amputation, it presents none of those uncertain results which have followed a similar procedure at the knee-joint, and fully justifies the remark of Erichsen, "that excision of the elbow-joint has been more frequently practised than that of any other of the articulations; and the result has been, on the whole, far more satisfactory." While, however, firm anchylosis is desirable at the knee, a very different result must be sought for at the elbow. The lower extremity would be useless with a loose unmanageable knee-joint; but a false joint at the elbow, by which the arm is enabled to retain a certain power of flexing and extending the lower arm on the upper, is here an object of the highest moment. Any procedure, therefore, which interferes with this result, is certainly to be avoided; and the case now under consideration is an evidence that partial excision of the elbow-joint is liable to be followed by complete loss of motion. I acted in this case on very high authority, but, in any similar case, shall certainly not be disposed to adopt a similar procedure.

Stromeyer asserts that anchylosis, in true excision of the elbow-joint, may always or generally be prevented by proper after-treatment; and the results of entire, compared with partial excision, in the Schleswig-Holstein campaign, strongly confirm this opinion. When some of his patients, on whom excision of the elbow had been performed, fell into the hands of the Danes, who did not practice the operation, a neglect of the proper treatment led to complete anchylosis. And, with regard to partial resection, Esmarch states that, in the cases in which it was adopted, bony anchylosis followed after a tedious recovery. The portion of synovial membrane left accounts for this troublesome action; for a total removal of the synovial cavity prevents the occurrence of those formidable symptoms which follow a wound or other injury. Hence I would venture, from the results of this and other reported cases, to draw a conclusion that entire, and not partial resection of the elbow-joint, ought to be the rule in operations for the removal of diseased or injured bone.

GREAT NORTHERN HOSPITAL.

EXCISION OF THE KNEE-JOINT, FOR RECTANGULAR ANCHYLOSIS OF SIXTEEN YEARS STANDING.

Under the care of P. C. PRICE, Esq.

ON Tuesday week, Mr. Price excised the left knee-joint of a young man aged 19, who had been admitted under his care at the Great Northern Hospital, for rectangular anchylosis of the articulation. The patient, a fine healthy lad, believes he met with an accident to his left knee some sixteen years since, and about the same period the articulation became involved with disease. It would appear that extreme neglect has led to the present deformity. The tibia is apparently dislocated into the popliteal space somewhat behind the condyles of the femur; and the head of the bone has a lateral twist outwards, which gives a still more unsightly appearance. The patella is firmly attached to the extremity of the femur between the condyles. There is slight motion on attempting to flex the lower limb; but the hamstring tendons are remarkably tight. The thigh-bone, with its muscular coverings, is considerably smaller than its fellow; and the leg presents the same appearance. Amputation has frequently been proposed, but refused by the patient. Mr. Price thought the case in every way fitted for the operation of removal of the joint, which was taken away entire. The femur was first cut through at two and a half to three inches above the ends of the condyles; and about three-quarters to one inch of the tibia, with the head of the fibula, taken away. The leg came easily into a straight position with the thighs, and the limb was placed at the time on one of the splints described by the operator in the *Lancet* of January 24th, 1857.)

We shall watch with extreme interest the termination of this case, as it opens a fresh feature with regard to the application of excision of distorted joints in preference to amputation of limbs, which, by judicious treatment, may become thoroughly useful.

ST. GEORGE'S HOSPITAL.

I. TUBERCULAR DISEASE AND ULCERATION OF THE PERITONEUM AND UTERINE ORGANS: PHTHISIS PULMONALIS.

Under the care of W. E. Page, M.D.Cantab.

[*Communicated by* G. Goddard Rogers, M.D., *Medical Registrar.*]

Case I. E. P., a cook, aged 21, living in Westminster, had been in the Hospital for some months during the early part of the year; and, after leaving in July, in about three weeks again came under the physician's care. Her illness commenced in February last, with retching and violent abdominal pain, and, at this time, the catamenia were both profuse and frequent. Her abdomen was somewhat tympanitic, but fluid could also be felt. She perspired profusely, and very often suffered from relaxed bowels. Her feet were always very cold. During the first part of her residence in the Hospital she brought up, at various times (generally in the night), large quantities of dark green fluid. The abdomen was always very tender on pressure, and she used to make frequent complaints of bearing down and uterine pains. Throughout the day she was constantly troubled with nausea. At the apex of the right lung was dulness anteriorly, and harsh breathing with undue vocal resonance posteriorly. She had not been long in the house before hacking cough set in, accompanied by sanious expectoration. At the latter part of her illness, when unmistakable tubercular disease existed in both lungs, this expectoration was very thick and purulent. The urine never exhibited any trace of albumen. One of the most remarkable phases of her long illness was a succession of fainting fits, occurring in March, April, and May. After their occurrence she was always left in a very exhausted condition, the whole body not unfrequently being covered with a cold clammy perspiration.

At the latter end of March, after continued menorrhagia, she became subject to a yellow vaginal discharge, profuse, but not very offensive. This ceased after lasting many weeks; and in May and June she showed signs of temporary amendment, and used to get up daily. The fainting fits kept off, and the sickness was only occasional. Then she went out, hoping that change of air would set her up, but, as before stated, soon returned with all the old symptoms aggravated, except that there was less vomiting, although constant nausea. The vaginal discharge especially was very profuse, and there was extreme tenderness all over the hypogastric region. Her cough and expectoration increased daily: she wasted almost to a skeleton, but lingered until the middle of the present month.

The autopsy took place twenty hours after death. The larynx, trachea, and bronchi, were healthy, as was the heart. The left pleural cavity was almost obliterated by old adhesions; the remaining part of the sac contained a little yellow fluid. There was a large ragged cavity in the apex of the left lung, and a few tubercles in its lower lobe. The upper lobe of the right lung contained several cavities; its lower part was studded with tubercles, and the parenchyma was œdematous. A portion of the peritoneal cavity was closed off from the rest by adhesion of the lower border of the stomach to the liver and abdominal viscera and parietes. The detached pouch so formed was filled with pus. The recto-uterine pouch of the peritoneum contained fæces. The liver was healthy; the spleen grumous. Both kidneys were pale, and had their pelves dilated. The suprarenal glands were natural. There were several strumous deposits under the mucous membrane of the lower end of the ileum, but there was no ulceration. About the subperitoneal cellular tissue were numerous deposits of a similar character, each about the size of a pea. On tracing the opening into the recto-uterine pouch, it was found to be a circular orifice with sharp margins leading into the rectum just behind the uterus. There was strumous deposit, and ulceration of the upper part of the cervix, the body, and fundus uteri. The Fallopian tubes were full of the same deposit, and were as large as the small intestine. Both ovaries were much fissured and corrugated. The end of the right Fallopian tube, and the right ovary, were matted to the parts about the orifice in the rectum. There were two other smaller openings in this pouch of peritoneum which led up into the cellular tissue at the back of the abdomen.

Case II. In April, 1853, S. H., aged 18, a pallid, phthisical looking girl, came under the care of Dr. Nairne. She dated her illness from suppression of menstruation four months previously, during the whole of which period she had suffered more or less from pain in the abdomen. Before this the catamenia had been regular, and her general health good, with the exception that she had suffered from headache occasionally during two or three years. Latterly the pain in her head had become more severe, and was occasionally accompanied by double vision. A remarkable oscillatory movement of the eyes was observed, which especially affected the right one. Her pulse was frequent, and without power; tongue dirty; bowels relaxed; abdomen full, firm, and flatulent, with some tenderness on pressure, especially on the right side. The heart seemed healthy; and no satisfactory evidence of disease of the lungs was obtained on her first admission. Her face was frequently much flushed; this, she said, occurred especially "after sleep." The left hand was remarkably cold, and this not solely from being uncovered; for she said that it had been "numb" for twelve months past, and was always colder than the other. A few days later the oscillatory movements of the eyeballs were more marked; there was strabismus, and decided double vision. The urine was free from albumen, alkaline, and contained granular phosphate of lime, oxalate of lime, and epithelium. The pain in the abdomen gradually increased in severity, and obstinate constipation accompanied it. A fortnight later diarrhœa set in, followed again by constipation, but not so obstinate as before. The other symptoms remained unchanged; the flushed cheeks, the oscillatory movements of the eyes, and the numbness of the left hand. Gradually the sight of the right eye failed her; a depressed languid state came on, and she took very little notice of anything. Apparently general loss of power to a certain extent followed; articulation and deglutition were performed with difficulty; and she speedily sank.

At the examination, twenty hours after death, on removing the calvaria the Pacchionian bodies were found enlarged, and there was much fluid in the subarachnoidean space. The substance of the brain was more vascular than natural. A small mass of tubercle, about the size of a horse-bean, was found at the back part of each posterior cerebral lobe, imbedded in the grey substance. Another irregularly rounded mass of tubercular deposit occupied the centre, right side, and back of the medulla oblongata. In the upper part of the pons Varolii, projecting somewhat into the anterior wall of the fourth ventricle, was a scrofulous mass, of similar size to the one just named. The lateral ventricles were full of fluid.

The apex of the left lung contained a large number of tubercles. Old pleuritic adhesions existed on the same side. The heart was healthy: so were the intestines, liver, spleen, and mesenteric glands. In each kidney small masses of scrofulous deposit were found. In the sheath of the right psoas muscle was a large abscess, reaching as low as the pelvis, and as high as the last dorsal and first lumbar vertebræ, which bones were softened and carious. In the vagina were five circular ulcers, varying in size from a threepenny piece to a shilling. The os and lower part of the cervix uteri were ulcerated. The upper part of the cervix and the whole of the interior of the cavity of the uterus were extensively ulcerated, exposing a rough uneven surface, covered over with white scrofulous deposit. The Fallopian tubes were much enlarged, their coats thickened, their mucous lining destroyed, and their canals filled with strumous matter. The end of the right one was dilated into a large cavity, full of white floccular creamy fluid. The left ovary contained a quantity of strumous pus; the right one was healthy. The form of the Fallopian tubes was much altered; in parts they were dilated and tortuous. The abscess described above communicated by means of a large circular orifice with the end of the right Fallopian tube. The fimbriated extremity of the same tube was thickened from scrofulous deposit in its substance.

Remarks. The second of these cases would be worth recording if only on account of the cerebral symptoms. Similar cases I have more than once reported in the pages of this Journal, and they afford some of the best opportunities for exercising and displaying the powers of the skilful diagnostic physician. But I have now taken it as an accompaniment to Case I, because the two are the only well marked instances, so far as I can ascertain, which have occurred of late years at St. George's to illustrate the pathological anatomy of the female organs of generation in tuberculosis. Ancell, in his valuable and complete treatise, speaks of the discrepancy of opinion which exists respecting the state of the generative powers in tuberculous subjects; but from the statements of Louis and others there appears very little doubt at all events that the menstrual functions from an early age, and before local symptoms set in, are performed irregularly. I merely mention this as coinciding with the histories given above,

where, in the one case menorrhagia, in the other amenorrhœa, preceded the breaking up of the general health.

With respect to the remarkable and profuse vaginal discharge in the first patient, I conclude that it consisted chiefly of softened tubercular matter. For cases confirmatory of this supposition, I must refer the reader to the writings of Carswell and Louis. The loading of the Fallopian tubes with strumous deposit, and their consequent dilatation and tortuosity, seems to have been observed more frequently than the occurrence of the same deposit in the uterus itself. Ulceration of the vagina, such as was noticed in Case II, is rare; and when it does take place, it is generally due to the action of the discharge, which, as first stated, probably consists of softened tuberculous matter. In Case I, fæcal matter was found in the recto-uterine pouch of the peritoneum, owing to the extensive ulceration which had taken place into the gut. That this is not of very frequent occurrence in scrofulous disease, is evident, as Dr. Watson (vol. ii, p. 182; third edition) says that *only once* has he known it to happen.

These brief remarks I think sufficiently point out the comparative rarity of cases like the above. If reference is made to Mr. Ancell's Table, showing the frequency of the development of tubercles in the various organs of the body in upwards of one thousand cases, and the relative frequency in each organ, a mere fractional part of the whole number will be found to come under the head of "Female Organs of Generation". Yet, as Mr. Ancell candidly owns, this table is only one step in the right direction: and we quite agree with him that the adoption of the numerical method on a far larger scale, and an uniform plan for the registration of *post mortem* appearances, are absolutely necessary in order to arrive at correct conclusions as to the relative frequency of tubercles in the different organs.

II. GANGLIONS IN RELATION WITH THE RADIAL ARTERY.

Under the care of Prescott G. Hewett, Esq.

M. Chassaignac has recently, we believe, directed attention to the fact that ganglions lying on the outer side of the wrist are sometimes situated beneath the radial artery, and that care is required in these cases to ascertain the position of this artery before a puncture is made. Two instances have recently been under Mr. Prescott Hewett's care, which illustrate the truth of this observation. In both, ganglions connected, in all probability, with the tendon of the supinator longus muscle, were observed to have raised the radial artery, which could be felt pulsating on the superficial surface of the swelling. In one case, that of a boy six years of age, the swelling was of small size; it was punctured at one side beneath the artery, and was soon cured. In the other case, that of an adult, the swelling was of large size. No treatment was adopted, as the man was only passing through London.

ST. BARTHOLOMEW'S HOSPITAL.

COMPOUND FRACTURE OF THE THIGH, WITH INJURY TO, AND ABSCESS IN, THE OPPOSITE KNEE-JOINT.

Under the care of E. Stanley, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Thomas J., aged 10, was admitted under Mr. Stanley's care in the evening of September 30th, on account of an accident in which his right leg had become entangled in the spokes of a cabwheel. He had suffered a compound fracture of the right thigh a little below the junction of the upper and middle third. The fracture ran in an oblique direction, and the upper fragment was protruding from the wound. There was much collapse; both limbs were cold. In the left leg (which was much bruised, in consequence of his having been dashed against the ground), the tibial arteries could be felt pulsating feebly, but no pulsation could be felt in the other limb. He was said to have lost much blood, but there was no great hæmorrhage at the time of his admission. The boy complained of feeling drowsy. As it seemed doubtful whether the artery had not been wounded, Mr. Stanley was sent for. Before his arrival, however, the pulse had reappeared in the tibial arteries of the injured limb; the idea of the necessity of amputation was therefore abandoned, and the limb was put up in splints, extension having been made under chloroform. Effusion into the knee-joint came on in the course of a few days, leading to the suspicion of fracture of the lower epiphysis of the femur. His situation, however, of course precluded any examination. He remained in a very listless, languid condition, exceedingly irritable and tender to the touch everywhere. On October 5th, the left leg was seen to be excessively œdematous and swollen, with much blood effused all around it. On October 8th, effusion was noticed in the left knee-joint, and there was a sensation of fluid at the lower part of the thigh. He was ordered nourishing diet and port wine; and an incision was made on the outer side of the limb, down to the tendon of the rectus muscle. This, however, did not give exit to any matter. On the 12th, more incisions were made, in the hope of finding matter in the neighbourhood of the joint which was setting up irritation and causing effusion in its cavity; but, as this was frustrated, it was determined to open the cavity of the knee-joint, which was accordingly done on October 19th, when a quantity of purulent fluid was evacuated by a free incision into the outer side of the knee. Things went on after this pretty well till November 1st, when, as the house-surgeon was going round the ward, he observed that the boy was unnaturally pallid, and, on turning down the bedclothes, discovered that he had lost a very large quantity of blood from the wound of the compound fracture. The source of this hæmorrhage remained obscure; it had ceased before it was discovered, and therefore, of course, no steps were then taken to find the bleeding vessel; and it did not recur. Since then he has been going on quite well. The wound in the knee-joint, after having remained open for more than three weeks, had been, on the last report (November 23rd), closed for some days; and an attempt was about to be made to restore the movements of the joint by passive motion. The fracture is in process of consolidation.

Remarks. We hope to give the termination of this interesting case at some future time; meanwhile, what we wish to call our readers' attention to is the difficulty which was at first experienced in deciding whether the artery was wounded or not. The total absence of pulse in the artery of the injured side, while that in the opposite artery was plainly felt, would have led, if too hastily acted on, to a conclusion which would, in all probability, have been found erroneous. The hæmorrhage, which occurred so long after the accident, was not clearly proved to have been arterial, and might have been caused merely by some accidental change of posture, or other slight cause; still, coupled with the other features of the case, it was suspicious. Mr. Stanley mentioned at the time that he had seen instances in which the pulse had been suspended temporarily in arteries of injured limbs, and where the spontaneous restoration of the circulation had shown that this had been the result of some temporary loss of tone from contusion, and not laceration. The child's recovery appears now almost certain; and we hope to have to report that the motion of the injured knee has been restored—a circumstance which does occur in childhood not very unfrequently, after abscess in the joint.

Erratum. In last week's Report from St. Mary's Hospital, at p. 964, column 1, last line but two of Case IV, for "cuticular" read "articular".

Original Communications.

DIPHTHERITIC CONJUNCTIVITIS.

By Augustin Prichard, Esq., Surgeon to the Bristol Royal Infirmary, and the Bristol Eye Dispensary.

I can find in no systematic or other treatise on the Diseases of the Eye which I have had an opportunity of examining,* a description of a pathological state which I wish to bring before the notice of the Association, and with which I and doubtless many of my fellow associates have been familiar for some years. Writers upon ophthalmic surgery must have noticed it, if they were practically acquainted with their subject on an extensive scale; but they do not appear to have considered it a disease sufficiently distinct to require a separate description. I allude to acute conjunctival inflammation, with fibrinous

* I have looked through, for this purpose, the authors named in the following formidable list:—Demours, De Sauvage, Guthrie, Wharton Jones, Jüngken, Lawrence, Mackenzie, Middlemore, Morgan, Sanders, Scarpa, Slade, Vetch, Walker, Ware, Wardrop, Warner, Watson, and Weller; besides the "Cyclopædia" and "Library of Medicine", the "Dictionnaire de Médecine"; and West, Underwood, Evanson and Mansell, and Syer, on the Diseases of Children; and other general works on the practice of medicine and surgery.

exudation, and it may very properly be called "Diphtheritic Conjunctivitis".

We are all acquainted—many of us too well—with the two peculiar diseases of the trachea and pharynx: croup, or "tracheitis", and "angina membranacea", or "diphtheritis", both characterised by the effusion of coagulable lymph upon the mucous surface; the former (croup) being an acute idiopathic inflammation, with fibrinous exudation, of the mucous membrane of the trachea in apparently healthy subjects, often in children remarkably strong and stout for their age; and the latter (angina membranacea) occurring sometimes in an epidemic form, and seen generally in children who have been exposed to the contagion of scarlatina, or who have actually had that disease; and it is the same disorder as the "inflammation diphtherique", described by M. Bretonneau in his memoir read before the Royal Academy of Medicine.

The pathological condition of the two diseases is the same; that is, an inflamed mucous membrane (in one instance in the trachea and bronchial tubes, in the other about the pharynx and isthmus faucium) secretes coagulable lymph instead of serum or mucus or pus, as is commonly the case; but why in some strong healthy subjects, and in some cachectic and weakly ones, this peculiar change in the product of mucous inflammation takes place, I can form no opinion.

I have now seen nine or ten cases of acute conjunctival inflammation in young children, where, instead of the ordinary serum, mucus, or pus, fibrin has been effused, of the same physical characters as that effused in a recent case of acute pleurisy, which has adhered to the lids, and when unchecked by treatment has spread over the surface of the globe and destroyed the sight; but until lately I have never seen any reason to associate this condition with the poison of scarlatina. The cases which I have noticed have been nearly, if not quite, all during the period of the first dentition. When the disease comes on, the lids are first affected, and to them the inflammation is, in the majority of instances, confined. They are much swollen, and, upon everting them, a layer of yellowish-white lymph is found adherent to the mucous surface, fitting it exactly, and reaching to the very margin; this may, with some difficulty, be peeled off, by laying hold of it with a pair of forceps, but the process causes bleeding from the conjunctiva underneath; and I have no doubt but that vessels are soon developed in the false membrane which communicate with those of the lids. I have examined a layer of lymph thus removed under the microscope, and have seen one or two red lines upon it, which I believe to have been vessels; but the specimens are so rare that I have had no opportunity of repeating this examination, and I should be sorry to base any decided statements upon one experiment.

All the cases which I have seen, with the exception of two, have been cut short at this stage by suitable treatment; but in one of these two, which occurred many years ago, the lymph, after being repeatedly reformed on the palpebral conjunctiva, was also secreted on the globe, and became adherent to the sclerotic and cornea, and the sight of that eye was lost. In the other, which I will briefly narrate, both eyes were lost two or three weeks before I saw the child, who ultimately died of the irritation. The history which follows proves the connection of this disease with the "angina membranacea", and with scarlatina, and its pathological identity with the former, and it shows also that under certain circumstances inflammation of the eyes may be a fatal disease. There are other interesting points connected with the account, such as the question of the contagion of this diphtheritic state, or the distinctness of the poison, and the risks of exposure to cold, or to unwholesome or fetid exhalations after scarlatina, which I cannot enter into now; but I may express my belief that this tendency to secrete fibrin from the mucous membranes will be found to be associated with that inflammatory condition of the system following scarlatina, familiar to us all, in which albumen is found in the urine, and patients become dropsical.

In one of the suburbs of Bristol is a street which has apparently been unfinished for a long time; the houses are not of the poorest kind, but the broken end to the rows, and the absence of any thoroughfare, give it a desolate aspect; behind the houses are small gardens with a ditch and open drain. There had been scarlet fever in one of the houses in August last, and in a neighbouring one my patient lived; and the following is the account of her illness and that of her family.

Case I. Julia Palmer, aged 3 years, was taken ill with fever on Thursday, September 3rd, and the eruption of scarlatina came out on the 4th. She went through the usual course, and got better; but after a while her eyes became weak and suddenly dull, and by the 21st they were quite opaque, and from that time she was blind.

She was admitted my patient on Monday, October the 12th, with lids much swollen, and tears running from her eyes. She evidently had no perception of light; and although she seemed in tolerably fair condition, she was very weak. Upon separating the lids, I could see the globe and the lids thickly covered with layers of coagulable lymph, the cornea being altogether invisible. I ordered her milk diet, and simple fomentations with warm water twice a-day for the eyes, for no active treatment could do more than give her pain and increase her irritability. After two or three days she had some wine and a drop or two of laudanum twice a-day, but she gradually became weaker.

On Thursday, the 15th, she seemed less able to sit up in bed, the swelling of the lids subsided, and blood in minute quantities escaped from the eyes. She was a pitiable object, sitting against the pillow, and constantly moaning and feeling about with her hands, calling upon her mother; and I was not sorry to find that she died on the morning of the 17th.

The body was not examined, but the eyes were removed. There were thick layers of lymph adherent to the sclerotic, and very dense, and apparently organised. The cornea had disappeared, the iris being exposed, and the lens entirely opaque. I have no doubt but that the cornea sloughed on the 15th when the discharge of blood took place, and that pressure from the effused lymph, and the low condition of the vitality of the child, were the cause of its sloughing.

Other members of the family were also affected, and with the following results:—

Case II. C. P., aged 14 months, was taken ill at the same time, and went through the ordinary stages of scarlatina without bad symptoms; but on recovery was a good deal exposed to cold, for the mother had to carry it to and fro in her arms during the time she was nursing the others. It was taken about the end of the third week in September with croupy symptoms, and died on the 17th of October of fetid sore throat, choked by the false membranes which were secreted from the pharynx, and which the mother used to brush out in considerable quantities.

Case III. James P., another brother, aged 5 years, was also taken at the same time, and appeared to recover in a satisfactory way. He was taken with a metallic croupy cough about the same time as the last, and died on the 22nd of October, suffocated in the same way by the false membrane.

Cases IV and V. B. and A. P., two older sisters, about 9 and 11, went through the scarlatina in the same way, and were taken in like manner with the croupy cough, but they recovered, having had fewer shreds of membrane about their throats. The eldest also had diphtheritic conjunctivitis in a milder form, for flakes of lymph formed in her eyes; and upon one occasion so large a portion was detached from her lid, that it covered the cornea for a while, and they thought she had suddenly become blind.

These five children constituted the whole of that family living at home, and, as has been seen, were thus affected:—

1. The eldest had diphtheritic inflammation of the throat and of the conjunctiva, and recovered.
2. The second had diphtheritic inflammation of the throat, and recovered.
3. The third had diphtheritic inflammation of the throat, and died.
4. The fourth had diphtheritic inflammation of the conjunctivæ, with destruction of the eyes, and died.
5. The fifth had diphtheritic inflammation of the throat, and died.

In this list we have both recoveries and deaths from both sets of cases.

Lastly, as to the treatment of this disease of the eyes. I believe that for its cure, besides great cleanliness, it is essential to strip away all the false membrane from the eye and lids, and to apply to the entire surface a strong solution of nitrate of silver, at least twenty grains to the ounce. This must be repeated daily until the tendency to the reproduction of the lymph has been checked. At the same time I should strongly recommend mild purgatives (containing mercury in some simple form); and if the patient is very full and hot, a leech to the temple will be of service. Poultices, wet pads, too prolonged fomentations, or anything resembling plasters, bandages, or dressings, must be entirely discarded. I think that the nitrate of silver plan will cure the disease if it is followed up in an energetic way. To attack it by any remedy not directly applied to the inflamed organ would be to lose time

and probably the patient's sight as well; and if in parallel cases we could get at the mucous membrane of the larynx and pharynx, and apply the same solution to it, I think the result would be as satisfactory.

N.B. Only one of these five cases was under my care; the other particulars I obtained subsequently from the mother, a very intelligent woman.

CASES OF NERVE-DISORDER, RECORDED WITH REFERENCE TO THE PROBABLE OPERATION OF MALARIA AS A CAUSE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Series II (*continued.*)

Case vii. C. M., aged 39, single, a butler, was admitted August 17th, having been ill five weeks. He has been paralysed to a considerable extent in both hands, so that he cannot dress himself, nor pick up anything. His feet are also weak, and flap down in walking. The hands and arms ache at night, so that he cannot sleep. The paralysis is getting worse. He has derived no benefit from blisters to the neck. He feels very weak all over. The head is hottish, but he has not much pain in it. The tongue is coated at the back; the bowels costive; the skin natural; the pulse large, soft. The urine (examined some days later) was of specific gravity 1014, of good full colour, not albuminous. There was great if not complete loss of sensibility in the parts paralysed. He states that his illness came on gradually, apparently from excess in drinking, not in venery. He never lost his consciousness.

He was treated from the first with five grains of quinine three times a day, which was continued till September 3rd, when he was much better in himself; the power of the right foot much improved, of the left but little; the hands still very weak. Citrate of iron and quinine were then prescribed, in doses of ten grains three times a day, with fifteen minims of tincture of nux vomica.

September 10th. The hands are improved, but are very numb, and get very weak towards night.

September 17th. The feet and hands are stronger. He is very much better in himself; he can lift and hold better than he could; but the more delicate movements he cannot yet manage. He says this is from numbness and stiffness of the fingers.

October 19th. He has been at Kingston, and is very much better. He has had no medicine during the last ten days. He can dress himself, and do anything almost. He still has some "dead thick" numb sensation in the fingers, and some "loose" sensation about the left leg; "it does not come up in walking so well as the other."

November 2nd. He is still further improved.

Remarks. Whatever may have been the exact seat of the palsy in this case, it seems clear that it must be ascribed to a simple failure of nervous power, and not to organic alteration. The excess he had indulged in, I suppose, acted as a predisposing cause, impairing the tone and resisting power of the nerve-structures; and then this gave way completely under the influence of the *constitutio anni*, which seems constantly, at the present day, to depress nervous force. A correct diagnosis of these cases is most important, but not, I think, always easy. The existence of great general debility (apart from the paralysis), and the *juvantia* and *lædentia*, are the chief points to look to.

Case viii. H., aged 45, a labourer, was admitted July 9th. Whilst at work, he was seized with violent pain across the loins, and with numbness running down the legs. The urine was retained, so that he could not pass it; and there was involuntary discharge of fæces. When first seen, he was lying on his back at full length, the toes pointing straight out; the skin cold; the legs paralysed and insensible, even when pinched with the nail. He was quite unable to stir. He had no pain nor disorder elsewhere. He was quite conscious. He was ordered to have an enema of turpentine with aloes; and to take immediately five grains of calomel, with ten of compound jalap powder. After the enema and powder had acted freely, the limbs still remained powerless; the pain continued, but was relieved by the use of a croton-oil liniment.

July 11th. He was ordered to have ten grains of disulphate of quina three times a day.

July 12th. Sensation had returned.

July 13th. He is able to sit up in bed.

July 20th. He attended himself at the Dispensary.

July 23rd. He was well. The quinine had been continued during all the time.

Remarks. This case was under the care of my friend Mr. Moullin, whose skilful management of it deserves great praise. It seems to have been very similar to the preceding, the disorder in both being functional, and not referrible to active hyperæmia affecting the nervous centres. Early treatment (not to say correct) is in these cases of much consequence to the obtaining of an early recovery. My case, which had been ill five weeks before I saw him, recovered much more slowly than Mr. Moullin's. Dr. West has dwelt on the same point as regards infantile paralysis. In Dr. Graves's clinical lecture on *Paraplegia*, a case is related where severe paroxysms of gastralgia and vomiting concurred with this form of paralysis, and where a careful *post mortem* examination detected no organic alteration whatever. In such cases, nothing remains but to assume that the *vis nervosa* was primarily disordered, or failed. Such derangements in persons predisposed may be induced by various causes which enfeeble the general power, as, for instance, an attack of fever. In this case it is, I think, the malarious, rather than the typhoid or typhus, which exhibits the sequel of paralysis. This is what might have been expected, as the malarious miasm exerts its prostrating influence peculiarly on the nervous system. It is rather remarkable how small an extent of the nervous system may be affected by the paralysis. A boy, aged 14, was recently under my care, who, after fever, had paralysis of the left little finger; the rest of the hand was only rather weak.

Case ix. E. Ph., cook, aged 43, was admitted December 19th. She had been ill about four weeks. She was first attacked with inflammation of the legs, which got well, and she returned to her work; but six days ago she began to lose the use of the right hand, and two days afterwards that of the left. The paralysis of the left hand for two days was complete, that of the right was not so much. The arms were not affected. The hands were numb, but not in pain. She is much confined to the house, and has been two months in a kitchen without going out. She has felt very weak, and has been overworked lately. She never had ague. She was living, when taken ill, near Reading. There is a small lake a quarter of a mile from the house, and springs of water round it. The passages and cellars were damp. She has suffered much with headache and giddiness, but not at the time of the attack. The skin is warm, moist; pulse 72, soft; the bowels are open. A blister was applied to the neck; and she was ordered to take three times a day five grains of citrate of iron and quinine, with ten minims of tincture of nux vomica; and to have half ordinary diet.

December 23rd. The skin is cold; circulation languid; pulse very weak. The left hand is improving slowly; the right recovered on the day of admission. The blister is very sore.

December 30th. The left hand is all right; the pulse a great deal better and stronger; the skin warm. She went out soon afterwards, quite well.

Remarks. The foregoing is a slight case of functional paralysis, but sufficiently well marked. The failure of nervous power in the motor nerves may have been due simply to fatigue, or, which I think more probable, the fatigue impaired their resisting power, and left them prone to succumb under even a slight degree of endemic influence. I incline to the latter opinion, because I am not aware that any amount of over-exertion alone is adequate to produce paralysis.

The following personal account given by M. Bailly, of his own experience during his stay at Rome, will form a suitable sequel to the foregoing cases. After some previous symptoms, such as morning headache, palpitation after a midday meal, sleeplessness, and momentary giddiness, he suffered as he goes on to relate. "In the morning I was comfortable enough, but towards 3 or 4 P.M. a state of *malaise* began, and went on increasing, without my being able to fix myself its especial seat. I had neither pain in the head nor in the abdomen, nor any rigors. However, there came on, little by little, a weakness of legs, very difficult to conceive as occurring in an individual who, having never been bedridden, and experiencing no local symptoms, could not himself determine in what manner such a weakness was possible, when he examined successively the state of all his functions. . . . . All my functions were performed very well. Every day I went to the hospital to collect observations, and to examine the bodies of those whose illness I had watched; each time I walked about three-quarters of a league to dine at Rome; and, when I had to return home, I despaired sometimes of being able to get to the end of the way; so great

was the singular weakness which I felt in the knees, not in the same degree, or rather not at all, in the other parts of the body. When I ascended a staircase, for instance, I made use of my hands, with which I grasped the banister, and nearly as strongly as at any other time, so as to draw all my body towards the fixed point, and so to relieve my legs, which, without this aid, could scarcely have fulfilled their habitual office. I am not surprised that some authors have admitted the existence of a *lassitudinary* fever; for, on examining what was most apparent in my state, there was nothing to be seen which announced distinctly the lesion of any particular function. . . . If this lassitude was produced by the same cause which determines adynamia in grave fevers, as in typhus, why was it not as great in the upper limbs as in the lower; in a word, why was it the only apparent symptom? Further, I may observe that this phenomenon is very common in the course of intermittent fevers." M. Bailly goes on to say that he was freed from all his symptoms by one hundred grains of quinine, taken in five days, and a vegetable diet. (*Traité des Fièvres intermittentes Simples et Pernicieuses*, pp. 151, 152.)

I can fully understand the state which the above extract describes, as I experience occasionally something of the same kind myself ever since I had an attack of quasi-aguish character during the prevalence of cholera in 1854. This consists in a sensation of slight uneasiness referred to the heart, which is aggravated by walking at all far, so that I have often felt weary at my heart, and not in my legs. It affects me for some days at a time, and I am free from it again for a long interval. There is nothing discoverably morbid about the heart's action.

Case x. M. S., aged 41, of active but nervous temperament, resident in London, has been subject latterly to bronchitis in winter. One day, having had a degree of stomach derangement for some time, she experienced all the symptoms of a commencing catarrhal attack. She had much cough, and felt bruised and sore all over. Two doses of carbonate of ammonia with compound camphor tincture were taken. In the night she fell ill, with quick pulse. About 8·30 the next morning, she was attacked with distress referred to the heart, a sensation as if she were dying, breathlessness, and anxiety. I saw her about 10 A.M., when I found the pulse at the wrist almost utterly gone; the hands cold; the same distress continuing; the action of the heart, on auscultation of the cardiac region, very rapid; the sounds normal and loud; the face pale; and the eyes sunken. Her voluntary muscular power was not materially impaired; she sat up well, and stretched her limbs vigorously. More than once she expressed a dread of going to sleep, lest she should never wake again. She seemed too restless and anxious to sleep or lie down. Stimulants were given freely, mustard poultices applied to the præcordia, and the electro-magnetic current passed from the nape of the neck to the same part. Very little improvement was produced for some time; the pulse continued fluttering and most indistinct; but at last warmth began to return in the hands, and the pulse improved. She took three grains of quinine at 11 A.M. and 1·30 P.M. For a good while before and after the latter hour, the cerebral functions were much disordered; she kept repeating the same question or remark again and again, in spite of all answers and assurances. It was evidently a form of delirium. About 4·30 P.M. she became much quieter, but complained of extreme weakness. The pulse was 108, of tolerable force; the tongue remained clean, but appeared to her to be dry, though it was fairly moist. She vomited once about the middle of the day, and coughed up a few times a little phlegm; but all catarrhal symptoms had disappeared.

10 P.M. She complains of extreme debility, and perspirations breaking out. The tongue is clean; the pulse large, weak, above 100. At 5 and 9 P.M., three grains of quinine were given, and twelve grains more in the course of the next day, and so the following half-day. She then had a grain and a half of calomel and a little rhubarb, which brought away a large solid dark evacuation, and liquid stools after. The action of the purge depressed her much; but she passed a better night than the preceding, when she had a third of a grain of morphia. No medicine was now given till the day but one after the calomel, when she began to take infusion of serpentaria, with tincture of cinchona, iodide of potassium, and bicarbonate of potash. This was prescribed with respect to the possible existence of a rheumatic element in the disorder; but no decided benefit was produced. After two days, citrate of iron and quinine were given, in five-grain doses, three times a day.

Up to this time she remained very weak, with very little power of taking food, and experiencing nervous sensations about the chest, which made her fear a relapse. On the morning of the fourth day after she had begun the ferro-citrate of quinine, she felt a fluttering of the heart and great weakness, but after midday she rallied. She had improved previously. One of her daughters, about the same time, had an attack of bronchitis, in which quotidian morning paroxysms of chilliness and depression occurred, ceasing only after the administration of quinine. The ferro-citrate of quinine was administered in rather larger doses for a week or ten days longer, by which time she was convalescent, and able to go out.

A few days afterwards, a relapse occurred. She was attacked February 3rd, about 11 P.M., by decided rigors; with violent beating of the heart in repeated *accès*, between which she felt better; with great depression and mental disturbance, manifested, as before, by constant loquacity and a tendency to repeat the same thing and question over and over again. The pulse at 2·30 A.M., when I saw her, was soft and quick; the skin fully warm; the tongue parched and dried up, and coated. She complained of breathlessness; threw the clothes off her chest; her legs fell as if they did not belong to her; and her hands tingled. I gave her fifteen minims of liquor opii sedativus, and twenty minims of chloric ether; but, though the symptoms gradually subsided, she did not get to sleep till 5 A.M. At 7·30 A.M. she began to take two grains of disulphate of quinine every three hours.

February 5th. She was better all yesterday until 11 P.M., when the same symptoms recurred, but less severely. She got some tolerable sleep, but experienced a recurrence in the morning of disturbance of the heart's action, with a feeling as if she were dying. This subsided after some time, and she remained till the afternoon weak and depressed. The appetite was lost. She had whizzing in the ears from the quinine.

February 7th. She passed a tolerably good day yesterday; the appetite, however, remaining very bad, and nausea being felt at times. Last night she was very bad. About 9 P.M. she began to have "internal tremors" and exceeding restlessness, which passed into high fever, and was succeeded by profuse sweating when at last she got to sleep. She is very weak and prostrate this morning, with much nausea and utter aversion to food. There is no enlargement of the liver or spleen. Her complexion is yellowish. She has some epigastric tenderness. The tongue is coated, dryish; the bowels are open. The quinine was omitted. A sinapism was applied to the epigastrium. She was ordered to have lumps of ice to swallow.

February 9th. On the night of the 7th, she slept well with thirty minims of morphia solution; last night she slept well without. She has been taking, to-day and yesterday, two grains of disulphate of quina three times a day. She is very weak, but has scarce any of her former symptoms, except gastric sinking and nausea.

February 10th. There was very much perspiration last night, and slight shivering and much depression this morning. The tongue is clean; pulse quick, good. She was directed to take five grains of citrate of quinine and iron, with six minims of tincture of nux vomica, three times a day.

Four days later, she went into the country, having materially improved before her departure. The change was productive of great benefit, and she returned apparently quite recovered. The stamp of aguish disorder, however, was still upon her, marked by evening chills, followed by slight flushes. About ten days after her return, she had a mild bronchitic attack, from which she recovered, and regained her ordinary health.

Remarks. It is difficult to make the narrative of a case like the preceding complete without being tedious. The salient points are cardiac neuralgia, paroxysms of aguish character, profound debility without any organic cause. The commencement of the affection, with the symptoms of incipient catarrh or influenza, is worthy of remark. It seems impossible to view the phenomena in any other light than as the results of a depressing poison operating on the nervous system, principally on the sympathetic and cardiac nerves. Syncopal tertian is well known in South America (*vide* Dr. Hamilton's pamphlet, p. 26), in Italy (Torti), and in France (Trousseau). Its occurrence among ourselves is not common, but yet the cognate form of cardiac neuralgia is, I suspect, more frequent than most of us have any idea of. The term is used by Dr. Stokes as applied to what he designates simple neuralgia of the heart; but I do not find that he connects it expressly with malarious disorder. Romberg also uses the terms cardiac hyperæsthesia and cardiac spasm, intending by the former angina pectoris; but he does not mention malarious disease as a cause of either.

He quotes, however, in a note, a passage from Laennec, which I subjoin as exactly expressing my own opinion. "The majority of physicians have nevertheless remained persuaded, in England, in Germany, and especially in Italy, that angina pectoris is always connected with some organic disease of the heart, that this symptom is very serious, and that most of the patients who are attacked by it die suddenly. These ideas are by no means correct. Angina pectoris, in a slight or moderate degree, is an extremely common affection, and exists very often in subjects who have no organic affection of the heart or of the great vessels. I have seen many persons who have experienced only some very sharp attacks, but of short duration, and who have been subsequently freed from them. I believe even that *the influence of the medical constitution* contributes to the development of this affection; for I have observed it frequently in the course of certain years, and I have scarcely met with it in others. On the other side it is true that angina pectoris very often coincides with organic affections of the heart; but there is nothing to prove that it depends on them even in these cases, since it may exist without them, and these affections are very various." The italics in the above passage are my own. I do not consider the cardiac disorder in Case x as quite identical with angina pectoris; but it was evidently very similar, and was attended, as well as in Case xi, with a sense of impending death. The term angina pectoris is one which I should be glad to see disused; it leads the mind too much to think of the cardiac affection as something strange and peculiar, and so confuses the practitioner's ideas in the treatment. Cardiac neuralgia I consider a much better term; it groups the phenomenon in question with a class of others which we continually recognise and treat. It is always a gain to take away the idea of a special entity from a disease, and to view it as a morbid process, which has its parallels elsewhere. Dr. Walshe, in his comprehensive work on *Disease of the Lungs and Heart*, has a note to the effect "that angina of malarious origin, and recurring periodically, has been observed." Of this kind, insofar as its origin, was the case above related.

Case xi. C. R., aged about 35, of sanguine habit, but rather weak nerve power, had been exposed to cold and got chilled. The same day he went out again after a hurried meal, and on returning took his ordinary siesta. He awoke with a very curious sensation of spasmodic choking all along the œsophagus; this was rather increased by taking spirit and water. He went to bed, and appeared relieved by the warmth somewhat, so that he slept for about an hour. He then awoke in the most excruciating pain; could only lie in one position, viz., on his back, slightly inclined to the right side, with the left leg drawn up. He could not breathe without great pain. "I dared not," he says, "close my eyes, from experiencing that most awful sensation as if my heart would cease pulsating; the agony I went through that night baffles all description." For two hours he was involuntarily kicking, though well aware that he was doing so; he seemed to have no control over his limbs; and if he chanced to kick himself the feeling was a most curious one, "as if one leg did not belong to the same body." A mustard and turpentine poultice to the chest afforded some relief. When I saw him early the next morning the pulse was excited; the tongue pretty clean; urine scanty and high-coloured; no morbid sounds in heart or lungs. He took calomel and opium, each two grains, immediately, and had his chest rubbed with a liniment of aconite and opium. After sleeping two or three hours he awoke, and began to take muriate of ammonia and bicarbonate of potash in camphor mixture four times a-day. The next day the urine deposited a lateritious sediment; he was much better, and in forty-eight hours from the commencement of the treatment he was convalescent, and has had no relapse. He has, however, both before and after this attack, suffered from rheumatism, muscular and periosteal.

Remarks. In this highly interesting case the disorder seems clearly to have been of rheumatoid character, though much more approximating to the neuralgic than the inflammatory form. Its exact location is not easy to determine; but I think it is probable the sheaths of the dorsal nerves were especially affected. The heart's action may have been disordered as well as that of the œsophagus, by sympathetic co-ordination, the nerves of the parietes and of the viscera being linked together in their various *παθηματα*. This seems not an uncommon occurrence. The sensation of not daring to sleep is one that I have remarked in other cases of cardiac neuralgia. The involuntary kicking may have proceeded from an excited state of the cord, induced by the irritation of the dorsal nerves. A man at present in St. Mary's under Dr. Chambers, who has had tropical fever, suffers from attacks of opisthotonos, controlled by quinine.

Case xii. M., aged 54, robust male, was under the care of a medical friend for some days on account of inflammation of the left testis, probably of gonorrhœal origin. It had been treated by three applications of six leeches each, and by other appropriate means. Considerable improvement had taken place when my friend visited his patient on the morning of the last day of his life. About the middle of the day M. was suddenly attacked with severe pain in the region of the heart, and sent at once for my informant. He arrived in about ten minutes after the receipt of the message, but the man was dead. My friend had had him under his observation for some length of time previous to this attack, and had treated him for gonorrhœa on one occasion. No attack similar to the fatal one had ever occurred before, at least no mention had been made of any, nor had he suffered from any serious illness. His mind had been harassed somewhat lately by domestic vexation.

I was present at the *post mortem* examination, and noted the following. Rigor mortis was well marked. The body was muscular, and in good condition. The heart was flabby, but presented no disease of the valves, no hypertrophy, nor dilatation. There was slight atheroma of the coronary arteries. The brain was not examined; all the other organs healthy. On more particular examination of the heart, its walls were observed to be perhaps rather thinner than usual, and the tissue of a less decided red than in the healthy state. The microscope showed some degree of fatty degeneration of the sarcous tissue, but not by any means enough (in my judgment) to account for death.

Remarks. In this case we have a healthy man, somewhat weakened and depressed, seized suddenly by a severe breast-pang, which arrests the action of his heart, and proves fatal. There is no whit of evidence to prove that malaria had anything to do with the occurrence, but neither is there any to show any other causation. I do not for a moment imagine that other causes may not give rise to neuralgia; but what inclines me to consider that in this case it was produced by some endemic influence, or the *constitutio anni*, is the circumstance which this series is intended to illustrate; viz., the notable prevalence at the present time of disorders of malarial character. I by no means affirm the existence among us of a marsh miasm, only of *some* influence producing various phenomena most resembling those of obscurely developed ague. This point seemed to accord with the experience of most of the speakers when I read a paper on the subject before the Royal Medical and Chirurgical Society. I regard, then, the foregoing case as one of neuralgia, such as, had it occurred in the forehead, or hip, or elsewhere, would have caused only pain; it struck the heart and the man dies.

[*To be continued.*]

PARAPLEGIA FROM GRADUAL SPINAL EFFUSION (?).

By William Walker, Esq., F.R.C.S.Eng.

Mr. E., aged 45, modeller, a stout, well formed man, had always enjoyed good health, with the exception of being occasionally troubled with dyspepsia and lumbago. A year ago, he had a fall down some stone steps, and bruised his back and side. A week's rest, under medical treatment, relieved him; and he felt no further inconvenience.

On November 3rd, of the present year, he was taken unwell at a tavern, whilst enjoying himself in the society of a few friends and neighbours, and was obliged to be led home. The following day he had rigors, pains in his back and limbs, which he ascribed to getting wet in the feet two days previously.

November 9th. I saw him with my friend Mr. Cornelius, under whose care he then was. He complained of pains in the chest and back; but there was no pain on strong pressure over the spinal column. He was unable to move his legs. On examining the abdomen, I found the bladder much distended. The pulse was 80; the tongue clean; the intellect clear; the eyes somewhat suffused. He had slight pain on the top of the head. The bowels were open; the skin moist; there was no vomiting. The urine was drawn off, which afforded him much relief. He had been taking colchicum mixture, with calomel and opium night and morning.

November 11th. He appeared much the same. The lower extremities were paralysed; he had a crampy feeling in his

hands. The urine was retained. He complained still of his head, but had perfect control over the sphincter ani. Mustard poultices were applied to the nape of the neck, and he was ordered to continue the calomel, etc.

November 13th. He was much worse; had become drowsy, and was with difficulty aroused. The breathing was somewhat oppressed. A large blister was applied between the shoulders. He passed his motions involuntarily.

November 14th. The blister had risen, but the man was in a sinking state, and unable to take stimulants, which had been ordered. He lingered on till late in the afternoon, when death terminated his sufferings. No *post mortem* examination was allowed.

Remarks. This case presented itself somewhat obscurely. The fact of his having rheumatic pains in his back at different times, getting wet feet, and exposure to the night air, seemed to tend to the opinion that one of his former attacks of lumbago was coming on; but as time wore on, the case assumed a more serious aspect, by the loss of power over the bladder and lower extremities. Still there was no tenderness over the region of the spine, nor febrile symptoms. He had a clean tongue, etc.; and up to a certain period perfect control over his bowels.

The supposition then is, that effusion was going on within the spinal canal, giving rise to paraplegia, and as the fluid increased, affecting the upper extremities, producing death by apnœa.

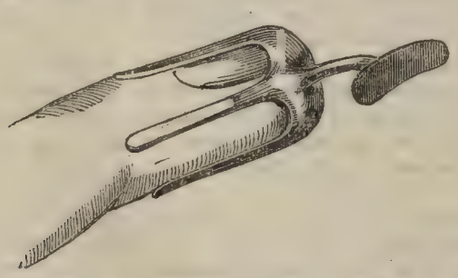
Treatment in these cases appears to be of little or no avail; as, in spite of remedies, the patient succumbs sooner or later.

THE CATARACTOUS EYE COMPRESSOR:

A NEW INSTRUMENT FOR FACILITATING THE EXTRACTION OF CATARACT.

By James Vose Solomon, Esq., F.R.C.S., Surgeon to the Birmingham and Midland Counties Eye Infirmary.

In the removal of hard cataract from the axis of vision by extraction, after the upper section of the cornea has been completed (say in the right eye), and the capsule of the lens has been sufficiently divided, the operator, in order to dislocate the cataract through the pupil, raises the upper lid with the fore-finger of the left hand, and with the "curette" in his right, makes pressure with the spoon-end of that instrument upon the globe, at a point about midway between the lower margin of the cornea and the insertion of the inferior rectus muscle. It will, however, sometimes happen, notwithstanding the corneal and capsular incisions have been properly executed, that the cataract does not come forward, but slips behind the iris, or perhaps sinks more or less deeply into the vitreous humour. Under these circumstances, it is usual (and a very good practice) to get an assistant to harpoon the lens with a small sharp hook, and then gently withdraw the cataract through the pupil and the corneal incision—care being taken not to evert the flap to such an extent as shall favour an escape of the vitreous. This manipulation, to be performed safely, requires that it shall be executed by the steady and delicate hand of one who has been practically instructed in the operation under consideration. But such a one is not always at hand. I have, therefore, been led to devise and make use of the instrument here delineated.



It consists of a cup of thin metal with four elastic ribs attached to it, which fits on the end of the second finger; to the centre of the cup is riveted a curved stem, something less than half an inch in length; this stem terminates in a transverse bar, which is concaved, and set on at such an angle as will render it easy of adaptation to the globe of the eye. Either silver or steel may be used for the manufacture of the cup and ribs. Each rib should be hollowed so as to give it strength and elasticity.

It will be obvious to those accustomed to operate for cataract, that the upper lid can be elevated and fixed by the index finger, and pressure made upon the eye-ball by the second finger of the same hand, arched in front of the eye, and having attached to it "the compressor".

From the trials I have made with this instrument, I believe that in the operation of extraction the surgeon will gain by its use an equivalent to a third hand. It is less painful to the patient than Daviel's spoon. The exact amount of pressure exerted is accurately appreciated through the tactile sensibility of the point of the finger. Moreover, by placing the stem of the hook held in the right hand just behind the incision, a useful degree of counter-pressure may be employed; and should the cataract not then come forward, or should any untoward accident threaten, the hook can be used to seize the cataract at the precise moment, and in the exact mode that the surgeon may consider advisable. In fact, one mind will direct the whole of those manipulations, which demand skill and knowledge for their perfect execution.

I have had several instruments constructed, which were modifications in detail, but not in the principle of the one delineated on this page; but I prefer the elastic ribs to a flat ring of metal, and the curved stem to a straight one set on obliquely to the cup. It is of importance that the shoulders of the cup should be hammered over a solid thimble, or what is called by mechanics "a spike".

Reviews and Notices.

Human Osteology: Comprising a Description of the Bones, with Delineations of the Attachments of the Muscles, the General and Microscopic Structure of Bone, and its Developments. To which is added, a brief Notice of the Unity of Type in the construction of the Vertebrate Skeleton. By Luther Holden, F.R.C.S., etc. Second edition. pp. 276. London: John Churchill. 1857.

Any man who manages to simplify books of instruction, which are the tools of the mind, deserves well of society. In medicine, the grasp is so wide, and the things to be learned so numerous, that the student is at first stunned, as it were, and despairs of ever mastering the details of a profession which presents so many aspects for his study. The production of such a book as Mr. Holden's marks, therefore, a new era in our method of teaching. The volume that, up to the present time, was the text-book in the schools on Human Osteology, is perhaps the most lucidly written and the most elegantly constructed volume we have on this subject. We allude to Mr. F. O. Ward's little volume, so familiar to students; yet, in consequence of its want of illustrations, it ranks infinitely inferior to the one before us. The attempt to give an account of the bones and the attachments of the muscles by mere verbal descriptions is indeed both arduous to the writer and perplexing to the reader. One good illustration will fix the knowledge to be acquired firmer in the mind than pages of mere text. Mr. Holden's plan of printing the names of the different parts of the bones upon the drawings of the bones themselves, is the true method of teaching directly by the eye. The student will be deeply thankful for this short cut to the first professional knowledge he has to master. "The bones" are proverbially dry; and when he has thoroughly familiarised himself with them, he has built a solid foundation for future studies. The illustrations are admirably drawn, and so ample in size that full room is afforded for the letterpress upon them indicating the different parts; and the plan of distinguishing the origin of muscles by red lines, and their insertions by blue, is happily carried out. No student need seek a grinder as long as he can possess himself of this very admirable volume, which is now the text-book of the schools. The second edition contains, as additional matter, the cartilages and muscles of the larynx, and the anatomy of the internal ear, illustrated by numerous plates and engravings.

Guy's Hospital Reports. Edited by Samuel Wilks, M.D., and Alfred Poland. Third Series. Volume iii. pp. 513. London: Churchill. 1857.

The volume of *Guy's Hospital Reports* for the present year contains twenty articles, of the character usually found in that publication.

Mr. Alfred Poland has a Report of 72 Cases of Tetanus occurring in Guy's Hospital since the year 1825. This is an elaborate statistical article; and embraces a comparison of the Guy's cases with those in the Jamsetjee Jejeebhoy Hospital, at Bombay, and in the Glasgow Infirmary, as well as with various published cases. The subject is treated in respect to the frequency of the disease; the condition of the patient and of the atmosphere as predisposing causes; the form of the disease, and the exciting causes; the interval between the probable cause and the first appearance of the symptoms; the state of the wound at the time of occurrence of the symptoms; the peculiarity of the symptoms; the duration of the disease, rate of recovery and mortality; mode of dying; prognosis; the morbid appearances; and the treatment.

Dr. Habershon has an article on Purpura and its Connection with Splenic Disease.

The same author has an Anatomical Description of a Double Fœtus. The monster consisted of two female fœtuses, of the character described as "Cyclopian", "janusbildung", "dehypogastricus", by Rokitansky; and "synotus" by G. St. Hilaire. Dr. Habershon gives a very careful account, illustrated by drawings, of the distribution of the internal organs.

Mr. J. Cooper Forster contributes Select Surgical Cases; viz.: 1. Tracheotomy for the Removal of Foreign Bodies from the Air-Passages (three cases). 2. Injuries to Veins (two cases). In the first of these cases, fatal hæmorrhage occurred in a child, aged 9, from a wound of the internal jugular vein, produced by a piece of broken crockery in a fall downstairs. In the second, a tall well developed man, aged 28, elated with evening festivities, had been walking on a skylight of very thick glass: he had fallen through, receiving a longitudinal wound in the popliteal space. Profuse hæmorrhage occurred, and he was brought into the hospital. Ligatures were applied; but he sank exhausted in about three hours. On *post mortem* examination, the popliteal vein was found to divide in the centre of the space into two branches, one of which followed the usual course of the vessel and became femoral, while the other, somewhat larger, accompanied the great sciatic nerve. The sural vein joined the popliteal within a quarter of an inch of the bifurcation; and it was at this point that the wound had occurred, and had consequently implicated many vessels. 3. Extravasation of Urine in Children (five cases). Three of these cases were fatal. In all the cases, a stone was either removed from the urethra during life, or found in it after death. Mr. Forster sums up with the following practical directions regarding these cases:—Attend to the earliest symptom, viz., retention of urine in children; incise the parts freely into which urine has been extravasated; search for and remove the calculus immediately; do not pass a catheter.

Dr. Wilks contributes Remarks upon some of the Specimens of Diseases of the Bone contained in Guy's Museum, especially those styled Osteosarcoma and Myeloid, with reference to the Question of Malignancy.

Mr. J. F. France has an article on the Treatment of Purulent Ophthalmia. Several cases are related, to shew the beneficial effects of the timely adoption of treatment. The following is a synopsis of the treatment of purulent ophthalmia in use at Guy's Hospital.

"α. During the acute stage:—1. Local depletion by leeching the lids, and scarifying their inner surface, every twenty-four hours. 2. Division of the external canthus, and puncturation of the integuments of the lids (as in erysipelas), when the tension and inflammatory swelling are extreme and prevent exposure of the globes. 3. Scarification of the ocular conjunctiva, according to Tyrrell's mode in radii, daily, so long as chemosis is high. 4. Application between the lids, every three, four, or six hours, of drops of a solution of its nitrate of silver, containing from three to eight grains in the ounce of distilled water; the strength of this collyrium and frequency of its use depending on the severity of the symptoms, and being, consequently, modified as these abate. 5. Constant fomentation and ablution with decoction of poppies having a drachm of alum dissolved in the pint. 6. Exhibition of mercury, after proper relief of the bowels, until the chemosis is subdued, or the mouth affords the earliest signs of the action of the mineral. This remedy must be guardedly used, when the stage of active interstitial effusion, marked by rising chemosis, has given way to that of ulceration manifested on the cornea. It should then be accompanied by a tonic regimen and by—7. Use of quinine, in cases where debility prevails at the outset, or is subsequently induced. 8. Moderately nutritious diet, which is generally preferable from the commencement, and may be progressively improved as the disease recedes.

"β. In the convalescent or chronic stage:—9. Tonics in diet and regimen, varied local astringents of mild character, and counter-irritants, must be used to complete the cure."

The same author also furnishes several Ophthalmic Cases of interest.

Dr. Wilks relates some Cases of Idiopathic Fatty Degeneration: with Remarks on Arcus Senilis. The author believes that arcus senilis accompanies that form of so-called "fatty degeneration" which consists in an increase of the natural adipose tissue, as distinguished from that degeneration of the muscular structure described especially by Dr. Quain.

Mr. Thomas Bryant, in a paper on the Causes of Death after Lithotomy, has collected from the clinical records of the Hospital the histories of 176 cases. The statistics of these are put together; and the conclusions (so far as relates to Guy's Hospital) are thus given.

"1. That lithotomy is at least twice as fatal during the first five years of life as it is during the second. 2. That during puberty, or between 11 and 20 years of age (the third period), it is more fatal than during any earlier period. 3. That after 20 and up to 40 years of age, it is comparatively of small fatality. 4. That 30 per cent. of the fatal cases are during the first 20 years of life. 5. That 10 per cent. are during the second 20 years of life. 6. That 60 per cent. are above 40 years of age. 7. That 14·20 per cent. of the cases operated upon prove fatal. 8. That hæmorrhage is the cause of death in the proportion of 15 per cent. 9. That 12·5 per cent. of the fatal cases die from exhaustion, or simple sinking: and that these are generally above the middle period of life. 10. That pyelitis or inflammation of the kidney is the cause of death in 15 per cent. 11. That pelvic cellulitis is the cause of death in 15 per cent. 12. That this pelvic cellulitis is not generally the result of a too extensive incision through the prostate, but is the result of continuity of a structure which has become inflamed from the necessary injury inflicted upon it by the operation, or by the presence of a calculus. 13. That the combined influence of pyelitis and pelvic cellulitis prove fatal in 15 per cent. 14. That 12·5 per cent. die from pyæmia. 15. That pelvic cellulitis, the result of accidental causes during the operation, may prove fatal in 7·5 per cent. 16. That disease of the kidney is found in at least 30 per cent. of the fatal cases. 17. That pelvic cellulitis is found in at least 37 per cent. of the fatal cases, either alone or associated with other disease. 18. That peritonitis, as the result of lithotomy and cause of death, is never found unassociated with other complications, such as pelvic cellulitis or perforation of the bladder. 19. That acute cystitis may alone prove the cause of death. 20. That chloroform, independent of its own special risks, does not seem to have any influence upon the fatality of lithotomy."

Dr. Oldham relates two Cases of Retention of the Menses relieved by Puncture through the Rectum. The first case was the result of congenital absence of the vagina; the second, of the closure of the vagina after labour, by adhesion of its walls, and cicatrisation.

Dr. G. Whitley relates some Cases of Disease of the Pulmonary Artery and its Valves: viz.: 1. Dilatation of the

Artery; 2. Disease of Pulmonary and Aortic Valves; 3. Obliteration of Pulmonary Sigmoids.

Dr. Gull has an elaborate and able article on Abscess of the Brain. He does not believe in the existence of the so-called "idiopathic" cerebral abscess, recognised by Lebert; unless that form of abscess which accompanies scrofulosis be called by this name. He supposes, he says, that Lebert only means "abscess whose origin is unaccounted for". We quite agree with him when he says, in a note: "Daily experience proves how much clinical investigation is prevented by the inappropriate use of the word idiopathic."

Dr. Gull also relates a remarkable Case of Paraplegia from Obstruction of the Abdominal Aorta. The patient was a tall strong man, a shipwright, aged 34. At the time of report, the superficial arteries of the back and abdomen had gradually enlarged; and the patient was able to walk tolerably well, though his muscles were thin, and his gait languid, and to do light work.

Mr. Birkett supplies Contributions to the Practical Surgery of New Growths or Tumours. The intention of the author is to illustrate in succession, for students especially, the natural history of every form of new growth which has come under observation in Guy's Hospital. In the present number, a series of cases of cancer are described and commented on. There is no doubt that Mr. Birkett's labour will be well repaid by the instruction which the students of Guy's Hospital will derive thereform.

The Curator of Guy's Museum (Dr. Wilks) has some Remarks on the Wax Models representing Roseola Cholerica and Roseola Variolosa.

Mr. Poland describes a Case in which a Urethro-Vesical Calculus was removed.

Dr. H. M. Hughes has a Note on Cases of Black Urinary Precipitate. He has found reason to alter his former opinion as to the cause of this phenomenon, and now does not believe it to be connected with the presence of iodine in the urine.

Mr. E. Cock gives the Sequel of a Case of Successful Trephining of the Skull for Rupture of the Meningeal Artery, performed fifteen years ago. The case is related in the seventh volume of the first series of *Guy's Hospital Reports*. The operation was performed in 1841; the patient remained in good health until 1849, when epilepsy appeared, and recurred at intervals. On August 30th, 1856, he died of apoplexy. On *post mortem* examination, it becomes evident that the parts of the brain immediately beneath the seat of the former injury were chiefly affected, being softened, and filled with extravasated blood. The blood-vessels throughout the brain were extensively diseased.

Dr. Taylor has an elaborate paper on Poisoning by Tartarised Antimony; with Medico-Legal Observations on the Cases of Ann Palmer and others. We have not space for an analysis of this able article, the object of which "is to examine some of the medical questions connected with antimonial poisoning, on which a great discrepancy of opinion appears to exist among members of the profession, and to illustrate the present state of medico-legal knowledge by reference to several cases which have come before our legal tribunals." The subject is treated of under the following heads:—1. History and Nature of Tartarised Antimony. 2. Action of Tartarised Antimony in Small Doses as a Medicine and as a Poison: Chronic Poisoning. 3. Action of Tartarised Antimony in Large Doses as a Poison: Acute Poisoning. 4. Summary of Symptoms in Acute Poisoning by Tartarised Antimony: Symptoms compared with those of Chronic Poisoning. 5. Summary of Appearances after Death in Antimonial Poisoning. 6. Chemical Processes for the Detection of Antimony in the Body, in a Free and in an Absorbed State. 7. The Absorption, Deposition, and Elimination of Antimony. 8. Cases of Suspected Poisoning by Tartarised Antimony. 9. Cases illustrative of the Criminal Administration of Antimony. In this latter section, the case of Ann Palmer is specially examined.*

The last article is another by Dr. Taylor, on the Detection of Absorbed Strychnia and other Poisons; being, in fact, a supplement to his article published last year.

An Introductory Address delivered at the London Hospital Medical College, at the Opening of the Session 1857-1858. By John C. Wordsworth, Assistant-Surgeon to the London Hospital. pp. 16. London: E. Wilson. 1857.

A Sketch of the History and Progress of Medicine: with Remarks on Medical Study: An Introductory Address delivered at the Liverpool Royal Infirmary School of Medicine, October 1st, 1857. By A. T. H. Waters, Lecturer on Anatomy and Physiology. pp. 28. Liverpool: Adam Holden. London: Longman and Co. 1857.

These are two of the introductory lectures delivered at the commencement of the present session. Both are replete with good advice, and may be read with advantage. Mr. Wordsworth's topics are the grandeur and dignity of medicine, and suggestions to students as to the means to be followed in qualifying themselves. Mr. Waters gives an interesting though brief outline of the history of medicine from the earliest ages, then glances at the present prospects of medical science, and ends with a few words of advice. We extract a sentence or two.

"I believe, gentlemen, it matters not much where you study your profession, but I believe it is of essential importance how you study it. You must study in the spirit of earnest inquiry. You must seek knowledge for her own sake, trusting to time to make it of practical use. It is not to be expected that during the time you are attending at the schools you can examine into the truth of all that is put before you; you must accept a great deal on the faith of those who are your teachers, whose duty it is to give you not only their own opinions, but those also of the great masters of our profession. You must not, however, become the blind followers of any man, uninquiring observers of perennial custom, or antiquated routine. . . . . Be not satisfied with simply becoming acquainted with the routine duties of the profession, or of mastering that which is already known, but strike out into some path of inquiry for yourselves, that, whereas you are now learners, reaping the fruit of other men's labours, you may hereafter add your share to the improvement of your profession, and become its teachers."

A Manual of the Practice of Medicine. By T. H. Tanner, M.D., F.L.S., etc. Third edition, revised and improved. pp. 451. London: Henry Renshaw. 1857.

Dr. Tanner seems to have bestowed much pains on revising the new edition of his *Manual*, and in bringing it generally up to the present state of knowledge. For this reason, and from the portable size of the book, it is likely to fulfil the author's wish that it "may prove useful to many practitioners and students, especially to those whose occupations prevent them from studying larger and more valuable treatises." An appendix of dietetic and medicinal formulæ is given: the former are

* In foot-notes to this article, at pp. 371 and 477, Dr. Taylor indulges in a sneer at this Journal, for calling Palmer a "professional brother." "The 'fraternizing terms'," says Dr. Taylor, "applied to Palmer by a medical journal, Association Medical Journal, May 10th, 1856." Dr. Taylor cannot have read our comments on Palmer's character and conduct with much attention. In the article to which he refers we said, in speaking of the approaching trial, that "we felt grateful to the authorities that they had decided that our professional brother, whether guilty or innocent, should not be made a show of to the vulgar at so much a head, as other notorious poisoners on their trial have been." And on the strength of this, the learned toxicologist insinuates that we joined in an attempted cry of "persecution of a professional brother." Dr. Taylor may be too much occupied to read a great deal beyond toxicological works, but perhaps, in the course of his reading, he has met with instances of the use of the term "brother" in a sense that does not necessarily imply fraternal aiding and abetting in every action? Has he, for example, ever read a poem called "Marmion"? If he has, he will perhaps remember the following passage in Canto VI, where sentence is passed on a guilty nun and her paramour:

"Thus the abbot's doom was given,
Raising his sightless balls to heaven:—
'Sister, let thy sorrows cease;
Sinful brother, part in peace'!"

We must really beg pardon for taking so much notice of Dr. Taylor's sneer at us for "fraternizing" with Palmer.

calculated to be useful; but, as for the numerous prescriptions we think the work would be quite as valuable without them to any practitioner who is capable of making use of the book itself.

Ophthalmic Hospital Reports; and Journal of the Royal London Ophthalmic Hospital. Edited by J. T. Streatfeild. No. I. October, 1857. London: To be had at the Hospital, and of Mr. Churchill, New Burlington Street.

This is a new periodical, devoted to a special subject; and, if special hospitals and specialists are unavoidable, we suppose they must, to some extent, have organs of their own. The first number of the *Ophthalmic Hospital Reports* contains 49 pages, and comprises articles on Statistics of Cataract in the Royal London Ophthalmic Hospital: A Case of Reinstated (Artificial) Pupil: The Treatment of Lachrymal Obstructions, by Mr. Bowman: Protrusion of the Eyeball, by Mr. Poland: and a Report of the Chief Operations performed at the Royal London Ophthalmic Hospital for the Quarter ending September 25th, 1857. The number is well got up, both in style and in the quality of its contents.

British Medical Journal.

SATURDAY, NOVEMBER 28th, 1857.

THE LATE MR. STAFFORD, M.P.

The somewhat sudden death of the late Mr. Augustus Stafford has without doubt raised an uneasy feeling in the public mind, with respect to the treatment he was subjected to by his medical attendant, Dr. Griffin; so much so, indeed, that the inquest called for by his private friends has been read with avidity throughout the length and the breadth of the land. We rejoice, however, at the publicity thus given to all the transactions which took place between the period of his first attack on the 4th of November, at Cratloe, near Limerick, and his death on the 15th at Dublin; inasmuch as it has set at rest many unfounded reports, by an exaggerating servant, respecting the manner in which he was treated, and at the same time has given in our opinion medical men a warning with respect to their own conduct when placed in similar circumstances. From the result of the inquest, there remains no manner of doubt that the acute and unbearable pain which, from an apparent state of rude health, suddenly prostrated Mr. Stafford, arose from the presence of calculi in the gall-bladder, one of which had commenced to enter the duct. The discussion as to the treatment of the patient for this complaint will, no doubt, long continue to occupy the professional mind. As far as we may venture to give an opinion,—after the settlement of the question by the coroner's jury,—we think there can be no doubt that the mere administration of a narcotic, even in the large doses in which it was administered, would have had no other than a salutary effect on the patient, provided his body had been otherwise in a healthy state. All medical men who have seen much practice, are well aware that the most astounding doses of laudanum are frequently given without producing narcotism during severe paroxysms of pain. Dr. Griffin, in a letter to the *Times*, has placed himself right with the public in this respect, by quoting the following passage from Dr. Seymour on *Severe Diseases of the Human Body*:—

"I have seen, in a paroxysm of gall-stones, 300 drops of laudanum given in two hours, without any effect except the relief of pain. The patient drove and dined out on the next day, without suffering from headache, nausea, or any of the usual effects from this drug which would have occurred under other circumstances."

The mere administration of the narcotic was not calculated, *per se*, to endanger life; but the question assumes altogether a different aspect when we take into consideration the depressing effect of the bleeding (still further increased by the secondary hæmorrhage produced by the slipping of the bandage) acting upon a heart already enfeebled by disease. This act of bleeding, in our mind, was the unfortunate part of the matter. Had there been inflammation of any kind consequent upon the attempted passage of the gall-stone, there would have been undoubted warranty for this operation, provided there had been no possibility of ascertaining the unhealthy condition of the heart; but there is no evidence of any inflammation whatever, and, in its absence, we can only account for the use of the lancet under the idea that Dr. Griffin drew blood from habit—*traditionally*; that he bled as as all of us were accustomed to bleed until very lately, in the majority of cases where great pain was involved. If this really was the case, we have a singular example of the injury which may be done by venesection whilst important organs are suffering under masked or otherwise undiscoverable disease. Had Dr. Griffin known that Mr. Stafford laboured with a heart rendered almost powerless by fatty degeneration, there can be little doubt that he would not have bled him. This bleeding performed, the heart was further enfeebled, and the powerful narcotic dose told with its full force upon the patient. It is very singular that Dr. Griffin, in his letter to the *Times*, makes no mention of the act of bleeding at all. He defends himself against the imputation of having given too powerful a narcotic; but he omits to state that the power of a narcotic must be measured relatively. A blow, that will have no effect upon a man standing firmly upon his legs, will at once prostrate the cripple; and physically crippled the patient undoubtedly was, by the loss of blood and the diseased heart.

We may also mention, as another cause of the ultimate debility of the patient, the excessive beating of the soles of the feet with battledores. No fewer than five men were employed for twelve hours in beating his feet with these implements, constructed of deal, eighteen inches long, four inches wide, and half an inch thick—beating him, indeed, upon the soles, so hard that the skin came off, and a dozen battledores were broken in the operation! Now, we all know that very energetic measures are required to prevent narcotised persons from falling into the long sleep of death; but we cannot but believe this battledore practice to have been both clumsy and injurious. It would have been far better to walk the patient up and down, and to pass a strong current of electricity through him. Such treatment would have been equally efficacious in arousing the nervous system, without producing that shock which must have added to the other causes which produced the fatal debility. As we said before, however, we feel inclined to believe—and, in saying so, we know that we reflect the opinion of the profession in the metropolis—that neither the narcotic, the diseased heart, nor the punishment of the soles of the feet, would have proved fatal, without the addition of the unfortunate bleeding. It was this that so depressed the

system as to give such fatal force to the narcotic; the already failing heart was an additional source of depression; and thus, in all probability, was produced that anæmic condition of the brain found after death.

We regret exceedingly the occurrence of this untoward affair, as we fear that its tendency will be to produce a certain mistrust in the mind of the public against provincial practitioners—a most unfounded and unjust mistrust, for we believe that no better practitioners in the world can be found than in the provinces of the United Kingdom. The occurrence, unfortunate as it is, however, will not be without its use—it will teach the practitioner to be more than ever cautious in the use of the lancet, which, indiscriminately applied, is of late years as fatal as the dart of the King of Terrors himself.

With regard to the loss of the late Mr. Stafford himself, no section of the community will feel it more acutely than the medical profession. His generous evidence on the behalf of the medical officers in the Crimea, given before the Sebastopol Committee, will be remembered with gratitude by our profession, and his honesty in denouncing the shortcomings of the Medical Department of the army, will be long missed by those reformers who reckoned upon his aid in putting that paralysed and incompetent department once more in a position of dignity and power.

THE WEEK.

We rejoice to find that our asssociate, Mr. Delves, has received the sympathy of the members of the South Eastern Branch, in the late very disagreeable and trying situation in which he has been placed. We know full well how easy it is to bring a charge of an attempt to procure abortion against a professional man, and the difficulty there sometimes is in repelling the charge; we also know how fearful is the injury which a false charge of this kind is calculated to produce upon a man's professional prospects, if not at once openly met and repelled. The mere dismissal of the case by the magistrate was not sufficient to completely re-establish the accused in the eyes of the public and the profession; such a termination to the charge might still have left a section of the public doubtful and hesitating in their belief of his innocence; but the spontaneous opinion of his medical brethren, given at a Special Meeting of the Branch, at once dispels the last fragment of doubt, even in the minds of those who are habitually inclined to be credulous when the character of a medical man is called in question. The report of this meeting will be found in another portion of the JOURNAL; but we cannot resist the pleasure of giving the resolution which so amply exonerates Mr. Delves from a charge which was, we believe, the offspring of a foul conspiracy.

"That this meeting, having considered the evidence produced in the proceedings taken against Mr. Delves of Tunbridge, on a charge of having criminally procured abortion, is of opinion that this charge is not sustained either by the general or professional testimony adduced; and that, whilst the members of the Branch congratulate Mr. Delves on the fact of the magistrates having on two separate occasions dismissed the charge, they desire to express their sympathy with him on the occasion, and their conviction that no stain whatever remains on the character of Mr. Delves."

We cannot help remarking that if some of the physicians who gave their opinion upon an abstract point, without being at all aware of the use to which their opinions would be put, had acted with a little more reserve, the charge would never for a moment have assumed the consistency it did. We cannot dismiss the matter without expressing our opinion of the admirable use to which the Branches of our noble Association are put in thus reassuring a traduced brother, and in affording him their strong moral support. In all such cases they afford a true court medical for the neighbourhood, in which the offender cannot escape with impunity, nor the offended retire without redress. Long may our Branches flourish, on whose boughs hang such golden fruit!

We are among those who look with no favour on the indiscriminate giving of testimonials and erection of memorials to men during their lives. Posterity, we think, are generally the best judges of merit. Nevertheless, there are occasions on which either a brilliant achievement, or a long continued course of good action, is so striking in its merits as to call for some acknowledgment at once. An occasion of this kind has recently been afforded by the retirement of Mr. Norman, of Bath, from the surgeonship of the United Hospital of that city; and we congratulate our worthy associate on the interesting proceedings of which an account is given in another part of this number. We congratulate him, that his bust has been placed in the hall of the Bath United Hospital; but still more that he has, in a half century's connection with the Bath medical charities, evoked from the public, of all classes, such a genuine admiration of his worth as has manifested itself not only in the erection of his bust, but also in the presentation to him of a testimonial from the poor. In all the good wishes expressed by the donors of the bust towards Mr. Norman, we most heartily join.

A case has recently occurred in France, illustrating the value of the combined aid of the profession when one of its members suffers injustice. A practitioner, Dr. Roboüam, was fined fifteen hundred francs by the tribunal of Senlis for having refused professional aid to a woman in her confinement, who died during labour. The Medical Association of the Seine took up the matter; and, on making inquiry, they found, in the first place, that Dr. Roboüam was legally entitled to refuse his services; and further, that his state of health was such as to justify his refusal, he having had an attack of hemiplegia four years ago, and being subject to symptoms of relapse after excitement or fatigue. An appeal was made to the Imperial Court of Amiens; and M. Paillard de Villeneuve, the legal adviser of the Association of the Seine, undertook to conduct the case in favour of M. Roboüam. The result has been, that the decision of the tribunal of Senlis has been quashed, and M. Roboüam has been entirely exonerated.

Association Intelligence.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the BRITISH MEDICAL ASSOCIATION will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the JOURNAL, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

TO THE HONORARY SECRETARIES OF THE BRANCHES.

The General Secretary will feel particularly obliged if the Honorary Secretaries will inform him, with as little delay as possible, of any subscriptions for the current year received by them since their last lists were forwarded to Worcester.

November, 1857.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	White Lion, Bristol.	Thurs., Dec. 3rd, 8 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Dec. 10th, 6 o'clock.

SOUTH-EASTERN BRANCH: SPECIAL GENERAL MEETING ON THE CASE OF MR. DELVES OF TUNBRIDGE.

On November 18th, a Special Meeting of the South-Eastern Branch was held at the Junction Hotel, Redhill, for the purpose of considering the evidence taken before magistrates at Tunbridge on the charge preferred against Mr. Delves, surgeon, of that town, of having criminally produced abortion. C. M. Thompson, Esq., of Westerham, President of the Branch, took the Chair. There were also present: J. Milner Barry, M.D. (Tunbridge Wells); John Blaxland, Esq. (Tunbridge Wells); George Bottomley, Esq. (Croydon); Richard Gravely, Esq. (Newick); Henry Harris, Esq. (Reigate); C. Holman, M.D. (Reigate); Peter Martin, Esq. (Reigate); Lewis Newnham, M.D. (Camberwell); Andrew Sisson, Esq. (Reigate); Thos. H. Smith, Esq. (St. Mary Cray); Henry L. Sopwith, Esq. (Tunbridge Wells); James Stedman, Esq. (Guildford); John Sisson Steele, Esq. (Reigate); George Stilwell, Esq. (Epsom); William Street, Esq. (Reigate); Charles Trustram, Esq. (Tunbridge Wells); Wm. Wallis, Esq. (Hartfield); and J. Lucas Worship, Esq. (Riverhead).

Mr. Sopwith (Tunbridge Wells) rose to protest against the meeting entertaining the matter at all, on the ground that civil proceedings at law were likely to arise out of the case.

Mr. Smith (St. Mary Cray) observed, that the business today had no reference to any civil proceedings which might be taken hereafter; but to criminal proceedings which had been taken against a member of the Branch, and which were now entirely concluded.

The meeting decided at once to entertain the matter.

The shorthand writer's minutes of evidence were laid before the meeting.

After discussion, it was proposed by Mr. James Stedman (Guildford), seconded by Dr. Milner Barry (Tunbridge Wells), and resolved unanimously—

"That this meeting, having considered the evidence produced in the proceedings taken against Mr. Delves of Tunbridge, on a charge of having criminally produced abortion, is of opinion that this charge is not sustained either by the general or professional testimony adduced; and that, whilst the members of the Branch congratulate Mr. Delves on the fact of the magistrates having on two separate occasions dismissed the charge, they desire to express their sympathy with him on the occasion, and their conviction that no stain whatever remains on the character of Mr. Delves."

It was proposed by Mr. Thomas Smith (St. Mary Cray), seconded by Mr. Wallis (Hartfield), and resolved unanimously—

"That the best thanks of the meeting be given to Mr. Trustram, for the pains he has taken in bringing this matter before the Branch; and that he be congratulated on the satisfactory conclusion of this case, in which he has, both here and during its progress, shown so much intelligence and zeal."

It was resolved—

"That copies of these resolutions be sent for publication to the London medical journals, and to the local newspapers."

Thanks were voted by acclamation to the President, and the meeting adjourned.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Editor's Letter Box.

THE RESIGNATION OF MEDICAL OFFICERS OF ST. MARY'S HOSPITAL, MANCHESTER.

Letter from Thomas Southam, LL.D.

Sir,—I am directed by the Board of Management of St. Mary's Hospital, Manchester, to send you, for insertion in your forthcoming number, the following brief summary of answers to the objections published in your issue of the 21st of November instant, and made by the medical officers who have resigned their functions at this institution. I inclose also the *Manchester Examiner and Times* of the 22nd of October last, containing a report of the special general meeting of the subscribers, called by the Board, after the resignations of the medical officers had been received, in order to take their sense upon this matter. This report, it is thought, will throw full light upon the subject.

I am also to call your attention to the fact that no complaint had been made to the Board by the medical officers who resigned against the Rules referred to, until the meeting of which you have the above named report, and which meeting took place fully one month after the resignations had been received.

For greater perspicuity, I quote the objections *seriatim* contained in your Journal from the *Manchester Guardian*, and supply the answers by order of the Board of Management.

"1. That, having been deprived by the Board of Management of our privileges as trustees *ex officio*, and as members of the Board of Management, we were thereby prevented from being present at any weekly or special meeting of the Board of Management, or any annual or special general meeting of the trustees, although, at any such meeting, the medical affairs of the hospital might have come under consideration—affairs which the non-medical members of the Board of Management were totally incompetent to understand."

1. The constitution of the Board of Management, when the alteration was made, included the whole medical staff, or, in other words, the medical officers were individually members of the Board of Management, none of whom made any objection to the exclusion of the medical men. All approved of it except two.

By Rules 65, 66, and 67, which are still rules of the Hospital, the medical officers constitute a medical Board for the consideration of medical questions, and of any alterations which may tend to the advantage of the Hospital. This Board is also a Board of approval, or otherwise of medical testimonials of candidates.

"2. That by Rules 2 and 172, we should, in future, have been compelled to attend children of any age, and in any disease, whether infectious or otherwise, at any time, during day or night, and at any distance within the extreme hospital boundaries,—with which boundaries the subscriber may acquaint himself by referring to the back of the recommendation papers, including a population of nearly 300,000."

2. Rules 2 and 172 have never yet been put into operation. When they were suggested, it was proposed that not less than six assistant-surgeons should be additionally elected for this extra work. The opposition of the medical staff has prevented the working of this rule altogether. They have so far, by opposing the increase of the staff, prevented the extension of the blessings of this charity to the poor. The Board is waiting anxiously to meet the wants of the infant population by the appointment of additional medical officers, the necessity for which is shown by your leading article.

"3. That by Rule 53, in all cases of disease which do not appear to yield to a plan of treatment pursued for fourteen days, the surgeon in attendance must summon a consultation. This rule is a direct reflection upon the professional ability of the surgeon, and Rule 78 appears equally objectionable."

3. This Rule was made for the good of the patients, and for

the economy of the funds of the Hospital, but with no possible intention of reflecting upon the ordinary medical attendant. There has never occurred a case in the Hospital where such unpleasant feeling has been produced.

"4. That by Rule 94 the fees paid by medical students for attendance upon lectures and hospital practice, are to be received by the treasurer; whilst, in all other hospitals, the medical officers are entitled to such fees."

4. When the Board heard recently that objection had been made respecting the disposal of the fees paid by medical students, they decided to give notice of the alteration of this Rule, by which alteration the fees will, in future, be left to the disposal of the medical officers. No loss has been sustained by the medical officers hitherto, inasmuch as no fees have yet been received.

"5. The following portion of rule 16:—That any officer of this institution may be suspended by the board of management for any cause which the board of management consider injurious to the hospital. No such power should be entrusted to any board where three are competent to form a quorum, and where the average attendance at such meetings does not exceed five."

5. The following is the whole Rule, and speaks for itself, and does not apply to the medical officers exclusively. The whole Rule ought to have been quoted to convey a correct idea of it. The power of appeal has been suppressed in this partial state. The Board had, under the old Rule dating from nearly the foundation of the hospital, the power of absolute dismissal, but they have now only the power of suspension with appeal.

"16. That any Officer of this Institution may be suspended by the Board of Management for neglect of duty, or for any conduct derogatory to the character of a gentleman, or for any cause which the Board of Management consider injurious to the Hospital; but that he have the power of appealing to a special General Board, on his requesting such to be called, provided such request, with the grounds of appeal, be delivered in writing to the Honorary Secretary, or left for him at the Hospital within five days after such notice has been given or sent to such officer of his suspension. If no such request be received from him within that period, he shall be considered to have vacated his office, and it shall be competent for the Board to proceed to fill up the vacancy."

In conclusion, I have only to say that the Board do not wish to occupy your space, but that they are prepared to give the fullest details confirmatory of these statements, and of all other matters relating to the management of the Hospital, which, they are confident, would justify them in the eyes of the subscribers, of all impartial medical men, and of the public in general.

I am, etc.,

Thomas Southam, LL.D., *Hon. Sec.*

St. Mary's Hospital, Manchester, November 23rd, 1857.

CONSERVATIVE SURGERY.

Sir,—"We believe firmly that the future historical glory of British surgeons of the present day will rest on their conservative achievements."

I have been highly gratified with the above observation, given in your review of one of our standard works on surgery; and am delighted to know that we have so noble and brave a champion in the cause of conservative surgery. Having had good opportunities of witnessing the steady advance of surgery in the hospitals, both north and south, of our land, I may perhaps be justly allowed to express an opinion on the subject, and to join you in your good example of honourable mention of the great luminaries of the day in this branch of our art.

To Syme, truly, must the civic crown be awarded for conservative surgery: to his firm and comprehensive mind, to his bold, independent, and heroic exertions in the cause, the surgeons of the present day are deeply indebted. When I mention the honoured name of Fergusson as "second in command", I shall only arouse the feelings of deep gratitude and veneration of hundreds of young surgeons, whom he has sent forth from King's College to all parts of the world, as steadfast believers in his doctrines, and enthusiastic imitators of his practice. May he long continue to uphold so honourably the good cause!

The names of Jones, Page, Mackenzie, etc., etc., with a host of others, deserve our highest praise; but, on examining the cases in the wards of our provincial hospitals, which may vie with many of the London schools, I find nowhere the true principles of conservative surgery more fully, scientifically, or efficiently carried out, than in the surgical wards of the Manchester Infirmary, under the zealous guidance of Mr. Jordan, Senior Surgeon to the Hospital. Here we find the true and decisive principles and practice of the art carried out, from the most simple to the most complex operation. 'Tis an extraordinary instance, certainly, of the love of science evinced by this veteran in surgery, who, we may suppose, looks on his art as "glory like a circle in the water, which never ceaseth to enlarge itself."

On some future occasion, I hope to be able to offer you a general outline of the present state of conservative surgery in the hospitals of the north of England.

I am, etc., Observer.

November 24th, 1857.

RETENTION OF PLACENTA.

Letter from B. W. Brown, Esq.

Sir,—In the Journal of November 14th, you gave us an account of a case of "Manslaughter" by a practitioner in midwifery, with comments. In the Journal of Saturday last, I have read the proceedings of an inquest, from which it would appear a Dr. Rolph has been charged with professional neglect in the treatment of a case of retention of placenta. Having had a large share of obstetric practice during the past thirty-six years, it has been my province to be consulted in similar cases; but perhaps a more flagrant instance than the following has not fallen to my lot to manage.

Mrs. Knifton, aged 21 years, residing about three miles hence, and in the enjoyment of the best health, was taken in labour of her first child, and was attended by an ordinary midwife. It appears that there was nothing remarkable in the labour; it was comparatively an easy one, and of short duration. The birth took place shortly after 3 o'clock one Tuesday morning, about three weeks ago. The placenta remained. The midwife made repeated attempts to remove it, and at length separated the funis, and left the woman, thinking that "Nature would finish it". On the following evening, as the placenta continued "fast", the woman's friends, as well as the female practitioner, began to be alarmed by her particular appearance; and at a midnight hour, nearly *forty hours* after the birth of the child, I was summoned to render assistance.

Upon proceeding to an examination, I inquired of the midwife, who was present, what she had done with the cord. "Oh, sir, it slipped off," was her reply; "and she thought Nature would manage very well, for the after-birth would rot off." I doubted at first whether the placenta had been left, for the parts had become so normal that there might not have been a recent delivery; but, on placing my left hand on the abdomen, it was evident that matters were not as they should be. The vagina, however, being rather capacious, I passed my hand up to the os uteri, which I could not reach before with my finger; the os was thrown considerably backward, and a great height up, and was so firmly contracted that it was with difficulty I could introduce one finger. However, I could readily distinguish the placenta. I then endeavoured gently to dilate the os uteri, which receded considerably until I made pressure with my left hand on the abdominal parietes. At length I was enabled to introduce two fingers, or a finger and thumb; but all my efforts to dislodge the mass proved abortive, without danger of drawing down the whole body of the uterus. I therefore contented myself with trying to break up the foreign body, and bring it away piecemeal, as much as I could. It was evident, however, that there were some strong adhesions; and I was compelled to leave some adherent portions, which could not be detached without producing more mischief than I felt justified in making. The poor woman expressed herself considerably relieved, and thanked me much. She progressed favourably until the fifth day; lactation had supervened; and the lochial discharge was natural. The patient was suddenly seized with a shivering fit, with cold perspirations, etc.; and there was excessive tenderness and tumefaction of the abdominal region, with feeble pulse. The woman was evidently sinking, and died on the following morning, at 9 o'clock. My treatment was opium, henbane, calomel, salines, etc., and hot cataplasms to the uterine region.

It will be evident to your readers that death in this case resulted from puerperal inflammation, after prolonged retention of placenta.

I am, etc., B. W. Brown.

Wymeswold, November 22nd, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Carpenter. On November 23rd, at Croydon, the wife of *Alfred Carpenter, M.B., of a son.

King. On November 20th, at Savile Row, the wife of Richard King, M.D., of a son.

Lavies. On November 24th, at 72, Warwick Square, Belgrave Road, the wife of — Lavies, M.D., of a son.

Morgan. On November 19th, at Albion Place, Hyde Park Square, the wife of John Morgan, Esq., Surgeon, of a daughter.

Noad. On November 18th, at Wokingham, Berks, the wife of George William Noad, Esq., Surgeon, of a son.

Simpson. On November 18th, at 17, Mount Street, Westminster Road, the wife of George Simpson, jun., Esq., Surgeon, of a daughter.

MARRIAGES.

Hewson—Otway. Hewson, George F., M.D., of Cheltenham, to Martha, younger daughter of the late Reverend S. Jocelyn Otway, of Portland Place, at Leamington Priors, on November 18th.

Macaulay—Wilkinson. Macaulay, Thomas, jun., Esq., of Kibworth Beauchamp, Leicestershire, third son of *Thomas Macaulay, Esq., Surgeon, of Leicester, to Louisa, third daughter of Nelson Wilkinson, Esq., of Peterborough, on November 18th.

Porter—Wyer. Porter, Nicholas Ellis, Esq., to Mary Anne, youngest daughter of John Wyer, Esq., Surgeon (half pay) 19th Regiment, at Leamington, on November 17th.

Wilson—O'Shaughnessy. Wilson, Charles C. W., Esq., Civil Assistant-Surgeon, Roorkee, to Nina Margaret, third daughter of Sir William B. O'Shaughnessy, M.D., F.R.S., Superintendent of Electric Telegraphs in India, at Christchurch, Massoorie, Bengal, on September 24th.

Workman—Coates. Workman, Walter, Esq., of Queen's College, Oxford, youngest son of the late *Thomas Workman, Esq., Surgeon, of Bayswater, to Maria Woodd, eldest daughter of Edward Coates, Esq., Park Place Villas, at Paddington, on November 17th.

DEATHS.

Bostock. On November 19th, at Horsham, Sussex, Emma, wife of J. S. Bostock, Esq., Surgeon.

Elkington. On September 7th, before Delhi, from wounds received in the engagement of Nujuffghur, aged 21, Samuel Bucknill Elkington, Esq., Lieut. H.M. 61st Regiment, third son of *F. Elkington, M.D., Birmingham.

Martin. On May 17th, at Akaroa, New Zealand, of consumption, Mary Louisa, wife of James Henry Martin, Esq., Surgeon, late of Bridgnorth.

*Thomas, James P., Esq., Surgeon, Pont-y-pridd, Glamorganshire, lately.

APPOINTMENTS.

*Bell, John, Esq., elected Mayor of Grimsby for the ensuing year.

Duchek, Professor, of Heidelberg, appointed Professor of Clinical Medicine in the Imperial Joseph's Academy at Vienna.

Duncan, Peter M., M.B., elected Mayor of Colchester for the ensuing year.

Gilchrist, J., M.D., late Superintendent of the Montrose Lunatic Asylum, appointed Medical Superintendent of the Crichton Institution, Dumfries, in the room of Dr. W. A. F. Browne.

Hunter, G. Y., Esq., Surgeon, elected Mayor of Margate for the ensuing year.

Pitha, Professor, of Prague, appointed Professor of Clinical Surgery in the Imperial Joseph's Academy at Vienna.

Rolleston, George, M.B., appointed Lee's Reader in Anatomy in the University of Oxford.

Spry, E. J., Esq., Surgeon, elected Mayor of Truro for the ensuing year.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, November 20th, 1857:—

Blennerhassett, Edward, Killarney
Burns, William McGregor, Glasgow
Kelland, Charles Theophilus, Plaistow, Essex
Manning, Joseph, Northampton
Pool, William Brooks, Canterbury
Robinson, John, Frodsham, near Liverpool
Tothill, John Henry Halhed, Topsham, Devon

At the same meeting of the Court:—

Symons, Croft George, of Haslar Hospital, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date April 7th, 1854.

HEALTH OF LONDON:—WEEK ENDING NOVEMBER 21st, 1857.

[From the Registrar-General's Report.]

The present return furnishes an unfavourable indication of the state of the public health. The weekly number of deaths registered in London was in October about 1000; in the first half of the present month it was about 1160; and in the last week that ended on Saturday (November 21st), the deaths rose to 1382. During the seven weeks, to which reference is here made, the mean weekly temperature has fallen from 55° to 44°; latterly, this depression of temperature has been rapid, whilst other observations on the atmosphere have shown that it was humid in a high degree.

In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1101. But population has increased; and for the purpose of comparison, it is necessary to raise the average in proportion to the increase. With this correction, the average will become 1211; and it will appear that 171 persons died last week above the number that would have died under the average rate of mortality.

Of the 1382 deaths now returned, 390, or more than a fourth part, were produced by bronchial and pulmonary diseases. In addition to these, phthisis (or consumption) was fatal in 159 cases; and hooping-cough carried off 53 children; croup 17. The progress of bronchitis and pneumonia in the last four weeks is shown in the following numbers:—from the former disease, the deaths were successively 87, 116, 152, and (last week) 227; from the latter they were 77, 115, 108, and 127. Last week, bronchitis exceeded the corrected average by 124; pneumonia by only 23. In the present returns, the number of deaths recorded specially under influenza is only 9.

That persons of advanced age are the principal sufferers will appear from comparing the results of last week with those of the last week of October; for while the deaths of young persons (under 20 years) have increased from 503 to 635, those of persons who had attained the age of 60 years and upwards have risen from 184 to 332, showing a much greater proportional increase. The deaths of no fewer than 13 nonagenarians are now returned; all of these aged individuals were women, except two: two of them had reached the age of 94 years, and two the still riper age of 97.

A mate in the merchant service, aged 45 years, died on the 13th instant, on board the *Dreadnought* hospital ship, of cholera. This is the only case of that disease reported in the week. Two children, aged about one year, died of croup in different families, but in the same house, 42, Long Alley, in the Shoreditch district. One died on the 12th, the other on the 13th instant; the duration of illness was in one case one day, in the other two days. Three children died of measles at Plumstead: of eleven deaths in the sub-district of this name, six were from diseases of the zymotic character.

Last week the births of 886 boys and 864 girls, in all 1750 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1468.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·125 in. The mean daily barometrical reading rose above 30 in. on November 7th, and has continued above it during the whole of the last two weeks. The highest reading last week was 30·22 in., which occurred on Sunday. The mean temperature of the week was 44·2°, which is 1·8° above the average of the same week in 43 years

(as determined by Mr. Glaisher). On Wednesday, the range of temperature was 15·4°; on the two following days it was only about 6°. The mean dew-point temperature was 42·4°, and the difference between this and the mean temperature of the air was 1·8°. The mean degree of humidity in the week was 93; and on Friday the humidity was equal to 100, which represents complete saturation. The mean daily temperature in the week of the water of the Thames was 48·3°. The wind was generally in the east or south-east. There was no rain during the week; but on Friday there were thick wetting fogs, and great darkness frequently prevailed.

INQUEST ON THE LATE MR. AUGUSTUS STAFFORD, M.P.

An inquest upon the late Mr. Augustus Stafford, M.P., was held on Wednesday, November 18th, at Morrison's Hotel, Dublin, by Mr. J. E. Hyndman, city coroner. Mr. P. Blake, Q.C., with Mr. A. R. Todd, appeared on behalf of the next of kin. Dr. Griffin, of Limerick, who had been in medical attendance upon the deceased, was likewise present, but had no counsel acting on his behalf.

Michael Naughten deposed that he had been for twenty-three years in the employment of the deceased as travelling servant. About a month ago, Mr. Stafford arrived at Cratloe in very good health. About the 4th of November, at 3 o'clock in the afternoon, he complained of a pain in the lower part of the stomach; this pain he had first about twelve months ago, and again in the course of the past summer. On the former occasion, he was ill about an hour and a half or two hours; and when he was again attacked in the summer, the pain only lasted about half an hour. On November 4th, when he found the pain continuing up to 5 o'clock, and that he was gradually getting worse, he sent witness for Dr. Griffin to Limerick, from which Cratloe is distant about five miles. Dr. Griffin arrived at Cratloe at half-past 6 o'clock. The deceased was in bed, suffering much more than he did at 5 o'clock. The doctor left Cratloe between 8 and 9 o'clock. He gave deceased two bottles, as witness believes, before he bled him. Having seen Dr. Cutler (who attended deceased in London when attacked in the same way) administer warm water to act as an emetic, witness gave some to Mr. Stafford, and succeeded in making his stomach sick previous to starting for Limerick; thinks Dr. Griffin also gave warm water before the bottles, but is unable to say whether or not it made the stomach again sick. Witness could not tell whether Dr. Griffin administered any more medicine than the two bottles. Deceased was bled in about half an hour after the arrival of Dr. Griffin. Mr. Stafford asked Dr. Griffin for some laudanum to give him rest, and the latter replied that he had given him some in the medicine which he had taken. About 11 o'clock, witness found his master sleeping, and breathing very heavily; this was unusual, for he was a very light sleeper, and was so easily awakened that the entrance of any person into the room was sufficient to rouse him. Dr. Griffin had left witness a powder, which he desired him to mix with a little sugar, and place on the tongue of deceased in the morning; he was also to get a wineglassful from a bottle which the doctor left. The next time witness saw deceased was about 2 o'clock in the morning, when he was still sleeping heavily, and lying upon his back. His breathing was more heavy than before. At 5 o'clock, Mr. Stafford tapped at witness's bedroom door, which closely adjoined his own sleeping apartment, and said, "My arm is bleeding; get up." Witness got up and followed him with a lighted candle; he bandaged the cut, and stopped the bleeding. Finding the bed to have been soiled by the blood, witness asked deceased to go into his (witness's) bed. This he did. Witness then called up the other servants, and desired them to get some new milk. This having been procured, witness returned to the room, and found his master again sleeping. Witness sent at once for the doctor. It was very difficult to awaken deceased when witness was about to give him the milk. He appeared then to be very heavy and shaky in his conversation. Witness asked him whether he should send for the doctor, but he said he thought he did not require him. Dr. Griffin arrived at Cratloe between 7 and 8 o'clock; and, on seeing deceased, said he should at once get out of bed. The latter demurred to this, and asked to be left there. The doctor, with the assistance of witness and a working man, had to drag him out of bed—not that he offered any resistance, more than evincing a strong inclination to lean back, but that he was so heavy as not to be able to render himself any assistance the head drooped very much, and, notwithstanding that witness, by the doctor's directions, kept deceased walking up and down for a quarter of an hour, he could only be kept awake for a moment or so by repeated shakings. He could speak two words quite sensibly, but before he had time to articulate a third he was asleep. When it was impossible to keep him awake any longer by walking him, he was placed upon a chair, and afterwards upon the bed, for the purpose of having the soles of his feet beaten to keep him awake. Dr. Griffin, the witness, and other men, beat his feet, first with a razor-strop and then with battledores, continuously from about half-past 8 A.M. till between 8 and 9 P.M. He was beaten on the feet until the skin blistered and came off; he used occasionally, when struck very hard, to rouse himself for a second, but always fell off again; he was struck on the palms of the hands and the calves of the legs, but ineffectually. When they left off beating, he appeared more lively and animated than when they began, and during the last half-hour he was more easily awakened, and cast off drowsiness more successfully; he sometimes rose from his chair, but soon fell back again. When the beating commenced, the feet appeared to have their natural heat; when the beating ceased, and Mr. Stafford was awakened, he was put into bed by Dr. Griffin's directions. Witness did not give deceased the powder or medicine which the doctor had left, and the latter said he was very glad he had not given them. About the middle of the day, Dr. Griffin called in Dr. Wilkinson of Limerick, who made one visit of about two hours duration. Dr. Griffin remained during the night until 9 o'clock next morning; deceased was still heavy and inclined to sleep, and continued so until his death, which took place at twenty minutes to 7 o'clock on Sunday evening, November 15th. He breathed and snored very hard, and used occasionally to start up suddenly. On Tuesday, the 10th inst., deceased left Cratloe, and on the following day he came to Dublin. On two occasions, Dr. Geary called at Cratloe with Dr. Griffin. After the beating had continued for three hours, Mr. Stafford's arm began again to bleed; during the progress of the beating, Dr. Griffin several times told witness that, if Mr. Stafford was allowed to sleep half an hour, he would never open his eyes again. Deceased said repeatedly that Dr. Griffin ought to be ashamed of himself for administering such a quantity of laudanum; he also said that, if Dr. Griffin "were not licensed, he would be transported." To witness's knowledge, Mr. Stafford did not speak about the laudanum to Dr. Griffin. Witness asked Dr. Griffin whether he thought going out in the air would injure Mr. Stafford: the doctor said he was of opinion it would do him good. He wrote immediately to Mr. Rynd, but he being in the country, he sent for Sir Henry Marsh. On the night that Mr. Stafford arrived in Limerick, he was seen there by Drs. Griffin and Geary.

Sir Henry Marsh, M.D., was acquainted with Mr. Stafford, and prescribed for him a long time ago. On Wednesday, November 11, witness saw him about seven o'clock. He was up, but in a state of extreme debility. He had great difficulty in getting upstairs. Witness became aware from Mr. Stafford himself that he had been attended by Dr. Griffin, and afterwards from a letter which he received from Dr. Griffin. That letter he enclosed by permission of Dr. Griffin to Colonel Herbert, the Chief Secretary. From the contents of that letter, and from Mr. Stafford's own communication to witness, as well as from the result of the *post mortem* examination, the witness had a strong impression that the violent pain complained of in the original attack arose from gall-stones. He suspected it during the lifetime of Mr. Stafford, but had no proof of it until the *post mortem* examination. The gall-stones were in the bladder, and witnessed believed that one had commenced to get into the duct, and caused the great pain. One symptom of gall-stones was wanting. The deceased was not jaundiced. That is generally the case; exceptions are rare. Laudanum is the usual remedy in case of gall-stones. In fact it is the sheet anchor. If the complaint had been gall-stones, Dr. Griffin's line of treatment would have been correct; of course generally. The effect of an emetic in the first instance is depressing, but it passes away. A mixture of laudanum, hyoscyamus, or henbane and ether, fifty drops of each, is a full dose; but it depends upon the amount of pain. Witness thought that the stomach being emptied by an emetic would increase the effect of the dose. A second dose similar to the first in all respects, and a third dose resembling the other two, with the exception of the ether, he should consider a very large quantity to be administered within two hours, unless the pain were excessive. Nothing else could justify it. He should consider that the pain should be such as to endanger life to justify the giving of such a quantity; but excessive pain long

continued does endanger life. Witness could scarcely conceive that any circumstances would justify the giving of a fourth dose similar in quantity within two hours. There are some persons so strong and so vigorous that they will take a much larger dose; but to a person unaccustomed to laudanum he should consider the quantity excessive. In the judgment of witness, bleeding would tend to increase the narcotic powers of these medicines on the constitution; but there are cases of very violent bleeding, where opium given in large quantities has not that effect, and where laudanum may be given in full dose without mischievous results. He could not call to memory any case of hæmorrhage in which the quantities of narcotic medicine that have been mentioned were given to subdue intense pain; but he had seen other cases of excessive pain, and of *delirium tremens*, in which the same amount was administered. The cases of hæmorrhage he alluded to were cases of parturition, which he only knew from hearsay. Witness believed that Mr. Stafford had recovered from the effects of the narcotic medicine when he saw him; and, save so far as it debilitated him, it did not contribute to his death. Bleeding and narcotic medicines unquestionably did debilitate him. If he had had a perfectly strong sound heart he would have recovered. Extreme inanition or debility was the cause of his death. After frequent examinations witness discovered that the action of the heart was extremely feeble, and also that of his pulse; the origin of that debility he believed to have been from a soft, weak, fatty heart, and thinness of the blood. The debility of his heart was instrumental in causing his death; and he believed that for about thirty-eight hours there was an almost total suppression of urine. Instruments ascertained that the bladder was empty, but he was relieved by diuretics. Witness thought the state of his kidneys had a share in his death. The state of the heart could not be clearly ascertained during the time that the remedies were being administered. Witness had known opium to produce suppression, but he had not known it to produce albumen in urine. From the letter that he got from Dr. Griffin he would not say there was a mistake in the treatment. It appeared to be very strong, but he would not form an opinion of its necessity in a case in which he was not present. He would consider the stertorous breathing during the night, and the necessity of flogging the soles of Mr. Stafford's feet to arouse him from lethargy during the whole of the next day, as decided evidences of his having been completely narcotised. The reopening of the wound and the secondary bleeding, superadded to the other causes, had a powerful influence in increasing the ultimate danger. In his opinion, that second bleeding was very instrumental in bringing about the fatal result.

Mr. George Porter made a *post mortem* examination of the body of the late Mr. Stafford, assisted by Professor Robert Smith; Sir H. Marsh was present for a few moments, and after seeing the heart he went away; Mr. Cusack and Mr. Rynd were also present for a short time. The following are the notes of the result of the *post mortem*:—

"The only external marks of violence on the body were a slight abrasion of the left leg, and the incision of the operation for venesection performed on the right arm. Signs of decomposition were well marked on the upper part of the chest and arms, which had a greenish appearance; the veins in this situation looked dark, and contained air; liver well marked on posterior aspect of the body; pupils of eyes natural in size; some of the superficial veins of forehead were somewhat distended. On opening the thorax I found the lungs healthy, with the exception of a few old adhesions of the right pleura; both sides of the chest contained about five ounces of bloody serum; the heart was larger than natural, very soft, and felt emphysematous; its parietes greatly thinned, and its substance easily torn: it contained very little blood, and a fibrinous clot lay in the right ventricle. There was a large quantity of fat on the right side of the heart, and on placing it in a basin of water it floated. On the front of the trachea, about the bifurcation, a tumour was found about the size of a walnut; it consisted of a cyst containing a soft white substance resembling putty. On opening the abdomen a layer of fat was divided an inch thick; the cavity contained a small quantity of bloody serum; the liver was larger than natural, and two tubercles were found developed in it; the gall bladder contained numerous biliary calculi; the stomach a little fluid, and was rapidly undergoing decomposition; the kidneys were somewhat larger than natural; the bladder was nearly empty; the intestines generally appeared normal. On examining the head I found some slight subarachnoid effusion, but no congestion of the membranes or substance of the brain. On cutting into the brain scarcely a drop of blood was visible, and its ventricles contained no serum; at the base, about the origin of the olfactory nerves, there was some slight fulness of the vessels, but not to any considerable extent."

From the result of the *post mortem* examination, the witness would say that Mr. Stafford died of fatty degeneration of the heart. The loss of even a small quantity of blood would be highly injurious and dangerous to a man affected with fatty degeneration of the heart. The administration of any narcotics would be highly injurious. A man labouring under fatty degeneration disease would be more easily affected by a narcotic than a man with a healthy heart. Witness did not think the beating of the soles of the feet conduced in any degree to the debility spoken of by Sir H. Marsh as the cause of death. To a man completely narcotised it was absolutely necessary. He did not believe that to any physician or surgeon, however accomplished, it is possible to discover the existence of fatty degeneration of the heart in the early stages. His opinion was that the excessive pain described was produced by the gall-stones; there were nineteen in the bladder, but none in the duct.

Dr. Robert Smith, Professor of Surgery in the University of Dublin, assisted Surgeon Porter in the *post mortem* examination. The heart was far advanced in disease. It could not have been in a sound state a fortnight or three weeks previous to his death. It had been going on in that state probably for years. It was quite possible that a competent medical man making a careful examination of Mr. Stafford during life might have, without culpable oversight or negligence, failed to discover the existence of fatty degeneration. There was no other disease of the heart. In witness's opinion, fatty degeneration was the immediate cause of his death. Bleeding would aggravate the attendant debility, and hasten death. The second bleeding, in his opinion, increased the debility and impeded the heart's action. The violent pain from the gall-stones would increase the debility, and consequently impede the action of the heart, but would not increase the disease. The presence of very violent pain not in the region of the heart would tend to prevent the discovery of the disease of the heart.

The Right Hon. Henry Arthur Herbert, M.P., Chief Secretary for Ireland, was a very intimate friend for many years of the late Mr. Stafford, and visited him daily during his recent illness in Dublin. The witness explained the circumstances which had led to the institution of the inquest on Mr. Stafford. He said, in conclusion, that what had taken place showed the advisability of having an inquest, inasmuch as the regret he felt for the loss of his friend had been, to a certain extent, softened by the evidence given of his having been afflicted with affection of the heart.

A discussion ensued with reference to the reading of letters written by Dr. Griffin to Sir Henry Marsh and Mr. Rynd.

Dr. Griffin had not the smallest objection.

The letters addressed to Sir H. Marsh and Dr. Rynd were then read at length; they contained a singularly minute and accurate description of the symptoms and treatment of the deceased, and in the opinion of those present established satisfactorily that every possible precaution had been taken by Dr. Griffin.

At the request of Dr. Griffin, Professor Smith was recalled, and stated,—The interval of eleven hours between the giving of a full dose of laudanum and the manifestation of its narcotic effects is most unusual. I think the only rational explanation that can be given of their appearance in this case after so long an internal is the additional loss of blood consequent upon the accidental slipping of the bandage in the course of the night. (Mr. Porter agreed in this opinion.) He would say the narcotic effects were not postponed for eleven hours, but they did not come on with full severity until after the bleeding was renewed. A person able to feel himself bleeding, get up, walk into another room, and give notice to a servant, could not at the time be dangerously narcotised.

Mr. Hyndman then inquired whether Dr. Griffin had any evidence which he was desirous to produce, or whether he wished himself to be examined?

Dr. Griffin wished merely to state that he could not charge himself with having acted rashly or improperly. He did not know how any man could withhold relief from a patient in excruciating agony, where the pain still continued, and where he still cried out for relief, the first dose not being effectual; he believed that any man in the same circumstances that he was in would have exercised the same discretion. As the jury had been told by Sir H. Marsh, it was by the intensity of the pain only that a man could judge of the remedies that were to be applied. On yesterday (Tuesday) evening he got a telegram

stating that an inquest was to be held. He had previously written to say that he had not the least objection to his letters being placed in the hands of the Chief Secretary, and that the case should receive full investigation. Upon learning that the inquest would be held that day, he came up by the night mail; and he could only now say that if the coroner or any of the jury had any question to ask respecting the case he was quite willing to put himself under examination with the same freedom with which he had delivered up the letters, and asked to have them read.

Mr. Hyndman then proceeded to charge the jury. He did not consider that Dr. Griffin could be held accountable for the death of Mr. Stafford, unless he ignorantly, with gross ignorance, committed some act or administered certain medicines which were the immediate cause of his death. It was for the jury to say, after the evidence that had been given by Professor Smith, Surgeon Porter, and Sir Henry Marsh, whether, after the *post mortem* examination exhibiting the diseased state of Mr. Stafford's heart, and considering that that disease had been in progress for many years, and that it is one most difficult, and in its earliest stages almost impossible of discovery,—whether, under the excruciating agony that he was suffering, which must, of course, have rendered discovery of the existing disease still more difficult, Dr. Griffin did adopt a correct or incorrect system of treatment under the circumstances. If they should be of opinion that he did not do anything by mistake or through gross ignorance, such as a competent medical man in the exercise of his discretion ought to avoid, it will be their duty to include that opinion in the verdict. There was no doubt that the immediate cause of death was the great debility consequent upon the fatty degeneration of the heart.

The jury unanimously agreed to the following verdict:—"We find that the said Stafford Augustus O'Brien Stafford died from natural causes; and that there is no blame to be attached to Dr. Griffin for the treatment which deceased received while at Limerick under his care."

Mr. Kemmis, the Crown Solicitor, was happy to add that he had arrived, in his own mind, at the same conclusion as the jury; but he had not done so until he had heard the evidence throughout.

The proceedings then terminated, having been prolonged from about half-past 11 A.M. until 7 o'clock P.M.

The following letter regarding this case has been sent by Dr. Griffin to the *Times*.

"Sir,—Will you grant me space for a few remarks on your article of Saturday last in reference to the late Mr. Stafford, in which the following passage occurs?—

"'A quantity of laudanum was also administered to alleviate the excessive pain. From that time he became gradually worse, and, though everything was done to relieve him from the deep sleep into which he had fallen, it was useless. Mr. Stafford died on Sunday last, and the circumstances of his death made it necessary to hold a coroner's inquest. The result has been to acquit the medical man, Dr. Griffin, of blame, and to establish that Mr. Stafford died from natural causes, though there cannot be a doubt that the opiates administered were unprecedently large in quantity, and might, without an excess of suspicion, be thought to have been fatal to the patient.'

"The first part of this statement seems to have been founded upon an assertion made by his servant, that from the time of the administration of the laudanum 'he was always nodding asleep and snoring up to the time of his death.' There were many facts not brought out at the inquest, as the public and the profession shall see clearly yet, which might have been brought out had I been disposed to place myself in the position of the defendant before any charge was established against me; but this statement of the servant is so wholly false, that I am anxious the public should be no further misled by it. The fact is, that on Friday morning—the narcotism from the opiate having passed off entirely the evening before—Mr. Stafford, though weak, looked on himself as convalescent, and only requiring a little time. He insisted on getting out of bed on Saturday against my strongest remonstrances, came down to the drawing-room, and spent the day there, read the papers, saw such of his friends and acquaintances as came to visit him, ate some wild fowl each day for his dinner, and on Tuesday at Cruise's Hotel, the eve of his departure for Dublin, ate as hearty a dinner as could be wished, and drank some porter. It was from this period forward he decidedly fell off, and the exhausting effect of the journey to Dublin—a journey undertaken on his own inflexible determination—had a good deal to do with the rapid and melancholy course his disorder took subsequently.

"As to the second statement, that 'there cannot be a doubt that the opiates administered were unprecedentedly large in quantity,' I maintain boldly that they were not so. I say, without fear of contradiction, that they were justified by the circumstances; that as large, and far larger, doses are safely given every day in the profession under a similar state of symptoms; and that in this case, even with the doses given, the world would never have heard of narcotism at all if it was not for the state of Mr. Stafford's heart—a state undiscoverable at the time. I go further, and I say boldly and without fear, and I call on the profession to say if the assertion be not true, that when life is endangered by acute pain there is almost no limit to the endurance of this medicine by persons in severe suffering, if the pain be taken as a guide; and that it is excruciating and unendurable. I have had several communications from medical men since the inquest, directing my attention to records of cases in which they had given far larger quantities than any administered here, and with the most complete safety and advantage. Of these I shall only call your attention to the following, which seems peculiarly apposite, though by no means the strongest of them; and you may judge of the feeling of the profession on this question of doses, when I mention that I received the notice of it this morning from a gentleman in England with whom I have not the least acquaintance:—

"'But, of all the sedatives known to our art, opium, when it does not from some peculiarity of system derange, is the most powerful.

"'It is well known that, during the acute pain arising from the passage of gall-stones, or the similarly acute pain of a calculus passing down the ureter on either side, a great quantity of this medicine may be given without the smallest danger, the relief of pain showing the period for leaving off.

"'I have seen, in a paroxysm of gall-stones, 300 drops of laudanum given in two hours, without any effect except the relief of pain. The patient drove and dined out on the next day, without suffering from headache, nausea, or any of the usual effects from this drug which would have occurred under other circumstances.'—Dr. Seymour on *Severe Diseases of the Human Body*, vol. i, p. 249.

"I am, sir, your obedient servant,

"Daniel Griffin.

"56, George Street, Limerick, Nov. 24."

BATH UNITED HOSPITAL: INAUGURATION OF A BUST OF GEORGE NORMAN, ESQ.

A few weeks ago, a testimonial was presented to our esteemed associate and Vice-President, Mr. Norman, of Bath, from the working classes of that city. On Wednesday, November 18th, a meeting was held for the purpose of inaugurating a marble bust of that gentleman, to be placed in the hall of the United Hospital. Mr. Norman resigned the office of surgeon to that institution in March, 1856; and the following circular was thereupon issued:

"Mr. Norman having resigned the office of Surgeon to the Bath United Hospital, after a service of most distinguished usefulness of nearly half a century, the President, Trustees, and Committee of the Hospital consider that the occasion should not be allowed to pass by without offering to that gentleman some substantial and lasting memorial of the great esteem and respect in which he is held by all clasess of his fellow citizens, in consideration of the eminent ability and benevolence he has so long displayed in the discharge of his important duties.

"The Trustees and Committee of the Hospital therefore request the co-operation of the public generally in order to obtain such a fund as will be worthy of the object proposed. With this view subscription lists will be opened at the various Banks and public Libraries. It is not desired to limit the amount of the subscription; this much, however, may be safely stated, that no sum will be considered insignificant when offered as a mark of gratitude and respect.

"The form which the proposed testimonial should take, must depend somewhat upon the amount subscribed. It is, however, thought that something which should permanently connect Mr. Norman's name with the United Hospital would be most gratifying to him, as it could, at the same time, be made to advance the usefulness of the Hospital itself, an object that has always been among the foremost of Mr. Norman's life. This is

a matter for future consideration, in which the wishes of the subscribers must be the guide.

"P. B. Duncan, D.C.L., *President;* William Bush, *Mayor of Bath;* T. H. King, George Monkland, W. Jackson, C. D. Bailey, J. S. Soden; William Davies, M.D., *Secretary and Treasurer.*"

The above gentlemen were appointed a sub-Committee to initiate a testimonial to Mr. Norman at a special meeting of the Trustees and Committee of the Hospital, called together with that object; and a very handsome sum having been subscribed, it was resolved that the memorial should consist of a marble bust of Mr. Norman to be placed in the Hospital.

The memorial was entrusted to Mr. Behnes, of London, who has produced a bust which is in every respect a most faithful likeness of Mr. Norman.

The bust, which is of white marble, bears the following inscription—"George Norman. A Vice-President and Consulting Surgeon of the Bath United Hospital. This Bust has been placed here by Mr. Norman's friends, as a public and lasting testimony of their admiration and gratitude for the eminent services rendered by him to the poor of this city as surgeon, first to the Bath Casualty Hospital, and subsequently to the Bath United Hospital, during a period of fifty years."

His Worship the Mayor (Dr. Falconer) having been called to the chair, read a letter from W. Tite, Esq., M.P., regretting his inability to be present. His Worship also read the letter, dated March 31st, 1856, from Mr. Norman, tendering his resignation, and the reply of the Committee.

Dr. Davies stated that the bust had been executed at a cost of £150, and that there was still a surplus in hand of nearly £200, which he was prepared to hand over to Mr. Norman.

The Mayor said that he very much regretted that the venerable President of the Hospital was not present to preside. Mr. Norman having been so long connected with the surgical profession of Bath, and having exercised his professional skill in an exceedingly humane manner, it must be to him, and to those connected with him, a source of considerable pride to find that the public had placed in the Hospital a permanent record of their feelings towards him. He trusted that Mr. Norman would, through him, accept the sincere wish of the subscribers to the memorial, that he might long live to look upon this record of his valuable services, and their gratitude to him for the manner in which he had rendered them. [*Applause.*]

Mr. Norman, after expressing his thanks to the Mayor and the President of the Hospital, said: My grateful thanks are due to those of my friends present, as well as to many who are absent. Their kindness in procuring the splendid memorial which is now in the hall of the Hospital (which, as a work of art, is much to be admired), is beyond all that I could expect. I felt greatly embarrassed and distressed when I sent in my resignation of the situation I had held for so many years. It appeared to me as though my life were sliding from me, and that by my own act; but the kindness of the President's letter, and the other kind acts of the committee restored me to myself, and I felt that I had acted rightly, in justice not only to myself but to the charity, and to my brethren in the profession. It is a very easy task to express sentiments, but a difficult, if not impracticable one to express feelings. I therefore trust that you all, in the kindness of your hearts, will supply that language which I am myself unable to express. I sincerely hope that the satisfaction which I am sure you all feel in this day's proceedings may be reflected on you individually in the form of health, happiness, and prosperity. You have placed this bust of me in the scene of my labours, and in a situation which is most dear to me. It is dear to me from the number of years I have spent in it, from the labours I have had to undergo, and from the kindness I have received from all who were connected with the institution. It is first endeared to me by the recollection of the Casualty Hospital—one of the two charities by the union of which this hospital was formed. That was first proposed, and afterwards assisted, and the surgical duties connected with it were performed, by my father. It is also endeared to me by the memory of the late Dr. Parry, who, for many years, was the only physician of the Casualty Hospital. From him I received instruction and kindness which I cannot attempt to express. I also feel the recollection of that hospital dear to me from the circumstance of its being the scene of all my early professional labours. It is dear to me also from the recollection of the gentlemen who have been my pupils. One of these has been for a long time one of my colleagues in this hospital; others are engaged in the medical and surgical practice in this town, others in various parts of the kingdom, and some abroad, and all have been my friends. The hospital in which you have placed this honourable memorial of me is also very dear to me from the circumstance that I was appointed by the trustees of the Casualty Hospital to meet the late Mr. Hastings Elwin, who was appointed by the Trustees and Committee of the Bath City Infirmary and Dispensary, to discuss and suggest the terms on which the two hospitals should be united. From the result of our discussions arose the splendid establishment we are now in. This hospital is likewise dear to me from the number of years that I have been employed and from the anxieties and cares that I have undergone in it. It is endeared to me also from the fact that I was brought into association with the gentlemen who have had its management, from whom I have received an amount of kindness which I can scarcely express, and because the association which I have had with my colleagues has been of the most pleasant and harmonious kind. The bust which you, ladies and gentlemen, have been pleased to fix in the hall of this building—the highest honour that could be conferred on any one—to identify me with this hospital, is to me most gratifying, and I will venture to believe that my image may speak a language pleasing to the governors, to the medical staff, and other officials of the hospital, when the voice of him whom it represents shall be no more heard; and I sincerely hope that the hospital may continue to prosper; that no differences of opinion, no dissensions, no jealousies, and no adverse circumstances will ever arise to sully the whiteness of the marble of which that bust is formed, or to darken one page in the future history of the hospital. [*Cheers.*] I will now, ladies and gentlemen, again thank you for your kindness from my heart, and will express my sincere hope that you may, each and all of you, be blessed with health, happiness, and prosperity, as long as you live. [*Loud cheers.*]

Mr. J. S. Soden, having been for a lengthened period a colleague of Mr. Norman in the hospital, fully concurred in all that had been said and done in favour of Mr. Norman. There was one fact which ought ever to be remembered, namely, that the establishment of the United Hospital would never have taken place but for the great exertions of Mr. Norman. From his long acquaintance with Mr. Norman, he could with truthfulness say that no one had more cordially received the approbation of his professional brethren. [*Applause.*]

Mr. W. Hunt moved "that the cordial thanks of this meeting be given to the Chairman and Committee for their valuable services in connection with this testimonial." He said: The character and qualities of Mr. Norman are clear and distinct to us all. It would be needless for me to dilate upon Mr. Norman's estimable qualities, his operating skill, his pathological knowledge, and his almost intuitive faculty of discerning and dealing with injury and disease. A thousand—I might say ten thousand—that have been benefited by his talent might be called to prove this; and I may be allowed to say that the opportunity which I had the honour and advantage to enjoy as a student under him in the Hospital indelibly impressed my mind with his profound skill. Such a man is an ornament to his profession, an honour to his family, and a providential blessing to the community. For, besides the immediate advantage he has been to cases of disastrous casualty and disease, he has not been less so as a necessary, not ostentatious, example of intelligence, judgment, and skill; and in this way kindling a generous flame of emulation in the minds of others engaged in the same profession, he has served the science he loves, and mainly contributed to the men of excellence and talent we have now in the Hospital and in the city, and in this may satisfy himself that his usefulness will extend far beyond his own day and generation. And is it not an elevating and most grateful consideration that all this ability has for years, not ten or twenty, but hardly less than fifty, been devoted, through the Hospital, to the assistance of multitudes of the poorest of the poor? It is a most striking and honourable feature in the medical profession that the poorest of the community may obtain the advice and assistance of the most eminent medical man. This advantage is secured through our Hospitals, and in this way gives a most benevolent prominence to the medical world over other professions. To this work Mr. Norman has sedulously, heartily devoted himself. As far as his strength carried him, he never faltered in this gracious labour; nay, he took such pleasure in it, that, seeing him, one would think that he was the party relieved rather than he who performed the task of giving relief. Long may he live to enjoy the honour and esteem he has so well earned from the community; long may society continue to enjoy the advantage of his professional knowledge, which his health and strength so plainly enable him to give; and when time shall carry him, as indeed it must all of us, to the closing scene of this present

life, may it be only to open to him another, where he shall experience that imperishable happiness and honour which have been graciously promised to every "good and faithful servant." [*Loud Applause.*]

Mr. Jerom Murch seconded the resolution, which was carried unanimously.

On the motion of Mr. Norman, a vote of thanks was unanimously accorded to the President of the Hospital, P. B. Duncan, Esq.

Dr. Davies, in the absence of the President, acknowledged the vote which had been passed to that gentleman, and to the Committee by whom the memorial had been got up. He could assure the meeting that the labour they had performed had afforded all who were engaged in it the utmost pleasure.

After a cordial vote of thanks to the Mayor for presiding, the proceedings terminated.

The Quarantine in Madeira. A writer in a recent number of the *Times*, in a letter dated November 18th, says:—"It is not surprising that the people of Madeira, smarting under the remembrance that the dreadful visitation of cholera, from which they suffered in 1856, was caused by an inconsiderate transmission of troops from Lisbon, should vehemently demand the enforcement of the quarantine laws or something more, to guard themselves against the fever which is desolating that city. But it is just ground of complaint that these laws, vexatious in themselves, should be enforced in the most vexatious manner. I learn from a letter, dated from the Lazaretto at Funchal, that nearly sixty persons were crammed into a house not fit to accommodate more than twenty; that the term of quarantine was arbitrarily doubled; that, though the walls of the Lazaretto run down on both sides to the edge to the sea, the inmates were at first debarred from the beach altogether; that no articles of any kind were admitted into the Lazaretto, except at fixed hours, though there was a guard always on the spot; that in consequence, the inmates were left for the whole of one evening and night without water, and without milk for two nights, though both the water and the milk were lying at the gate from 4 P.M. till 9 A.M.; that one of the inmates who landed in a dying state prayed in vain for water to cool his parched mouth, and actually died without obtaining it; that no one was allowed to hold converse with the inmates, standing forty feet outside the wall, except at certain hours, some of which were at midday, when it was too hot to move; and that consequently persons who came from long distances to see their friends were sent back by the guard, according to orders received. I think it well that petty tyranny of this kind should be exposed, especially when inflicted by the officers of our ancient ally, the King of Portugal."

The Royal Medical and Chirurgical Society: Question of Exemption from Poor-Rates. In the Court of Queen's Bench, the opinion of the Court was taken some days ago as to whether the Royal Medical and Chirurgical Society of London was liable to be assessed to the poor-rate in respect of the Society's house, situate at No. 53, Berners Street, Oxford Street. The Society occupied the whole of the house in question, with the exception of two rooms and a cellar and stables. The two rooms and cellar, with right of access through the street-door and staircase, were let off to the Society for the Relief of the Widows and Orphans of Medical Men in London and its Vicinity, at the annual rent of £52:10; and on the occasion of such letting, it was agreed between the two societies that the Widows and Orphans Society might place a brass-plate on the outer door; that they should be supplied with gas in the rooms so let to them; and that they might use for general meetings, if required, the first room on the first floor, which was otherwise occupied by the Medico-Chirurgical Society. The Society had been rated at a rateable value of £156 for the whole building, the rooms being let to the Widows and Orphans Society for £52:10, and the stables to other parties for £30 per annum. Exemption from rateability was claimed, upon the ground that the Society was established exclusively for the purposes of science, literature, or the fine arts, and so came within the 6th and 7th of Victoria, cap. 36. It was agreed that if the exemption existed as to the whole house, except the stables and rooms let, the rate should be reduced to £75; but if it existed, except as to the stables and rooms let, and also except as to the first room on the first floor, the rate should be reduced to £45.

Mr. Huddleston Q.C., (with whom was Mr. Taylor), was heard for the respondents; and Mr. C. Pollock for the Society.

Lord Campbell was of opinion that the Society came within the Act of Parliament, being established exclusively for purposes of science, literature, or the fine arts. It appeared that a part of the house was let off as a separate tenement. That might be rated separately; and where that was the case, it would not take away the exemption of the Society. But with regard to the room used for the general meetings of the Widows and Orphans Society, his Lordship thought the objection was fatal. It must be taken as part of the agreement of letting, that it was agreed that the Widows and Orphans Society might place a brass-plate on the outer door, that they should be supplied with gas in the rooms so let to them, and that they might use for general meetings, if required, the first room on the first-floor, which was otherwise occupied by the Medico-Chirurgical Society. The latter Society could not be considered as in the exclusive occupation of that room; and therefore he felt bound to give judgment against them. The Society was a very laudable one; and as the defect could be easily cured, it would be able to enjoy the exemption.

Mr. Justice Coleridge and Mr. Justice Wightman expressed themselves to the same effect, and thought that physic and surgery ought to be ranked among the "applied sciences".

Mr. Huddleston asked that the rate should be confirmed, and with costs; but, after some discussion as to how the decision of the Court should be applied to the questions, submitted to it,

Lord Campbell said the rate must be reduced to £75.

According to the practice of the Court, this would be without costs.

An Example of Benevolence. The following advertisement has recently appeared in the *Times*. "A retired physician, whose sands of life have nearly run out, discovered while in the East Indies a certain cure for consumption, asthma, bronchitis, coughs, colds, etc. The remedy was discovered by him when his only child, a daughter, was given up to die. He had heard much of the wonderful restorative and healing qualities of preparations made from the East India Hemp, and the thought occurred to him that he might make a remedy for his child. He studied hard, and succeeded in realising his wishes. His child was cured, and is now alive and well. He has since administered the wonderful remedy to thousands of sufferers in all parts of the world, and he has never failed in making them completely healthy and happy. Wishing to do as much good as possible, he will send to such of his afflicted fellow-beings as request it this recipe, with full and explicit directions for making it up and successfully using it. He requires each applicant to enclose him six stamps—one to be returned as postage on the recipe, and the remainder to be applied to the payment of this advertisement. Address H. James, M.D., 14, Cecil Street, Strand." Our readers will doubtless join us in our profound admiration of the unfailing skill and philanthropic benevolence of the "retired physician". Really his name ought not to lie hidden beneath a pseudonym!

Committal of a Servant for administering Laudanum. At the High Court of Justiciary, Edinburgh, lately, Elizabeth Hamilton, domestic servant, pleaded guilty to culpable homicide, in so far as she administered about ten drops of laudanum to the infant son of Mr. Alexander Drysdale, in order to induce sleep, but which produced death. She was sentenced to eighteen months imprisonment.

TO CORRESPONDENTS.

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Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Cantrell *versus* the Board of Guardians of the Belper Union. The Report of this important trial shall appear in our next number.

Communications have been received from: — Mr. I. Harrinson; Mr. W. W. Morgan; Mr. E. L. Hussey; Mr. W. Brigham; Mr. Joseph Delves; Mr. Peter Martin; Dr. W. Webb: Dr. A. P. Stewart; Dr. Thomas Southam; Mr. A. Prichard; Dr. Logan; Mr. T. Holmes; Mr. W. D. Husband; Mr. J. V. Solomon; Dr. C. Handfield Jones; Mr. W. Walker; Mr. Stone; Mr. B. W. Brown; Mr. J. W. Fletcher; Dr. Owen Daly; Dr. D. Greig; Dr. P. H. Williams; Mr. G. F. Bodington; Mrs. Lewis; Mr. P. C. Price; The Students of Queen's College, Birmingham; Mr. Charles Thompson; Mr. G. Southam; Mr. Walter Garstang; Mr. W. J. Moore; Mr. C. Leonard; and Mr. I. B. Brown.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. FEVER AND PNEUMONIA TREATED BY BRANDY.

Under the care of R. B. TODD, M.D., F.R.S.

[*From Notes by* DR. WOODFORD, *House-Physician.*]

FREDERICK S., aged 14, a pale and rather weakly looking boy, was admitted under Dr. Todd's care on November 6th, suffering the ordinary symptoms of the prevailing epidemic—typhoid fever. After working at his master's (a law stationer) all day, he was, on the evening of November 5th, seized with shivering, followed by heat of skin, thirst, and headache. On November 6th, his bowels were relaxed, and the abdomen tympanitic and tender on pressure. No spots, however, were noticed. The pulse was 128; respiration 28. There was no cough or dyspnœa. He was ordered chloric ether with ammonia every four hours, turpentine stupes to the chest, and two teaspoonfuls of brandy every two hours.

November 8th. There were still great pain over the abdomen, purging, and tympanitis. Pulse 128; respiration 28. He was ordered an enema of gruel, and then one composed of starch and opium. The latter succeeded in checking the alvine discharges.

November 9th. His breathing had become very quick, 50 in a minute, with short hacking cough. The pulse remained at 128. He spat a little viscid rusty coloured mucus, for the first time; and, on examination of the chest, there was found considerable dulness on percussion at the base of the right lung posteriorly, with fine crepitation and bronchial breathing. The purging had ceased, and the tympanitis was gone. He was ordered two drachms of brandy every hour, and turpentine stupes to the chest.

November 10th (fifth day of the fever and second of the pneumonia). The pulse was 104, the respiration 48. Bronchophony, bronchial breathing, and in parts some crepitus, could be detected over the whole lower lobe of the left lung. The cough was very troublesome. He was ordered to continue the brandy every hour.

November 11th (third day of the pneumonia). The pulse was 106, much increased in strength and tone. There was still slight crepitation at the base of the left lung; and more crepitus over the right lung, with less bronchial breathing. The voice was ægophonic at the base of the lung behind. He was coughing a great deal. The brandy and stupes were continued.

November 12th (fourth day of the pneumonia). The cough was greatly diminished. The pulse was 82; respiration 31. The crepitation had disappeared from the base of the left lung, and there was nothing but healthy breathing to be heard over the whole of that side. Some coarse crepitus still existed over the right lung, and some bronchial breathing at the lower angle of the scapula.

November 13th (fifth day of the pneumonia). The pulse was 76, the respiration 36. He coughed very little, and spat much less mucus—viscid, but not rusty.

November 14th. The pulse was 68, the respiration 32. The respiration at the base on both sides was vesicular. There was still bronchial breathing at the lower angle of the scapula, where a blister, the size of half-a-crown, was applied. The stimulant was still persisted in.

November 16th (eighth day of the pneumonia). The cough and spitting were quite gone. The breathing was vesicular over nearly the whole of both lungs. The pulse was 64, of excellent quality; the respiration 24. He felt strong and hearty, and was pronounced convalescent.

REMARKS. The above is a striking instance of the adynamic type of fever at present prevailing in the metropolis, of which we hope shortly to give other examples, and of how even severe visceral inflammation, complicating such fevers, may be successfully treated on the indications given by the principal disease. It will be observed that, as the stimulant was steadily persevered in, the pulse gradually diminished in frequency, though increasing in power; and the evidence of effusion within the chest, and in the parenchyma of the lung, diminished; and as the treatment was so very simple, and the inflammation so evidently increasing at its commencement, there could be no doubt of its being a real instance of cure, and not merely recovery. The same practice would doubtless be reprehensible in country districts, and among a less debilitated class of patients; but in London, as far as our experience goes, the opportunities for applying the old "antiphlogistic regimen" are becoming more and more limited, and the stimulant system universally gaining ground.

II. PLASTIC OPERATION FOR CICATRIX IN THE NECK.

Under the care of W. FERGUSSON, Esq., F.R.S.

[*Reported by* P. W. SWAIN, ESQ., *House-Surgeon.*]

Hannah P., aged 20, was admitted on September 20th, under the care of Mr. Fergusson, on account of the contraction of a cicatrix in the front of the neck, from a burn which had occurred thirteen years before. The cicatrix extended from the lower border of the lower jaw to the root of the neck, pulling the lower lip down to within a very short distance of the sternum, and keeping the mouth permanently open, thus giving the patient a very hideous appearance, and preventing her from retaining her saliva.

On October 10th, Mr. Fergusson divided the cicatrix transversely. This immediately enabled the patient to shut her mouth and retain the saliva.

The wound continued for some days to display rather a languid appearance; healthy suppuration then came on. An instrument was made for the patient by Mr. Matthews, consisting of a sort of crutch to support the head, bearing upon a girdle passing round the patient's waist, and keeping the chin at the proper distance from the sternum. The wound, at the last note (October 30th), was healing rapidly, and the patient was freed from the inconvenience of the sialorrhœa, and the deformity of her permanently open mouth.

REMARKS. The improvement in this case, after division of the cicatrix and extension, was very marked, and was well shown by two photographs, executed by Mr. Swain, of the patient in her original state, and with the instrument applied. We have before observed on the importance, in plastic surgery, of illustrating the progress of the operation by photography, and are glad to see that this invention is coming into more frequent use in our hospitals.

ST. MARY'S HOSPITAL.

I. RUPTURED PERINÆUM OF THIRTY YEARS DURATION: OPERATION: CURE.

By I. B. BROWN, Esq., Surgeon-Accoucheur to the Hospital.

THE following case was kindly sent me by my friend Mr. Hugh Rump, of Wells, in Norfolk. He could not tell me the name of the accoucheur or midwife who attended her. The case appearing to me to offer some striking practical points, I have extracted the notes of our clinical clerk from the hospital case-book.

A. V., aged 55, married, the mother of three children, was admitted into Boynton Ward, in St. Mary's Hospital, under my care, on October 14th, 1857. When in labour of her first

child, thirty years ago, at the time when the head was passing, she felt something give way. The labour was tedious and difficult. She soon perceived that she had lost all control over her motions; and though her general health soon became good, yet she remained a prisoner in her own room, and a source of misery both to herself and her friends, as, no matter whether relaxed or costive, her fæces passed away involuntarily.

On examination, the perinæum was found torn; the rent extended through the sphincter. There was, of course, a good deal of bearing down pain, and the os uteri was ulcerated.

October 21st. I performed my usual operation of denuding the parts, bringing them together with deep and superficial sutures, dividing the sphincter ani, and then keeping her under the influence of opium, with generous diet and wine.

October 22nd. She was ordered to have daily four ounces of port wine, two ounces of brandy, a pint of beef-tea, and two eggs.

October 24th. The deep sutures were removed. The parts were healing. She was ordered to have eight ounces of port wine, a pint of porter, mutton chops, and the following mixture:—

℞ Decocti cinchonæ ℥vi; acidi nitrici diluti ℥i; tincturæ opii ℥i. M. Fiat mistura cujus sumatur ℥i ter die.

October 30th. The interrupted sutures were removed. The parts were healed, and looked very healthy.

November 1st. A dose of castor oil and a simple enema caused the bowels to act for the first time for thirty years, with the motions perfectly under her own control.

November 5th. The parts were quite healed.

November 20th. She left the Hospital with the perinæum perfectly sound, firm, and thick. She has perfect control over her motions, and is more comfortable both in mind and body than she has been for thirty years.

Remarks. I would observe, that no case could more fully illustrate the benefits of an operation such as I have so long practised and advocated. Here was a woman who for half of her life had been in so miserable a plight that death was preferable to existence—debarred from all comfort or pleasure—a burden to herself and all about her—in three weeks perfectly restored to peace of mind and body. I pared the mucous membrane rather deeper than usual, because, from the long continuance of the irritation, the parts had become very thickened and hardened. I also inserted the deep sutures well, to increase the depth of the new perinæum. I look upon opium, wine, and generous diet, as perfect sheet-anchors, as, without their very free exhibition, the most perfectly performed operation of this character will not succeed.

II. Table of Cases of Acute Rheumatism treated by Large Doses of Opium.

Under the care of F. Sibson, M.D., F.R.S.

No.	Sex and Age.	Prominent Symptom on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
1	M. 20	Pain and swelling in all the joints. Sour sweat. Oppressed breathing. Fever. 14 days.	Bruit, 4 days after admission.	Great pain came on at the same time as the murmur. This was relieved after six days of the opium treatment. He could leave his bed about a month after admission. The bruit continued nearly till his discharge.	Fourth day, opium gr. ½ every 3 hours; and gr. i at night, to which, in four days, gr. ¼ of acetous extract of colchicum was added; and it was continued every four hours. Opium seems to have been discontinued after fourteen days.	At first (before the commencement of the opium) only purgatives. With the opium, a little calomel and colchicum at night. After the opium, at first, digitalis and steel; then, a week afterwards, steel and quinine.	Cured. 6 weeks from admission.
2	F. 17	Swelling and great pain of knee and wrist, preventing sleep. Much fever. 1 week.	Bruit, the day after admission.	The pain seemed to diminish rapidly after the commencement of the opium, and ceased seven days after admission, recurring occasionally. The bruit continued up to the time of her discharge.	Opium gr. ½ every three hours on the day of admission. Increased to gr. i two days afterwards; but this was given up that evening, and only gr. i given every night. Then four days after admission, gr. i twice or thrice a day. Diminished again, eight days after this, to gr. i every night. Omitted (as it seems) on the seventeenth day.	Lemon juice at commencement of attack (time not specified). Then, as she improved, tonics, bark, quinine, etc.	Cured. 26 days.
3	F. 23	Pain in back, ankles, and right side. 3 days.	No heart affection.	The pain in the joints increased for a few days, and extended to others which were not affected at first, then rapidly subsided. Copious deposit of lithates. Great perspiration.	Day of admission, opium gr. ½ every four hours, and gr. i at bed-time. Next day, gr. i every four hours. Diminished again to gr. ½ every four hours on the third day, on account of dry brown tongue and constipation; and on the following day to gr. ij every night.	Lemon juice at first. Occasional purgatives. Tonics on subsidence of pain.	Convalescent (able to leave her bed, free from pain and swelling). 10 days. (No further notes).
4	M. 10 Epileptic.	Pain in head, left side of body and legs. Swelling and redness of ankles. 3 days.	No heart affection.	The pain yielded rapidly; considerable deposit being noticed in the urine about the same time.	On day of admission, opium gr. ½ every three hours till third day, when two doses were omitted, as he was slightly affected. Then gr. i every night, and gr. ½ every six hours. Omitted 7 days after admission.	Lemon juice first two days. Ammonia and bark when the opium was omitted.	Cured 24 days.

No.	Sex and Age.	Prominent Symptom on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and Complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
5	M. 19	Great pain and swelling of most of the joints. Shortness of breath. 6 days. Had been, apparently, taking mercury.	Bruit observed 2nd day after admission.	The pain and swelling in joints subsided greatly on the day after commencement of treatment, succeeded by symptoms of cardiac affection. Then the pain recurred, with constipation, brown tongue, acid sweats, and deposits in the urine. The pain subsided in about sixteen days. The bruit persisted till his discharge.	On day of admission, opium gr. i every three hours. Diminished next day to every six hours. On the third day ordered opium gr. i, with comp. coloc. pill gr. iv every four hours, with two pills at bed-time; and so occasionally varying from four to six hours, till they were finally omitted, except at bed-time, seventeen days after admission.	Lemon juice at first. Occasional purgatives. Leeches to the præcordia on occurrence of the bruit.	Cured. 8 weeks.
6	M. 38	Pains and swelling in the loins, knees, and shoulders. 2 weeks.	No heart affection.	The pain soon yielded, and the swelling rapidly subsided. The urine showed a trace of albumen till two days before discharge. He had at that time no pain or swelling.	Day of admission, opium gr. i every four hours gr. ij with comp. coloc. pill gr. viij at bed-time. Diminished to gr i every six hours (with the same pill at bed-time) on the sixth day.	Lemon juice at first. Occasional purgatives.	Cured. 9 days.
7	M. 42	Swelling, redness, and pain of wrists and ankles. Some fever. 5 days. Had recently had another attack.	Bruit observed on second day after admission, perhaps from remains of previous attack.	The pain soon yielded. On the second day the signs of bronchitis were observed. This having subsided under the use of antimony, he did well.	On admission, opium gr. i every four hours. Third day, changed to opium gr. ij, and pilul. hydrargyri gr. iij, at bed-time; and so continued till his discharge.	Lemon juice at first. Saline mixture, with antimony, on occurrence of bronchitis.	Cured. 2 weeks.
8	M. 14	Pain in knees and ankles. 3 days. Rheumatism from the previous year.	Bruit heard a week after admission.	The pain seemed to yield on the dose of opium being increased; but the bruit continued up to the last note. He was able to leave his bed in about six weeks. Diarrhœa came on while he was taking the opium.	Day of admission, opium gr. ⅔, comp. coloc. pill gr. ½ every four hours. Increased on fourth day to gr. i every four hours, with camphor gr. ½. On twelfth day the quantity of opium doubled at bed-time. Omitted four weeks after admission.	Lemon juice at first. Leeches to præcordia. Chalk and opium powder for the diarrhœa. On cessation of the large dose of opium, iodide of potassium, with grey powder and Dover's powder at night.	Convalescent. 7 weeks. Notes deficient.
9	F. 19	Pain and swelling in ankles and legs. No previous attack. Affection of the heart.	Bruit heard on admission.	During the time for which notes were taken (seventeen days) the pain seems to have soon subsided, but the cardiac bruit persisted.	On day of admission, opium gr. i every three hours.	Lemon juice at first, and leeches to the præcordia. Bark and ammonia.	Notes imperfect. 17 days.
10	F. 15	Swelling and redness of feet, ankles, and hands. 9 days. An attack seven years ago.	Bruit observed 4th day.	The pain yielded in three days to the opium, but the bruit persisted till the time of her discharge.	On day of admission, opium gr. ⅔ every three hours; gr. ij at bed-time. This seems to have been omitted after three days on account of agitation of of the nervous system, quick pulse, etc.	Lemon juice at first, with poppy fomentation to the affected parts. Leeches to the præcordia on occurrence of bruit.	Cured. 28 days.
11	M. 18	Pain and swelling of ankles, elbows, wrists, and knees; with pain in the præcordial region. Much fever. Less than a week. Two previous attacks.	Bruit observed next day.	The pain yielded very gradually. The bruit disappeared a few days before his discharge.	On admission, opium gr. i every four hours. The length of administration is not noted.	Lemon juice. Purgatives frequently requisite. Blisters to chest.	Out-patient. 4 weeks 5 days.
12	F. 18	Swelling and great tenderness of knees and ankles. A few days.	Bruit perceived the day after admission.	The pain continued long the prominent symptom; not much inflammation of the joints. The bruit persisted, but very faint, up to the time of her discharge.	On admission, opium gr. i every three hours, continued for three days. Then omitted on account of drowsiness. Resumed two days afterwards, and continued every three hours for five days. Then comp. soap pill gr. i every four hours, gradually diminished to every night, and then omitted forty days after admission.	Lemon juice, six ounces a-day for a few days: no effect. Leeches to præcordia. Colchicum and alkalies; occasional purgatives, then tonics.	Cured. 7 weeks.

No.	Sex and Age.	Prominent Symptom on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and Complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
13	F. 16	Swelling and pain of hands, wrists, and legs. 3 weeks.	Bruit perceived the day after admission.	The pain was severe for some time. She had some alarming fits of syncope. The bruit remained till her discharge.	Opium gr. i (with a small quantity of colocynth) every three hours for twelve days, except two, when it was taken every four hours, and for two days, every six hours. On the twelfth day, comp. soap pill gr. vj every six hours, gradually diminished.	Lemon juice for a few days: it appeared to produce no benefit and was omitted. Leeches; mustard poultices; and soothing liniment.	Cured. 7 weeks 2 days.
14	F. 19	Pain and swelling in right hip and foot, also in hands and wrists. Cardiac affection. 1 week.	Bruit on admission.	The pain was quickly relieved at first. Bruit disappeared on tenth day.	On admission, opium gr. i, comp. coloc. pill gr. iss. every four hours for four days; then every six hours for ten days more; then every night.	Alkalies (bicarb. of potass in barley water) at first. As the pain and inflammation subsided, tonics were ordered.	Cured. 6 weeks.
15	M. 25	Great pain in joints of the lower extremities. Fever. Cardiac affection. Less than a week.	Bruit heard next day (probably existed on admission.)	Pain relieved greatly after five days opium treatment; but continued in a modified form, with a relapse occasionally for three weeks. He is reported free from pain on twenty-second day. The bruit continued rather longer.	On admission, opium gr. i, acet. extr. of colch. gr. iss every three hours for three days; then every five hours, with pill containing gr. iss of opium at night. Omitted temporarily next day on account of drowsiness. Continued six hours, after temporary cessation, till eighteenth day (with pill at night). Then comp. soap pill, and comp. coloc. pill, āā gr. v, three times a day. Reduced to twice a day on twentieth day, and omitted on thirtieth.	Alkalies at first. Leeches to the præcordia; occasional purgatives; lemon juice; then tonics.	Cured. 7 weeks.
16	M. 36	Pain and swelling in knees, hands, and wrists.	No cardiac affection.	Pain soon relieved; then inflammation (bronchial) of lungs came on.	On admission, opium gr. i, comp. coloc. pill gr. iiss every three hours. Next day every six hours; next day twice daily; and soon afterwards omitted.	Alkalies and purgatives at first. Lemon juice for a short time. Then antimony, etc., for bronchitis.	Cured. 3 weeks 5 days.
17	M. 9	Pain and swelling of hands, ankles, and knees, with headache and cardiac affection. 11 days.	Bruit on admission.	The pain and swelling soon yielded. The bruit disappeared a few days before his discharge.	On admission, opium gr. ss, comp. coloc. pill gr. i, every three hours. Omitted next day on account of drowsiness. Resumed on the following day, and again omitted for the same reason. Then about three pills a-day, as he was too sleepy to take more. Omitted finally on ninth day.	Lemon juice at first. Leeches to præcordia; occasional purgatives. Tonics on omission of the opium.	Convalescent. 3 weeks.
18	F. 24	Few symptoms on admission. Next day, severe pain and swelling of ankles and knees, with considerable fever.	Bruit on second day after commencing the opium.	The pain was much relieved after taking the opium for one day; and soon ceased to be the prominent symptom. The bruit persisted, but much less harsh, up to the date of her discharge. She had a copious eruption of sudamina, and some signs of bronchial inflammation.	Day of admission, opium gr. i, comp. coloc. pill gr. iij, every three hours. Two days afterwards, every six hours, drowsiness supervening. Four days afterwards, ordered every night only, and omitted next day.	Lemon juice on third day. Free purging; leeches to præcordia on the occurrence of bruit. Alkalies and ether on omission of opium. Blisters to epigastrium, leeches, etc. On convalescence commencg., salts of iron.	Cured. 6 weeks.
19	M. 18	Great pain in ankles, knees, wrists, and chest. Cardiac affection. 1 fortnight.	Bruit on admission.	The pain continued, apparently unaffected by the opium, and the tongue was very foul. He slept better, however. The urine, which had been acid, became alkaline ten days after admission, by which time the pain had disappeared. It recurred, however, nineteen days after admission, when the opium was again ordered.	Opium gr. i, sesquicarb. of soda gr. xv, sesquicarb. of ammonia gr. iij, every four hours for three days, then omitted; till a relapse of pain occurred on the nineteenth day, when he was ordered opium gr. i, comp. coloc. pill gr. ij, three times a-day, and a few days afterwards, every six hours. This was continued for a fortnight, and then omitted again.	Purgatives. Poppy fomentations on omission of opium. Lemon juice, six ounces daily, and twenty drops of sal volatile every three hours. Ten days after admission, pot. tartrate of iron, with sal volatile, at the same time as the laudanum.	Discharged (nearly well) 8 weeks.

No.	Sex and Age.	Prominent Symptom on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
20	F. 17	Great pain in all parts of the body, profuse perspiration. Cardiac affection. 1 week.	Bruit on admission.	Great dyspnœa, and symptoms of pneumonia, came on shortly after admission.	On admission, opium gr. i, comp. coloc. pill gr. iiss, every three hours. Omitted in two days.	Alkalies. Leeches to præcordia. Then lemon juice. Purgatives.	Recovered. 10 weeks. Relapsed a few months afterwards. Recovered. 7 weeks.
21	F. 31	Pain in limbs. About 1 week. Irregular action of heart, but no bruit.	Bruit heard next day.	The pain continued obstinate for several days. The bruit continued till near the date of her discharge. She suffered from diarrhœa while taking the opiate.	On admission, opium gr. i, comp. coloc. pill gr. iij, every four hours. Continued for thirteen days; then every night.	Lemon juice, soon omitted. Then alkalies, and when the pain had been subdued, chalybeates.	
22	F. 18	Pain and swelling in ankles, with considerable fever. 1 week.	No bruit.	The pain increased much the day after admission, when the opium was commenced. The pain then soon yielded.	The day after admission, extract of opium gr. i, comp. coloc. pill gr. ij, every four hours. Cont. for three days; then night and morning for a week.	Lemon juice some days after admission. Continued after the opium was omitted.	Rheumatism cured in 4 weeks. Then took small-pox.
23	F. 17	Swelling and pain of wrists, knees, ankles, and feet. Cardiac affection. 1 week.	Bruit on admission.	Pain, especially in chest, soon subsided, and the swellings of the joints shortly afterwards disappeared. The bruit was still audible when she left the house.	On admission, opium gr. i, comp. coloc. pill gr. ij, every four hours. Continued for five days; then three times a-day. Omitted, on account of his improved condition, on the eleventh day.	Purgatives. Poppy fomentations; leeches to præcordia; alkalies; blisters to chest. On omission of opium, potassio-tart. of iron, with alkalies.	Cured. 5 weeks.
24	F. 25	Great pain and swelling of knees and ankle. Inflammation of the lung. 1 week.	Bruit heard on 6th day.	The pain and swelling were soon relieved, and the opium then (seventh day) omitted. The bruit was transient, and disappeared in less than a week.	On admission, opium gr. i, comp. coloc. pill gr. ij, every four hours, for a week.	Purgatives. Alkalies. On omission of opium, pot.-tart. of iron and alkalies.	Cured. 5 weeks.
25	M. 38	Much pain and swelling of all the joints. 4 days. Had opium treatment for 3 days of this period.	No bruit.	The pain and swelling soon subsided. Convalescence rapid.	On admission, opium gr. i, comp. coloc. pill gr. iss, every three hours for 2 days; then changed, on account of contraction of the pupils, to three times a-day. Changed to two such pills every night, on the fifth day.	Lemon juice. Poppy fomentations.	Recovered. 3 weeks.
26	F. 24	Pain and swelling of the knees, ankles, and shoulders; pain in the chest. 1 week. Fever.	Bruit on 7th day.	The pain continued very obstinate. On the seventh day pleuritic friction was heard, and exocardial bruit on same day. The pain continued obstinate, and she seems to have had little sleep notwithstanding the large dose of opium. She was rapidly improving, thirty-six days after admission, when the notes break off; but the bruit still persisted, and the effusion into the pleura was not quite gone.	On admission, opium gr. i, comp. coloc. pill gr. iij, every three hours for three days; then every hour for one day; afterwards again every three hours; again on 6th day every hour; on 7th, every two hours, with two at bed-time; again every hour on 12th day; every two hours on the 16th; every hour on the 17th. Next day, two pills every three hours; on the 19th day, one every hour; every other hour on the 25th day. Two days afterwards every three hours.	Lemon juice. Then effervescing mixture with alkalies, to which bark was afterwards added. Leeches to præcordia. Blisters to chest frequently repeated.	Notes cease on 36th day, when she was rapidly improving.

Remarks. The cases which we have tabulated above, together with the five cases of which we gave notes at p. 963, will enable our readers to judge for themselves of the power of large doses of opium in combating acute rheumatism. The first thing that will probably suggest itself is the remarkable absence of any symptoms such as accompany the administration of opium in less painful disorders. We hear hardly anything of drowsiness, of tendency to coma, of constipation or contracted pupils; only, when the remedy is pushed to its extreme point, delirium comes on, which speedily subsides on the diminution of the dose. In some cases, it will be observed that, so far from constipation being produced by the opium, the patient actually suffered from diarrhœa during the opium treatment. In most of the cases, an improvement is reported in the patient's sleep; but this never proceeded to the extent of narcotism. The pain, as might naturally have been expected, was in almost all cases much relieved; but any idea which has been entertained of the prophylactic virtue of large doses of opium against affection of the heart in rheumatism must, we think, be negatived by the table before us, by which it will be seen that, excluding the cases in which the heart was affected before the treatment was commenced, a proportion quite as large as the average suffered from cardiac affection while under the opium treatment. No evidence is contained in the above table as to any immunity from relapses which may be afforded by the treatment. It is curious, however, to observe that the only case which is known to have relapsed (No. 20), was one in which the treatment was abandoned in two days, on account of chest affection. The patient was again under Dr. Sibson's care, and was treated on the narcotic plan; but the notes were not preserved.

With reference to the administration of other remedies, it seems that the opium does not materially interfere with their action; but on this point we are perhaps hardly competent to

pronounce an opinion, not having had the opportunity of following the cases themselves. The time during which the patients remained in the Hospital does not seem to have been much shorter than under other plans of treatment; but their condition during this time appears to have been more tolerable, their convalescence less protracted, and the cardiac mischief, where present, was in most cases either nearly or entirely repaired before the discharge of the patient.

We have discharged our functions as reporters in laying before the profession as complete a notice as we can collect of a series of cases which we think of much interest; but it is only by those who have themselves treated and watched the patients that such series can be authoritatively generalised; and we therefore leave our readers, to a great extent, to draw their own conclusions. We may be pardoned, however, for expressing a hope that Dr. Sibson will himself apply his large experience in this matter to the resolution of the question as to the value of opium as the principal remedy in rheumatic fever.

Original Communications.

DELIRIUM TREMENS.

By Henry Duncalfe, Esq., M.R.C.S., West Bromwich.

[Read before the Queen's College Medical Chirurgical Society, Birmingham.]

During our last session it was wisely remarked by our then President, that because a case was one of ordinary occurrence, it was not therefore the less important or practical. Truly believing in this affirmation, I bring before the society a case of delirium tremens, so well marked, and of such severity, that it serves as a good example of one form of the disease, and of a certain line of treatment necessary to be adopted, in contradistinction to an opposite form requiring a *varied* treatment, and to the characteristic symptoms indicative of which I shall hereafter draw your attention.

A retrospective view of the history of disease teaches us that cases where diagnosis has been established beyond doubt, and cases where the symptoms have been uniformly regular, have done more to elucidate the pathology of organism, and the deviation from normal action and healthy structure, than those cases in which peculiarity of form or irregularity of symptoms, have rendered it difficult where to assign the seat of disease.

A consideration of illustrative cases, such as the one I am about to detail, leads us, I believe, to the true and rational treatment of disease. The causes being so well established, the symptoms so in accordance with the disturbed organism, and the necessary treatment so fully indicated.

Case. A gentleman, of middle age and active habits, who had suffered more or less from hæmorrhage for three years, his appearance being often sallow and cachectic, applied to me to afford him some relief for the increased hæmorrhagic discharge from the bowels. I found him on August 29th with a hot and dry skin, complaining of great loss of strength, impaired appetite, fatigue on making the slightest exertion, and using large quantities of stimulant daily to keep him up to the standard requirements of his daily duties. I prescribed for him a preparation of iron and quinine with hyoscyamus, supporting him with nutritious food as far as his appetite would allow, gradually withdrawing from him some portion of his accustomed stimulants. From such treatment he had found relief on previous occasions; and from the date of my first attendance until September 1st, he appeared to derive benefit from the care bestowed upon him. On that day, I remarked an appearance of anxiety and restlessness about him, and a suddenness in his movements; he answered sharply, and was irritable; impatient of contradiction or restraint, and determined to have his hands constantly employed; his features were hard; his eyes wild, staring, and restless; his tongue was moist and clean, slightly tremulous; the skin, which had been hot and dry, was now hot and moist; the bowels had been acted upon several times, but sparingly, and some blood had accompanied each motion. Towards night he began to have some delusions—seeing birds, monkeys, and other objects, on the walls and ceiling; but when reasoned with, or upon making a closer examination, he could correct the false impressions. A drachm of laudanum was given to him at bed-time. During the night he was extremely restless; armed himself with a life-preserver, and defended the stairs against the approach of robbers. These nervous fears continued through the day of September 2nd; but when conversed with, he was appeased and quieted for a short time. An opiate mixture was given through the day, and at night a morphia pill. No relief followed; his restlessness increased; and he mistook his friends for foes; and he especially evinced a great antipathy to his wife. He believed everybody had conspired to rob him; and he constantly was employed in hiding imaginary moneys in imaginary safety places. As it would be tedious to give the details of each successive day, I will state in a concise form the medicine prescribed, adverting to any important change as it occurred.

September 2nd. Cinchona mixture, twelve ounces, containing four drachms of tincture of opium, one-ounce doses every two hours. At night, one grain and a half of morphia pill.

September 3rd. Cinchona mixture, containing eight drachms of tincture of opium. A four-grain morphia pill at night, and four drachms of tincture of opium, in doses of a drachm every two hours through the night.

September 4th. A draught containing three grains of morphia; twelve drachms of tincture of opium through the day and night. Before the draught he took two grains of tartarised antimony; and in two hours after it, he commenced taking one-drachm doses of laudanum. He slept irregularly for nearly three hours, and was more composed in the evening. He took food plentifully, and stimulants only in small quantities.

September 5th. A three-grain morphia draught, and a cinchona mixture, with four drachms of tincture of opium.

September 6th. A mixture containing eight drachms of tincture of opium, and three drachms of tincture of opium at night.

Through these days he remained stationary, conversed rationally at times, and slept at short intervals, generally wakening affrighted and trembling. He became gradually more excited through the two following days.

September 7th. The opiate and bark mixtures were omitted. A three-drachm tincture of opium draught at bed-time.

September 8th. A three-drachm tincture of opium draught at bed-time.

September 9th. The bowels having acted but slightly, he had two drops of croton oil in pill, also a blister at the nape of the neck; he resumed his opiate mixture, taking four drachms of the tincture during the day, and three grains of morphia in a draught at night.

September 10th. Mixture containing nine drachms of tincture of opium.

September 11th. Four-grain morphia pill. Mixture containing six drachms of opium through the day.

September 12th. Croton oil pill. Mixture of hyoscyamus, sulphuric ether, and camphor; at night, a two-grain morphia pill.

September 13th. Three-drachm tincture of opium draught; ether and hyoscyamus mixture.

September 14th. Three-drachm tincture of opium draught; ether and hyoscyamus mixture.

September 15th. Mixture repeated. A three-drachm tincture of opium draught; and half a grain of morphia every two hours, till he had taken four grains.

September 16th. Mixture repeated. A three-drachm laudanum draught.

September 17th. Bark and hyoscyamus mixture. To take solid food, and then change from home.

My note-book bears entry on Sept. 10th:—"He has not been so much disturbed by delusions as in the earlier days of the affection. His perceptions are more accurate; his aversions to those around him are the exciting causes of his illusory wanderings; his repugnance and aversion to have even his wife in the room are marked; he rages and shrieks loudly for help, tears his clothes, abuses those who touch him, refuses food, and demands to be taken from the prison in which he is incarcerated." Day following day and night succeeding night, found no change in this fierce delirium. The pulse was quick and sharp; the breathing hurried and panting; the skin hot and bathed in perspiration; the constantly increasing ramblings, restlessness, and wandering, continued almost unaltered till the 15th, when a slowly but well marked change took place. The violent gesticulations were now falling into a groping about in space for imaginary objects, and the wild delirium was merging into the low mutterings of incoherence. He was now brought to that state of exhaustion when a short time must

decide the ultimate result. Still conscious of the great utility and applicability of that one remedy on which I had throughout relied, I steadily persevered in it, till the long-wished for sleep came to the rescue; and on wakening, after an almost uninterrupted sleep of thirty hours, what a change had taken place! The countenance had resumed the expression worn in health; the bathing perspirations no longer bedewed the body; the pulse, which only a few hours previously had been thready, small, and almost too rapid to count, was soft, fuller, and compressible; the urine, which had been voided in small quantities, and involuntarily, was now abundant, and passed with consciousness. The mind was clear; intelligible questions were asked and answered by him; in a word, the disease had vanished with the long sleep, leaving behind a deficiency of strength but slowly to be regained, and bad habits to be amended. My patient was well. During the fifteen days of the continuance of this attack, I administered seventy-nine drachms of laudanum, besides ten grains of solid opium, and twenty-five and a half grains of acetate of morphia, which were taken in the form of pill.

Remarks. Whatever in this instance may have been the exciting circumstances that determined the disease, I would attribute much influence to the long-continued discharges of blood from the rectum, which *more* than predisposed by exhausting the nervous powers, and enfeebling the condition of the general health. To that cause, also, may, with fair probability, be assigned the protracted duration of the attack, and the slow return to health. This form of the disease no doubt had its cause in a passive congestion of the venous cerebral circulation; and no one could have witnessed the complete course without being at times struck with the close affinity to mania on the one hand, and to febrile delirium on the other, so much in accordance with the condition of the circulatory system were the symptoms more or less developed and modified. The history of the case itself—the bleedings—the slow absorption of large amounts of stimulants—the debility—the general irritability with weakened powers—the small compressible pulse—the clammy skin, and tremor—demanded at once a nutritious diet, a certain amount of stimulant drinks, and, above all, *sleep*, the one thing so necessary to recruit the exhausted powers, and to restore vigour to the brain.

Great diversity of opinions exist on the treatment of delirium tremens, some believing that the disease has a certain course, and has a fixed termination, not to be altered by remedial measures; whilst others place their entire reliance on opium; and others again on purgatives and depletory measures; while experience surely proves that disease cannot be met by any plan of treatment laid down at the beginning, but must have remedies varied according to the condition, temperament, habits and idiosyncrasies of the individuals in whom that disease may occur. During the progress of this case the opium was sometimes combined with cinchona, and sometimes with sulphuric ether and camphor. On one occasion, during a long paroxysm, attended with great violence, I found it expedient to give nauseating doses of antimony, following its effects by hourly doses of laudanum. It is very important, when administering opium with a view to procure sleep, to enjoin rest and quietude. I have seen a patient in delirium, with the system entirely impregnated with opium, die, without having derived the least benefit from its exhibition; and I am quite satisfied that in some cases where the restlessness of the patient has prevented sleep from ensuing after sufficiently large doses, I have seen the desired effect produced by tranquilising the system with tartarised antimony prior to the opium being administered: at other times by the inhalation of chloroform after it; nor do I think it should be lost sight of that, in order to fulfil the object we have in view, we should either give opium in a large dose at once, or in full doses frequently repeated. A great responsibility, I own, attaches itself to the medical attendant; and I cannot now but think if I had administered for one dose a much greater quantity of morphia or laudanum, my patient would have been more speedily relieved.

In the numbers of the *Lancet* for August 15th and 22nd will be found a very important paper by Dr. Oliver, of the Salop and Montgomery Counties Lunatic Asylum, on the Facts and Observations respecting the Principles to be kept in view in regulating the Administration of Opium. To the observations of Sydenham, "that great exhaustion of nervous power, being dependent on want of harmony between the cerebro-spinal and sympathetic centres, forms one of the three great symptoms which peculiarly require the use of opium," Dr. Oliver adds that the facts which most certainly prove the existence of this necessity are those which indicate both that the process of sanguification has been seriously impaired, or, in other words, that the quantity of blood in the system is insufficient for the general purposes of nutrition; and that some of the most essential elements of neurine are either wasted too rapidly in the wear and tear of the vital processes, or cease to be separated from the blood for the ordinary purpose of repair.

In the *Lancet* for August 15th, a case is detailed extending over seventeen days, and the stated quantities of opium and morphia during each day. On the first, nine grains of hydrochlorate of morphia were taken; second, seven grains; third, fifteen grains; fourth, fifteen grains, and twenty grains of solid opium; fifth, fifteen grains; sixth, fifteen grains; seventh, fifteen grains; eighth, eighteen grains; ninth, twelve grains; tenth, four drachms of tincture of hyoscyamus; eleventh, six grains of morphia; twelfth, three drachms of tincture of opium three times a day; thirteenth, six drachms of tincture of opium; fourteenth, three grains of morphia, and half an ounce of tincture of opium; fifteenth, six drachms of tincture of opium; sixteenth, six drachms of tincture of opium; seventeenth, half an ounce of tincture of opium, and five grains of powdered opium; about which time improvement was discoverable. Other cases are extensively dwelt upon, to which I will refer those who are interested; and at the conclusion of the paper is an extract from the letter of Mr. Joseph Allen, of the Liverpool Royal Infirmary, where a patient, suffering apparently from delirium tremens and mania, took in one day an ounce of Battley's sedative solution, two drachms of powdered opium, and eight grains of acetate of morphia; and with great benefit. The same patient, when convalescing, took every night, in two doses, four scruples of powdered opium.

Delirium tremens also makes its appearance in a form which is nearly allied to phrenitis, occurring generally in robust subjects, hard livers, and not unfrequently following a debauch. In such cases, there is from the commencement a greater exaltation of the cerebral functions; the congestion is arterial and active; and there is generally pain referred to the head. The countenance is very red, and the veins full; the eyes fiery and suffused, the globes appearing to be prominent; and patients have a very ferocious appearance. On analysing this important symptom in cerebral diseases—this wildness of expression—it will be found mainly due to a complete retraction of the upper eyelid under the orbit, thereby exposing the entire anterior surface of the sclerotic. The other ordinary evidences are of a mixed description, sometimes identical in their nature with those of the first stage of meningitis, in others having the more characteristic resemblances of true delirium tremens. The first object is to relieve the immediate symptoms; for, if neglected, a condition of congestive apoplexy may speedily ensue. Venesection, cupping, croton oil, purgatives, and tartarised antimony, are the means which meet the requirements; and I believe the best form in which to administer opium, when the congestion has been lessened, is Dover's powder, in doses of from two to three scruples.

The rapid sketch now given shows the immense importance of combating a disease according to the form it assumes, and the absurdity of the pretence of adopting a specific form of treatment, which in so many instances exposes the medical practitioner most justly to the charge of quackery and charlatanism.

ON IRITIS.

By W. J. Moore, Esq., Assistant-Surgeon, Bombay Army; formerly Senior Resident Surgeon at the Queen's Hospital, Birmingham.

The following cases present some characteristics which are contrary to the appearances generally following injuries of the eyes, and probably, therefore, will not be destitute of interest to many of the readers of the British Medical Journal.

Case I. While I was engaged on service in Persia in the early part of the present year, an accident happened to some individuals in my medical charge, who were engaged making a battery for the defence of an important military position. To such end it was necessary to "blast" the hard soil and rock by means of gunpowder; and, a premature explosion having taken place, several persons were wounded, the case of one of whom is now briefly related.

This officer was struck on the eyes and face by numerous grains of powder, each of which were picked out with great care by the aid of a lancet. The right eye had one grain

lodged about the centre of the cornea, and another about midway between the internal margin of that body and the inner canthus. These grains were also detached, and the patient enjoined to remain quiet, in a subdued light, and to take purgative medicine. At this time the internal structures of the eye were perfectly natural.

The next day there was considerable conjunctival congestion, and a *slight* dilatation of the pupil was observed.

On the morning of the third day this dilatation had become much more apparent. Although on stimulus, the iris became as contracted as its fellow, yet in subdued light there was enormous dilatation. It was also slightly discoloured, of a reddish muddy hue, and there was some little tendency to puckering at the internal marginal circumference.

After the lapse of a few hours, these morbid appearances having rather increased than otherwise, I deemed it necessary to administer calomel and opium, and apply leeches. The next day, *the fourth from the date of injury*, it was reported to me that the patient had become suddenly blind.

On inspecting the organ, I found an effusion of blood filling the anterior chamber—and, as far as I could judge, the posterior also—to about two-thirds of their extent, the upper third showing the superior margin of the iris contracted so much as to appear a mere line, in the centre of which was a perpendicular red streak, showing the effused fluid had evidently issued from that part. The mass was slightly moveable by altering the position of the patient; and thus constituted what may be called an immense bloody "hypopion."

Leeches were again applied; and the calomel was continued. The blood began to be absorbed, and the iris gradually reappeared, gained its natural colour, but continued dilated. The patient took strychnia, etc.; had blisters applied without effect. Vision, however, which was at first impaired, gradually became perfect, even better than that of the other eye, and the patient is now doing good service against the Bengal mutineers.

Case II. A seaman, while engaged landing stores for the troops after the capture of the forts and city of Mahomrah, received a blow on the right eye, Iritis came on the third day afterwards, accompanied by *dilated* pupil. The usual treatment was employed, excepting the use of belladonna. The iritis yielded in a satisfactory manner; but, as in the other case, dilatation remained, and did not improve during the months the patient was under my observation.

Remarks. The dilatation of the pupils in these cases must undoubtedly be due to some nervous injury; but why a comparatively slight blow, like that which happened in the first case from a grain of gunpowder, should have been followed by permanent dilatation of the pupil, I am unable to say. I have seen numbers of cases where sparks from the anvil, etc., have struck the eye; but in only one instance did any nervous injury result, and then complete amaurosis occurred. Another point very remarkable is the fact that the dilatation did not appear until, in one case, twenty-four hours, in the other three days after the injury. The extravasation of blood also occuring as it did four days after the accident, is again contrary to what usually happens; this result generally quickly, if at all, following.

On these heads Middlemore says: "*Severe* blows on the eyeball may cause the effusion of blood within it"; "may also give rise to amaurosis"; but there is no case mentioned in which dilatation of the pupil and effusion of blood took place days after the injury had been received. Tyrrell, Blundell, Haynes Walton, and Lawrence likewise do not detail a case of the kind; neither do any of these authors mention the anomaly of an iritis accompanied by dilated pupil.

The latter says: "I saw complete amaurosis caused by a small shot, which struck obliquely and did not enter." And again: "Concussion of the retina, internal extravasation of blood, are the almost invariable concomitants of such an injury"—(violent blow). These effects, however, immediately followed the injury.

It was mentioned in the first case detailed that the patient was struck about the face by the grains of gunpowder. These penetrated more or less deeply, and were, as before stated, picked out as well as might be. Numbers of blue or, in some places, black marks were, however, left, which I considered unavoidable. It so happens, that since I have had occasion to treat a similar case, and was advised by a non-medical friend to wash the parts with, and dip the lancet in, milk, previously to using it. This plan was adopted; and certainly, although not quite successful, the result was an improvement on that of the first case; the injuries in the two cases being as nearly as possible equal. I do not myself see what the *modus operandi* of milk in such cases may be. I should, however, be much obliged to any gentleman who could furnish me with a method af treatment calculated to prevent or remove the disfigurement occasioned by the lodgment of gunpowder grains—an accident which the military surgeon is frequently called upon to treat.

LITHOTOMY BY THE MEDIO-PERINEAL SECTION: WITH CASES.

By Albert G. Walter, M.D., Pittsburgh, Pennsylvania, North America.

The simple and beautiful operation of lithotomy by incising the membranous and dilating the prostatic portion of the urethra and the neck of the bladder with the finger for the extraction of stones, being now fully established by the successful practice of Manzoni and Bresciani de Borsa, of Verona, and latterly by that of G. Allarton, of England, needs hardly any further recommendation. Still, as the dogmata of the schools and the rules of time honoured practices are not readily given up by the majority of professional men, even when found wanting in success and certainty of cure, and as too often many valuable suggestions pass by unheeded from indisposition to investigate, try, and adopt new practices, I think it no more than a duty incumbent on any member of the profession, to furnish to it the results of his experience, when benefit to the science and to the public must follow its promulgation. The successful results of the medio-perineal section are so startling, every case of stone thus treated being truly a triumph of modern surgery, that they ought to be made known, and spread far and wide, for the benefit of suffering mankind.

There can be no doubt, but that by the introduction of this new and simple operation, the sufferings of the patients will be greatly mitigated. Those afflicted with stone will consequently submit to the operation sooner, being assured that it is free from dangers which are apt to follow the antiquated lateral operation; and surgeons, too, will more eagerly resort to it, being no longer harassed by the uncertainty of the results of the old practice. The patient will escape great sufferings, by being operated on while the stone is yet small and the bladder free from serious disease. The surgeon's labour will be greatly shortened, having to deal with the urinary organs yet unaltered by the presence of the foreign body. Lithotrity, too, will have to yield its claim of greater security from danger to this novel practice, in which the bladder is not molested at all by the use of instruments.

Allowing every claim of priority to De Borsa and Allarton, for the introduction and promulgation of this new practice, I am still disposed to claim that, prior to the publication of the experience of the above named surgeons, I had occasion to resort to it about ten years since.

Case I. A boy, aged 6, Frederick Kuner, of good constitution, but suffering for two years from a stone in the bladder, became my patient in January 1847, while attacked with retention of urine. On passing a catheter, I found the stone wedged in the prostatic portion of the urethra, examination by the rectum and manipulation of the perinæum confirming the diagnosis. Not being able to grasp the stone in this situation by any instrument which I had, nor believing that one could be constructed to answer the purpose, and unwilling to push it back into the bladder and then resort to the lateral operation, I made an incision three-fourths of an inch long into the membranous portion, upon a grooved staff, and introduced a probe into the wound to the staff, which was then removed. Guided by the probe, a polypus forceps was introduced down to the stone; but, on attempting to grasp it, it slipped back into the bladder. The retention of urine was relieved, but the stone had escaped, to trouble my patient again. While hesitating how to proceed farther, I inserted my finger through the wound into the neck of the bladder; and, contrary to what I had expected, the finger moved freely in the prostatic portion of the urethra, and entered the neck of the bladder readily. A polypus forceps was now introduced into the bladder, and the stone (of the size of a small cherry, and of the mulberry species) was easily removed. The boy made a rapid recovery, left his bed on the third day, and would have done so sooner but for the urgent remonstrances of his parents. The wound in the perinæum closed in a week. The urine, on the second

day, began to flow mostly by the natural channel. There was no traumatic fever of any consequence: in fact, the boy hardly needed any attention. Such a happy result was as new to me as it was unexpected. Delighted with the success of the case, I was eager to get further experience.

Case II. William Grunter, aged 35, farmer, had suffered for five years from symptoms of stone in the bladder; had had retention of urine twice; passed a great quantity of ropy purulent urine, of an acid nature, very frequently, by day and by night, with pain in the kidneys and bladder. He had been incapacitated by his sufferings from work for the last six months, when he became my patient in July 1849, shortly after an attack of retention. Without any preparatory treatment, with the exception of an aperient, I operated on him July 12th, 1849, kindly assisted by Drs. S. Holmes and F. Guenste. The membranous part of the urethra was divided upon a staff, hooked tightly under the pubes, to the extent of one and a half inch; a probe was passed into the wound, and into the bladder, the forefinger of the left hand following it through the prostatic portion into the neck of the bladder, whilst the staff was withdrawn. Dilatation thus being made, a strong curved polypus forceps was pushed along while the finger was withdrawn; the stone was felt for, easily grasped, and extracted. The bladder was washed out with lukewarm water, and the wound left to itself. In this case, too, very little febrile excitement followed; the urine flowed partly by the urethra on the fourth day; the wound was entirely closed on the tenth day; and it was with difficulty that I could prevail on the patient to stay in bed more than three days. The relief being thus prompt, the bladder soon recovered, and the patient left my care six weeks after the operation. I saw him years after, in perfect health. The stone was of the size of a plum, very rough, and heavy. The result of this case, too, surprised me not a little.

Case III. The son of Peter Ansbach, aged 3, of Allegheny City, came under my care on August 12th, 1851, while suffering from retention of urine, occasioned by the impaction of a calculus in that part of the urethra which is covered by the scrotum. The child had had symptoms of stone since he was a year old; had suffered greatly at times, but had not had retention till he became my patient. The calculus having advanced so far into the urethra, I attempted to push it farther forwards, in order to grasp it by a slender forceps. However, I could not push it onwards, the little patient all the time resisting. Not being able to move the calculus forwards, and unwilling to administer chloroform to a child of his age, I forced the stone backwards by manipulation into the membranous portion of the urethra, and prepared to extract it by incision. But, on introducing the staff, before opening the urethra, it slipped into the bladder. The urethra, however, was opened; the prostatic portion of it, and the neck of the bladder, were dilated; and the stone was readily caught with a slender polypus forceps. The next day the boy got out of bed, and did not return to it again, his recovery being as rapid as unexpected.

Case IV. On January 12th, 1852, Peter Shafer, 28 years of age, of Allegheny City, unmarried, called on me in great distress and alarm, having broken a gutta-percha bougie in the posterior part of the urethra. He had been advised by a medical friend to pass daily a bougie into the urethra, up to the neck of the bladder, for the relief of a spermatorrhœa from which he had been suffering for some time. Partial retention of urine was the consequence of this accident. I tried to grasp the foreign body with a small lithontriptic instrument; but, failing after repeated attempts, I opened the membranous portion of the urethra upon a grooved staff. This being withdrawn, and a polypus forceps introduced through the wound, the foreign body was touched; but, during the attempts to catch it, it got into the bladder, from which, however, it was removed, after previous dilation of the prostatic portion, and of the neck of the bladder. The grasping of the bougie occasioned a good deal of trouble, as its long diameter could not be easily got at. The patient's recovery was rapid; the wound had healed in twelve days.

Case V. John Grundy, a lad aged 10, of Pittsburgh, had suffered from symptoms of stone in the bladder for the last six years. Retention of urine had happened several times. For the last six months, the calls to make water were very frequent by day and by night, accompanied with distressing pain and prolapsus of the lower part of the rectum, stillicidium urinæ being almost constant. On February 14th, 1854, assisted by Drs. Guenske and Sherman, the stone was removed by the medio-perineal section of the membranous portion, the patient being under the influence of chloroform. The stone was rough, and as large as a cherry. The patient speedily recovered; the wound had closed in ten days.

Case VI. Jacob Gerlach, aged 26, of Allegheny City, a tailor by trade, had been afflicted with stone in the bladder for fifteen years. He was worn out by protracted disease of the bladder and kidneys, passing very frequently bloody and purulent urine in small quantities, with great pain. Many years ago, he had objected to have his stone removed either by the lateral operation or by lithotrity, dreading the danger of the operation, and the pain in consequence of it. Being assured that the proposed operation was harmless, and that chloroform would be administered to him, he consented, and had the stone extracted through the membranous portion on July 10th, 1855. The calculus, being of the size of a small pigeon's egg, passed readily through the dilated neck of the bladder and wound. The recovery of the patient was rapid. The urine, previously loaded with pus, soon became natural; the nephritic pains ceased; and, in a few months, Gerlach had regained strength and flesh, and was enabled to work at his trade again.

Case VII. Peter Hoffman, a soldier in the late Mexican war, having received before Chapultepec a musket-ball in his left groin, became disabled from further service in consequence of it. He was confined for some time, but recovered, the ball not having been extracted. His recovery, however, did not last long; but symptoms of disease of the bladder, which, previous to the receipt of the present injury, he never had felt, became more and more apparent, disabling him from following his occupation as a shoemaker. Some months ago, his sufferings having become aggravated, he placed himself under my care. Examination detected a stone in the bladder. On May 26th, 1856, chloroform being administered; the membranous part was opened, the neck of the bladder dilated, and, by a large polypus forceps, the calculus was removed. On being broken open, it was found to contain the very bullet that, on entering the groin, had passed into the bladder, and, lodging there, had become encrusted with calcareous matter. The patient made a rapid recovery; the wound had healed in two weeks.

Case VIII. Captain John May, aged 54, of Beavertown, Beaver County, of a good constitution, but subject to biliary derangements, has had symptoms of stone in the bladder for the last twelve years, accompanied with pain in the kidneys. Formerly he had passed large quantities of sand, with ropy urine; but for the last six months the sand had disappeared, whilst the pain in the neck of the bladder, the ureters, and kidneys, had become aggravated. The urine was alkaline, with a mucous purulent sediment. Micturition was frequent, painful, tedious, but no retention had happened. He had followed steamboating on the Mississippi river till about four months ago, when the distress of his urinary organs compelled him to retire. Any exercise gave him exquisite pain, which became relieved whenever he resumed the sitting posture with the feet elevated, in which position the stone was thrown backwards off the inflamed neck of the bladder. Convinced himself that calculus in the bladder was present, still fearful of the results of an operation, he suffered on till life became a burden, when he placed himself under my care, willing to incur the dangers of lithotomy. Being told by many of his medical friends that the risk of lithotomy, and even of lithotrity, was great, he was not a little astonished when I informed him that there was no danger in removing his stone. He went to my hospital, and on November 18th, 1856, I removed the calculus by incising the membranous part of the urethra, while the patient was under the influence of chloroform, kindly assisted by Drs. Lusk, Henderson, and several other gentlemen. The perinæum was pierced in the median line half an inch in front of the anus; the membranous portion of the urethra was cut upon a grooved staff, held firmly hooked against the pubes, for about one and a quarter inch. The patient being corpulent, there was a considerable depth of the perinæum from the skin to the membranous part of the urethra. A long ball-pointed probe was pushed into the groove of the staff, which was then removed, while the probe glided into the bladder. The index finger of the left hand was now pushed into the neck of the bladder by rotatory movements along the probe, which was then withdrawn. Such, however, was the constriction of the neck of the bladder, irritated by the long-continued presence of the stone, that the point of the finger became completely benumbed, unable to discover its whereabouts. The perinæum, too, being so deep, hardly the point of the index finger entered the bladder, and the stone could not be felt. After proceeding with the dilatation for some time, I had to withdraw the finger in order to relieve it

of its numbness. When dilatation of the neck was effected, the finger discovered the stone on the right side above the neck of the bladder, but firmly adhering to it. There was no bleeding from the wound, but a good deal from the congested neck of the bladder during the attempts to dislodge the calculus, and to bring it within the blades of a strong polypus forceps. With some difficulty it was caught, the concavity of the blades of the forceps being directed downwards, and extracted. The stone, a beautiful specimen, was very hard, white, and studded with very sharp and irregular crystals, of an oblong shape, and of the size of a large pigeon's egg. The bladder was washed out as well as the urethra, and the wound left to itself. Along with the stone there was removed a gristly substance of about the size of a pea, smooth on its outer surface, but containing a milky fluid within. This seemed to have grown from the mucous surface of the bladder, probably produced by the irritation of the calculus. My patient, though very sensitive, suffered somewhat from the effects of chloroform for some days, but hardly any from the operation, though the passing of the urine outwardly over the cut surface occasioned a great deal of pain to him. The stomach appeared to be deranged by the chloroform, for vomiting continued for several days. There was very little febrile excitement; and on the fifth day the patient left his bed, being already able to pass his urine mostly by the natural channel. The case went on admirably; the wound was closed in two weeks, and the patient left the hospital three weeks after the operation during a cold winter season to return to his home in the country. The bladder soon recovered its natural condition, all pain was gone, and strength returned.

Case ix. John Madison Deighton, aged 9, of Wellsburgh, Brook County, Virginia, pale and emaciated from protracted sufferings, was admitted into my hospital on December 4th, 1856. The patient had first shown symptoms of stone in the bladder when he was only two years old, which occasionally continued more or less urging up to the present time. Retention of urine had been frequent, and latterly he urinated every few minutes by day and by night with great agony, occasioning prolapsus ani. For the last two months there had been constant incontinence of urine alternating with retention. For the last two weeks there had been severe pain in the region of the right ureter with swelling, seemingly from distension of the ureter with water. Blood occasionally appeared in the urine, which contained a whitish mattery sediment, and was highly acid. One time, some years ago, the mother of the boy noticed at the place where he had been just urinating, three worms resembling fine thread, sharp at both ends, and white, about two inches long, which she believes had come from his bladder, though more probably they were ascarides vermicularis, proceeding from the anus. There were intermissions of the violent pain, lulling the parents into the belief that the boy was recovering. There is a singular fact in connection with this case, to which the mother of the boy attributes the formation of the calculus, that the child, when very young, would eagerly eat mud and sand; that he would watch his father coming home from work and eat the clay collected about his shoes. He was cured, however of this unnatural appetite by his sister rolling an earthworm in a piece of bread and making him eat it. Vomiting followed, and from that time the morbid craving ceased. One more peculiarity in this case requires to be noticed, the connexion of which with the stone in the bladder is not ready to be explained. The boy's pulse was irregular, intermitting every fourth or sixth beat, the several strokes being unequal, some slower than others. During etherisation, his pulse became regular for a short time; but under the deep coma of chloroform the irregularity reappeared. Though feeble and emaciated, the boy's appetite was tolerably good; his bowels were rather costive. Without any preparatory treatment, on December 5th, 1856, in the presence of several gentlemen, and assisted by Drs. Lusk, Henderson, and Pillichody, the membranous portion of the urethra was incised, the neck of the bladder easily dilated, and a calculus of the size of a large cherry, rough and weighty, easily extracted. The stone measured one inch by three fourths of an inch in diameter. Hardly any blood flowed during the operation, the patient being under the influence of chloroform. The coats of the bladder felt hypertrophied. Very little febrile reaction followed, and on the third day the patient left his bed; the wound closed in a week, and twelve days after the operation he left the hospital for his home. On the second day urine began to flow naturally. On account of the hypertrophy of the muscular fibres of the bladder and the weakened condition of the neck, the calls to make water are still very urgent, and dribbling of urine after micturition continued for some weeks. However, this imperfection, too, has disappeared, the irregularity of the pulse only continuing.

Having witnessed the happy results which have followed the urethro-perineal section for the removal of stone, and having practised both the lateral operation and lithotrity, I need no longer feel any hesitancy in deciding as to the merits of these respective operations, nor need the profession be urged to adopt this new operation, which commends itself by its simplicity, harmlessness, and the certainty of relief. He who has practised it will never resort to any other method; for in every case of stone, with the exception of such very large and hard calculi as cannot be broken by instruments introduced through the previous perineal cut, it is by far preferable to any other operation.

Modern surgery, guided by a more correct and more extensive knowledge of anatomy, physiology, and pathology, aims at simplicity of practice; it glories in being able to restrict the use of the knife, though made painless by the introduction of the anæsthetic agents, to much rarer occasions, and fancies the time not far distant when, through the spreading light of science, *conservatism* will become the surgeon's armour.

Reviews and Notices.

A Manual of Medical Diagnosis. By A. W. Barclay, M.D., Fellow of the Royal College of Physicians, Assistant-Physician to St. George's Hospital. pp. 612. Churchill. 1857.

Dr. Barclay has published this volume for a most legitimate purpose, viz., to supply a want invariably felt by the student when he commences his study of disease at the bedside of the patient. He was prompted to its composition through a recollection of the need he himself had once had for such a guide, and through often hearing from students their wish for a manual of this kind. The pupil naturally requires other aid than that which is afforded him by his clinical teacher; he must not only have the history of individual cases clinically detailed to him, but he also needs to be taught how to set to work to observe them most effectually, and what especially to observe in them. However well primed with a knowledge of the theory of medicine he may be when he enters the hospital ward, he soon finds that all this book-learning avails him nothing until he has discovered how to apply it practically. He stands like one starving in the midst of plenty, because he knows not how to use his instruments for gathering the harvest.

To give this information, to supply this admitted deficiency, is the object of Dr. Barclay's Manual. The task of composing such a work is neither an easy nor a light one; but Dr. Barclay has performed it in a manner which meets with our most unqualified approbation. He is no mere theorist; he knows his work thoroughly, and, in attempting to perform it, has not exceeded his powers. He has kept well to the Horatian maxim: "Sumite materiam vestris qui scribitis æquam viribus." Dr. Barclay writes evidently out of the fulness of his knowledge, and teaches what he himself has put to the test of practice, and has found efficient and good. This volume was not manufactured, as books sometimes are, from the contents of a well selected bookshelf, the literary compiler all the while seated in his easy well stuffed chair; it is the fruit of a large experience, gathered during many years of active labour in St. George's Hospital. The student will find in it a great amount of useful information laid down handily for use. The work is something more than a mere emporium of the facts requisite for diagnosis; it also gives a general history of diseases, such as will excite the curiosity and attract the attention of the industrious student—not merely exercise his memory. The student, in fact, is taught to think while imbibing knowledge. Dr. Barclay has wisely avoided that modern bane of the intellect, the learning-made-easy system of instruction. We can, there-

fore, fairly call his book, manual though it be, comprehensive and philosophic. One, indeed, of the most valuable items in it is the spirit of comprehension which pervades it; and never, perhaps, was there a time when such a spirit was more to be desired in the practice of medicine. The profession now-a-days is so sliced up into bits called specialities, that doctors are apt to take confined and limited notions of diseases; each man has his particular part or organ to take charge of, and by degrees gains such an affection for his *protégé* as at last to believe that no other part of the body is worthy of any consideration; or, again, he so loves some particular method of diagnosing diseases, that he ends by a most supercilious disregard of any other means of arriving at a knowledge of them. What chance would Heberden or Sydenham have of "getting on the rail" of professional repute, in the scuffle now going on among liver, stomach, heart, rectum, eye, lungs, ear, orthopædic, cerebral, renal, fistulary, cancer, etc., etc., doctors? Every man now has his special beat or division as body-guardian, just as a policeman—so much so that a physician *pure sang* is a being scarcely to be met with, and only as a memento of past times. The public have learnt the lesson well, too. We have heard, for example, of a gentleman who had three special doctors in attendance at the same time, one for his stomach, one for his rectum, and a third exclusively for his lungs. Besides, all the world now knows well that there are only certain hospitals that can put crooked legs straight; that only consumption-doctors can cure consumption; that Dr. Fell alone can compete with cancer; that to be "washed whiter than snow", and eased of cutaneous excrescences, the body must be washed by a cutaneous doctor. What can an eye-doctor know of the ear, indeed? or he of the ear concerning the eye? In these days, at all events, there need be no disputings between the belly and the members, when sick, about the undue attention of the doctors to their individualities.

"Whatever is, is right;" and *therefore* we readily acquiesce in the propriety of all this. But, at the same time, we rather suspect that the system works better for the professional special than it does for the patient, in that the doctor, while specially protecting his own pet part, is very often forgetful that it forms only one item of a great whole; and that disease which touches one part touches the whole, and with greater or less effect in proportion to the energy of the agent and the sensitiveness of the part acted on; and that in this wonderful frame of ours, just as in the mighty macrocosm of the universe, not the smallest deviation from the right direction of the natural forces of any one portion of it remains unresented by the whole; unity of contrivance being everywhere manifest; manifest in the individual parts as well as in the perfected being, which is the resultant of the individual parts combined.

Now, Dr. Barclay teaches the student to avoid these pitfalls of exclusiveness; and happy will he be who listens to the lesson, and saturates his medical knowledge early with a spirit of comprehensiveness. He tells him that "the ultimate object of study in all departments of medicine—the object which must ever be kept in view alike by teacher and pupil—is the relief of the patient by the successful treatment of disease." The maxim seems hardly to require notice, so absurdly self-evident is it; but we tell the student to regard it as one of those golden rules of morality of which we all admit the truth in theory, and yet are for ever transgressing in practice. Look, for example, at a highly skilled stethoscopist; you will see him, surrounded by admiring pupils, most curiously pummelling his patient by the half-hour, to decide a shade of less or greater dulness in his percussion-sounds; or investigating some inward pulmonary sound, whether it be a click or a cluck—not splitting hairs, but actually slitting them into quarters. You will see him lingering over these sounds as if he loved them, and as if they were the only matters about the patient with which he had any concern whatever; and his pupils naturally partake of his mode of doing, and so end by falling into the error referred to above. A man who is for ever tapping and listening at the chest with undue eagerness has a natural tendency—for human nature is ever human nature—to treat his patient according to what he *hears*; he forgets that the pulse, the tongue, and the general condition, are items of ten times greater importance as guides to and directors of his treatment. The stethoscope points out the seat of the disease and its nature, but it won't tell the physician how to treat the malady. If the student listens to Dr. Barclay, he won't give way to this one-sidedness; he will never forget the absolute necessity of giving to *all* the phenomena which the diseased body presents their due value, and of forming his *rationale* of treatment upon a fair consideration of them all. He will not only learn how to use the means of diagnosis, but he will also learn how to avoid the abuse of their use. He won't, moreover, fall into the error of himself inventing diseases, as, for instance, certain special uterine doctors have the credit of doing, "who find diseases of frequent or constant occurrence which we search for in vain, except in a very few instances, in the dead body." Neither will he outrage female delicacy, and impair the morality of the sex, by needless local investigations and manipulations of parts when the maladies need no such manual interference, but are to be cured, and cured only, by general treatment; as is the common practice with a set of men who "use any pretext to enrich themselves at the expense of their patients, without regard to morality or propriety"—a truth of shameful notoriety, and honestly expressed by Dr. Barclay. "Be on your guard", he says, "against the fancied excellence of accurate diagnosis, remembering that it is our business to treat diseases, not to be supremely wise." Minute physical diagnosis is an excellent thing in its proper place, and, when handled wisely, does excellent service; but, like all good things, it is, alas! sadly abused.

We have thus given a specimen of Dr. Barclay's generalising spirit in one direction; but the same pervades his whole work, and will, we are sure, induce teachers to recommend it strongly to their pupils. It is impossible for us here to follow the book into its particulars; and, indeed, we think it enough to indicate, as we have done, the importance of the teaching which it offers to the rising generation of medicine, to ensure for it a hearty reception at the hands of the profession. It is the work of a physician and a gentleman.

Periscope.

PSYCHOLOGY.

USE OF OPIUM IN THE TREATMENT OF INSANITY.

Dr. Noble has published the following paper in the *Asylum Journal* for October, 1857:—

Of all the available resources of the Materia Medica, opium, in its beneficial efficacy, is probably surpassed by none. It calms irritability, it soothes pain, it assuages spasm, and restores sleep. And when, in the course of disease, these indications have to be fulfilled, there is no drug like opium upon which we can place such uniform reliance. It is no wonder, then, that its advantages have been solicited, and realised, in the practice of psychological medicine.

In the premonitory and incipient stages of certain forms of emotional insanity, especially those of the melancholic type, the good effects of the salts of morphia, administered from time to time in small doses as first advised, I believe, by Dr. Seymour, appear to be amply demonstrated; and, occasionally, in some of the more acute varieties—those in which maniacal excitement is conspicuous, beneficial results from employment of the preparations of opium have undoubtedly been obtained. I apprehend that, thus far, I only affirm the familiar conclusions of experience. But, of course, opium in the treatment of insanity, like every other remedy in any of the forms of dis-

ease, is liable to abuse; and some of the circumstances of this abuse I propose to illustrate in this paper—circumstances which have arisen within my own experience, and in the responsibility of which I may in some degree have participated. If I appear to admit errors of practice, I must frankly own that I see no humiliation in doing so—at least, if the errors in question have not had origin in culpable ignorance or in wilful inattention. Indeed, I have often thought that if medical men would be as communicative of their errors as of their sound judgments—of their *misses* as of their *hits*, results much more conducive to practical good would in this way ensue, than by publishing unvarying records of real or supposed sagacity.

What are the conditions in mental maladies indicating, and what those contraindicating, the preparations of opium? This question does not altogether admit of a categorical answer. Administered in moderate quantities two or three times a day, in the earlier stages of those cases of emotional insanity which are characterised by restless irritability and an intolerable malaise, opium sometimes relieves, apparently by communicating such a temporary calm to the feelings, as to furnish opportunity for employment of those hygienic and other measures which are fitted to accomplish permanent good. And, again, in some instances of incoherent wandering and maniacal excitement, wherein sleep is rendered impracticable, the somniferous properties of opium would seem to exert a beneficial influence very much after the manner in which the remedy relieves in delirium tremens—procuring for the patient, on awaking from the induced sleep, a decided remission of all the more violent symptoms.

Yet it frequently happens that, at the outset of very decided cases of insanity, the employment of opium seems to produce mischievous effects. Patients become inmates of asylums from time to time who, having been largely treated with this medicine, appear to have become more excited in consequence, more incoherent, less tractable; and who, on ceasing to take narcotic drugs of any kind, progressively improve and in a very short time become tranquil and lucid. Can we by symptomatic phenomena discriminate between the two classes of cases—those in which opium may be administered with reasonable expectations of benefit, and those in which it may be likely to exercise a prejudicial influence?

I think it will be generally conceded that few points of medical practice involve greater difficulty, and that no very complete elucidation of this inquiry can be given. I apprehend that, for the present at least, we must attempt a solution of the problem rather by citation of additional facts of experience, than by appeals to formal or recognised rules of practice. As a contribution in aid, I will relate the particulars of two cases in which, I fear, the unseasonable employment of the acetate of morphia *hastened*, if it were not the efficient cause of, a fatal termination.

Upwards of three years ago, I was requested to visit an elderly lady dwelling in the country, some miles distant from my own residence. She had for some months been the subject of melancholic depression of spirits, which had gradually ensued almost immediately upon the death of her husband. A few days prior to my seeing her, she had begun to exhibit all the symptoms of acute mania, unaccompanied, however, by any violence of disposition; an unceasing babble—a veritable diarrhœa of words, and an absence for some days of all sleep, constituted the prominent features of her malady. For some time, she had taken very little food; and this fact, with loss of rest and a long continued depression of the *morale*, must have greatly lowered the vital tone—a circumstance not very obvious on the surface of things, owing to the very great excitability which she manifested. I found that the surgeon in attendance was administering the acetate of morphia, with a view to obtain sleep, but in doses which under the circumstances were very inadequate; I think the quantity was the fourth of a grain, twice a day. In the consultation which succeeded my own examination of the patient's condition, I stated that I considered sleep to be most desirable, and that if this were not procured, the lady must die exhausted; that larger than ordinary doses, however, were required in these abnormal states of the brain and nervous system; that, in fact, I would give at least a grain of morphia at once; and that, if this did not produce the desired result in about two hours, I would increase the dose, and, indeed, go on progressively, just as we sometimes did successfully in delirium tremens. I omitted to place any limit to the dose, in this recommendation; and my suggestions were acted upon to the letter. It was not intended, on account of the distance, that I should visit the case again; so I requested the medical attendant to apprise me of the future course of the malady, simply as a matter of scientific interest. In a few days afterwards, he informed me by letter that the patient was dead; that he had gradually elevated the doses of morphia, until sleep was at length obtained; that many grains had been taken—how many, I do not remember, but the quantity was certainly enormous—that about fourteen hours had expired before the patient slept, and that the sleep so procured was one from which she never thoroughly awoke. A few hours before the fatal event, it appeared there had been some partial restoration to consciousness, and, upon this occasion, a little nutrition was administered; but very soon she dozed off once more, and finally expired, in about forty-eight hours from the period of my visit.

Now, considering that for some months this patient had been under the distressing influence of melancholia, and that the sources of re-invigoration—sleep and food—had for a long time been but little available, there must have obtained a considerable waste of nervous energy; and it is most probable that, owing to lowered vitality, irrespective of all treatment, fatal exhaustion would sooner or later have terminated the maniacal outbreak. But yet I cannot help thinking that the sleep-compelling extent to which the morphia was given involved an error in practice, and that the issue was at least accelerated by excessive employment of the narcotic drug.

I may here observe, that notwithstanding that I have for years been most hesitating in the use of opium in psychological practice, I have yet so often seen benefit follow its careful administration, that I cannot bring myself to discontinue it in all cases, either of mania or melancholia; although it is probable that, with all imaginable circumspection, we may occasionally encounter disappointment, and even disaster, in its employment.

I will now record a second case, which teaches the same practical lesson as the foregoing one:

A lady, upwards of forty years of age, apparently approaching the so-called "change of life," became melancholic; and having continued so, more or less, for some months, she at length exhibited herself violently maniacal. She was attended by a surgeon of eminent ability and of high standing, and it became a question whether it would not be right to send her to an asylum. Before a decision was taken upon this point, it was agreed that I should be consulted. This was done. The case itself presented no unusual features. The patient had slept badly for months, and scarcely at all for several nights prior to my visit; and, as often happens in such forms of disease, very little food had for some time been taken. In the estimation of the medical attendant, sleep was the prominent requirement; and, in fulfilment of this indication, he was giving very full doses of the acetate of morphia, but without any perceptible effect. I concurred in the view which was taken, very generally; and recommended, moreover, that wine, milk, and other nutrient drinks should be administered, whenever it was practicable to do so. I stated, also, that in my opinion, if there was no material abatement of the symptoms after sleep had been experienced, removal to an asylum would become indispensable. I do not remember the precise dose of morphia to which, by gradual elevation, my associate in the case had already attained; but he now proposed that so large a quantity as three grains should be given, to be repeated in three hours if sleep did not ensue, a proposal to which I assented, suggesting, at the same time, that before the administration of a second dose he should again see the patient. The medicine, in the quantity agreed upon, was given; and when the surgeon again saw her at the hour fixed, not the slightest narcotic or even sedative effect was discoverable. Accordingly, he himself administered the second dose, by which, in about half an hour, I believe, she was fairly overpowered. Although, after some hours heavy sleep, she was capable of being sufficiently roused to take a glass of wine, the sleep itself, barely interrupted for a minute or two, terminated only in that other sleep—the sleep of death!

The foregoing examples of an apparently disastrous issue following the employment of opium in the treatment of insanity, are not taken from amongst numbers; they are quite exceptional in my own experience, and indeed exhaust it; yet still I think them sufficiently striking to suggest the necessity of all possible care in dealing with this medicine under any similar circumstances. The great point of interest in the question is, whether we have any means of determining beforehand the particular cases in which an intolerance of large doses of opium may be reasonably inferred, and of distinguishing them from those wherein we may fearlessly *push* the remedy? Upon this topic I cannot state anything very definite or deci-

sive. I will venture, nevertheless, to offer a few reflections upon this matter, as they have occurred to myself whilst revolving in mind the facts just related.

When Dr. Monro states that insanity is an affection consequent upon decreased vitality, manifesting itself peculiarly and specifically in the cerebral masses, he undoubtedly expresses a very general, if not, as he himself supposes, the universal fact. And, from this circumstance, some might be disposed to rush at once to the conclusion that powerful sedatives must inevitably operate prejudicially upon the functions of structure already exhibiting conditions of depressed vitality. But then much experience would negative so absolute a conclusion. Various forms of morbid action, characterised by depressed vitality, not only tolerate, but are unquestionably benefited by such medicines as opium.

Certain cases of anæmia, of delirium tremens, and of adynamic fever, as well as occasional instances of insanity, certainly show remarkable tolerance of opium and other such drugs. The quantity, indeed, that is sometimes advantageously taken in delirium tremens, and in cases of exhaustion by loss of blood, is, *à priori*, almost incredible. How shall we reconcile this apparent anomaly?

I will here premise a few general observations; and, in the first instance, express my conviction that hereafter a proceeding which regulates itself rather by the etiology of particular maladies than by present symptoms in themselves considered, will be regarded as the best practice; a proceeding which determines the indications of treatment by the *genesis* of disease, rather than by the physical changes discoverable in structure Now let us contrast the ailments which have their starting point, so far as we can judge, in the nervous centres, from causes directly acting upon their functions, with those wherein the primary disturbance is for the most part in the vascular system, in consequence of agencies operating more immediately thereupon. I conceive that, by doing so, we may obtain at least some limited guidance in discrimination of the instances of disease which tolerate sedatives, from those in which their extensive use may be prejudicial, and possibly fatal.

If a parturient woman of strong constitution, and in previously good health, become pulseless and apparently moribund from the sudden occurrence of uterine hæmorrhage, the admirable effects of laudanum in extraordinarily large doses are very demonstrable, and well known to those who are much engaged in obstetric practice. In these cases, the remedy seems to stimulate and uphold the nervous system—thus keeping the patient alive—until the vessels can accommodate themselves to their reduced contents, and until, by alcoholic aids and dietetic agencies, more permanent results can be accomplished, and compensation be obtained for the loss which the blood-vessels themselves have sustained. In such instances as these it is assumed that we have an abundant source of nervous energy to draw upon, and that this vital attribute vigorously reacts, when the peculiar influence of opium is exerted upon it. Again, in delirium tremens, a large proportion of cases *originate* in lesion of the blood—the nervous centres becoming affected but secondarily. Undoubtedly there is an asthenic state of the brain in these instances; but it is one apparently that is attributable to a certain toxic condition of the blood, rather than to primary exhaustion of proper cerebral vitality. Under such circumstances the somniferous effects of opium, whilst invigorating function, appear to antagonise the prejudicial action of the alcoholic poison, and at the same time to facilitate an elimination of the toxic material itself. But, even in delirium tremens, there are numerous examples of opium producing very injurious effects; and I have myself seen one instance in which the sleep provoked went on to death; and I consider that this result may be regarded as not only possible, but probable, in cases wherein the nervous force is already so *used up* by antecedent circumstances, as to make all reaction impossible, and to be itself destroyed entirely, if once overpowered by narcotic agency. The superinduction by opium of sleep in typhoid fevers of an adynamic type is suggestive of similar considerations, and in practice would probably demand the same qualifications. When nervous exhaustion is not direct and quasi-independent, but has its phenomena determined rather by perverted blood, the beneficial action of the medicine will most likely follow the rule which obtains in delirium tremens.

Thus, then, it has occurred to myself that, in the employment of opium in the treatment of insanity, regard should be had to the presumable degree of residual nervous tone, whenever there is question of artificially inducing sleep; and that, in forming a judgment upon this point, prominent consideration should be given to the antecedent circumstances originating any particular malady—to its genesis. In the fatal cases recorded in this paper there had been melancholic depression for some months prior to the maniacal outbreak; and, as is customary in such instances, there had also been a feeble condition of the digestive organs. Deficiency of food and defective sleep had in this manner, in addition to lowness of spirits, been directly and immediately exhausting nervous vigour—nullifying, indeed, its conservative agency. The circulation was feeble, but did not otherwise indicate anything abnormal. And thus we have seen that, when the cerebral and nervous power was fairly *brought under* by the administration of opium, fatal collapse very soon ensued. On reverting in memory to cases in which the results of employing this medicine have been different, I think that in such instances there were grounds for inferring the existence of much residual energy in the brain and nervous system, although temporarily perverted so as to prevent sleep. Of course it will be remembered, from my earlier remarks, that I am not now referring to the mild, soothing influence of small doses of opium, but to the severer, the sleep-*compelling* action of this remedy.

I am somewhat in doubt as to whether, by this reasoning, I shall have made myself quite understood. Anything that so much as resembles speculation is now so unpopular with medical men, that discussions of this nature are very generally passed over, or, if in any way attended to, are rapidly dismissed from mind as misty, obscure, and *unpractical*. But it should be recollected that speculation gives form and consistency to thought, and that thought must always guide practice; and that, in medicine more particularly, the required thought cannot always rest upon phenomena patent to the senses. In this view of things I should like to see a better philosophy pervade our profession; and I have no hesitation myself in giving utterance to a certain measure of speculation; for, indeed, does not this mental process stimulate inquiry and guide investigation? And is it not sometimes inevitably applied in the practical exercise of our art? Why, therefore, as a profession, should we affect to disregard or undervalue it?

But, after all, is not this neglect of even rational speculation on the part of so many members of our body one of the causes why psychological medicine is so unreasonably overlooked? why, in fact, it obtains no sort of recognition, either in medical examinations or in the curricula of medical education? Has not the modern rage for accumulating mere sensible facts, held together by no sort of logical connection, and an almost exclusive attention to the minutest circumstances of physical diagnosis, somewhat prejudiced the professional *mind*, and thus rendered it less competent to grasp many of those larger questions which concern ourselves probably more than any other class of the community? Certain it is that when we would elevate ourselves above and beyond the technicalities of our science and art; and when we are brought for some practical purpose to the enunciation of our philosophical views *coram judice*, the acuteness and comprehensiveness of our mental powers do not usually exhibit to any remarkable advantage. How much of our deficiencies in these respects comes from professional *dislike of speculation?*

BELLADONNA IN EPILEPSY.

The following is an extract from a lecture of M. Trousseau on Epilepsy, published in the *Edinburgh Medical Journal* for July 1857.

M. de Brine, physician of la Trappe, and M. Bretonneau, undertook, twenty years ago, the one in the department of the Orne, the other in that of the Indre and Loire, patient investigations on the results furnished by the administration of belladonna in epilepsy. These gentlemen, supporting their assertions by cases of apparent cure somewhat conclusive, proclaimed the superiority of this therapeutic agent: but its superiority is only sadly relative.

For the last twelve years, I have always under my care, both in Paris and in the departments, from eight to ten epileptics. In some, belladonna has completely failed; in others, it has afforded partial relief; but there are some, a small number it is true, who have derived the greatest advantages from it. The remedy is nothing, the medication is all; the mode of administration, in particular, has in it something almost ritual. The way I act is as follows:—I cause pills to be prepared containing one *centigramme* of extract of belladonna and *one centigramme* of powder of belladonna; I administer daily during the first month only one of these pills, and that at night in

preference, on account, in the first place, of the inconveniences produced by the medicine; and, secondly, because epilepsy, as I have told you, is frequently nocturnal. I give two at a time during the second month, and three the third. But if the belladonna is not easily supported, I do not add a pill oftener than every sixty or even every hundred days. The friends take care to keep a register, on which the grand attacks and the vertigos are rigorously indicated. If, at the end of six months, nine months, or a year of treatment, I perceive a diminution of the frequency, the duration, and the severity of the grand attacks and the vertigos, I persevere, and I insist much more on the belladonna, for I still grapple with the disease. When my patient is without attacks for a year or eighteen months, and the belladonna is otherwise difficultly borne, I relax a little, and suspend the treatment during thirty, forty, or fifty days; but I never fail to return to it, continuing its use during one or two years longer.

By proceeding thus, you will in a great many cases moderate epilepsy; still, I must tell you, that in many others you will produce no effect, or very little. During the last twelve years, I have treated in this manner one hundred and fifty patients, and of this number I have cured twenty! Will they have a relapse?

M. Bretonneau has a larger proportion of cures. He insists very much upon this point, that the doses of belladonna should be increased slowly, so that the poisonous effects of this remedy, which oblige us to suspend its use or diminish the dose, may be avoided, at least during the first eighteen months. It is at least our duty, then, strongly to recommend a mode of medication which renders so great services in a disease which has been hitherto considered incurable.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 5th, 1857.

'CUTE PRACTICE AT SOMERSET HOUSE.

Poor-law medical officers get so wearied and disgusted with the whole question of reform in their own particular department, that they require now and then to be stimulated by the recital of some more than ordinary piece of meanness or shuffling on the part of the Poor-law Commissioners, or some terrible act of dishonesty on the part of Boards of Guardians. We publish this week the particulars of a case in which a most shameful attempt was made by both Commissioners and Board to deprive one of our associates of his legitimate remuneration for professional services. Had we not long been aware of the meanness to which Boards, whether governmental or parochial, will descend in order to save a shilling, or to shift responsibility from their own shoulders, we could not have believed that gentlemen would be guilty of such underhand methods of settling a question as were followed in this case. From the report to be found in our news columns, the full particulars of the cause Cantrell *v.* the Guardians of the Belper Union will be learned; and it will only be necessary here to give an outline of the facts.

On February 13th, Henry Smith, a person in poor circumstances, was thrown from a gig, whereby he incurred a compound dislocation of the ankle, and also a fracture of the leg. The case being urgent, Mr. Street, the assistant-overseer, issued a written order to Mr. Cantrell, the district surgeon, to attend the injured man. That gentleman, as in duty bound, did so; and, probably anticipating some difficulty hereafter about the matter, reported the circumstances of the accident and his attendance to the Board of Guardians, who neither objected to his attendance at the time or at any period during the illness of the man, which lasted until April 4th. On his applying for his fee, however, the guardians refused to allow it; and Mr. Cantrell at once appealed to the Poor-law Commissioners, who ruled that the guardians were not bound to adopt such order—for what weighty reason does our reader imagine? Because it was addressed to Messrs. Cantrell and Webb, and not to Mr. Cantrell as surgeon of the district! Was there ever such a disgraceful attempt to take advantage of the blunder of one of their own officers, to evade payment of a just demand? We fully believe that such an act would have been repudiated by any company of card-sharpers. Let us for one moment ask either commissioners or guardians what kind of position Mr. Cantrell would have been placed in, if, on receiving this letter from the authorised officer for assistance in "a case of urgency", he had coolly returned it by the messenger, with an intimation that, when the address of Messrs. Cantrell and Webb was erased, and that of Mr. Cantrell put in its place on the envelope of the order, then he would see to the condition of the severely injured man? He would have been the talk of the country side immediately as a monster of cruelty; and, in the next issue of the local journal, he would undoubtedly have found, under the head of "Disgraceful Conduct of a Surgeon", a spirited account of his "monstrous disregard of the cries of suffering humanity". Such would have been the effect of Mr. Cantrell's conduct, had he viewed the order in the spirit of the Poor-law Board.

Mr. Cantrell of course determined to try the question in the County Court; and the guardians, strong in the support of the Commissioners, determined to defend it. The objection of the magnates of Somerset House was too 'cute to be lost; the guardians accordingly urged it in their own defence, and adduced arguments in favour of repudiation on their own account. Dr. Webb, the partner of Mr. Cantrell, had, it appears, attended the case; here was a fine opportunity for a quibble. "Dr. Webb had no right to attend except during the illness or absence of the appointed surgeon." Again, "the man was not in the poor circumstances stated"—so urged the solicitor for the defence. The judge, however, made very short work of these unworthy attempts to defeat the justice of the case.

"It was quite clear," he said, "that the plaintiff received an order requiring his attendance within a reasonable time after the accident, and from the Assistant-Overseer, who had an authority to give it. The order was dated the same day, and it was not requisite for the surgeon to wait, nor reasonable to suppose the overseer would, under the excitement of such an accident, deliberately sit down and write an order before the surgeon would attend; but the overseer attended with the surgeon, and knowing Smith's position he gave the order. With regard to the Poor-law Commissioners' objection to the claim by the order being addressed to 'Messrs. Cantrell and Webb,' it could not affect the plaintiff's claim. He considered the surgeon had given great attention in this case, and the patient had also had the additional attendance of Dr. Webb as the plaintiff's substitute. Smith's circumstances were not a matter between the Guardians and Mr. Cantrell. Plaintiff re-

ceived the order of the overseer, he must attend to it or not at his own risk, without inquiry by him as to the man's condition, and he is justly entitled to the amount claimed with costs, to be paid forthwith."

And thus the repudiating Guardians of Belper were brought to book; and the case will, we trust, be remembered as a precedent by all Poor-law medical officers who have to do with shuffling masters.

The letter of Mr. Griffin in the Journal of November 21st, affords another instance of the habit of the Poor-law Commissioners to evade responsibility, and to throw it as much as possible upon the shoulders of the medical officer. Mr. Griffin, it will be remembered, applied to those gentlemen to be allowed to obtain additional professional assistance during a case of amputation; the Commissioners, however, were not to be caught sanctioning on their own authority any such expense. "The more regular course," replies their Secretary, "under circumstances such as you describe, is that the medical officer himself (when he deems it needful to do so) should obtain any additional professional aid which may in his judgment be necessary, and after the operation has been performed, submit the facts to the Guardians. *It then rests with them to determine whether the case was of such an unusual and exceptional character as to warrant them in making a special allowance for the assistance rendered!*" That is, the medical man must bear the expense, and then stand the chance, and the certainty in some cases, of being refused repayment! Well may Mr. Griffin, moved by such injustices as these, determine himself to press on the draft of an Act of Parliament which shall place the Poor-law medical officer in his right position, and settle definitively the rights and duties of his office.

THE WEEK.

It appears that the friends of Mr. West are not at all satisfied with the determination of the Council to elect Mr. Gamgee to the Surgeoncy of Queen's Hospital in place of the former gentleman, on the plea of his having canvassed. One day last week a very numerous meeting was held at the Provident Institution Rooms, Birmingham, at which there was much speechifying; in the course of which the Rev. Dr. Miller stated his intention of discontinuing his private and offertory subscriptions to the hospital! It was urged by others, that the Council had power to rescind a resolution conferring an appointment, but not to reappoint; and finally the Rev. J. S. Bull moved the following resolution:—

"That as subscribers and well-wishers to the Queen's Hospital our first anxiety is the prosperity of the charity; and in reference, as we believe, to this object, this meeting views with great regret the recent proceeding in relation to the election of a surgeon, and regards them as highly irregular as respects the attempt to annul Mr. West's election, such an attempt being a clear invasion of the undoubted privilege of the council; that the subsequent attempt to elect another surgeon was, as it appears to us, attended by a breach of a distinct understanding that no such business should be transacted at the very meeting which professed to depose Mr. West and to elect another surgeon, whereas no such proceeding could properly be taken, except at a meeting specially convened for the purpose. That such a course is calculated to discourage the council in their valuable co-operation, to impair if not destroy the confidence of the public in the institution, and to inflict severe injury upon that excellent and valuable charity; and this meeting does therefore request that measures may be speedily taken to obtain a general meeting of the subscribers to express their opinion of these proceedings.'"

This resolution was passed unanimously. We shall accordingly soon hear what the subscribers generally have to say upon the matter. Meanwhile the hospital has been the theatre of many disgraceful scenes, Mr. West persisting in going round at the same time as Mr. Gamgee—a most unwarrantable line of conduct on his part, especially as we hear that, in all probability, the law will have to decide the question as to who shall fill the appointment after all. Mr. Gamgee has been exercising to the utmost his unfortunate fluency of pen, or, as he expresses it, "wielding the ink-darts of Mr. Gillott's factory"; and we have before us three letters, two addressed to the Rev. Dr. Miller, and the other "To the Ladies of Birmingham," in which, among other pieces of fine writing, he says, "While it is a beautiful, mine is a terrible profession"; and concludes by assuring "Mesdames" that, "unless I find a grave in Birmingham, I shall one day leave it respected, though I came to it five weeks since a total stranger." Mr. Gamgee has, we believe, a very good position; but, we can assure him, he will hopelessly damage it if he lets his pen run away with him, as it is too apt to do on the slightest provocation.

Another medical recipient of the Victoria Cross has been gazetted. Perhaps we may hear of more in the course of the next year: for the reward of merit often comes slowly. Here is the official announcement:

"War Office, Pall Mall, November 18th. The Queen has been graciously pleased to signify her intention to confer the decoration of the Victoria Cross on [among others] Assistant-Surgeon Henry Thomas Sylvester, M.D., 23rd Regiment; date of act of bravery, 8th September, 1855. For going out, on the 8th September, 1855, under a heavy fire, in front of the fifth parallel, Right Attack, to a spot near the Redan, where Lieut. and Adjutant Dyneley was lying, mortally wounded, and for dressing his wounds in that dangerous and exposed situation. N.B. This officer was mentioned in General Sir James Simpson's despatch of the 18th September, 1855, for his courage in going to the front, under a heavy fire, to assist the wounded."

At the Mansion House this week, a case has been heard before the Lord Mayor, in which two persons named Mr. Thomas Piper and Mr. John Young were charged with having unlawfully disinterred and exposed bodies in a state of decomposition in the Roman Catholic burial-ground in Moorfields. Mr. Mitchell, an inspector of City Police, Dr. Letheby, Medical Officer of Health for the City, and Mr. J. Williams, inspector of nuisances, gave evidence that on November 19th, they had found a trench being dug across the burial-ground. About twenty-three or twenty-four coffins were, some partially and others entirely, exposed in various stages of decay; human bones and skulls were placed in heaps; and there was a "most sickening" smell. Several policemen, and a man living in the vicinity, had also noticed the offensive smell; and the latter said it had made him so sick that he was obliged to take other lodgings. The defendants had, Dr. Letheby believed, ceased to do anything likely to be injurious to the public health on his remonstrating with them. They were bound in their own recognisances of £40 each to meet the charge at the sessions.

Association Intelligence.

TO THE HONORARY SECRETARIES OF THE BRANCHES.

The General Secretary will feel particularly obliged if the Honorary Secretaries will inform him, with as little delay as possible, of any subscriptions for the current year received by them since their last lists were forwarded to Worcester.

December, 1857.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Dec. 10th, 6 o'clock.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, AND THEIR VICINITIES.

Three scientific and social meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, and their vicinities, will be held on the under mentioned days:

Friday, December 11th, 1857, at 3.30 P.M., at the Guildhall, Rochester.

Friday, February 12th, 1858, at 4.30 P.M., at the Guildhall, Maidstone.

Friday, March 12th, 1858, at 3.30 P.M., at the Guildhall, Gravesend.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

All members of the South-Eastern Branch may attend these meetings, and be at liberty to introduce any professional friends.

Any member of the profession may, by permission of the Chairman, attend one of these meetings, subject to the rules of the Parent Society.

James Dulvey, *Local Sec. pro tem.*

Brompton, Chatham, December 1st, 1857.

Editor's Letter Box.

THE RESIGNATIONS AT ST. MARY'S HOSPITAL, MANCHESTER.

Sir,—The grievances existing at St. Mary's Hospital, which have led to the resignation of five of the medical officers, are so fully set forth in their statements as to render unnecessary any further explanation. It is worthy of remark, however, that, up to the present time, no answer, official or otherwise, has appeared; unless, indeed, the letter of Dr. Radford, in the Journal of the 21st inst., be considered as such.

The question naturally arises, Who formed such objectionable rules? Probably they were drawn up while the five surgeons were in office, and doubtless by means of a committee. It is certain that these five officers had nothing to do with their formation; but, as it is impossible that they could have been framed without the aid of one or more medical men acting in conjunction with the Board, it becomes rather probable that some one or more of those still connected with the hospital gave their aid in the making of laws so objectionable to their colleagues. In proof of this, I need only refer to the general nature of the rules in question. It is perfectly impossible, also, that the affairs of a hospital like St. Mary's can be carried on by any Board, without the presence and advice of some one well acquainted with the medical departments of the institution. Cases must arise at Board meetings in which the opinion of a medical man is alone of any service; and therefore I think that it must have been the custom at St. Mary's for some one or more of the medical officers to have been present at the Board. The five surgeons who have resigned were not allowed to give their advice; whether any of those now remaining at the hospital took part in the meetings, I do not know; but if they did, I am afraid that they cannot exculpate themselves from the charge of having had something to do with the resignation of their colleagues. I think I can trace in this hospital what I know sometimes obtains in others, that one medical man domineers over his colleagues by means of the Board. The sooner this is unmasked, the better; for it cannot fail to be the cause of endless disputes, and thereby hazard the well-being of the hospital, and the status of those connected with it. Either make all the medical officers *ex officio* members of the Board, or else none, and then let the Board see how matters will go on without them. But the admission of one or a few, to the exclusion of the rest, is as unjust as it is impolitic.

It is almost a pity that the medical officers say anything about students' fees; for, during the last three years, the number of students paying fees to the hospital has only been two, and the fee is only two or three pounds. To complain that this sum has not been given to them, instead of appropriated to the funds of the hospital, is making a mountain of a molehill; and it is a pity to have spoilt their otherwise satisfactory explanation by a complaint like this.

The manner in which the medical officers were treated after their resignation was by no means creditable. Of course they attended as usual to their hospital duties, and expected to do so until their successors were appointed. Accordingly, one of them went as usual to see his out-patients: he was told that they were no longer his, that arrangements had been made to supply his place until his successor was appointed, and that he had nothing further to do with the treatment of his cases; and this was a few days after a vote of thanks had been given to him by the Board. They did not even send the surgeon a message; but gave him the trouble to come to the hospital to receive the message from the house-apothecary. Such treatment needs no comment, except that some people considered it incompatible with a vote of thanks.

With reference to Dr. Radford's letter, if intended in any way to answer either the protest of the surgeons or your remarks in a former Journal, it singularly fails in so doing. He states that "although only two remained on the ordinary list [there is, in reality, only one], yet the others considered it right, both as a duty and as an act of humanity, to offer their services until other surgeons were appointed." In other words, the others considered it their duty to offer, or to be allowed to offer, a gratuitous insult to their colleagues, by suddenly, and without warning, taking their patients from them.

As for their "humanity", the effect of this is best illustrated by the manner in which the poor fared. A case which occurred a few days back is one in point. A woman was taken in labour; serious symptoms set in; and the surgeon wished to operate, but could not without a consultation (according to rule). For this he had to send a mile and a half; but, before the other arrived, the woman was beyond their skill, and shortly died. Had the other surgeons been allowed to act, a consultation might have taken place within a few minutes, and the woman's life saved. That this favourable result might have been attained, was rendered probable on a *post mortem* examination, and still more so by the fact that, at the termination, the husband received a sum of money from two of the gentlemen who attended the examination. Such giving of hush-money looks very awkward; and it would appear from it that the well-being of the poor is, at all events, not enhanced by the display of humanity. The above statement is correct, for I had it voluntarily from the recipient of the donation.

Dr. Radford says that "the Board are ready at any time to vindicate their conduct". Can they vindicate their conduct in treating the five surgeons so uncourteously? Can they vindicate their conduct in allowing five efficient officers to give up their posts because of a few ridiculous rules, which might easily have been rescinded, and ought never to have been made? And this when they must have known that it would be impossible (as has since been proved), under the present rules, to get others to fill their places; for, at the last vacancy, only two candidates appeared. Can the Board vindicate their conduct in the above case, where they reversed the order

of things, and pay instead of being paid? I think not; but, until they do, I affirm that they are not anxious for the prosperity of the institution, that they are not anxious for the advancement of medical science, and that they are certainly not anxious for the welfare of the poor.

I have forwarded to you by the same post a copy of the *Manchester Guardian*, in which are two letters in corroboration of my statements. The insertion of one or both in your Journal, when space allows, might be of service.

I am, etc., A Manchester Student.

Manchester, November 24th, 1857.

P.S. I have omitted to state that the *post mortem* examination disclosed a ruptured uterus, without obstruction of any consequence.

MEDICAL STUDENTS AT ST. BARTHOLOMEW'S.

Sir,—Having the other day a little leisure time, I went to attend one of the chemical lectures at St. Bartholomew's Hospital. I was not little amazed to find some of the students conducting themselves in the most disgraceful and undignified manner. Some of them, who had organised themselves as a body on the back seats, created such noise and confusion by undergoing various absurd and ridiculous performances, that the lecturer was frequently obliged to stop; for those on the front seats could not understand what he said, nor could the lecturer himself connect his ideas among such disturbance and clamour. The lecturer, after repeated solicitations for quietness, was finally compelled to state that he would suspend the lecture if some of the gentlemen present would not desist from such ignominious proceedings. Their conduct was more worthy of schoolboys than of young men, whose age and education should teach them more civility and manners.

Such scene at lecture was quite astonishing to me. For I attended two courses of chemical lectures at another London school, but never saw a student forgetting himself so much as to make it his great effort to interrupt the lecturer. I hope that those few of the students of St. Bartholomew's to whom these remarks relate will not bring odium and shame upon that respectable school, and on medical students generally, by indulging in childish and impudent amusements during lecture time.

I am, etc.,

One who wishes Reformation.

November, 1857.

[Our readers will be careful not to take such noisy youths as those to whom our correspondent alludes as a type of the present race of students. The frequenters of the back benches at St. Bartholomew's Hospital must be only a few specimens of a *genus* nearly extinct there and in all British schools. Editor.]

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Brady. On November 24th, at King's Road, Brighton, the wife of John Brady, Esq., Surgeon, M.P., prematurely, of a daughter, stillborn.

Brown. On November 29th, at Streatham, Surrey, the wife of Alexander Brown, Esq., Surgeon, of a daughter, which survived but four days.

Fasken. On November 17th, at Chatham, the wife of — Fasken, M.D., Royal Marines Light Infantry, of a son.

Garrod. On November 25th, at 84, Harley Street, the wife of Alfred Baring Garrod, M.D., of a son.

Macpherson. On November 27th, at Moville, Ireland, the wife of John Macpherson, M.D., Bengal Medical Establishment, of a son.

Martin. On November 26th, at Reigate, the wife of *Peter Martin, Esq., Surgeon, of a daughter.

Scott. On November 29th, at Portsea, the widow of the late E. J. Scott, M.D., of a posthumous son.

Underhill On November 25th, at Tipton, Staffordshire, the wife of *Thomas Underhill, Esq., Surgeon, of a son.

MARRIAGES.

Blackett—Cutler. Blackett, Joseph Byron, Esq., Surgeon, of 28, Green Street, Grosvenor Square, to Caroline Mary, youngest daughter of — Cutler, Esq., of 8, Hanover Street, on November 25th.

Christian—Ogle. Christian, J. Stanley, M.D., of Ovington Terrace, Brompton, to Julia, daughter of Edward Lodge Ogle, Esq., of Gloucester Crescent, South Belgravia, on November 25th.

Hartley—Vale. Hartley, the Reverend Henry Robert, curate of St. Mary's Sowerby, Yorkshire, to Martha Catherine Mary, eldest daughter of *James Theodoric Vale, Esq., Surgeon, of Birkenhead, on November 11th.

Hubbard—Biddell. Hubbard, Henry W., Esq., Surgeon, of Queen's Road, Notting Hill, to Fanny, only daughter of George Biddell, Esq., of Bayswater, at Greensted, Essex, on December 1st.

Young—Edwards. Young, Christopher, M.D., of Yarm, Yorkshire, to Emma, youngest daughter of the late Thomas Edwards, Esq., of Denbigh, at Rhyl, on November 26th.

DEATHS.

Jarvis. On November 29th, Elizabeth, eldest daughter of John Jarvis, Esq., Surgeon, of Hart Street, Bloomsbury.

Noad. On November 27th, at Wokingham, Berks, aged 3½ years, George Rowland Elliott, eldest son of George William Noad, Esq., Surgeon.

Olmsted, John H., M.D., of Staten Island, New York, at Nice, aged 32, on November 24th.

Phillips, James, Esq., Surgeon, of Bethnal House, Bethnal Green, aged 50, on November 27th.

Prichard, Octavius, M.D., late of Colchester, at Northampton, aged 72, on November 28th.

APPOINTMENTS.

*Clay, Charles, M.D., appointed Surgeon to St. Mary's Hospital, Manchester.

*Crosse, Thomas William, Esq, elected Assistant-Surgeon to the Norfolk and Norwich Hospital.

Hourten, James C., M.D., of the Morningside Asylum, elected Medical Superintendent of the Lunatic Asylum, Montrose.

Nesfield, S., Esq., appointed Surgeon to St. Mary's Hospital, Manchester.

Pettinger, G. W., Esq., appointed Surgeon to St. Mary's Hospital, Manchester.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, November 12th, 1857:—

Elliot, John, Kingsbridge, Devon
Galloway, James, Penrith, Cumberland
Hartley, John Henry, Thames Ditton, Surrey
Marriott, Charles Hayes, Kibworth, Leicester
Marshall, John
Neal, James, Birmingham
Ormerod, Henry, Portland Square, Bristol
Rendle, Charles Bainbridge, Plymouth, Devon

As an Assistant—

Britton, Thomas, Doncaster

Thursdays, November 19th and 26th:—

Crammer, Samuel Richard, Canonbury Middlesex
Inman, Joseph Hayton, Yorkshire
Jepson, George Theophilus, Hampton, Middlesex
Morgan, James Lawrence, Pontrilas, Hereford
Stacey, George, Hornsey
Wise, Thomas, Plumstead, Kent

University of London. M.B. Second Examination, 1857. Examination for Honours.

Physiology and Comparative Anatomy.

Walker, T. J. (University Medical Scholarship and Gold Medal), University of Edinburgh
Bond, Francis Thomas, B.A. (Gold Medal), Queen's College, Birmingham
Sadler, Michael Thomas, B.A., St. Bartholomew's Hospital
Lawrence, George William, King's College
Laurence, John Zachariah, University College
Anstie, Francis Edmund, King's College
Ord, William Miller, St. Thomas's Hospital
Edwards, St. John, University College
Giles, Samuel, B.A., Guy's Hospital

Surgery.

Buzzard, Thomas (University Medical Scholarship and Gold Medal), King's College
Ord, William Miller (Gold Medal), St. Thomas's Hospital
Fawcus, James, University College
Bond, Francis Thomas, B.A., Queen's College, Birmingham } Equal.
Laurence, John Zachariah, University College }
Lawrence, George William, King's College
Cribb, Arthur John, Middlesex Hospital
Fox, William Tilbury, University College
Meadows, Alfred, King's College
Sadler, Michael Thomas, B.A., St. Bartholomew's Hospital
Walker, Thomas James, University of Edinburgh
Whitford, Antony, King's College

Medicine.

Fox, W. Tilbury (University Medical Scholarship and Gold Medal), University College
Lawrence, George William (Gold Medal), King's College
Edwards, St. John, University College
Walker, Thomas James, University of Edinburgh
Fawcus, James, University College
Anstie, Francis Edmund, King's College } Equal.
Propert, John Lumsden, King's College }

Midwifery.

Ord, William Miller, (Gold Medal), St. Thomas's Hospital
Meadows, Alfred, King's College
Cribb, Arthur John, Middlesex Hospital }
Giles, Samuel, B.A., Guy's Hospital } Equal.
Walker, Thomas James, University of Edinburgh }

M.D. Examination, 1857.

First Division.

Andrew, Edwyn, University College
Blake, James Gibbs, B.A., University College
Brown, Thomas Edwin Burton, Guy's Hospital
Clapton, Edward, St. Thomas's Hospital
Evans, David Conway, King's College
Footman, John, University College
Maudsley, Henry, University College
Ryan, William Burke, Jervis St. & Middlesex Hospital
Scurrah, John Dewherst, University College
Stevens, Henry, King's College
Thorowgood, John Charles, University College
Tunzelmann, Julius Woldemar von, University College

HEALTH OF LONDON:—WEEK ENDING NOVEMBER 28TH, 1857.

[*From the Registrar-General's Report.*]

The sickness which is now so generally diffused throughout the metropolitan population continues to develope itself in a high rate of mortality. The deaths registered in London, which rose in the previous week to 1382, were of nearly equal amount in the week that ended last Saturday (November 28th), the number having been 1373. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1183. But the deaths of last week occurred in an increased population; and with the view of comparison the average must be raised in proportion to the increase, in which case it will become 1301. It appears, therefore, that the deaths now returned exceed by 72 the number which the average rate of mortality, as ascertained for the close of November, would have produced. At this period, in 1847, influenza began to be very prevalent, and in a population which was not so great as it is now, the deaths from all causes rose to 1677.

The births registered last week exceeded the deaths in the same period by 227.

In this return, the number of cases in which influenza is recorded under its specific designation, is only 13; in the previous week it was 9. The epidemic has certain distinguishing features; and in all cases where medical attendants observe it, either as the primary disease, or as supervening on pulmonary or other complaints, it is important that it should be specially mentioned by that name which is both popular and scientific. It deserves to be noticed that the deaths referred to diseases of the respiratory organs, which class does not include phthisis in the tables, were precisely the same numerically as those in the same class in the previous week—the number in each case having been 390. This number exceeds the corrected average of ten weeks corresponding with last week by 102. Of the 390, by far the largest proportion arose from bronchitis, namely, 217 deaths, which are thus distributed according to the ages at which they occurred: seventy-five occurred in the period from birth to 20 years; only five between 20 and 40 years; thirty-three in the period 40—60; eighty-seven at 60—80; and seventeen at 80 years and upwards. But to correctly estimate the widely different degrees in which bronchitis is fatal in different stages of life, it is evident that these numbers must be compared with the numbers living at the several periods.

In the last four weeks the deaths from bronchitis increased or decreased in the following numbers:—116, 152, 227, and 217; pneumonia, 115, 108, 127, and 143; hooping-cough, 40, 45, 53, and 58; phthisis, 137, 151, 159, and 171.

The deaths of six nonagenarians and one centenarian are included in the returns. Amongst the former are two women, whose respective ages were 95 and 96 years. The most advanced in life was a man who died in Trafalgar Road, Greenwich, said to have been 100 years old.

Of 43 cases in which scarlatina was fatal, four occurred in the sub-district of St. John, Westminster, and also four in that of Lambeth Church (second part). A child died of starvation, a verdict of manslaughter having been recorded in this case; and a crossing-sweeper also perished from starvation. A man who had been employed by a farrier died from glanders.

Last week the births of 803 boys and 797 girls, in all 1600 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1487.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·575 in. The instrument fell from 30·18 in. at the beginning of the week to 29·09 in., on Tuesday, the lowest point in the week. The mean temperature of the week was 41·6°, which is 0·4° above the average of the same week in 43 years (as determined by Mr. Glaisher). The highest reading of the thermometer was 55·3°, on Monday; and the lowest 30·5°, which occurred on Wednesday. The mean daily range of the week was 13·4°. The difference between the mean dew-point temperature and the mean air temperature was 1·9°. The mean temperature of the water of the Thames was 45·9°. The wind on the first three days was in the south and south-west; afterwards, it was mostly in the north-east. The amount of rain measured was 0·78 in., most of which fell on Tuesday. The first snow this winter fell on the morning of Thursday, in large flakes.

IMPORTANT TO POOR-LAW SURGEONS: SUCCESSFUL ACTION FOR RECOVERY OF FEES.

At the Belper County Court, on November 19th, 1857, an action was tried before Joseph S. Cantrell, Esq., Judge, brought by Mr. W. Cantrell, Surgeon of the Wirksworth District in the Belper Union, against the Board of Guardians, to recover the sum of £5, due for attendance upon a poor man named Henry Smith, who, on February 13th last, sustained a compound dislocation of the ankle, and fracture of the leg, by being thrown from a gig. Mr. Stone, solicitor, of Wirksworth, appeared for the plaintiff. The defendants were represented by Mr. Greaves, of Belper.

Mr. Stone, in stating the case, said that, on February 13th last, Mr. Cantrell was called by the assistant-overseer of Wirksworth to attend a poor man named Smith, who had met with a compound dislocation of the ankle, and fracture of one of the bones of the leg. By Article 206 of the General Consolidated Order, an overseer was entitled to give an order in case of sudden and urgent necessity; and by Article 177, the surgeon, upon giving the requisite attendance upon a case like that of Mr. Smith, was entitled to the fee of £5 over and above his regular salary. It happened that, at the time of the accident, Mr. Cantrell was from home; but Dr. Webb, his partner, attended at once, and reduced the dislocation. Mr. Cantrell saw the case in an hour afterwards, and attended daily, and sometimes several times in a day, to April 4th. The fee having been disallowed by the guardians, Mr. Cantrell appealed to the Poor-Law Board, who advised his obtaining the fee from Mr. Street, the overseer who had given the order; the Board considering that the guardians were not bound to adopt the overseer's order, as it was addressed to "Messrs. Cantrell and Webb". Mr. Cantrell took a different view of the matter; and hence the present action.

Mr. Cantrell was examined, and cross-examined by Mr. Greaves at some length, as to his appointment, his attendance

and that of his partner upon the case, and his personal knowledge of the circumstances of Smith.

Mr. Benjamin Street, Assistant-Overseer of Wirksworth, deposed that, on February 13th last, he went to the scene of an accident, and found that Henry Smith and two other persons were seriously injured. He knew Smith to be in destitute circumstances, and therefore directed the parish surgeon to attend him. He afterwards wrote the order produced, and sent it to the surgeon. Smith must have had parochial relief had not he (Mr. Street) raised a subscription for his family.

Mr. Greaves, in reply, argued that Mr. Cantrell could not recover: first, because the man Smith was not in the indigent circumstances represented, but was able to pay the surgeon himself; secondly, because the order was addressed to "Messrs. Cantrell and Webb", and therefore the guardians were not bound to adopt it as an order upon the medical officer of the Union; and thirdly, because, although Mr. Cantrell had attended the case himself, on some occasions, when Mr. Cantrell could well have attended, his partner Dr. Webb had also officiated. He held that it was the duty of a substitute only to attend during the illness or absence of the appointed medical officer. The guardians of the Belper Union believed that Mr. Cantrell was entitled to his fee, but not from them; and, acting under the advice of the Poor-Law Board, they had opposed his demand.

Mr. Greaves here read the following letters from the Poor-Law Board to Mr. Cantrell, in reply to communications from that gentleman.

"No. 18307 (B), 1857.

"Poor Law Board, Whitehall (S.W.), 13th June, 1857.

"Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 21st ultimo, respecting your claim to be paid the sum of £5 for your services in the case of a poor person named Henry Smith.

"In reply, I am directed to state that the guardians of the Belper Union have forwarded to the Board the order for medical attendance given by Mr. Benjamin Street, the assistant-overseer of Wirksworth. The Board perceive that the order was addressed to 'Messrs. Cantrell and Webb'; and they do not, therefore, consider it can be regarded as an order upon the medical officer which the guardians are bound to adopt; and, as they decline to do so, the Board are of opinion that you have no legal ground for complaint againt the guardians. They are not aware, however, of any reason why Mr. Street, the assistant-overseer, who called upon you and your partner to attend Henry Smith, should not be applied to, to pay a proper compensation for the services which you rendered in his case. It will be open to the assistant-overseer to charge the amount in his account, assuming that the case was one in which he was justified in providing medical attendance at the cost of the poor-rates. "I am, sir, your obedient servant,

"Courtenay, *Secretary*.

"To William Cantrell, Esq., Medical Officer of the Wirksworth District, Wirksworth, Derbyshire."

"No. 22248 (B), 1857.

"Poor-Law Board, Whitehall (S.W.), 26th June, 1857.

"Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 17th instant, in reference to the fee which you have claimed for attendance in the case of Henry Smith.

"I am directed to state that the question at issue between you and the guardians of the Belper Union, in the case in question, is one of strict legal liability; and the Board see no reason to depart from the opinion which they expressed in the letter which they addressed to you on the subject on the 13th instant. "I am, sir, your obedient servant,

"Courtenay, *Secretary*.

"To William Cantrell, Esq., Medical Officer, Wirksworth, Derbyshire."

His Honour inquired whether Mr. Greaves was prepared to adopt those letters.

Mr. Greaves replied in the negative, but stated that he was extremely anxious to do the best he could for his clients, who believed that the overseer was the person liable for the claim.

In giving judgment, his Honour said it was perfectly clear that Mr. Cantrell had received a written order to attend the man Smith, within a reasonable time, from a competent authority; for the order bore the date of the day of the accident. The nature of the case was of such a serious character that it could hardly be expected that the overseer of Wirksworth would deliberately sit down, in the midst of such excitement as usually prevails after an accident of this kind, to write an order for the parish surgeon; nor would the surgeon, actuated by common feelings of humanity, refuse to interfere in so desperate a case until such order had been given him; but the overseer, who knew the man's circumstances well, having promised the surgeon an order, on reaching his home he wrote it and sent it to him. With regard to the order being addressed to "Messrs. Cantrell and Webb", he held that, whatever it might be with reference to Dr. Webb, it was essentially an order for Mr. Cantrell, and could not affect his claim as medical officer of the Union. He considered it absurd to suppose that a surgeon in extensive practice, who necessarily had a great many cases to attend to, could not employ occasionally a qualified gentleman as his substitute; and in this case he certainly thought that the surgeon had given very great attention. The medical man had nothing to do with Smith's circumstances. He received the order, was bound to attend to it without inquiring about the man's condition in life, and was therefore most justly entitled to a verdict, with costs.

Alleged Remedy for Hydrophobia. At a recent meeting of the Academy of Sciences in Paris, M. Guérin-Méneville sent in a letter on the *Cetonia aurata*, or rose beetle, which for some time past has engrossed the attention of naturalists as a remedy for hydrophobia. M. Méneville stated, from personal experience, that in the governments of Voroneje and Koursk, in Russia, it is customary to give dogs half a beetle in powder from time to time, mixed with bread crumbs, as a preservative against that disease; and that the Russians affirm that there are persons who cure hydrophobia radically by means of the fresh juice of a certain plant. He further suggested that the want of freshness may be the reason why these juices preserved in chemists' shops do not produce the desired effect.

Royal College of Physicians. The President and Censors of the Royal College of Physicians having learned that in the manufacture of tinctures and some other preparations of the *Pharmacopœia*, it has latterly become the practice of certain druggists and manufacturers to use methylated in the place of pure spirit, hereby declare their disapproval of such an unauthorised departure from the instructions laid down in the *Pharmacopœia*.

Dispensers for the Army. Major S. G. Bunbury, commanding the Medical Staff Corps at Chatham, has received an order directing him to hold in readiness thirty orderlies, wardmasters, and stewards of that corps, who are to proceed to India for the purpose of being employed as assistant dispensers in the military hospitals.

TO CORRESPONDENTS.

Communications have been received from: — Mr. R. H. Leach; Mr. John T. Jones; Mr. G. Mitchinson; One who wishes Reformation; The Registrar of the University of London; Mr. J. S. Gamgee; Mr. P. C. Price; Mr. I. B. Brown; Mr. C. A. Barrett; Mr. D. Phillips; Dr. Markham; Mr. Holmes Coote; A Manchester Student; Mr. John Birkett; Mr. James Reid; Dr. William Webb; Mr. Delves; Mr. T. Holmes; Dr. Bader; Mr. H. Duncalfe; Mr. I. Harrinson; Dr. Routh; Mr. Booth Eddison; Mr. Thomas Underhill; Mr. T. F. Edwards; Mr. Hugh Neill; Mr. John Clarke; Dr. R. P. Cotton; Mr. C. R. Thompson; Mr. Peter Martin; Mr. Skidmore; Mr. James Dulvey; and Dr. R. C. R. Jordan.

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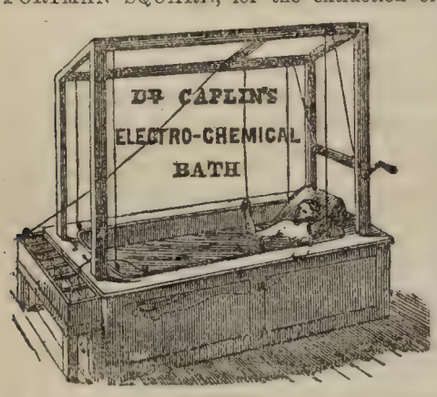
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Saint Mary's Hospital, Quay Street,

MANCHESTER, December 5, 1857.

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43. That every candidate for the office of Physician be a graduate of one of the Universities of Great Britain or Ireland, or a Fellow, or a Licentiate of one of the Royal Colleges of Physicians of Great Britain or Ireland; and that every candidate for the office of Surgeon shall possess a diploma of one of the Royal Colleges of Surgeons of Great Britain or Ireland, and shall also be a Licentiate of the Worshipful Society of Apothecaries, London; but that no surgeon be eligible to hold the office of Surgeon in ordinary to this Hospital, unless he resides within a distance of one mile in a direct line from the Manchester Royal Exchange. And any Surgeon in ordinary removing beyond the said distance, shall become disqualified from holding his office, and the same shall become vacant accordingly.

44. That any Candidate for any honorary medical office connected with this institution shall be disqualified for such office if he canvasses by advertisement, circular, or personally for such situation.

45. That no Surgeon shall be eligible as a Candidate for the office of Surgeon to this Hospital who is Surgeon to any Club, or Sick Society of any description.

46. That upon the election of any Medical Officer to this Hospital, he shall at once resign all other honorary medical appointments he may hold at the time; and that if any Medical Officer of this Hospital shall, in future, be appointed Medical Officer to any other Hospital, Medical Charity, or to the Militia, he shall no longer remain a Medical Officer to this Hospital.

THOMAS SOUTHAM, LL.D., Honorary Secretary.

9, St. James's Square, December 5, 1857.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. L.] LONDON: SATURDAY, DECEMBER 12, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

FEMORAL HERNIA OF LARGE SIZE: OPERATION: PROBABLY RADICAL CURE.

Under the care of PRESCOTT G. HEWETT, Esq.

CHARLOTTE G., aged 46, was admitted on October 26th, under the care of Mr. Prescott Hewett. She had been suffering from femoral hernia for eleven years. The hernia had been strangulated six years ago, and operated on with success at this Hospital. About three weeks before her present admission she was in the Hospital with the hernia incarcerated, and was treated by Mr. Cæsar Hawkins; she had at that time constipation, sickness, and slight symptoms of peritonitis. After the prolonged application of ice, the tumour was sufficiently reduced to allow of the application of a truss, and she left after about a fortnight's stay in the house. The night after her discharge the bowels were very freely open. On the following day she began to vomit, and the vomit soon assumed a stercoraceous character. She felt violent pain all day, but still continued in bed with the truss on. Next evening she applied at the Hospital, in consequence of the increase of the pain. The hernia was found to have descended behind the truss. For a femoral hernia, it was of an unusually large size—as large as a cricket ball. It was exceedingly painful to the touch, and the pain extended over the belly, which was tympanitic as high as the umbilicus. The countenance was much depressed and anxious; the extremities cold; pulse weak; tongue coated. Ice to the tumour, and the application of the taxis under chloroform having been tried in vain, the operation was performed. The skin and other coverings were closely adherent to the sac, which was very thick. The sac contained a large quantity of dark coloured fluid; several inches of bowel, which at first looked like the large intestine: it was very much dilated, and its coats, thickened and leather-like, presented several large patches of blood extravasated under the serous covering. This was evidently the result of the pressure of the truss on the bowel, when it was down. The stricture was not very tight; but even after dividing the ring, the bowel could not be reduced. On pulling the bowel down, and examining the parts carefully, a strong, thick fibrous band was found deep within the ring, at its upper part; this it was which prevented the reduction of the gut. After the division of this band, the bowel easily returned. A ligature was applied to a branch of the epigastric artery, which had been divided in cutting deep. Such was the size of the ring that it was found difficult to keep the bowels within the belly. A large pad and graduated compresses were therefore placed over the ring, and a bandage applied. The symptoms were completely relieved by the operation. The pressure was kept up over the ring, without interference, for two days; it was then removed, as the patient began to complain of pain in the groin. On examination, the neck of the hernial sac was found blocked up by adhesion, and the sac itself formed a large tumour, no longer communicating with the peritoneal cavity; the tumour was very hard, and evidently filled with fluid. Pressure was reapplied over the ring, and removed again in a couple of days. The tumour in the groin had increased in size, and was exceedingly tense and painful when handled—points of matter oozing through the sides of the sutures used for keeping the lips of the wound together. The wound healed, and the sutures were removed. Poultices were applied. The skin over the tumour subsequently became red, and pressure forced matter through the openings of the sutures. The wound gave way at the lower part on the following day, and a large quantity of matter escaped. From this time the case presented the appearance of a common circumscribed abscess. The matter was gradually evacuated; the pouch contracted; the skin puckered; and, when the patient left the Hospital, on the 5th instant, the tumour was quite solid, and not larger than a walnut.

REMARKS. The above case is interesting in many points. It shows the changes which are effected in the intestine by long-continued pressure and irritation in a hernial sac, whereby the bowel becomes thickened and altered in character so that the small intestine has much the appearance of the colon. The absence of the muscular bands, and appendices epiploicæ peculiar to the latter, are sufficient to establish the diagnosis. It also affords an instance of a difficulty frequently experienced in femoral hernia; viz., the presence of a band deep within the neck of the sac, which, although it does not appear to be the principal agent in the strangulation, affords effective resistance to the return of the gut. Whether this band is or is not the deep crural arch is a question more curious than useful. In fact, surgeons of the present day lay much less stress than used to be the fashion upon the precise seat of stricture—a question which interested Sir Astley Cooper so strongly, that (if the reporter of his lectures is to be trusted) he declared that no words could express his contempt for the man who would assert that Gimbernat's ligament was the usual seat of stricture in femoral hernia. The most interesting part of the case, however, was the apparently complete obliteration of the very large opening under the application of pressure. That this did really occur, may be reasonably conjectured from the complete isolation of the large suppurating cavity formed by the rest of the sac, while that of the abdomen remained free from any trace of inflammation.

UNIVERSITY COLLEGE HOSPITAL.

PULSATING BRONCHOCELE TREATED BY THE INJECTION OF PERCHLORIDE OF IRON.

Under the care of J. E. ERICHSEN, Esq.

[*From Notes by* V. BAZIRE, ESQ., *House-Surgeon.*]

HARRIET C., aged 28, was admitted on September 23rd, under Mr. Erichsen's care, on account of a pulsating tumour of the thyroid body. She was in good general health, and had been a domestic servant for about three years, up to the time of her admission. She was a native of a village in Buckinghamshire (Quentin), situated at the foot of a hill. Thick woods surrounded her house; and the water was peculiarly hard. One of her sisters was affected with some swelling of the neck, which had been treated by means of iodine externally with benefit. Such swellings, however, were not common, as far as she knew, in that part of the country. The tumour had made its appearance at about the age of sixteen, and had grown very gradually, and without producing any inconvenience, until two years ago, when it began to grow more rapidly; and throbbing, which had previously been hardly noticed (though always present), became more evident. She had been treated for a short time, about three years before the present time, with ointment, and the application of leeches to the tumour. This produced some benefit, but was not persisted in.

On admission, a rounded tumour, larger than a fœtal head, not pediculated, was seen at the root of the neck. It extended from the hyoid bone above to the upper part of the chest below, where it covered a portion of the sternum, and appeared to have some attachment to it. At the side, it extended behind the sterno-mastoid to the spinal column, inclosing the carotid vessels. There was very distinct pulsation, especially at the right side, with heaving impulse. The external surface was smooth, with numerous anastomosing vessels shining through the integuments. Two arteries, of about the size of the

brachial, lay immediately beneath the skin on the right side; one extending from below obliquely upwards; the other a little higher up, running inwards and downwards. On the left, a smaller artery could be felt; and on this side the carotid artery could be detected issuing from the upper border of the swelling. The consistence of the mass varied in different parts; it was generally soft and elastic, in some parts almost cartilaginous. The finger detected deep fissures, which seemed to separate the tumour into distinct lobes. There were two smaller detached masses on the left side; one of them, the higher of the two, was of about the size of a walnut, hard, extremely movable, and entirely unconnected with the chest. The other was softer, more elongated, and appeared to be connected with the main body of the tumour beneath the sterno-mastoid.

On October 5th, the patient having been brought under the influence of chloroform, Mr. Erichsen proceeded to endeavour to isolate and tie the lower of the two large arteries on the right. It was, however (as had been anticipated), so incorporated with the tumour that it was not possible to isolate it. A pointed needle was accordingly thrust under it, and the vessel and parts in the neighbourhood were strangulated. At the same time, a solution of perchloride of iron was injected into the swelling. This was prepared according to the formula of the French *codex*, of the specific gravity of 1·263; and was passed into the tumour by means of a small syringe used in injecting vascular tumours, which held about a drachm of the solution. This was repeated in seven different parts of the tumour. The patient was very sick from the chloroform, and complained of great weakness afterwards; but the injection did not produce any local mischief, except that a drop or two of pus issued from some of the places where the perchloride had been injected. The pulsation in the swelling was much diminished.

The ligature came off the artery on the eighth day, and rather profuse bleeding occurred on that and the following day. This, however, was checked by a suture wound round two harelip pins. On October 14th, the injection was repeated, about one and a half drachm of the solution being injected in two different places. The point of the syringe then broke, and it was impossible to inject more. No chloroform was used. Three days afterwards, it is noted that the patient feels better and stronger; and that two of the spots, where the injection has been introduced, are decidedly harder; and the whole tumour feels much firmer. On October 22nd, four more parts were injected. This time the injection was followed by some rather alarming symptoms. On October 27th, the patient was complaining of great weakness; had had a very bad night, with rigors and fever. Her aspect was bad, complexion yellow, and bowels relaxed. These symptoms, however, appeared to depend on the confinement of matter, as, after the discharge of some pus from one of the injected spots, they subsided; and the case seemed progressing favourably, when, in consequence of some quarrel with her nurse, she insisted on leaving the Hospital.

Remarks. We have given publicity to this case, imperfect as it is, on account of its intrinsic interest, as being a form of disease very rarely met with, at any rate in England; and as an instance of the employment of a method of treatment which has not hitherto made much progress in London, though much recommended by various continental authorities. The action of perchloride of iron upon the tissue of vascular tumours, and the degree of risk which its injection involves, are subjects on which our experience in London is hardly sufficiently extensive to enable us to speak positively. There exists in the *Mémoires de la Société de Chirurgie de Paris* an elaborate memoir by M. Desgranges, in which he investigates the former point in the treatment of varices and hæmorrhoids. The ingenious author there comes to the conclusion, as the result of his experience, that the perchloride enters into a real combination with the elements of the blood, when passed fairly into the cavity of a vessel; and that this new compound modifies the composition of the rest of the blood. Thus, as he conceives, the risks attending the introduction of foreign matter into the vessels are materially modified, since none of the perchloride passes in this state into the circulation, and the new product is inert for the purpose of exciting inflammation. This view does not derive any support from the case before us; but it should be remembered that, in so large and complicated a tumour, it would not be possible, as in the simple form treated by the French surgeon, to be sure of the precise position of the point of the syringe; and hence some of the solution might be extravasated into the cellular tissue—an accident to be avoided, according to him, with all possible care.

As to the success of the treatment, all that can be said is, that the case was progressing favourably. The rather alarming symptoms noticed after the third injection appear to have depended on the presence of confined matter, and not on any inflammation of the lining membrane of the vessels; and the process of consolidation had certainly advanced. It is much to be regretted that the patient's waywardness prevented the completion of a very interesting surgical case.

KING'S COLLEGE HOSPITAL.

HOSPITAL GANGRENE.

Under the care of W. Fergusson, Esq.

[*From Notes by* J. Walters, Esq., *Assistant House-Surgeon.*]

T. A., aged 32, was admitted, under Mr. Fergusson, Sept. 19th, with caries of a portion of each tibia, on its anterior aspect, about the centre, the result of syphilitic nodes, which had existed for six years. The patient had been in the habit of drinking pretty freely. The constant pain which he suffered had reduced him to a very low condition. He was ordered iodide of potassium, and was put upon a good diet; under which treatment his health improved considerably. The pain, however, continuing as bad as ever, on October 24th, Mr. Fergusson removed the carious portions of bone with a gouge, having previously enlarged the openings by crucial incisions; after which the patient went on well, and the wounds granulated healthily, till November 5th, when he was attacked with shivering, lost his appetite, and complained of burning pains in both the wounds, which had assumed a somewhat ashy colour; a poultice was then applied to each of them, and he was ordered eight ounces of brandy in the twenty-four hours.

November 6th. The sores are beginning to spread. The margins present black spots at various points, around which the skin has assumed a red colour He suffers a great deal of pain in them. His skin and conjunctiva are tinged with yellow.

November 7th. The sloughing process still continues.

November 8th. The extent of the sores has greatly increased; their surfaces are of a dirty ash colour; the margins of a dark blue, and the skin around of a dusky red hue; the smell is peculiar and very offensive. His countenance is anxious; he is very restless; his tongue is dry and brown; he complains of great thirst, and vomits his food. The skin is still somewhat jaundiced. Pulse 104, feeble.

The patient was now removed to a separate ward. Strong nitric acid was freely applied to the whole surface of the sores, and then a yeast poultice. He was ordered to have half an ounce of yeast three times a-day, and chlorate of potash, gr. xv, in an ounce and a half of water every six hours. The brandy was increased to twelve ounces. During the next few days the sores assumed a more healthy aspect. Fresh spots of gangrene, as they appeared, were immediately touched with nitric acid. The sloughs extended on each leg about five inches by four, laying bare on each side about the middle third of the tibia. The slough on the left side was the largest, and extended round the inner edge of the tibia to the calf of the leg. The skin surrounding the sores was much undermined.

November 15th. The sloughs have now entirely separated, leaving a clean surface underneath. Water dressing was substituted for poultices. The yeast was omitted.

November 28th. The wounds are filling up with healthy granulations, and are much contracted; several pieces of exfoliated bone have come away and others are separating. The patient's health has much improved, and he has no pain in either of the legs. He was ordered to have one grain of quinine three times a-day.

December 2nd. He was progressing very favourably.

Remarks. We have quoted this case partly to call our readers' attention to the fact that yeast, which is known to be so useful an external application in cases of phagedæna and hospital gangrene, is sometimes given internally in these diseases; partly to remark upon the extent to which gangrene may spread through the cellular tissue without much real destruction of parts. As to the first point, this one trial is of course insufficient to establish any facts relative to the efficacy of the medicine; as far as it went it was not particularly satisfactory; but it did not interfere with the exhibition of more powerful remedies. With respect to the latter it will be observed, that though the sloughing extended half round the leg, and for a great extent upwards and downwards, the only

result was the necrosis of no very large portion of the surface of the tibia, while the deep fascia and muscles (much more the vessels and nerves) remained intact.

ST. MARY'S HOSPITAL.

AMPUTATION AT THE KNEE-JOINT.

Under the care of S. Lane, Esq.

We had an opportunity of seeing a very successful example of the above operation, so seldom practised of late, at St. Mary's Hospital, in the case of a little boy, about eight years of age, under Mr. Lane's care. When we saw the stump the wound had entirely healed, and the patient would soon be discharged. The limb had been removed through the joint, and the condyles of the femur formed a broad surface for the stump; which, even at that early period, appeared remarkably free from irritation. The flap had been taken from the anterior part of the leg, so that the cicatrix lay well back, quite out of the way of pressure. The patella was in its usual place, and was quite movable, showing the slight amount of inflammation which had preceded the healing of the wound. Altogether, the result of the case gave us a much higher idea of the merits of this operation than theoretical considerations had led us previously to form.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

REPORT OF OPERATIONS PERFORMED FROM OCTOBER 25TH TO NOVEMBER 25TH, 1857.

Communicated by C. Bader, M.D., Curator.

I. Lacrymal Apparatus. The actual cautery was applied to the lacrymal sac in three cases. In one case there was a fistulous opening at one inch distance from the sac beneath the skin, which was laid open before cauterisation.

One case of tinea with ectropium, brought to the operating-room, was treated by slitting open both lower lacrymal ducts, cutting off the eyelashes, and applying the nitrate of silver to the edge of the lids.

In one case, a small sebaceous tumour was removed from near the lacrymal sac. It appeared whilst the patient was being treated for an affection of the lacrymal sac, and closely resembled an infiltration of the skin, except that it was possible to squeeze out some of the sebaceous contents.

II. Eyelids. Seven operations were performed for entropium of the upper, and two of the lower lid. In the latter cases, an oval piece of skin and muscular tissue, its long axis parallel to the edge of the lid, was removed, and sutures were employed. Of the cases of entropium of the upper lid, two were treated by the skin incision close to and parallel with the palpebral edge, and grooving the fibro-cartilage to the same extent; in the seventh case, the usual operation of removing the palpebral edge, as far as the eyelashes are concerned, was resorted to.

Ectropium of the lower lid was met with in three cases. In one it was caused by a flabby granular state of the conjunctiva; an oval piece was removed out of the latter. In the second case a triangular piece, its base towards the palpebral edge, was removed out of the whole thickness of the lid. In the third it was consequent on necrosis of the malar bone; the skin was made movable by a V-shaped incision, the flap was brought up, and the wound below it united by sutures and entomological pins.

In one case of lime-burn, followed by fleshy bands stretching from the inner surface of the lids to the ocular conjunctiva, a probe was carried beneath these bands; they were then divided, and the conjunctivæ were kept separate by introducing a glass mask, with an aperture in the centre, which sits well off from the transparent cornea.

III. Muscles of the Eyeball. There were twenty-five operations of subconjunctival division of the muscles for internal strabismus.

One case of external strabismus (patient of Mr. Poland) was operated on by the old method; the muscular insertion was in this case as far backwards as midway between the corneal edge and the optic nerve.

Mr. Bowman, in the case of a lad, divided the external and internal recti of both eyes, with the view of obviating the continual oscillations of the globe consequent on a congenital defect of the retina. Under chloroform the oscillations ceased, but returned some time afterwards; and then the old operation (division of the conjunctiva and muscle) was performed on the external rectus.

IV. Cornea. One case of staphyloma, replacing the cornea, which had been lost during purulent ophthalmia, was treated by continued pressure, after allowing some of the distending fluid to escape by a puncture made through the thinnest part of the staphyloma.

In a case of extreme conical cornea of both eyes, with slight opacity of the lenses, Mr. Critchett operated first on the left eye by breaking up the lenticular substance with one needle. One week later, the swollen lenticular substance was removed in great part with the scoop, leaving the capsule with some opaque lens matter on it. Afterwards, by a third operation, this capsule was torn across; these successive operations were accompanied by very little irritation.

V. Iris. Adhesions of the iris were detached in two cases by blunt instruments: in the one with the hook, in the other with the spatula. In both the cornea was previously opened with the broad needle; in the one, where the adhesion existed between the cornea and iris, some bleeding ensued into the anterior chamber: a useful pupil was restored.

Excision of from one-third to one-fourth of the whole iris, for the treatment of glaucoma, was performed in five cases. The iris was drawn out through an incision either made in the part of the sclerotic nearest the cornea, or in the corneal edge; and the whole of the drawn out iris was cut off, or part of it left in the wound. The operation appears not so successful when less than one-third of the iris is removed; and offers optically the most advantages when applied to the portion of the iris nearest the upper lid.

Formation of an artificial pupil was performed in six cases: in three for opacities of the cornea; in one for adhesions of the pupillary edge to the capsule (after extraction); and in two for adhesions of the same to an exudation thrown out in the pupillary area. For the three cases, the broad needle, blunt hook, and iris scissors, were used, and the drawn out piece of iris was snipped off; in the one the pupil was reestablished by introducing the broad needle through the adherent capsule, and partly cutting and partly tearing the iris, so as to form an oblong pupil towards the corneal incision; in the last two, the iris, drawn out with the blunt hook, was left in the corneal incision.

VI. Lens. In three cases of congenital cataract the lenses were well broken up with one needle. In eight cases hard cataract was removed by an upper corneal section; in one case the iris was slightly wounded; in another case a piece of the whole thickness of the iris was excised while completing the corneal section; the pupil and this opening were united in one to prevent the vitreous humour from escaping through the iris wound; the greater part of the lens was then removed with the sharp hook.

Four cases of traumatic cataract were treated by opening the cornea with the needle, and removing the membranous lens with the cannula forceps. In two cases the portion seized broke off, and was extracted while the remaining upper half retreated behind the pupil, leaving its area clear. In a third case (of Mr. Hutchinson) the lens was thought to be soft, and when entered with the needle retracted; the whole was then withdrawn as a round disc with the cannula forceps. In the fourth case, most of the soft lens matter having been scooped out, the membranous part was left adherent to the posterior surface of the iris; repeated attempts with the cannula forceps proved that the adhesions would not give way.

One case of soft cataract (in a man, aged 45) was treated by breaking up the lens with one needle, and exposing it to the aqueous humour, and in two cases the soft lenticular matter, broken up with two needles, was scooped out through a small corneal opening.

In eight cases, after extraction, the remaining opaque lenticular matter, or the product of some irritation, caused the opaque appearance of the capsule styled false membrane. They were treated by opening this membrane in three cases with one, in five with two needles. In two other cases the false membrane was adherent to the posterior surface of the iris; and, after opening the cornea with the broad needle, the greater part of the adhesions, being detached with the spatula, retracted from the pupillary area. In one case there was recent inflammation of the conjunctiva, with sequelæ of iritis (occluded pupil and yellowish aqueous humour). Through the cornea, the exudation in the pupil was opened with the broad needle; and then it was withdrawn with the cannula forceps; after the escape of the aqueous humour, some blood oozed out from the surface of the iris.

In one case in which injury was followed by a central opacity of the cornea, with adhesions of the capsule to it, and the opaque capsule stretching forwards through the pupil had also portions of iris adherent to it, Mr. Streatfeild first divided the corneal adhesion with the broad needle, then with the cannula forceps withdrew the capsule by separately detaching the points of adhesion of the iris with a needle introduced at the opposite edge of the cornea, and by a subsequent operation made an artificial pupil downwards and inwards; vision was from mere perception of light improved to a knowledge of objects.

VII. Excision of the Globe was performed in five cases. Three were for staphylomatous enlargement after purulent ophthalmia, and two for what is called chronic glaucoma. In none of the cases *perception of light* existed in the glaucomatous cases; a piece of iris was excised from the opposite eye. The pathological change in the two excised globes consisted in a peculiar disease in or upon (?) the nerve-cell layer of the retina, accompanied by enormous vascularity and by the effects of pressure (atrophy of the optic nerve fibres, retarded ciliary and retinal circulation, opacity of the lens, etc.).

Total of major operations, 89.

Original Communications.

PUERPERAL CONVULSIONS, WITH COMPLETE OCCLUSION OF THE OS UTERI.

By Charles Robert Thompson, Esq., Surgeon, Westerham.

August 20th, 1857. Mrs. L., aged about 35, is a tall, well made woman, of dark complexion. She has been married some years: has one child 12 years old, and is now in the eighth month of her second pregnancy, having been sterile nearly twelve years. Soon after her previous confinement, she suffered from some uterine mischief, for which she was treated in London, having caustic applied to the uterus during a period of several months, at the end of which time she was informed by her physician that she would probably never again be pregnant. Since then, she reports that she has had tolerable health, but latterly has been subject to headache, and disinclined for society, and consequently left London, and came to reside in this neighbourhood. She states that the catamenial periods had been regular until pregnancy, but always with great suffering for some days. She has been complaining for the last six weeks of headache, with puffiness of the eyelids and face, some œdema of the legs, and scanty, turbid urine, for which mild diuretics and purgatives have been given. She took an aperient yesterday morning, which acted freely.

This morning, at 6 A.M., she had a slight convulsion, lasting only a few minutes, and from which she rallied perfectly. This was repeated at 9 A.M., when the friends were alarmed, and sent for assistance. On my father's arrival, he found her in a semi-comatose state, with heavy laboured breathing, and dusky countenance; pulse about 96, firm, but easily compressed. He bled her to sixteen ounces, gave calomel and enemata, and applied cold lotions to the head, and sinapisms to the neck and legs. At noon she had another convulsion; and from that time until 10 P.M. they returned at regular intervals of an hour, with increasing severity, and deep coma between the fits.

At 4 P.M. the face was very dusky; the head hot; pulse about 96, soft and compressible, but not indicating exhaustion; tongue swollen, protruding, and bleeding; pupils rather dilated, but contracting sluggishly on stimulus of light. A small quantity of urine, withdrawn by the catheter, was very turbid, and loaded with albumen. Every few minutes she would become restless, and moan as if in pain, probably from some uterine effort. The uterus externally appeared normal, and firmly pressing on its contents; no vaginal discharge of any kind.

On examination *per vaginam*, the head could be felt, covered by the uterine wall, in the brim of the pelvis; but the most careful and repeated examinations failed to detect any os uteri. From her being insensible, it was easy to introduce the left hand fairly into the vagina, pass the fingers up to the reflection of the mucous membrane, and thoroughly examine the lower part of the uterus. It felt firm, globular, and perfectly smooth, with no trace of an os, excepting a little doubtful, almost imperceptible indentation, high up, and directed back towards the sacrum; but even at this point the uterine wall was thick and firm, and with unbroken surface. The uterus was not forced down into the pelvis at all, as though there were any expulsive pains.

At 6 P.M. we had the advantage of Dr. Lever's opinion. He quite agreed as to the os being perfectly occluded; and, after some consideration, he forcibly bored and pushed his finger into the uterus, at the part where the slight indentation existed; he then ruptured the membranes, and felt the fœtal head. She had a fearful convulsion directly after this proceeding.

Dr. Lever suggested grain doses of tartar emetic every twenty minutes; and, in addition to this, we removed the hair, kept ether lotions to the scalp, gave another full dose of calomel, and enemata of turpentine and castor oil. Dr. Lever also agreed that, directly it was possible, the fœtus must be removed by any means, as the only chance of saving our patient. He then left at 7 P.M.

The os uteri was very thick and unyielding, and of almost gristly hardness. In about three hours it was of the size of a crown piece; and, as it seemed very undilatable, and the convulsions continued, the perforator was guided on to the head between the tips of two fingers, and the brain was evacuated, in the hope that, by getting a firm hold, and making traction, the os might dilate gradually by the pressure from within. From this time until she was delivered, about midnight, she had but one convulsion; she was semi-comatose, but disturbed and crying out at intervals of a few minutes, evidently from uterine pains; and then traction was made on the head. After steady perseverance the os yielded a little; the parietal bones, being very soft, were torn away, and at last a firm hold was obtained with the crotchet on the outside of the base of the skull; and about midnight the child was brought away. The placenta was removed without difficulty, and the uterus contracted firmly at once.

The pulse had kept tolerably steady, though feeble; and we now made her swallow a few teaspoonfuls of brandy-and-water. There was no further return of convulsions. Through the night and next day she remained comatose; but she took stimulants, and in thirty-six hours began to show some consciousness. Her convalescence was slow, but satisfactory: she was down stairs, and able to get out in her carriage, in about six weeks. The catamenia reappeared, without pain, about ten weeks after labour. The urine is still slightly albuminous; but this is decreasing.

Remarks. This case is very apposite to those lately related in the Journal by Mr. Hatton and Dr. Mayne. In the few books to which I have had the opportunity of referring, I have found details of seven cases of labour with occluded os uteri. The above case differs from these, not only in the fearful coincidence of convulsions, but also in this respect, that in all the other cases the full term of gestation had been reached; there were strong uterine efforts, and the head, covered by the closed uterus, was forced down into the pelvis, or even to the vulva, at each pain, before interference became necessary; whereas, here, in the eighth month of pregnancy, there was no decided evidence of labour, and the uterus was not forced down below the brim of the pelvis. In two cases, Dr. Mayne's and Dr. Highmore's (*Lancet*, vol. ii, 1852, p. 174), there was, as in this instance, evidence of previous uterine disease, inflammation with the so-called ulceration of the os and cervix, resulting in thickness and induration, or inflammatory hypertrophy of the os uteri. In our case this was sufficient so nearly to obliterate the canal of the cervix, as to cause difficult menstruation and sterility for above eleven years, when, by some fortuitous combination of circumstances, conception again took place.

I think it is impossible to read Dr. Mayne's and this case without a suspicion as to whether the *treatment* of the previous disease had not a share in producing the hardness and contraction of the part. Dr. Rigby (*Female Diseases*, p. 114) says that he has seen a great number of cases where severe uterine irritation had been produced, with chronic induration of the part, from the too frequent and injudicious use of caustics. Dr. H. Bennet writes (*On Inflammation of the Uterus*, p. 417): "Sometimes the os uteri becomes smaller than in its healthy state, only admitting the uterine sound on a little pressure being used; but I have never seen it obliterated by these severe cauterisations. In one instance, in which I had produced a large eschar in an hypertrophied cervix by the potassa-cum-calce, on complete cicatrisation taking place the orifice of the os uteri was scarcely perceptible. The first day (of the next menstruation) was more painful than usual, but subsequently the sanguineous flux was freely established; and on examina-

tion of the patient afterwards I found the os open. This narrowing of the os uteri may take place after the cure of inflammation or ulceration of the cervical cavity by milder means." On the other hand he writes: "Even when a deep slough has been formed by the action of a powerful caustic, such as potassa fusa, or the actual cautery, in the course of a few months, or even weeks, all trace of the cicatrix disappears, and the cervix again becomes soft and supple." (*Op. cit.*, p. 397). And again: "I have repeatedly seen females confined without difficulty or accident, whom I had previously treated by deep cauterisation. M. Gendrin's experience on this point is the same as my own." (p. 434.) Dr. Bennet argues that mucous membrane, wanting the developed fibrous tissue of true skin, cannot become the seat of a hard cicatrix; but it is, I believe, no uncommon thing to have hard cicatrices, producing stricture of the œsophagus, as the result of swallowing boiling or corrosive liquids; and the urethral stricture following on the cicatrisation of a wound or injury of the mucous membrane is one of the most intractable and recurring forms of that disease.

As to the treatment of our case, it seemed right, as there was no sign of labour, first to try all remedies for the convulsions; and, these failing, it became imperative to empty the uterus. But for the success of Dr. Lever's expedient of boring through the closed os with the finger, we were prepared to make an incision into the most depending part, as has been done successfully in several instances; but fortunately this was not necessary, and the great rigidity of the os was overcome by steady perseverance.

PRACTICAL ILLUSTRATIONS OF THE TREATMENT OF SOME CASES OF INJURY TO THE HANDS.

By John Birkett, Esq., F.R.C.S., Surgeon to Guy's Hospital.

[*Read before the Medical Society of London, October 24th*, 1857.]

The opportunities afforded by the clinical experience of a large hospital may be taken advantage of by the practical surgeon for the benefit of the public in two ways.

First, he has abundant examples of the results of improper surgical treatment, in consequence of the prejudices of the sufferers themselves, the advice of some parties not qualified to direct the most suitable plan of treatment, and neglect of, or the inability to carry out, the proper mode of treatment when advised to do so.

Secondly, he has a vast field open before him in which to observe the method and plan of treatment by which the most permanent and rapid cures are effected, and the reparative powers of nature assisted.

From the first class of cases, therefore, he learns what to avoid; from the second, he feels confidence in the plan of treatment he recommends.

Fortified by the observation of both classes of cases, I thought it might be useful to bring forward for discussion the treatment of certain forms of injury to the hands which are very common in our metropolitan hospitals; and my chief object in doing this has been to elicit the opinions of hospital surgeons upon its merits.

Some of the members of the Society, especially the hospital surgeons, may regard this communication as destitute of novelty and deficient in originality; but I made choice of the subject, under the conviction that the treatment of the injuries to which it relates is not generally recognised, and certainly, from the number of cases I have seen treated with stripes of adhesive plaister, that it is not very generally practised.

For many years accustomed to see the ill effects resulting from the plan of encircling with stripes of adhesive plaster even slight injuries of the fingers, particularly in the labouring classes, it occurred to me that it might be useful to describe a plan of treatment, simple in itself, and certainly most efficacious in producing a very rapid cicatrisation of a wound. It has constantly occurred to me to see a man's hand inflamed, thecal abscess produced, and even the destruction of a finger result from this method of applying plaister around that which was in the first instance a most simple injury—a simple incised wound.

I considered, therefore, that, by the relation of a few practical illustrations of the advantages of the method now generally adopted in Guy's Hospital, and, as we shall probably learn to night, in other hospitals, the chemists and druggists and the surgery assistants might be induced to lay aside their plaister for strips of wet lint, and some surgeons their bread or meal poultices for a much more cleanly and really useful application. I strongly advocate the plan to be immediately described in every kind of injury of the hand or fingers, except the purely incised wound inflicted with a sharp cutting instrument. In such an injury the careful adjustment of the lips of the wound with adhesive plaister may be admissible, the application being so arranged that the finger is never encircled, nor the wound entirely covered and closed over with the plaister.

In all other injuries complicated with wounds, my practical experience induces me to urge the adoption of another plan, which I will now briefly describe.

After the thorough cleansing of the hand by soaking in warm water, narrow stripes of lint or linen wetted in tepid water should be lightly and gently applied around the fingers which are injured, commencing from their ungual phalanges. In each case some slight modification may be required, and often an oblique or even a vertical adjustment of the lint may be useful. When a severe laceration of the back of the hand or palm is to be treated, pieces of lint with a slit in them may be advantageously employed. The finger passes through the aperture in the lint, and the stripe then supports the flap of integument very firmly. The arm is to be supported and raised upon a pillow, and irrigation may be used temporarily or continuously. This is accomplished by arranging a vessel to hold water above the patient, and to this a tube of vulcanised India-rubber is affixed, the end of which terminates in a fan-shaped piece of zinc, the convex border of which is perforated with small holes, through which, by means of threads, the water percolates guttatim. A piece of vulcanised India-rubber cloth must be laid upon the bed as a conductor for the water as it drains off into some receptacle placed by the side of the patient.

The advantages of this plan seem to be—

1. A constant stream of water is flowing over the injured part, whereby an equable temperature is maintained.

2. When suppuration is established, the discharge, especially if sloughing takes place, is washed away, and the wound kept perfectly clean.

3. The cuticle is kept moist and yielding, a circumstance of no little importance in the treatment of injuries of the hand in the working classes, in whom this structure, often like a layer of horn, prevents the swelling resulting from inflammation, and causes intense pain, and therefore more constitutional disturbance.

4. It ensures the parts being kept moist, which is not always the case when the patient is dependent upon another person to apply the water.

In illustration of the advantages of the treatment advocated, I adduce the following cases, which I will now briefly relate.

Case I. *Incised wound of the Index Finger, with division of its Metacarpal Bone.* A boy, aged 8 years, whilst using a chaff-cutting knife, inflicted upon his right hand the following injury. A wound in the soft parts extended from the palmar surface of the index finger transversely across its radial border, over its dorsal surface, and terminated at the radial border of the extensor tendon of the middle finger. The head of the metacarpal bone was severed from its shaft, and the member hung down from the hand, being attached by the soft parts only on its palmar aspect. The knife had cut into the metacarpal bone of the middle finger also. My dresser, Mr. Penfold, at once determined to attempt the restoration of the finger, and adjusted the parts by means of stripes of wet lint in an extended position. The arm and hand were elevated, and the parts were kept constantly wet. Suppuration occurred; but after a few days the wound granulated healthily, and in nine weeks the part was healed, and the boy enjoyed flexion and extension of the finger.

Case II. *Incised Wound of the Metacarpo-Phalangeal Articulations and soft parts on the Dorsal Surface of the Right Thumb and Index Finger.* Dennis Haley, aged 20, was admitted into Guy's Hospital May 6th, 1853. He was a healthy, robust countryman from Bexley, and employed in a stable. With the knife of a chaff-cutting machine he had inflicted a severe wound transversely across the dorsal surface of the right thumb and index finger. The metacarpo-phalangeal articulations of both these members were laid open. The extensor tendons of the thumb were divided, but those of the index finger were not entirely divided. The thumb was partially dislocated forwards by the action of the flexor muscles. The wound extended slightly round to the radial border of the thumb. The hand was well soaked in warm water; and afterwards, the soft parts being adjusted, and the articular surfaces of the thumb being brought into apposition, narrow stripes of

lint, wetted in water, were gently applied around the injured members, beginning from their ungual ends until a complete splint was thus formed. The stripes of lint were applied layer upon layer as high up as the wrist joint. The whole hand was then enveloped in wet lint, and supported on a pillow so that a constant stream of water might flow over it from the irrigator. Considerable hæmorrhage occurred during the first twelve hours. For a few days afterwards active inflammation existed, which was controlled, however, and in eight days the edges of the wound showed healthy granulations. Irrigation was still continued for a few days longer, after which wet lint alone was applied. About the middle of June the wound was quite healed; and when he left the hospital he had a useful hand. He could flex and extend the index finger, and bring the thumb in contact with it firmly. The thumb was partially dislocated forwards, and did not allow of much movement.

Case iii. *Lacerated Wound of the Joints between the First and Second Phalanges of the Index and Middle Fingers: Both Saved.* A boy, aged 16 years, was admitted in Guy's under my care in February, 1857. A severe injury had been inflicted on his right hand by a circular saw, just before admission. The little and ring fingers were merely hanging by stripes of integument; and my dresser, Mr. Broad, removed these through the first phalanx. The joints between the first and second phalanges of the index finger and middle were cut open on their dorsal aspect; but as there was no further injury to them, Mr. Broad determined to attempt their reparation. In this he was successful; for by enveloping the injured fingers in stripes of wet lint cicatrisation was effected in thirty-four days, and the boy enjoyed the movements of flexion and extension of the fingers.

As the value and usefulness of the hand depends in a great measure upon the integrity of the thumb, I may be excused if I devote a few moments to the consideration of the injuries of this important member in particular.

I believe it may be laid down as a rule that no portion of a phalanx or of the metacarpal bone should be removed by the surgeon, even should the bone project beyond the lacerated integuments, and appear to be so denuded, that to save it would be looked upon by the majority of observers as hopeless. This rule is based upon practical experience, and the results obtained in leaving cases of compound comminuted fracture to the reparative powers of nature. One case among several I will relate.

Case iv. A young man was brought to the hospital, whose thumb was shattered by the explosion of a pistol. The ungual phalanx and about half of the first were carried away, together with the soft parts, as high as the ball of the thumb, and the integuments were hanging in shreds. The stump of the first phalanx projected considerably, and it did not seem possible that it could ever have been again covered by skin. I determined, however, to assist nature in saving all that remained; for, had the parts been neatly trimmed, and the bone covered with integuments, the stump of the first phalanx required to be removed at its articulation with the metacarpal bone. In this case the hand was well cleaned, and stripes of lint applied from the carpus towards the ungual phalanx, so as to bring the lacerated integuments as much over the stump as possible. Superficial sloughing of the lacerated surface took place, granulations were soon developed, and about an eighth of an inch of the stump of the phalanx exfoliated. After this the wound healed rapidly, and the lad obtained a most useful hand, enjoying all the movements of the second phalanx. He came under my observation a few years after this accident; and I was gratified to feel the power he enjoyed in grasping my hand between the stump of his thumb and fingers. He was then pursuing the employment of an engineer, an occupation requiring considerable manipular dexterity.

I trust my hearers will excuse the detail of this case, hoping that its result may deter the younger members of the profession from an officious interference with the reparative powers of the animal economy. No case, at first sight, presented more discouraging prospects; yet I never had one attended with more satisfactory results.

In severe lacerations of the soft parts of the fingers and hands, I believe we are not justified in pursuing any other treatment than an attempt to save the parts. However ragged and lacerated the integuments, it is surprising how nature restores the injured member; and in the treatment of these cases the wet lint dressing assists the reparative powers admirably.

A machine is employed in some manufactories under the term of a "devil", to tear rags into fine shreds. Boys are employed to feed this machine, which consists of a roller covered with spikes, and which performs rapid revolutions. These boys often get their hands drawn in, and the result is most frightful laceration.

Case v. An injury of this description occurred to a little boy who was brought into Guy's Hospital under my care. Both hands and fingers were frightfully lacerated, the integuments hanging from them in shreds. At first sight, they seemed to be hopelessly damaged. The injury was chiefly, however, on their palmar aspect, and the movements of flexion and extension were not destroyed. The fingers had suffered most, and the ungual and second phalanges of the right index finger were nearly torn off. If, under the circumstances above described, the parts most injured had been removed, little more would have been preserved than the palm of the hands; for, upon examining each finger, if any portion of them had been removed, the amputation must have been performed at the heads of the metacarpal bones. I therefore determined to attempt the reparation of the injury; and, with this view, after the removal of the injured portions of the right index finger, the other fingers and thumb were dressed with wet lint, and the integument which remained was brought over the parts as neatly as was practicable. In these vertical lacerations it is remarkable how the skin contracts laterally, and becomes drawn into a narrow stripe upon the dorsal aspect of the finger when the wound is on the palmar surface; and, in this case, this effect was so marked as, upon some of the fingers, to expose the theca and the tendons, as if a dissection had been made of them. Slight sloughing of the lacerated edges took place, but a few days sufficed to bring about a healthy granulating action, and cicatrisation proceeded favourably. After the hands were healed the boy enjoyed a considerable amount of movement in the fingers; indeed, to a far greater extent than would have been anticipated after the first examination of the injury.

The injuries of the hand to which I believe the treatment described to be adapted may be thus classified:—

1. All incised and lacerated wounds of the integuments.
2. The same wounds complicated with similar injuries of the muscles or tendons.
3. Incised and lacerated wounds, by which the joints are cut open.
4. Compound fractures of the bones of the metacarpus and phalanges, with severe contusion, and those accidents by which one or more of the fingers are torn off by machinery, leaving, as in the thumb for example, more or less of the bone of that important organ exposed without any covering of soft parts.
5. Injuries produced by the explosion of gunpowder from firearms, with or without shot, by the force of which the soft parts are more or less lacerated, contused, and destroyed, and the bones fractured.

CASES OF NERVE-DISORDER, RECORDED WITH REFERENCE TO THE PROBABLE OPERATION OF MALARIA AS A CAUSE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Series II (*continued.*)

Case xiii. W. M., aged 40, coachman, was admitted May 14th, 1856. He had been ill three weeks. He had never had ague, but was in a part of Kent where it prevailed very much six months ago. He vomits all his food, and, after each vomiting, has a fever all over him for two or three hours, with perspirations. The epigastrium is tender. He is better with light food. The tongue is moist and clean, except a streak of coating in the centre; the urine is very red; the bowels are open. He is very weak. He has a pain in his forehead, "as if he had all the troubles of the world". He attributes his illness to a bad smell proceeding from a sick person. He was put on the use of strychnia and quinine, the former being changed after three days for six minims of liquor opii sedativus. At this time, he had less of the febrile paroxysms, but attacks of shaking occurred every evening. In four days more, the sickness had quite ceased; he had no pain in his head; and there had been but trifling shaking on the previous evening. On the same plan, he improved still further, and ceased attendance.

Remarks. It seems scarce doubtful that this was an instance of aguish impregnation roused, though after a long

interval, into activity by debilitating urban influences: indeed, he stated that the pain in his head existed from the time of his visit to Kent. This circumstance—viz., the power of the conditions under which the individual is placed subsequent to his exposure to the malaria to develope the morbid effects—is of great importance for us to attend to. It may entirely depend on these whether the poison imbibed is to be active or harmless. Of this Dr. Copland has given an excellent example (*vide Art. Disease*, p. 571). I should think it almost certain that a slight aguish impregnation may be rendered by depressing circumstances as potent for evil as a more virulent one when the latter were absent. The utter uncertainty of the length of time requisite to effect a malarious impregnation makes the importance of the subsequent conditions still greater. Who shall say that sleeping a single night in some malarious locality (and I now speak of our own country) may not establish a predisposition which various depressing causes shall promote till it becomes the cause of serious illness, or of lingering wasting ill health?

Case xiv. S. R., aged 26, a female, single, of healthy aspect, was admitted July 2nd, 1857. She had been ill two months. She is giddy and faint, "so awfully faint"; has pain about the lower part of the sternum, extending to the interscapular region of the back, much aggravated by food, but not more by a chop than by bread. She never vomits. There is some epigastric tenderness. The catamenia have been absent for seven or eight months. The bowels are regular; the skin cool; the pulse weak; tongue whitish, with red tip. She has much pain in the feet, especially in the left. A week later, she stated that the left side, arm, and leg, were quite numb and in pain when she came out into the air, but were easier when the parts were warm. She had suffered from this all the last winter; during the cold weather, she could not dress herself at one time for a period of fourteen days. She took the following draughts for a week:—

℞ Bismuthi subnitrat. gr. xv; sodæ sesquicarbon. gr. v; liquoris opii sedativi ♏vii; aquæ ℥iss. M. Fiat haustus ter die sumendus.

Afterwards she had strychnine, quinine, and iron, in combination with liquor opii sedativus. Under this treatment, she improved a good deal, and ceased attendance after August 6th. The numbness of the left side was much better after the first fortnight of the tonics. The opium did not confine the bowels.

Remarks. The gastralgic disorder in this case was associated with a left side affection of similar character. The latter, when I saw her, was not rheumatism, though she stated that there was occasionally swelling of the hand and foot. I have observed in several cases that severe cold has acted in a depressing manner on the nervous system, intensifying its disorders. Two marked cases of aguish disease came under my observation during the severe cold of last winter.

Case xv. R. W., aged 67, a charwoman, single, was admitted July 5th. She has had jaundice several times; the last attack was in April. She had been getting ill three months. Every third day she has a violent pain at the epigastrium and lower part of the chest, like cramp, which strikes through to the shoulders and down the spine. She shivers at times, and has damp sweats. Urine dark. The bowels are costive; the tongue white; the pulse large, compressible. The treatment consisted in occasional calomel and colocynth aperients, and in the steady administration of full doses of quinine, and citrate of iron and quinine. The last decided attack was on July 26th, just a week after the preceding. After some treatment directed against deafness, from which she suffered, she was discharged October 11th, in better health than for years.

Remarks. The phenomena of aguish disorder were marked plainly enough in this case, which, for anything that appeared, was solely of London origin.

Care xvi. E. S., aged 36, married, of rather sanguine habit, was admitted May 11th, 1857. She had been affected by pityriasis all her life. At the catamenial periods (which occur regularly), and, at the intervening fortnights, she has copious vomiting of stuff like brown water, which lasts for twelve hours, and is preceded by violent headache. In the intervals, she is tolerably well. The skin is warm; the pulse of good force, excited; the lips red; the bowels act two or three times a day, motions healthy; the urine is natural. She can digest her food well, only beef lies heavy. She is very apt to take cold, and has bad cough; no *râles* are heard in the posterior parts of the lungs. She is worse after any exertion. She lives at Chiswick, near the river, in an open meadow. I was at first quite inclined to view the case as one of hepatic derangement, and prescribed nitro-muriatic acid and taraxacum, with biweekly doses of calomel.

May 18th. The urine was found exceedingly pale, aqueous, not albuminous.

May 25th. Cascarilla infusion, with half a drachm of tincture of cinchona, was given, in place of the water of the mixture. The calomel was continued.

June 14th. She is not improving. An attack of vomiting occurred a week ago, when she brought up much thick stuff, like brown phlegm. Tongue clean. She has dreadful weight "round the chest" for several days before the vomiting comes on. The bowels are much relaxed, as they always are in warm weather.

℞ Strychniæ gr. 1-20; quinæ disulphatis gr. ij; acidi sulphurici diluti q. s.; liquoris opii sedat. ♏v; aquæ ℥j. M. Fiat haustus ter die sumendus.

June 22nd. An attack of vomiting occurred on the 19th, but lasted only five hours, instead of all day. The medicine was continued; and she was ordered to take five minims of liquor potassæ arsenitis twice a day with her meals.

July 6th. She is much better; has had one attack of vomiting, lasting a very short time, when she scarcely brought up anything.

July 16th. An attack of vomiting occurred on the 10th, which kept her in bed all day. She is much better and stronger; the vomiting is not near so violent as it used to be.

℞ Strychniæ gr. 1-16; quinæ disulphatis gr. iv; ferri sulphatis gr. iv; acidi sulphurici diluti q. s.; liquoris opii sedat. ♏v; aquæ ℥j. M. Fiat haustus ter die sumendus.

July 30th. She is very much better than she has been for some time, and has no sickness. She continued to improve till she was discharged, apparently well, August 27th.

Remarks. The result of the treatment proved that this case was one of nerve-disorder, and not of hepatic congestion and obstruction. The diagnosis was not clear at first, and would have been still more difficult but for the knowledge I had acquired of the existing *constitutio anni*. The locality of her dwelling is the only circumstance that affords some ground for suspecting the operation of malaria. However, whether her disorder was produced by malaria, or by some other obscure influence, it is clear that the pathological state was the same, and required the same treatment. The brown coloration of the matter vomited was probably from blood exuded together with it.

Case xvii. E. T., aged 35, of rather sanguine aspect, married, and having had five children, was admitted February 9th, 1857. She has been ill one month. She has some cough, and spits much blood (a teacupful in one day), and some phlegm, but less of this than blood. The blood comes up with nausea, but no vomiting, and is of a very bright colour. This hæmorrhage has been going on the whole month that she has been ill. The first of her illness was that she felt extreme debility, and fainted several times a-day. About eight days after this, blood came up. She has copious cold sweats at night, and feels very shivery in the morning. The pulse is soft and yielding; the bowels costive. The catamenia were delayed one week when the blood first came up. The chest is deformed; there is right lateral curvature; the right front is flattened. There is no dulness anywhere; weak breathing all through both lungs. There is some epigastric tenderness. She always experiences extreme exhaustion a quarter of an hour after taking food; it lies heavy, but causes not much pain. The tongue is whity. A sinapism was applied to the epigastrium.

℞ Quinæ disulphatis gr. iij; liquoris opii sedat. ♏iv; acidi sulphurici diluti q. s.; aquæ ℥i. M. Fiat haustus ter die sumendus.

The food was ordered to be taken cold.

February 12th. No more blood has been brought up, except a few streaks. She feels rather better. There is much pain under the scapulæ; the breath is short in the mornings; bowels open; pulse very weak. She lay unconscious in a faint yesterday for an hour and a half.

February 16th. She has such extreme weakness that she cannot describe it. A long faint occurred on the 14th, and she almost lost consciousness on the 15th. The bowels are confined; the tongue is nearly clean. A teaspoonful of blood came up yesterday, but no more since last date.

℞ Ferri et quinæ citratis gr. v; tincturæ nucis vomicæ ♏v; aquæ ℥i. M. Fiat haustus ter die sumendus.

February 19th. She has fainted twice since last date, but feels much better; the bowels are open.

February 26th. She is getting on a great deal better; no more blood has been brought up. She has had no fainting, and is decidedly stronger.

March 12th. She feels much better while taking the medicine, but is worse without. A drachm of blood came up twice last week. On exertion, she has sharp pain in the left side. She has been at Walworth lately, but is not so well there as at Paddington, and loses her appetite.

March 23rd. She has been not nearly so well the last three days; she complains of extreme weakness. She has brought up a great deal of blood again this week. The tongue is clean. She is still residing at Walworth. While in the consulting-room, she threw her head back in the chair, and appeared quite unconscious for a short time. The pulse, however, did not fail; nor did her face become pale (I think it was flushed). The mixture was continued; and she was ordered to take ten grains of assafœtida four times a day.

April 2nd. She is very weak; has extreme leucorrhœa. The pulse appears steady, of fair force. She is still at Walworth. A pint and a half of blood was brought up on March 29th.

℞ Cinchonæ gr. vi; strychniæ gr. 1-16; ferri sulph. gr. v; acid. sulph. dil. q. s; aquæ ʒi. M. Fiat haustus ter die sumendus.

An alum tampon was applied.

April 9th. She is improving very fast now. No blood has been brought up. She has been taking food well the last three days; she has stayed the last eight in Paddington. Pulse soft, quiet.

April 20th. She went back three days ago to Walworth, and was a great deal better; there was no return of the hæmorrhage. The medicine, however, made her giddy, and was not taken.

Remarks. The prominent phenomena in this case were extreme nervous depression and debility, and gastric hæmorrhage. The leipothymia which frequently occurred, once in my presence, seemed to be the result of a temporary failure of the functional power of the brain, quite analogous to the numbness which occasionally affects a sensory nerve. The hæmorrhage was owing to a sudden flushing of the capillary plexus of the gastric mucous surface with blood induced by paralysis of the vaso-motor nerves of the part. The primary disorder was therefore lowering of the nervous power generally, and the bleeding was a secondary accident. Residence in a low unhealthy locality appeared to be the main cause of the nervous prostration, and of course removal from it was the best remedy. Quinine and strychnia also seemed to aid materially in restoring the failing power; the hæmorrhage really appeared to be controlled by these agents. I feel very sure that the hæmorrhage did not proceed from pulmonary tubercles, vicarious menstruation, cardiac disease, or cirrhosis of the liver. Gastric ulcer of course suggests itself as a very possible cause; and it cannot be affirmed that it was not present. However, it may be remarked that the hæmorrhage in gastric ulcer is not so continuous, or of so frequent recurrence, as it was in the above instance, nor is it associated with such prominent symptoms of nervous depression and failing powers. A patient who has gastric ulcer may fall into syncope at the time when a profuse gush of blood occurs; but neither this nor the bleeding are often repeated. The more I see of this aguish disorder the more I come to look at prostration of nervous power, *not produced by any organic disease*, as the most characteristic feature. Patients remark themselves they cannot think what makes them so weak; they express a fear that they are going to be paralysed; and, in truth, the nerve disorder tends in that direction. The powerful tonics which she took with advantage from April 2nd to 9th afterwards disagreed. I have observed the same in other cases; it seems that as more power is regained the system is less tolerant of high doses.

I add to the foregoing case the sequel of a very similar one recorded in Series I, No. 5 (Association Medical Journal, 1856, p. 474). After she ceased to be under my care she went over to Ireland, where she remained a short time. She never brought up any blood after this voyage, and improved gradually; so that at the date I saw her (four months subsequent to her departure) she was well and cheerful. For the last two months of this period she had returned to service in London. Here again change of air accomplished what medication utterly failed to effect.

A case recently attracted my attention where hæmatemesis in small quantities went on for about six months, recurring at short but irregular intervals, and continuing for several days at a time. It was associated with severe pain of one knee, and great nervous depression. After an ineffectual trial of blisters, etc., amputation was advised by a surgeon of repute, but the patient refused consent. No astringents had any effect in arresting the hæmorrhage, which at last ceased (I rather think under the use of carbonate of iron), and the pain in the knee became easier, so that she was able to move about with a crutch, after having been for months confined to bed. The knee was never swelled, nor did it present to my eye much appearance of organic disease. I strongly suspect that this was an instance similar to the one recorded above.

Case xviii. H. H., aged 13, a healthy looking boy, has been ailing as at present two years, but has been worse during the last two months. The tongue is clean; the bowels open. He is very languid, and suffers with pain in the abdomen, commencing in the region of the cæcum, and following pretty regularly the course of the transverse and descending colon. The pain is "wretched agony"; it lasts from five minutes to fifteen, and is not relieved by blisters. His father thought he would have died some days ago. He is not attacked nearly so much at night when lying quiet. Exertion brings on the pain. The skin is cool; the pulse weak. He was put, March 19th, on the use of eight grains of citrate of quinine and iron three times a day, under which he benefited materially, but did not lose the pain; he had some also in the chest and shoulders.

April 9th. He is not near so well, and feels weak.

℞ Ammoniæ muriatis gr. x; spiritûs ætheris sulph. comp. ♏xv; decocti cinchonæ ʒi. M. Fiat haustus ter die sumendus.

Marked improvement took place immediately, and he ceased attendance after May 10th.

Remarks. The success of the muriate of ammonia indicates that the abdominal pain was of rheumatic nature, and seated in the muscular coat of the bowel. In cases apparently similar, the citrate of iron aud quinine given steadily has generally accomplished a cure (*vide* Cases i and iii, Series I, Association Medical Journal, 1856, p. 445). It appears to me that the detection of the rheumatic element in many instances is scarcely to be made without the testing action of remedies. Not unfrequently, also, pure neuralgia shades so gradually into rheumatic, and the attendant conditions are so similar, that it is difficult not to believe there is a real affinity between them.

Case xix. E. M., aged 32, housemaid, in a healthy situation in Paddington, was admitted August 27th, 1856. She had been ill fourteen days, but worse during the last seven. She feels ill all over, and without strength. She has sometimes great fever, sometimes is so cold "that she could get into the fire." There is no periodicity in these febrile attacks. The head feels giddy; she was quite "light-headed" on the night of August 24th. The skin is warm; the pulse and tongue nearly natural. The bowels acted thrice yesterday, but scantily, and with pain; she passes much "slime", and a little blood last week. She has tenderness on pressure about the descending colon. The urine is clear this week. She had had cough and expectoration lately. The throat sore; the right tonsil is enlarged. She was ordered to take two drachms of castor oil, with six minims of laudanum every night.

℞ Quinæ disulph. gr. iij; acidi nitrici ♏ i; liquoris opii ♏ iv; aquæ ʒi. M. Fiat haustus ter die sumendus.

September 6th. She is better, and has less sickness (a few days before it had occurred every night). She complains of a curious burning sensation all round the tongue, which is natural. The mixture was continued, fifteen minims of liquor ferri persesquinitratis being added to each ounce. The oil was also continued.

September 13th. She is better; has no pain in the tongue now, and is getting much stronger.

September 24th. She is gaining strength, and is not like the same person. She was now discharged.

Remarks. Though not a severe case of disease, this has some well-marked features of malarious character. There was decided fever, dysentery, and a neuralgia. It is on the *concurrence* of these that I wish chiefly to lay stress as illustrating the nature of the morbid action; and the argument would not have been of more weight if the symptoms had been far more severe. A miniature may be as true to nature as a large picture. Lingual neuralgia is not very common. I have, however, met with three or four cases of it lately; and I have been informed of one where half the tongue was affected, together with the corresponding palate and face.

Case xx. S. B., aged 21, housemaid, was admitted on

September 10th, 1856. She was a weakly girl, too much confined to the house. She has been suffering for eighteen months with an eruption of the following description. Œdematous swellings, attended with slight redness, appear on different parts, lasting only a short while. I saw her one day with one or both eyes half closed by swelling of the lids; sometimes the eruption affects the scalp, sometimes the throat, causing a choking sensation, sometimes the joints or other parts. The catamenia are regular; the eruption is worse at those periods. The health is otherwise pretty good. The warmth of bed seems to promote the occurrence of the eruption. She was treated by nerve tonics in various combinations till March 26th, when she was discharged quite well, having been improving steadily for some time. In the course of treatment one or two furuncles appeared. Citrate of iron and quinine, liquor potassæ arsenitis, carbonate of ammonia, strychnine, etc., were employed: on their sustained steady use the success of the case depended.

Remarks. The result of this case goes far, I think, to demonstrate that disordered innervation and not a blood poison was the main cause of the eruptive œdema. By toning the nerves the latter ceased. Had eliminants been employed, it may be confidently asserted that no such desirable end would have been attained. The fleeting nature of the eruption also strongly indicates a nerve action as the essential movement. There was no indication here of any malarious influence, no febricitation, neuralgia, or peculiar prostration. The case is one of some value, as in this respect contrasting with most of the others, and yet, in its shifting nervoid character, exhibiting a decided affinity. I consider it as one of simple asthenia of the vaso-motor cutaneous nerves, to be distinguished from similar states produced by a poison.

Case xxi. E. W., aged 29, married, was admitted, May 7th, 1857. She resides at Kensal Town, close to the canal. She has been ill six months. She complains of great sinking and weakness at the epigastrium; of flushes of heat followed by chills; great exhaustion on the least excitement; and low spirits. Her food seems to do her no good; she has no power for anything. The tongue is white; it is parched in the morning. The skin is cool; pulse weak. She is very drowsy. She has never been well since she was in her present residence. Strychnia, with iron, and compound spirit of sulphuric æther, was given for eleven days; at the end of which time she reported herself better and stronger, but did not attend again. Most probably the injurious influence was far too powerful to be overcome by drugs.

Case xxii. H. H., aged 36, married, was admitted April 30th, 1857. She resides near a canal; and has been ill six months. She is hyperæsthetic; the tongue is clean; the pulse quiet; the skin cool. She has languid, aching pain in every part of her, most severe in head. She is feverish, and cannot sleep at night. Some days she vomits bilious matter, and has violent headache. The urine is high coloured. She thinks she shall lose her senses. She has never been well since she has lived near the canal. Last summer she was ill in the same way; she went down to Windsor, and in three weeks was quite recovered. Citrate of iron and quinine, with tincture of nux vomica, were given, but when I last saw her, on May 7th, she was not any better, and complained of drenching sweats at night.

To these I may add the sequel of a case reported in the previous series (Association Medical Journal, 1856, p. 314), the last given. She was a laundress, and lived on the bank of the same canal as is alluded to above. Medicine could only afford some temporary relief to her distressing symptoms, which were even more severe than those in Cases xxi and xxii. She removed to another locality, and in three weeks reported herself quite a different woman. She still continued her washing occupation.

Remarks. I by no means wish to conclude positively from these cases that the vicinity of a canal is to be considered absolutely injurious, and by all means to be shunned. I confess I should not like myself to live on its banks. But so many persons in Paddington reside very near it, without seeming to experience any inconvenience, that I suppose it is only those who are in some way predisposed that are likely to suffer. Mr. Dempster's observations in India go to prove that the vicinity of canals is more productive of malaria than places more remote. In both the above cases it will be observed the symptoms were essentially those of prostration of nervous power, and obscurely developed fever.

[*To be continued.*]

CONCLUSION OF A CASE OF VESICO-UTERINE FISTULA.

By I. Harrinson, Esq., F.R.C.S., Reading.

[*Read before the Reading Pathological Society, October 28th.*]

It may be in the remembrance of some members of this Society that, in the year 1842, I had the honour of reading a Case of Vesico-Uterine Fistula. It was published in the then *Provincial Medical and Surgical Journal*, June 11th, 1845. The subject of this grave infirmity having died last week, I have now the opportunity of showing the parts concerned. It may be well to first give a short account of the case as then read.

Mrs. H., aged 41, had been delivered of her seventh child five years before. The labour was severe, protracted to fifty-seven hours, and eventually completed by instrumental aid. Retention of urine followed; and on the thirteenth day she felt something give way, when the urine immediately flowed away. For the subsequent five years, not a drop of urine passed through the natural outlet. After repeated examinations, I discovered that an instrument passed from the bladder through the os uteri into the vagina; that there was a communication between the bladder and the uterus; that there was a vesico-uterine fistula. I then introduced a skein of silk through the opening, and withdrew the threads one by one, with a few days interval, till one only remained. By this one thread the incontinence was remedied.

From this time sixteen years rolled away, till I was called to her in March 1857, suffering from the effects of obstructed circulation from mitral regurgitation; viz., universal œdema, ascites, congested lungs, enlarged liver, etc. The heart's action was tumultuous, with double murmur. The pulse was so irregular as not to be counted. The urine was albuminous. Her urgent symptoms were relieved by the means used; but the heart maintained its irregularity, and the œdema persisted. Incisions were made into the legs from time to time; then in the thighs, and lastly in the abdominal parietes, with surprising relief. More or less inflammation, and then consolidation, frequently followed these incisions. Her powers gradually failed; and she died of œdema of the lungs, on October 19th, 1857. During the last few days of her life, she complained of great pain in the lower part of the abdomen, and that she was unable to retain her urine.

Post Mortem Examination. The mitral valves were so much thickened as to render them imperfect, and allow regurgitation. The bladder was thickened, contracted, and internally gangrenous, the mucous membrane being almost entirely removed. A considerable quantity of sabulous matter had accumulated, more particularly around the thread which passed through near the fundus. The uterus was much enlarged; and, on opening it, a polypus, of about the thickness of the little finger and an inch long, was seen growing from the fundus. The vagina was normal. The neck of the uterus was dark coloured, and was involved in the mischief by extension from the bladder. The thread had cut through the anterior lip of the os uteri. About an inch within the os uteri was a considerable opening communicating with the fundus of the bladder. The opening admitted the tip of the little finger; but it was evident that, from the sloughy state of the parts, this view could give no idea of their condition during life. The last thread which she put in still remained.

For the first two years, I changed the thread for her about once a month; for the last fourteen years, she did it herself. Every day she was obliged to draw it down, and cleanse it from the sabulous matter invariably collected around it, in the situation of the vesico-uterine opening. During these last fourteen years she was constantly engaged, first, in the laborious occupation of night nurse at the Royal Berkshire Hospital; and afterwards, in the more arduous duty of monthly nurse among the better classes of society. The presence of the thread possibly had something to do in inducing that state of bladder which aggravated her sufferings during the last few days of her life.

As a palliative, the thread exceeded all expectation. It was my intention, after the catamenia had ceased, to have endeavoured to obliterate the os uteri, and so close this eccentric aqueduct. This period unfortunately never arrived; the catamenia continued with more or less regularity to the last. This persistence was undoubtedly somewhat dependent on the presence of the polypus.

For fourteen years the thread enabled her to support herself

and family in comparative comfort—with ease to herself, and without suspicion on the part of her various mistresses.

On the other hand, the choice of other means was so curtailed as to extort this remedy or none.

INFLAMMATION OF THE LUNGS CAUSED BY A FOREIGN BODY IN THE BRONCHUS.

By Charles A. Barrett, Esq., Surgeon, Wallingford.

Sophia Weston, aged 13 years, came with her mother to my surgery on August 10th, 1857, complaining that she had swallowed a piece of glass. On inquiry, I found that the girl had the end of one of those glass pistols, used for fastening the coat together across the chest, in her mouth. Whilst running she made a false step, and the glass went down her throat. I found her suffering slightly from dyspnœa, but not more than I attributed to fright. There was no cough, nor any congested appearance of the countenance, and the pulse was quiet. I ordered her an emetic directly, and told the mother to watch for the glass. The emetic acted well, but no glass appeared. I ordered her castor oil, and after that had failed, a large dose of alum. That operated; but still no glass was found. The child was kept in and quiet during this time, and was to all appearance quite well, excepting that a slight dyspnœa continued. I examined the chest, but found no abnormal sound. I felt at a loss to account for this, and thought that the glass must have fallen out of her mouth instead of going down her throat. I did not see her again for some time.

About the last week in August, the mother brought her again to me, saying, that the breathing was still difficult, that she had a cough, and that she had been out and about ever since the accident happened. I again examined the chest, but found nothing but the sounds of a slight bronchitis. I ordered a mustard poultice and a simple cough mixture, and did not see her again for a week. I heard that she was about the same.

In the beginning of September, the mother sent to me, saying, that the little girl was worse, and wishing me to see her. I found her suffering from an acute attack of broncho-pneumonia on the right side. I ordered her leeches on the chest, and a pill containing calomel, antimony, and opium, every four hours. The next day I found her better; and, as the skin was inclined to be moist, I ordered her a blister. She improved; and I continued the pills till the mouth was slightly affected, supporting her on good beef tea. When the blister was healed, the liniment of turpentine and acetic acid was used twice a-day, with simple treatment of the cough that still remained. She got better, and was ordered wine, etc., and I left off attending her.

About six weeks ago she was seized with inflammation of the left lung. I examined the chest; could find nothing of the glass, but felt pretty sure that it must be the cause of all the mischief. The inflammation was, this time, of rather a low type. I ordered her nitric acid and tincture of conium; also a large blister to be put on the chest and kept on till symptoms of vesication showed themselves, then to be removed and a common poultice applied. The wine was discontinued and the beef tea continued. Next day she was better; and she continued to improve. Wine was again ordered, and infusion of serpentary was added to the mixture. Night-sweats had showed themselves during this last attack. The fingers were very much enlarged at the tips, and the nails very much incurved. On November 25th, the child was taken with a very violent fit of coughing, and brought up the glass, after which she slept for twelve hours, breathing quite comfortably.

The glass measured in length one inch and one-tenth. Its diameter, at the broad part, was three-tenths, and at the middle one-tenth of an inch. It weighed forty-seven grains.

Remarks. One great point of interest in this case was the total absence of all physical signs of a foreign body in the tubes. Though the weight and shape of the glass would prevent it from being moved with every inspiration or expiration, yet silence might have been expected over some part of the lung. Then there was no cough when the glass went into the wind-pipe, rendering it difficult to say which passage it took, whether into the stomach or the bronchus. Its non-ejection might be thought to point out the seat of the mischief; but, even if it had passed into the stomach, it might have traversed the small intestines, and been lodged in the caput cæci. Then again it might have fallen from the mouth, and have not entered the throat at all. The long time before the inflammation showed itself, and the entire absence of the slightest uncomfortable feeling in the chest, were extraordinary. Just before the glass was expectorated she complained to her mother that she felt something moving in the chest, like the moving of worms. I did not see her during this time. The lung is very seriously damaged; and I fear that the patient, who belongs to a phthisical family, will become consumptive.

British Medical Journal.

SATURDAY, DECEMBER 13th, 1857.

THE COSHAM CASE OF MALPRAXIS.

We very much regret to have to record the conviction of a medical man, who appears to have practised honourably for years, of an act of gross neglect, resulting in the death of his patient. Some few weeks since, it will be remembered, we referred to a charge having been brought against a Mr. Frederick Deane, of Cosham, in Hampshire, of having allowed a patient to die undelivered; and that in a manner to excite our wonder, and almost to lead us to disbelieve in the version of the matter then offered. On Wednesday, however, the prisoner was put upon his trial; and facts came out which evince a stubbornness and an ignorance on his part which is altogether inconceivable, when we remember that he has practised his profession for the last fifteen years. The young woman, Mrs. George, was taken in labour with her first child on Friday, October 23rd. Mr. Deane was immediately sent for, and saw the patient: he also visited her again on Saturday. Early on Sunday morning he was again called in, and remained there the whole of that day, and until seven o'clock on Monday morning; indeed, he appears to have been in attendance until Wednesday evening following; the labour making but slow progress, and he effectively taking no measures to bring it on. We all know that nothing can be worse than "a meddlesome midwifery", and that bystanders often imagine there is more urgency in a first labour than the facts warrant; and we are not inclined to blame Mr. Deane for his inactivity up to this point quite so much as the husband appears to have done; but the protracted nature of the case, even taken in its most favourable light, ought to have determined him either to have acted himself or to have called in assistance. This the husband begged him to do, but he said there was no occasion. He remained that night; and, about six o'clock on Thursday morning, he announced that "the head was born, and the presentation was a natural one."

Here begins the unaccountable neglect of the prisoner. After a labour, more or less severe, of nearly a week's duration, one would have thought that he would have completed the case at once, especially as the poor woman was so much exhausted that the pains no longer came to expel the body; but, no, he still contented himself with looking on, and, as it would appear, actually prevented the husband from obtaining other assistance. "I entreated him", said the husband in his evidence, "to have a second opinion;" but he thought it unnecessary. After some time, he agreed to call himself upon Dr. Engledue.

"Dr. Engledue lived four miles off. Mr. Deane returned alone about two o'clock. I said, 'Where's the doctor?' He said he could not come. I said, 'Good God! not come?' He said he had stated the whole of the case to him, and that would do as well. He said the Doctor had asked him why he did not remove the child, and he had told him he could do it himself, and he should do it directly. Dr. Engledue had told him that

he (Mr. Deane) must be the best judge of the time. I asked him if the child was dead; he said he could not tell till it was completely born. At five o'clock in the afternoon, he said it was necessary that something should be done; and he went for Mrs. Littlefield, who lived close by; and they went upstairs together. About six o'clock, Mr. Deane came to me, and said, 'I have bad news to tell you; she is gone.' I said, 'Good God, sir, you have left it too long.' He assured me everything had been done that could be."

All this time, that is, from six o'clock in the morning until six in the evening, when she died, the woman remained with the head delivered, without any attempt on the part of Mr. Deane to complete the labour. What there was in the case to paralyse him in this remarkable manner, we cannot conceive. He stated, indeed, to the husband, that there was some entanglement about the neck, but the evidence of the *post mortem* examination appears to contradict this statement. The three medical men who performed this duty only make the case appear the more extraordinary by their statement. "The head of the child," say they, "was born as far as the shoulders. It was in a natural position. *It was delivered without the least difficulty. There was no obstruction to the birth.* From hearing the evidence, they were of opinion that she died from exhaustion of the vital powers, after a long protracted labour and the non-delivery of the child." With this opinion we cannot help agreeing; and, painful as it is to see a professional brother suffer, yet we cannot see that after such gross neglect he could hope to escape punishment. There appears to have been no defence, further than an attempt to prove that an error of judgment only had been committed. This plea, however, cannot be admitted by any one for a moment. We could not justly call for justice on the quack for having caused the death of a patient, if we allowed one of our own body to take advantage of such an excuse. It was the business of Mr. Deane to have known what to do; and the jury could find no other verdict than that of "Guilty of feloniously killing and slaying."

The wonder still remains how it was that in so simple a case any difficulty should have arisen. It did, indeed, offer itself as an explanation when we last touched upon the matter, that Mr. Deane was not a medical man, as we could not find his name in the *Directory*. We have since ascertained, however, that he is one of those members of the College of Surgeons who appear to have made no return to that useful work. The judge has not yet delivered the sentence; but, as the jury seemed to hesitate about their verdict, we do not suppose the punishment will be very severe.

THE WEEK.

Is quackery and something worse to be allowed to consolidate itself and to flaunt unblushingly in the public eye? We ask the question with respect to Dr. Kahn, whose museum the medical press has so justly denounced, and whose practices upon his unhappy dupes have been fully exposed in the papers. Exposure appears, however, only to make him more bold; he seems to mistake notoriety for fame. At all events, he has removed his disgusting exhibition from its former modest abode, and now he builds unto himself a stately façade, on which he has the audacity to perch statues, emblematic of Health and Medicine. Not content with flaunting thus before the public, he draws additional attention by exhibiting the electric light in his top floor window. No doubt he thinks that foolish fowl will be atttracted by its glare; but we beg to inform all silly young men who may be in danger of falling into his clutches, that there are lights which should warn them off a dangerous coast; and this is one of them.

We beg to direct the attention of our readers, especially those who are engaged in poor-law practice, to the circumstance that Mr. Griffin, the indefatigable Chairman of the Poor-Law Medical Reform Association, has prepared a draft of an Act of Parliament for regulating the medical relief of the poor in England and Wales. The document, which has been printed and circulated, is too long for insertion in our columns; but the subjects for which it provides are: Determination of the class of persons entitled to parochial medical relief; appointment of medical officers; duties of medical officers; fees of medical officers—to be paid at a fixed rate per case, with mileage in addition; special fees for operations, and for consultations; public vaccination; the formation of a superannuation fund for poor-law medical officers; and the appointment of a medical secretary to the Poor-Law Board. The provisions of the draft Bill are worthy of careful attention; and therefore we hope those gentlemen who have not received a copy will at once apply for it to Mr. Griffin, Weymouth, who will be glad to receive any suggestions which may be offered.

Dr. G. Wyld writes a very angry letter to the *Times* about the London smoke, which he considers to be a greater offender than ever. The chimneys of the manufactories, he thinks, do little mischief compared with those of the 300,000 private houses; and here no doubt he is correct; but we cannot agree with him that it is a light matter to have abolished the black wreaths of smoke that used to be seen lacing the sky on the Surrey side of the water. Dr. Wyld thinks there is no excuse for not putting the Smoke Act in force against private dwellings, now that "there exist several kinds of grates by which almost all the smoke resulting from the combustion of coal may be prevented." If Dr. Wyld will kindly inform us of one that will perform this office, and at the same time give us a cheerful fire, we shall be obliged. We have seen several of the smoke-consuming fire-grates, but without an exception they are perfectly intolerable; not one of them, we predict, will ever come into public use. The dead, dismal aspect of the grate in all cases is sufficient to deter the buyer from attempting to consume his own smoke. We trust that science will, however, before long enable us to accomplish this very important object, without obliging us to sacrifice the cheerful blaze of the present offending grate. Dr. Wyld suggests that coke may be used in order to prevent smoke; but we fear the remedy would be worse than the disease, as coke always gives out large quantities of noxious gas, very detrimental to health, and sometimes fatal. Dr. Wyld finally draws attention to his suggestion made some time since, that the common sewers should be converted into grand smoke-funnels, "which process would have the further advantage of disinfecting the sewers, and fixing the ammonia, to be afterwards used as manure, soot itself being a rich manure." Ere this scheme could be carried out, it would be necessary to trap every water-closet and sink; otherwise the smoke would climb in crooked wreaths up to the "nostrils of the gods" from very inconvenient quarters. Even provided the trapping process were carried out, we fear that the clogging of the sewers with soot would be a very inconvenient and expensive process.

Association Intelligence.

TO THE HONORARY SECRETARIES OF THE BRANCHES.

The General Secretary will feel particularly obliged if the Honorary Secretaries will inform him, with as little delay as possible, of any subscriptions for the current year received by them since their last lists were forwarded to Worcester.

December, 1857.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 24th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

THE INFLUENCE WHICH LIQUOR POTASSÆ AND OTHER CAUSTIC ALKALIES EXERT UPON THE PREPARATIONS OF HENBANE, STRAMONIUM, AND BELLADONNA. BY A. B. GARROD, M.D.

Dr. Garrod first alluded to the frequent exhibition of henbane with liquor potassæ. He then detailed experiments, which demonstrated that the active principle of henbane was destroyed by liquor potassæ and other caustic alkalies; and that such a combination was inert, both when topically applied (as evidenced by the absence of power in causing dilatation of the pupil of the eye), and also when internally administered. Similar observations were next detailed upon the preparations of stramonium and belladonna, and the results were found to be the same. The carbonates and bicarbonates of the alkalies, however, were devoid of the property of destroying the activity of the plants. In some of Dr. Garrod's experiments, as much as a drachm of the extract of henbane and an ounce and a half of the tincture were administered in combination with potash, without the production of the slightest symptom.

The results arrived at in the communication may be thus summed up:—

1. Caustic alkalies, such as exist in liquor potassæ or liquor sodæ, entirely destroy the activity of henbane, preventing its action on the pupil when topically applied, and its influence upon the system when internally administered; and, combined with a proper amount of these alkalies, the largest doses of the preparations of henbane may be given without the production of any symptoms.

2. The same influence is exerted by the fixed caustic alkalies upon belladonna and stramonium.

3. The carbonates and bicarbonates of potash and soda produce no injurious effects upon the preparations of any of the three above-named plants.

The deductions to be drawn from these results are:—

a. Neither liquor potassæ nor any caustic fixed alkali should be prescribed with tincture or extract of henbane, as the virtues of the latter drug are thereby completely neutralised.

b. When it is desirable to administer an alkaline remedy with henbane, either a carbonate or bicarbonate should be selected, which would probably be equally efficacious upon the stomach, if such influence be required, and certainly as efficient in altering the condition of the urine, and the mucous membrane of the urinary passages.

c. The same precautions should be observed with regard to belladonna and stramonium, if at any time prescribed in conjunction with alkalies.

The President remarked that a combination of liquor potassæ with henbane was very frequently prescribed. The paper before the Society showed the reason why many had been disappointed in the effects of the remedy. He inquired whether caustic alkalies could be employed with success as antidotes to the poisons of belladonna, henbane, and stramonium. He had nearly poisoned a patient on one occasion with stramonium; and had seen another case in which a patient nearly fell a victim to belladonna. It seemed from the paper that it took two hours for the alkali to destroy the poisonous properties of those drugs. Could a more concentrated or larger quantity of caustic alkali be safely applied as an antidote?

Dr. Garrod thought the caustic alkalies never could be employed as antidotes in these cases, as the quantity given must be so large, or the strength so great, as to make it dangerous. There was, however, a certain antidote for henbane, belladonna, or stramonium. This was animal charcoal. If we took a solution of any of these poisons, and added but a small amount of animal charcoal, the effect on the system was instantly destroyed, or rather neutralised. It required less to neutralise stramonium than belladonna, and less for henbane than stramonium. He narrated two cases in which, by accident, twelve grains and a quarter of an ounce respectively of the dried leaves of belladonna were swallowed. In both these cases animal charcoal was administered, and, though somewhat late, both recovered. He need not say that it was necessary that the antidote should be given before the poison had been absorbed into the system; if it had passed from the stomach, of course no antidote would be effective. In illustration of his statements, he related the following experiments, which he had repeated on several occasions. He gave a dog a certain dose of aconite, which destroyed him. He gave another dog forty times the quantity of the same poison, combined with a small quantity of animal charcoal. This animal was unaffected. In these experiments it was not necessary to have purified animal charcoal, as the common bone-black would answer all purposes.

In answer to questions from Drs. E. Smith and Barclay, Dr. Garrod said he was quite ignorant of the mode of action of animal charcoal upon vegetable poisons, nor could he explain why vegetable charcoal did not answer equally well. But such was the fact. It could be proved in this way:—Take a certain quantity of vegetable charcoal, and add to it a solution of henbane, stramonium, or belladonna; it did not in any way influence the solution, and when it was applied to the eye, it would still dilate the pupil. If animal charcoal, however, were substituted for the vegetable charcoal, the solution would fail to dilate the pupil. Animal charcoal, it was known, had an intense absorbing power compared with vegetable charcoal. That animal charcoal did possess the property in question might be determined easily. If to a solution of quinine or morphia animal charcoal were added, it neutralised it; vegetable charcoal did not act upon it.

Dr. Marcet referred to the experiments of Dr. Hofmann, for the detection of strychnia in beer: these experiments had shown that the strychnia was taken up by the animal charcoal, which rendered it insoluble, and prevented its absorption when steeped in animal matter. This circumstance tended to prove that animal charcoal destroyed the poisonous effects of the vegetable alkaloids.

Dr. Benjamin Ridge made some remarks on the propriety of determining the kind of narcotic, and the proportion in which it should be combined with an alkali, to effect the object of the prescriber.

Dr. Garrod inquired the experience of members of the sedative effects of henbane when combined with caustic alkalies. He had himself often been disappointed with the effects of this combination, and he had found that a great number of practitioners of whom he had made inquiries had been equally disappointed.

Mr. Ure had frequently prescribed henbane with the liquor potassæ: the good effects resulting had, doubtless, been owing to the alkali and not to the henbane.

CASE OF COMMUNICATION WITH THE STOMACH THROUGH THE ABDOMINAL PARIETES, PRODUCED BY ULCERATION FROM EXTERNAL PRESSURE; WITH OBSERVATIONS ON THE CASES OF GASTRO-CUTANEOUS FISTULÆ ALREADY RECORDED. BY CHAS. MURCHISON, M.D., L.R.C.P.

The author had seen the subject of the following history,

when on a visit to Aberdeen, in May 1857. The patient was then under the care of Dr. Keith, professor of clinical surgery to the Aberdeen universities; to whom also, he was indebted for the details of the case, and for permission to bring them before the society.

Catherine R., aged thirty-four, was admitted into the Aberdeen Royal Infirmary, under Dr. Keith, February 19th, 1857. She is the daughter of healthy parents, both still alive; but one of her brothers is epileptic, and of two of her sisters, one is the subject of hysterical fits, and the other idiotic. The patient herself, about the age of eighteen, began to exhibit hysterical symptoms of the most aggravated form. On more than one occasion, she has been convicted of feigning diseases, so as to deceive her friends and medical attendants. In 1844, she succeeded, by applying a tight ligature around the shoulder, in producing such a solid œdematous condition of the left arm, that it was believed by her medical attendants to be elephantiasis. After two years of unavailing treatment, at her own suggestion she was admitted into the Aberdeen Infirmary, under Dr. Keith, with the object of having her arm amputated. Dr. Keith, however, exposed the fraud; and three weeks confinement in a strait-waistcoat cured the arm. Some years after this, she fancied she had heart-disease, and a seton was introduced by a surgeon into the epigastrium. This seton was allowed to ulcerate out; and the patient contrived to prevent the resulting ulcer from healing, by making constant pressure upon it with a copper penny-piece. The ulceration continued to advance; and after three years—viz., on March 2nd, 1854, it penetrated into the stomach, this organ having been previously contracted, adhering to the abdominal parietes. On removing the dressings on this day, a quantity of fluid, with a piece of biscuit and orange-skin, escaped from the opening. This opening continued to enlarge; and the only way she could retain her food was by keeping it closed with a gutta percha plug.

On her admission into the Aberdeen Infirmary, in 1857, the opening was situated partly in the epigastric, and partly in the umbilical regions, measuring four inches transversely, and three from above downwards. When the plug was removed, everything she swallowed immediately escaped from the opening; and, if the patient raised herself up, or coughed, the whole stomach became everted. The mucous membrane was of a bright vermillion-red colour, disposed in rugæ, along which undulatory movements could be observed. Blue litmus paper, applied to the moist surface of the empty stomach, was not reddened. The stomach could be manipulated in the freest manner, without causing any pain, the only result being a slight feeling of faintness or nausea. The integuments surrounding the opening were red, glistening, and tender. Her appetite was good, often ravenous; and she could eat and digest any kind of food. She was much troubled with thirst; and had only one motion of the bowels in twelve days. For nine years she had been confined to bed, but more from pretended than real ailments; so that, at last, her joints had become stiff, and she was unable to stand.

The author then gave an account of an experiment which had been performed upon the patient by Dr. Keith, to demonstrate the mechanism of vomiting. From this, it would appear, that there is first contraction of the pyloric extremity of the stomach itself; but that the evacuation of the organ is chiefly caused by its compression, from the simultaneous contraction of both the diaphragm, and recti and oblique muscles.

Dr. Murchison then gave a brief abstract of all the cases of fistulæ opening into the stomach from without, which he had been able to collect from the records of medicine and surgery during the last three hundred years. They amounted to twenty-five, including that of Catherine R. He then proceeded to make some general observations on these cases, under the following heads :—

A. *Causes of Gastro-Cutaneous Fistulæ.*

I. *Mechanical Injuries:* seven cases.

1. Incised wounds of the abdomen penetrating the stomach, and ending in permanent fistulæ: three cases.
2. Gun-shot wounds: two cases.
3. A blow over the stomach, ending in abscess, which opened both externally and into the stomach: one case.
4. Ulceration from without, caused by pressure: one case.

II. *Disease:* eighteen cases.

1. Cancer of the stomach: six cases.
2. Simple perforating ulcer of the stomach: probably twelve cases.
3. An abscess originating external to the stomach, and opening both into this organ and externally, may have been the cause in one or two cases.

B. *Situation, size, and other characters of the external opening.* In none of the cases hitherto recorded did the opening at all equal in size that which exists in Catherine R.

C. *Escape of food swallowed by the abnormal opening.* This was observed in all the cases; but in six, fluids only are noted as having escaped. In the case of St. Martin, the necessity for an artificial plug became, after a year or two, superseded by the formation of a natural one, from a fold of the mucous membrane of the stomach. The author pointed out that the escape of food, recently swallowed, from a fistulous opening in the abdomen, did not necessarily indicate à *direct* communication with the stomach.

D. *Duration of the fistula, and possibility of cure.* In cases resulting from cancer of the stomach, death, as might be expected, speedily ensues; three months being the longest period that a patient has survived the fistula. On the other hand, where wound or simple ulcer of the stomach has been the cause, the patients have generally lived many years, apparently in the enjoyment of good health. One case is on record of a woman who lived twenty-seven years with a fistula into the stomach; and the opening into St. Martin's stomach has existed for thirty-five years, he being still alive and in good health. As to the question of cure, the author stated that in four of the cases the fistula appears to have closed spontaneously, but in two of them it reopened. In two other cases the obliteration of the fistula was the result of treatment; but in none of the cases was any cutting operation resorted to.

E. *General health of persons affected with gastro-cutaneous fistula.* In permanent fistulæ, the general health has in most cases been wonderfully good. The chief abnormal symptoms have been great thirst, increased appetite, obstinate constipation, deficient secretion of urine, and, in women, amenorrhœa.

F. *The physiological observations which have been made in cases of gastro-cutaneous fistula.* In six of the cases observations had been made as to the appearance of the gastric mucous membrane, and the movements of the stomach, etc. Out of four cases in which the colour of the mucous membrane has been noted, it has been a bright vermillion red in three; but in the case of St. Martin it was a "pale pink," varying in tint with the full or empty state of the organ. Movements of the stomach, for the most part of an undulatory nature, have been observed in five of the cases. In three cases, irritation of the mucous membrane has been observed to give rise to nausea and faintness, but not to cause any pain.

The author went on to notice the various theories which have been entertained as to the mechanism of the act of vomiting; and stated that, from all the observations that had been made, including that upon Catherine R., the following conclusions might be arrived at :—

1. The act of vomiting is produced by the contraction of both the stomach and the abdominal muscles.
2. The contraction of the stomach is limited to the pyloric extremity, and has for its main object the closure of the pylorus.
3. The chief part of the act is effected by the contraction of the diaphragm, as well as of the recti and oblique muscles.

In three of the cases observations had been made on the chemical and physical characters of the gastric juice, and on its digestive powers over different articles of diet; viz., on Madelaine Goré, in Paris, at the commencement of the present century, by M. Clarieu; on Alexis St. Martin, by Drs. Beaumont, Dunglison, and Smith; and on a female at Dorpat, in 1853, by Messrs. Otto Von Grünewaldt and Ernst Von Schrœder. The nature of the results arrived at, in each of these cases, was briefly alluded to, and they were stated to be of a somewhat conflicting character.

No experiments as regards the gastric juice have as yet been undertaken in the case of Catherine R. Although the fistula, in her case, affords unparalleled opportunities for making such experiments, the author doubted if the results obtained would be of much value in her present debilitated state of health. He observed, however, that for some months she had been improving in strength; and expressed a hope that she might yet become a fit subject for experiment.

The paper was illustrated by numerous photographs of Catherine R., and by drawings of several of the other recorded cases of gastro-cutaneous fistulæ.

MEDICAL SOCIETY OF LONDON.

Saturday, November 14th, 1857.

Francis Hird, Esq., President, in the Chair.

LARGE UTERINE POLYPUS REMOVED BY THE CURVED ECRASEUR WITH DOUBLE ACTION. BY H. SAVAGE, M.D.

A woman, fifty years of age, who had been suffering from frequent uterine hæmorrhage during the last two years, was admitted into the Samaritan Hospital ten days ago, under Dr. Savage's care. Many examinations had been made elsewhere previously by various surgeons; but a polypus, if suspected, until the day before her admission, was probably quite out of reach. A swelling could even now be scarcely made out by the finger introduced far into the os uteri. Sponge tents were introduced daily. On the third day the tumour became more distinct, and then rapidly distended through the dilated os into the vagina. On the fourth day it could be felt in size and shape like a large jargonel pear (its neck not much less than its body), extending into the uterus to be attached somewhere towards its back part. On the fifth day the polypus was laid hold of by a pair of ring forceps, the looped chain of the écraseur being passed over the handle of the forceps, slipped up, and was drawn tight, precisely as the cord in the ordinary operation by ligature, and the tumour was brought away without pain or hæmorrhage. Dr. Savage observed that the unwieldy look of the instrument was suggestive of much pain and difficulty; but its curve fell into the hollow of the sacrum with the utmost facility, and its point as readily passed into the uterus as high as he thought necessary. As the chain is flexible only on one side, much careful manipulation was required before it could be got where he thought it ought to be. Before working the handle which tightened the chain, the single forefinger readily ascertained that nothing improper was included. The handle was worked at half-minute intervals as soon as decided resistance showed that contraction had commenced. The tumour came away in six minutes. From first to last the patient said she felt no pain whatever. The hæmorrhage has not reappeared. Dr. Savage said he had heard of two cases of polypus thus treated in this country, but believed they had not been recorded. He had several times seen M. Chassaignac remove parts highly vascular with his écraseur without the least hæmorrhage, and thought, as the plan he had adopted in this case was equally safe as the ligature, without any of its obvious annoyances, he would add his testimony to its value through the Medical Society. Dr. Savage strongly recommended an instrument with the double action, the finishing improvement of the inventor, M. Matthieu.

CONSERVATIVE SURGERY. BY P. C. PRICE, ESQ.

Mr. Price related the case of a girl who had been under his care in the Great Northern Hospital, suffering from injury to the first joint of the forefinger. There was much swelling and pain, and on examination the cartilages on one or two parts were found to be exposed. Instead of amputating the finger according to the old system, he took out the articulation, and brought the surfaces of the divided bones into union. The case had done exceedingly well.

STEREOSCOPIC SKETCH OF AN HYDATID TUMOUR OF THE LIVER IN SITU. BY C. J. HARE, M.D.

Dr. Hare suggested the use of photography in estimating the increase or decrease of tumours of the abdomen, by the taking of sketches at intervals.

PATHOLOGY AND TREATMENT OF CARBUNCLE. BY J. BISHOP, ESQ., F.R.S.

This paper contained a digest of the views entertained by the French and English surgeons, on the causes, pathology, and treatment of carbuncle. The author explained the conflicting notions which are entertained of the origin of this disease, and he gave a minute description of the pathological changes which these tumours undergo from their earliest formation through all their stages of inflammation, mortification, and suppuration, to their final discharge and resolution into ulcer, and subsequent healing by granulation and adhesion of the integument. In the surgical treatment, he recommends the crucial incision to be made to the bottom of the tumour as soon as the mortification of the cellular membrane takes place. The advantages of this plan of treatment were fully made out. He related some formidable and interesting cases having a practical bearing on the principles contained in the paper. He considers these tumours to be preceded and to be accompanied by an asthenic state of the system, which should be treated with tonics and a full nutritious diet. We have not space for further details of this excellent paper.

Mr. Hunt regarded carbuncle as a mode of eliminating poison from the system. His treatment was by purgatives and tonics, with ample diet. The purgatives, at short intervals, carried off any offending matter, and new blood was made by the tonics and good food. He objected to carrying the crucial incision very deep, or beyond the margin of the diseased structure.

Dr. B. Sanderson spoke of the great increase in the number of cases of carbuncle since 1846, when one or two cases only were annually fatal in London. Now they numbered upwards of 100.

Dr. Hare believed that though fatal cases of carbuncle had increased of late years, the aggregate number of cases of the disease had decreased since 1854.

Dr. Camps thought, on the contrary, that the cases were more numerous at present than at former periods.

Mr. Birkett was in the habit of employing a crucial or other incision at the end of the first stage of the disease, with much relief. He never extended the incision into parts from whence any hæmorrhage would be likely to ensue. The use of caustic had no advantage over the knife, except in removing the objection of a patient to cutting.

Mr. G. Cooper had seen carbuncle usually associated with a depressed state of the system, either resulting from mental or bodily causes. In treating the disease, he made a crucial incision quite to the bottom of the slough, applied linseed-meal poultices, and ordered tonics with carbonate of ammonia.

Mr. Dendy suggested that when the crucial incision had been made, it was not necessary to wait for the carrying away the slough by poultices, as it could be removed at once with advantage. He suggested the use of tonics and cod-liver oil.

Mr. Hird said that chloric ether, ammonia, and bark, with the mineral acids, were most useful in cases of carbuncle. He should fear to carry the incisions beyond the sloughing parts, as even a small loss of blood might be very injurious.

Dr. Theophilus Thompson made some remarks on the danger of carrying our views against depletion to an undue extent, and related the case of an old lady of eighty with carbuncle, in whom tonics aggravated the disease, whilst depletion relieved it.

Mr. R. Dunn, jun., had treated carbuncle according to its type. If inflammatory, he made a crucial incision through the tumour, applied poultices, and administered purgatives. In the asthenic carbuncle, stimulants, tonics, and a free incision into the tumour, followed by escharotics, to favour the separation of the slough quickly, was the most successful plan.

Mr. Bishop, in reply, said, that in one case he had attended, Sir B. Brodie had advised the carrying of the incisions beyond the margin of the tumour. The difference in the state of the tumour depended on a difference of constitution and kind of inflammation in the tumour.

Saturday, November 21st, 1857.

Francis Hird, Esq., President, in the Chair.

ENDOCARDITIS FOLLOWING THE INJECTION OF LACTIC ACID INTO THE PERITONEUM. BY BENJAMIN W. RICHARDSON, M.D.

Dr. Richardson laid before the Society a heart in the second stage of endocarditis. The subject had been a dog, and the cause of the disease the introduction of lactic acid into the system by the peritoneum. He explained that, after a long inquiry into the effects of the alkalies, he had turned his attention to the influence of the acids, selecting first for experiment the lactic as a feeble acid, and as an acid to which unusual importance had been attached, from the fact that Dr. Prout had first spoken of it as the probable *materies morbi* of acute rheumatism. The author having failed in introducing the acid into the systems of animals by the mouth in such a way as to excite any specific symptoms, and having equally failed in injecting it into veins, owing to the immediate effects, he introduced it into the peritoneal cavity. Here the acid was quickly absorbed, and in such a way as to produce the pathological results he now exhibited. The heart presented showed acute valvular disease of both sides. One segment of the tricuspid valve, swollen several times beyond its usual size, and having a pale red appearance, was bound by recent adhesion firmly down to the cardiac wall. The mitral valve was swollen and vascular, and around the upper margin it was studded with fibrinous beads. The animal had been subjected to the acid on three occasions; seventy-five grains of the acid, with four

drachms of water, having been thrown in each time, at intervals of two days. Twenty-four hours after the first injection, the heart was embarrassed, and the first sound obscure. Forty-eight hours after the second injection, a well marked systolic *bruit* came on, and continued till death. Death had been prematurely hastened in this case. By an accident in the last injection, the bowel had been slightly torn by the injecting needle, and the intestinal contents had flowed into the peritoneal sac. In commenting on this case, Dr. Richardson showed drawings in which endocarditis thus produced was present in the first stage, and in the stage of recovery. He did not, he said, hastily rush to the conclusion that his experiments (some of which were briefly referred to) proved to demonstration that lactic acid was the true cause of rheumatic endocarditis; but they certainly proved, thus far, that lactic acid was sufficient to produce such endocardial condition. In the heart placed before the Society, it would be observed that both sides were affected, which was uncommon in simple rheumatic endocarditis. This arose from the fact that, in the experiment, the acid had to traverse, with the venous blood, the right side of the heart before it reached the left: hence both sides were affected. The cause of the immunity of the right side of the heart in simple rheumatism, he (Dr. Richardson) explained by two propositions:—1. That the action of the poison was local; *i. e.*, it exerted a direct action on the endocardial surface. 2. That, in ordinary rheumatism, the poison was a product of respiration. Thus, the poison being formed in the course of pulmonic circuit was carried over the left endocardial surface, and, being distributed through the body, was either thrown off in the excretions, or, if returned by the veins, returned so modified or neutralised as to exert no injurious influence on the right endocardial membrane. The instrument used by the author for injection was laid before the Society: it is very simple, viz., a thin finely pointed hollow needle, attached to a small India-rubber injecting pump. The needle being carefully thrust through the abdominal wall, but directed a little upwards, so as to avoid the intestine, the solution of the acid, warmed to 96° Fahr., is gradually thrown in, and the needle is withdrawn. To hasten absorption, the animal is kept without food or drink a few hours previous to the operation.

THE DIAGNOSIS OF TUMOURS AND ENLARGEMENT OF THE KIDNEYS. BY C. J. HARE, M.D.

The author, after stating that under favourable circumstances (in a thin person, with the abdomen flaccid, etc.), the lower end of the kidneys, even in a healthy condition, may occasionally be detected, next described some of the malformations and malpositions to which these organs are liable. He then referred to a certain mobility sometimes presented by the kidneys, even when otherwise in a normal state. Such kidneys may occasionally be moved as much as four or five inches. A knowledge of this condition is important, as healthy kidneys presenting this peculiarity have been mistaken for abdominal tumours of different kinds. The great size which renal tumours may attain was mentioned: a cancerous kidney in a boy, aged only eight years, weighed 31 lbs. The general characteristics of tumours of the kidneys were then adverted to—those revealed by inspection, palpation, percussion, auscultation, etc. The characters of the upper part of a tumour of this kind are rarely to be made out, owing to its anatomical position; but the form, condition of surface, etc., of the rest of the tumour may often be readily determined. These vary much, according to the nature of the disease affecting the organ, as does also the amount of resistance to pressure. The whole may be solid or elastic, or may even present fluctuation. When one part of a renal tumour is solid and the other elastic, etc. (containing fluid), the latter is, in by far the majority of cases, situated nearer the median line than is the solid portion. The value of the usual position of the colon in front of renal enlargements was especially enforced. Dr. Hare had only once met with a murmur produced *in* a renal tumour; he believed such murmurs to be very rare. The characters of the pain, secondary and local effects, general symptoms, and conditions of the urine, occurring in different kinds of these affections, were described; and the author then passed in review the diseased conditions of other organs, which might be, and often have been, mistaken for kidney tumours; and particularly dwelt upon the difficulties of diagnosing certain malignant growths from the tumours under consideration. With regard to the spleen, he took the opportunity of mentioning, what he did not remember having seen named elsewhere, that he had frequently noticed an excessive quantity of lithic acid in the urine in cases of enlargement of that organ (*Transactions of the Pathological Society of London*, 1851-52), and in connexion with that point referred to some experiments lately published by Dr. Ranké. The different kinds of renal disease capable of giving rise to enlargement of the viscus were passed in review, and the destructive physical characters and characteristic symptoms of each were enumerated, so as to aid in the differential diagnosis of tumours of the kidneys.

The paper was illustrated by some recent specimens, and by numerous drawings, some of which represented the form and appearance of the abdomen in patients suffering from these affections, while others showed the appearance of the tumours *in situ*, or when removed from the body.

A discussion ensued, in which several members took part.

Saturday, November 28th, 1857.

Francis Hird, Esq., President, in the Chair.

ON OVARIAN DROPSY AND INJECTION OF IODINE. BY I. B. BROWN, ESQ.

Mr. Baker Brown related the following case of ovarian dropsy:—Miss C., aged 26, of a delicate constitution, suddenly discovered an enlargement on the left side of the abdomen, which proved to be ovarian dropsy. The disease so rapidly progressed that, in the short space of six months, it became absolutely necessary to relieve her by tapping, when about sixteen pints of highly albuminous dark fluid were drawn off. In six weeks, the operation was obliged to be repeated. At the end of seven weeks more, the distension and inconvenience became so great that Mr. Brown was requested to see her. He then heard the history just given, as also that she had consulted, a few weeks before, a celebrated London physician, especially with a few to inquire of him as to the utility of injecting the cyst with iodine. This gentleman in no measured terms condemned any interference beyond tapping, and especially condemned the injection of iodine, stating that it was almost uniformly fatal. Mr. Brown found the patient extremely emaciated, with a quick irritable pulse, and a painfully distended abdomen. Mr. Brown represented the dangers to be apprehended from every kind of interference, including even tapping; and left it for the patient and friends themselves to decide. In twenty-four hours the patient elected to try the injection of iodine. On the following day (November 13th), Mr. Brown injected five ounces of tincture of iodine, of the Edinburgh *Pharmacopœia;* and allowed it to remain in the cyst. The patient was less affected than usual by the shock of the iodine and its elimination; and, although iodine could be detected in the ejecta from the stomach, it could not be in any appreciable degree in the urine or in the saliva. Under the free administration of stimulants, the patient was convalescent in four days; and in ten days she was so much better in general health as to be drawn out in a Bath chair for half an hour. Although there was no doubt that there will be some return of the fluid, still it was evident that the health had been improved, not impaired, by the injection of iodine. Mr. Brown observed, that this case was instructive on several grounds. It was an additional case in his own hands where the operation was not fatal (he not having had one fatal case as yet); that, therefore, it controverted the wholesale condemnation of the plan; that the improvement of her general health warranted its trial; and that the absence of the elimination of the iodine through the kidneys was new in his (Mr. Brown's) experience. The cases already recorded before the Society, one of which was operated on nearly three years since, all continued well and free from disease. He therefore inferred that the operation was worthy of serious consideration in the profession, and that the following practical deductions might fairly be drawn:—1. That the operation, if carefully performed, was not so dangerous as had been supposed. 2. That it had in many cases, in France and in this country, proved eminently successful. 3. That, in the severer forms of multilocular ovarian dropsy, one or more of the cysts may be destroyed by the iodine, and so retard the progress of the disease. 4. That, even where it did not cure, the general health was certainly improved.

POISONING BY SULPHURIC ACID. BY J. M. WINN, M.D.

The patient was a child, four years of age, and had swallowed a quantity of sulphuric acid by accident. Difficulty of breathing and pain, followed by cough, dark tongue, fever, and glossitis, supervened. A grain of calomel was given every hour, and a blister applied. The next day the calomel was omitted, and the blister dressed with mercurial ointment. The child recovered.

SOME FEATURES OF PRACTICAL INTEREST IN CONNEXION WITH THE OPERATION OF RESECTION OF THE KNEE-JOINT FOR ARTICULAR DISEASE. BY P. C. PRICE, ESQ.

The author alluded to a paper on the subject of Resection of the Knee-Joint, which he had read before the Society on a former occasion; but since that event he had gained extra experience, which enabled him to speak with greater freedom and preciseness as to various features in connexion with the great conservative proceeding. The subject was divided into four heads:—1. The author discussed the ages at which the operation might be resorted to. Mr. Price stated that the proceeding was admissible in young children, in adults, and he believed, with much hope of success, it might be followed in patients who were passing the prime of life. He would, however, place no limit to age, as facts had not occurred to enable a precise rule to be laid down. The growth of the limb in young children, after resections at an early age, was fully admitted; and therefore no argument could favour recourse to amputation as a commendable plan of treatment in those instances in which the nature of the disease did not negative excision. 2. He entered at some length into the state of the patient's general health at the time of operating, as influencing the immediate and future results of the proceeding. There could be no doubt, if facts were to be received as evidence, that the shock after removal of the joint, even in persons distressed by pain and attenuated by suffering, was far less severe than generally imagined. Ease, comfort, and freedom from all pain, were the immediate results of the operation; and the author insisted that the weakened condition of the patient should not be held as a strong argument against the adoption of excision. Cases from the author's own practice were quoted to show the truth of this remark, and a reference was given to others. 3. The nature and extent of the disease, in relation to the performance of resection, was illustrated by some beautiful water-coloured sketches by Dr. Westmacott, which showed that, provided the disease be confined to the articulation, and not of a malignant character, the operation was on all occasions admissible; except, perhaps, for one class of disease—diffuse strumous infiltration of the cancellous structure of the heads of the tibia and femur. The extent of the morbid process was also duly considered, and a fair consideration given to other points of minor detail. 4. The author insisted upon a judicious after-treatment, and recommended the adoption of the splint described by himself in the *Lancet* for January 24th, in constant use at King's College Hospital, and now universally employed. A model, with the limb duly dressed and in position, showed the advantages to be derived from its use. 5. The author concluded by saying that an experience of his own, and of the operation in the hands of others, had induced the opinions he now held; and that, though he had endeavoured, by a study of over thirty cases, to arrive at many points of interest, still he hoped, at a future time, to bring the subject again before the Society in a more forcible and more agreeable manner.

Mr. Hird said that it was desirable to ascertain whether the limb in young subjects—before puberty—grew after resection of the knee-joint.

Mr. Weeden Cooke spoke generally in favour of the operation, but said that in many cases of diseased knee-joints the disease could be treated successfully by rest, and on Scott's plan. Resection was not applicable to joints in a state of inflammation, but in cases of disorganised joint.

Mr. Baker Brown considered the success in these cases depended on the after-treatment, the administration of opium, perfect rest, and full support, with plenty of wine.

Dr. Stocker said, in these cases, after the operation, there was no pain. With respect to the administration of large quantities of wine, he thought we were apt even in fever to carry the plan of treatment too far. Milk diet, with bark, was often better than wine.

Mr. Henry Smith agreed in the main with the paper. The question as to whether the limb grew after resection of the knee-joint in early life, must be answered in the affirmative. Several years since, Mr. Jones had operated on a boy below fifteen years of age. This boy's limb had grown since equally with the other, and he did not even require a high-heeled boot. He (Mr. Smith) should not like to perform the operation on a child below four years of age. The limb in such a case would not be so useful as though the patient were an adult. Mr. Syme had rejected the operation in early life because, in his case, the limb did not grow after the resection. There was, however, a greater shock from the operation in an adult than a child; but even in an adult the shock was less than that from amputation. Mr. Jones, of Jersey, was in the habit of administering large quantities of wine to his patients.

Mr. Hird remarked, that it would appear that in the period from four to puberty the operation was less advisable than after that period.

Editor's Letter Box.

ST. MARY'S HOSPITAL, MANCHESTER.

Letter from J. Foster, Esq.

Sir,—Your Journal of last Saturday contained a letter from one signing himself "A Manchester Student." The main design of it was to justify the recent resignation of medical officers at St. Mary's Hospital; but in so doing the writer has thought fit to give his version of a case of mine, which, if true, reflects very severely on my character as a surgeon.

The patient alluded to was seen twice before any symptoms arose to excite alarm. I left her at 3 A.M., in charge of the midwife, with good pains, the os uteri fully dilated, the head gradually advancing, and with a conviction on my mind it would soon be over, and I should hear no more about it. At 7 A.M. they came for me again. I found her sinking. The midwife said the pains had gradually gone off. I dispatched a messenger for one, whom I then thought my colleague; but his connexion with the hospital having ceased, he refused to come. Then I sent for the consulting surgeon; but fearing to wait longer, I delivered with the forceps myself. She died at 2 A.M. the following morning. The *post mortem* disclosed a ruptured uterus.

Now for your correspondent. He says, "as for their humanity, the effect of this is best illustrated by the manner in which the poor fared. A case which occurred a few days back is one in point. A woman was taken in labour; serious symptoms set in; and the surgeon wished to operate, but could not without a consultation (according to rule). For this he had to send a mile and a half; but, before the other arrived, the woman was beyond their skill, and shortly died. Had the other surgeons been allowed to act, a consultation might have taken place within a few minutes, and the woman's life saved. That this favourable result might have been attained, was rendered probable on a *post mortem* examination, and still more by the fact that, at the termination, the husband received a sum of money from two of the gentlemen who attended the examination. Such giving of hush-money looks very awkward; and it would appear from it that the well-being of the poor, is, at all events, not enhanced by the display of humanity."

The meaning is plain enough; that my "humanity" quietly stood by and allowed the woman to die for fear of breaking a rule; whereas she was delivered *before* my consulting surgeon arrived. This fact proves that death did not take place from any delay in the operation required, but from a cause quite unavoidable. And considering the knowledge of the case, professed by your correspondent, this suppression of the principal point leaves him open to the suspicion of having wilfully uttered an untruth; for, but for this suppression, everyone would understand the rule had been disregarded.

"A Manchester Student" ought to know that the distance from the patient's house, to that of the consulting surgeon, is hardly a mile, and not a mile and a half, as he would try to persuade you. But, supposing it was a mile and a half, is that far to send for a consulting surgeon in private practice? If not, why refer to it in this case?

Again, the opinion expressed by "A Manchester Student," that the *post mortem* examination rendered it probable a more favourable result might have been attained by an immediate consultation, is only to be attributed to his total ignorance of practical midwifery.

His remark, in reference to the charity bestowed on the husband by two of the medical officers, "looks very awkward" for the "humanity" your "Manchester Student" would "display" for the "well-being of the poor."

The gentlemen present at the examination, viz., Drs. Radford and Stephens, Messrs. Midwood and Runcorn, will verify my statement of the case.

In conclusion, I am sorry you should allow an anonymous letter to appear in your widely circulated Journal, containing such unscrupulous remarks on the conduct of medical men.

I am, etc., Joseph Foster,
Surgeon to St. Mary's Hospital.

44, Sidney Street, Manchester, December 7th, 1857.

THE ELECTION AT QUEEN'S HOSPITAL, BIRMINGHAM.

Letter from Joseph Sampson Gamgee, Esq.

Sir,—Without any desire to elude just criticism, I beg to be allowed publicly to protest against the fairness of the strictures editorially passed upon me in the last number of the British Medical Journal. It appears to me that a member of Parliament would be as open to censure for addressing, for a philanthropic object, the ladies of the town he represents, as you represent me to be for the simple fact of appealing to the ladies of Birmingham on behalf of the Queen's Hospital Ball. This festivity is the agency through which several hundred pounds are annually collected for the Queen's Hospital; and, as my election to the surgeonship, in opposition to the canvassing party, was being made a pretext for damaging the institution, I took early opportunity to set myself right on several points in which I had been maliciously misrepresented.

I beg to invite you to consider all the bearings of the contest in which I have been engaged. You may possibly find that I have suffered more than "slight provocation"—that I have done something else besides "writing fluently". I cannot but feel, and I believe that many besides myself feel, that something more than a personal question is at issue; and, while I recognise in you the full right of criticising me, I invite you to do so fairly, and not to lose sight of the several bearings of a great question in a good humoured appeal to the lady patronesses of a hospital ball.

I am, etc.,

Joseph Sampson Gamgee.

Queen's Hotel, Birmingham, December 7th, 1857.

[We can assure Mr. Gamgee that we are doing him infinite service by recommending him to restrain his too fluent pen. He is only compromising his position and losing his friends by rushing into fiery print on every possible occasion. Editor.]

STUDENTS AT ST. BARTHOLOMEW'S HOSPITAL.

Sir,—I trust that you will allow me to acquaint the numerous readers of your Journal with the fact that the occasion on which "One who wishes Reformation" visited the chemical lecture theatre of St. Bartholomew's Hospital, was that on which the usual exhibition of laughing gas took place at the close of the lecture; and also, on the same day, the mottos and number of marks obtained by some of the students at a previous examination were given out; of course giving rise to various exclamations of applause or disapprobation.

Although not wishing to defend any students causing improper interruption in a lecture room, still I must express my surprise that an individual, visiting a lecture theatre through courtesy, should publish occurrences, however improper, which he might witness in that place.

I am, etc., Studens.

St. Bartholomew's Hospital, December 10th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Monday, December 6th, 1857.

MEDICAL CHARITIES (IRELAND).

Mr. H. Herbert obtained leave to bring in a Bill to amend the laws in force for the relief of the destitute poor in Ireland, and to amend an Act of the 15th year of Her Majesty, providing for the better distribution, support, and management of Medical Charities in Ireland.

The Bill was brought in and read a first time.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Bell. On December 2nd, the wife of *Charles W. Bell, M.D., K.L.S., of Barlaston-under-Stone, Staffordshire, of a daughter.

Berney. On December 1st, at Croydon, Surrey, the wife of *Edward Berney, Esq., Surgeon, of a daughter.

MacLimont. On December 4th, at Guernsey, the wife of Robert MacLimont, M.D., of a son.

Marsden. On December 6th, a 2a, Hyde Park Place, Cumberland Gate, the wife of Alexander Marsden, Esq., Surgeon, of a daughter.

Richardson. On December 5th, at 16, King's Place, St. George's-in-the-East, the wife of Alfred Richardson, M.D., of a daughter.

Roden. On December 1st, at Llandudno, near Conway, the wife of *T. C. Roden, Esq., Surgeon, of a daughter.

Smith. On December 7th, at Corsham, Wiltshire, the wife of *M. Bass Smith, M.D., of a son.

Turnbull. On October 17th, at Bangalore, Madras Presidency, the wife of Gavin Ainslie Turnbull, Esq., Surgeon 12th Royal Lancers, of a daughter.

Turner. On December 7th, at 37, Sussex Gardens, the wife of George Turner, Esq., Surgeon, of a daughter.

MARRIAGES.

Barrow—Merriman. Barrow, the Rev. John Croker, to Emily Jane, eldest daughter of the late James Nathaniel Merriman, Esq., Surgeon, of Kensington Square, at St. Mary Abbott's, Kensington, on December 2nd.

Boxall—Napper. Boxall, Henry, Esq., Surgeon, to Frances, fourth daughter of Henry Frederick Napper, Esq., of Wisborough Green, Sussex, on December 9th.

Jones—Brown. Jones, Joseph Turner, Esq., Surgeon, of Farthingstone, to Caroline Emma, second daughter of the late Mr. Robert Brown, at Bramstone, on December 1st.

Parr—Broughton. Parr, Harington W., Esq., H.M.C.S., Labuan, to Mary Elizabeth Hyde, niece of *H. H. Broughton, M.D., of Preston, at Preston, on December 3rd.

Wildash—Wightwick. Wildash, Henry C., M.D., of Hythe, to Rose Mame, younger daughter of the late William Wightwick, Esq., of New Romney, at Selling, Kent, on Dec. 1st.

DEATHS.

*Bally, William Ford, Esq., Surgeon, of Bath, aged 59, on December 2nd.

Barlow. On December 1st, at Ardwick, near Manchester, Mary Ann, wife of *Joshua Barlow, Esq., Surgeon.

Benson, James F., Esq., Apothecary to the County Dispensary, Norwich, of scarlet fever and pleurisy, aged 24, on December 3rd.

Bird. On December 4th, aged 26, Alfred Eustace, eldest son of *James Bird, Esq., Surgeon, of 6, Seymour Street West, Connaught Square.

Hooper, Charles, Esq., Surgeon, formerly of Kempsey, Worcestershire, at Notting Hill, aged 57, on December 4th.

Luard. On November 25th, at Florence, Mary Magdalene, wife of Peter Francis Luard, M.D.

Woodward, Thos. Hewlett, Esq., Assistant-Surgeon H.E.I.C.S. in camp, before Delhi, on August 31st.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, December 4th, 1857:—

Angus, James Acworth, Newcastle
Bower, William Eliot, Nantwich, Cheshire
Cooper, Vincent Morton, Bow Road
Croucher, Alexander Richard, Shadwell
Everest, George John, Cork
Fleury, Charles Robert, Passage, co. Waterford
Granger, William Slocombe, Bradford Yeovil, Somerset
Hillman, William, Army
Holmes, John, Chesterfield
Howard, John Simpson, Madras
Land, John Fullarton, Patrington, near Hull
Leet, Charles Henry, Army
Pemberton, John McLeod, H.E.I.C.S.

At the same meeting of the Court—

Evans, Edward Higgon, of the Naval Hospital, Plymouth, passed his examination as Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date January 23rd, 1851.

The Fellowship. The following gentlemen have just passed

the preliminary examination (in Classics, Mathematics, and French) for the Fellowship of the Royal College of Surgeons:—

Browne, James Herbert, West Street, Brighton
Lee, Frederick Fawson, Charles Street, Trevor Square
Mason, Francis, Bedford Place
Walford, Walter Gilson, Cambridge

Apothecaries' Hall. Members admitted on Thursday, December 3rd, 1857:—

Dow, John, St. Martin's-le-Grand
May, John, Gerranarworthal
Tunmer, James Robert, Ipswich

HEALTH OF LONDON:—WEEK ENDING DECEMBER 5TH, 1857.

[From the Registrar-General's Report.]

The mortality of London continued high last week, and even showed a tendency further to increase. In the two previous weeks, the deaths were about 1380; in the week that ended last Saturday (December 5th), they rose to 1428. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1318. But, as population has increased, the average for comparison must be raised proportionally to the increase, in which case it will become 1450. Hence it appears that the deaths of last week were rather less than the corrected average; but, on reference to the return for the first week of December in 1847, it will be seen that, in consequence of influenza being epidemic, the deaths from all causes then rose to the extraordinary number of 2454, and the average which embraces that period is higher than would have been obtained if only ordinary causes had been in operation.

It may be stated that at least a hundred persons died last week who would have survived if the season had not been in more than a usual degree unfavourable to health. These deaths are the results of influenza, terminating, as the medical practitioners believe, in bronchitis.

The number of deaths referred in the present returns to pulmonary diseases (exclusive of phthisis and hooping-cough) is 415, which is not much less than a third part of the total number returned in the week. In the nine years 1848-56, the deaths from the same class of complaints ranged from 171 to 379. The deaths caused by bronchitis continue to increase, for in the two previous weeks they were respectively 227 and 217; last week they were 242; the corrected average for last week is 158. The table shows the greatest number of deaths from bronchitis during that period of life which extends from 60 to 80 years, 92 persons having died in that interval. Beyond 80 years, the number falls to 20, the disease then finding a much reduced number of living subjects for its attacks. Pneumonia, which carries off chiefly the young, is far from being so fatal during the present period of sickness; for the deaths from it, which were in two previous weeks 127 and 143, fell last week to 129, which is hardly equal to the average. The number of cases in which influenza is specially mentioned is 22. Nine nonagenarians are returned, all of whom were women, except one.

Besides a fatal case of "infantile cholera", the death of a seaman from "cholera, pneumonia", is recorded. He died on November 24th, on board the Dreadnought Hospital Ship. Three children died of scarlatina within four days in a family in George Street, Somers Town; and two in another family in Exmouth Street, in the same subdistrict. In the family last referred to, the mother and another of her children died also of the same disease in November.

Last week the births of 938 boys and 874 girls, in all 1812 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1504.

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·858 in. The *highest* reading was 30·16 in., at the end of the week. The mean temperature of the week was 46·1°, which is 4·5° above the average of the same week in forty-three years (as determined by Mr. Glaisher). On Wednesday and Thursday, the excess above the average was 9° and 11°. The *highest* temperature occurred an Wednesday, and was 56·4; the *lowest* on Tuesday, which was 35·8. The range of temperature on Thursday was only 6·8°; the mean daily range in the week was 12·7°. The difference between the mean dew-point temperature and mean air temperature was 2·9° The mean temperature of the water of the Thames was 43·6°. The mean daily degree of humidity of the air was 91°, complete saturation being represented by 100; on Wednesday the humidity was 98. After Tuesday, the direction of the wind was generally south-west. The rain measured in the week was only 0·10 in.

ROYAL MEDICAL BENEVOLENT COLLEGE.

A general meeting of the Governors of this Institution took place on Friday, December 4th, at the office in Soho Square, Henry Pownall, Esq., in the chair, when the following resolutions were passed:—

1. Moved by Mr. Propert, and seconded by Mr. Ray—

"That the following words be substituted for the last paragraph but one in the 15th bye law: 'A Governor who has one vote or more may at all elections use such vote or votes for as many candidates as there are vacancies to be filled up, and those votes may be divided at pleasure, or accumulated on any one candidate, provided they do not exceed the number to which the Governor is entitled according to the vacancies declared.'"

2. Moved by Mr. Charles Hogg, and seconded by Mr. Fincham—

"That the following words be omitted from the 15th bye law: 'All new subscriptions must be paid one month before the election, in order to entitle Governors to vote.'"

3. Moved by Sir John Forbes, and seconded by Mr. Webb—

"That the following words be added to the 13th bye law: 'After the election of a pensioner, and before admission, a certificate must be given by two householders that, in case of the decease of the pensioner, they, or either of them, will be bound to bury the deceased or guarantee the burial expenses.'"

4. Moved by Mr. Jonson, and seconded by Major Milles—

"That the following words be added to the 16th bye law: 'Each pensioner must take up his or her residence within two months after his or her election, unless for reasons approved by the Council; otherwise the election of such pensioner will become void.'"

A vote of thanks to the chairman was then moved by Mr. Propert, and carried unanimously.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Mr. Griffin has addressed the following letter to the Poor-law Medical Officers, accompanying it with a draft of an Act of Parliament.

"12, Royal Terrace, Weymouth, December 8th, 1857.

"Dear Sirs,—I have much pleasure in submitting to your opinion the Draft of an Act of Parliament, and shall feel obliged by your informing me *within fourteen days* of any suggestions you may wish to offer in regard to any of the Sections, the numbers of which please to quote, that my time may be saved. It is most desirable to have the Bill laid before Parliament as speedily as possible after the adjournment of the House for the Christmas recess. It will be necessary to reprint the Bill and again submit it to you, as doubtless many alterations will have to be made in accordance with the general views of the entire body. It will be important to lay a copy before the individual Members of both Houses, and with it a reprint of the present Rules, Orders, and Regulations of the Poor-law Board having reference to the Medical Officers, and it will require comments on many of the sections, with quotations from various sources, to prove the necessity of them. I need scarcely remind you that to do all this will be very expensive, and cannot be carried out unless you will aid the Association with money.

"Bear in mind the battle the Association is fighting is your battle; it is the battle of the children of many of us; it is the battle of the weak against the strong; it is the battle of the profession against long and cruel injustice and grinding misrule; it is a battle for the welfare of the poorer classes; and, I may add, it is a battle for the good of the rate-payers, as an improved state of health of the community must tend to a diminution of the poor-rates. Of the three thousand and odd officers composing the medical staff of the Poor-law, but few over one-third have contributed to the fund of £600 already subscribed. Of this sum, a part has been contributed by gentlemen not Union officers; amongst these stands the name of Joseph Toynbee, Esq., who within the last few days has, unasked, sent me £1 1*s*. as an annual subscription—the other names I have before published. The Association requires your pecuniary assistance, as upwards of £500 have been spent during the last two years, and a like sum is now necessary. It requires your energetic aid in other respects; it requires you to petition the Legisla-

ture to carry the Bill through Parliament—for which purpose I will send you petitions to sign—if you say you will attach your signature to them, as the writing them out costs money, therefore it will not do for me to send them in vain: it requires you to write to the Members of the Legislature with whom you are personally acquainted, and request their support.

"As soon as I have ascertained your sentiments, I will call the Committee together, and I feel confident, however inconvenient it may be to many of them, that they will do their best to get the Bill introduced into both Houses, and aid the cause in every possible way; but, to render success certain, it will require you—and each of you—to put your shoulders to the wheel; for although we ask nothing but what is just and reasonable, public bodies are slow to grant redress, unless a little gentle pressure be put upon them.

"I am, dear Sirs, faithfully yours,

"Richard Griffin, *Chairman.*

"To the Poor-law Medical Officers.

"P.S.—Stamps for 10*s.* and under will be very convenient, as about £40 will be required for postage during the next two months.

"Every Poor-law Medical Officer communicating with Mr. Griffin is requested to head his letter with the name of his Union as well as his address."

Mr. Griffin requests us to state that, as the Poor-law Board express their regret that they "cannot forward a list, showing the changes in the appointments of Poor-law Medical Officers which have taken place during the last eleven months," he must trouble those gentlemen who have received appointments since December 1856, to write to him for a copy of the draft petition.

ALLEGED FORGERY OF A WILL BY A SURGEON.

On Friday, December 4th, Mr. Thomas Monk, surgeon, a borough and county magistrate of Preston, was brought up at the Town-hall in custody on charge of forging a will. The case excited great interest and the court was crowded. Mr. Ascroft, the town clerk, and Mr. R. Segar, barrister, prosecuted; Mr. R. A. Cross, M.P., barrister, instructed by Mr. W. Blackhurst, being for the defence. On Thursday a coroner's inquest was held, arising out of the same matter. Edward Turner, reed-maker, St. Paul's-road, died on the 25th of September. During his illness he was attended by the prisoner. He died in a fortnight, and at his death it was found that the prisoner had succeeded to deceased's effects, which amounted to about £100 after his debts were paid. The rumours which were circulated led to the exhumation of Turner's body at the cemetery, and to the transmission of the stomach and intestines to Professor Taylor for examination. Professor Taylor's examination is not yet finished. The inquest on Thursday was adjourned after the evidence of Alice Chadwick, the housekeeper, had been given. That evidence showed that deceased during his illness was attended by Mr. Monk, who in an hour after his patient's death demanded the keys and removed money and books from the house. The man died on the Friday and Mr. Monk ordered the funeral for the Sunday, on which day he took some silver spoons away in his pocket. Subsequently he disposed of the stock in the workshop, and the household furniture. The inquest was adjourned till the 11th inst.

Immediately after the inquest Mr. Monk was taken into custody by the superintendent of the police, and lodged in the lock-up.

Mr. Segar briefly stated the facts, and expressed the pain and embarrassment he felt in being engaged in the case.

Mr. William H. Hinder, of the Consistory Court, Lancaster, produced the will alleged to have been forged.

The Rev. Thomas Clark, surrogate, said he remembered the 26th of September. The prisoner came to his house and said that a man named Turner was dead, and money was wanted to pay his workmen's wages; that he had been to the bank, and they declined to give him any without proper authority on his part to receive it. He said there was no will found, or words to that effect, and that there were no relations to deceased known or likely to be heard of, and therefore letters of administration could be granted to him, as principal creditor. He further stated that he had had repeated conversations with the deceased, and knew exactly what he wanted to do with his money. The housekeeeper was to have 5*s.* a-week paid to her as long as she lived. He applied for letters of administration, and witness read him the following instruction which is given to surrogates:—"No creditor can obtain administration without first issuing a citation, and obtaining a decree of court." Mr. Monk then wished him to apply at Lancaster for that purpose. On the following Tuesday he came again, and witness told him he had an answer from Lancaster. The prisoner said no answer was required, as a will had been found. He produced a will, and witness administered the oath to the prisoner as sole surviving executor.

The following is a copy of the will:—

"This is the last Will and Testament of me Edward Turner of St. Paul's Road Reed Maker of Preston in the County of Lancaster. I direct my Executors to pay all my just debts funeral and testamentary expenses so soon after my decease as may be convenient and it is my Will and desire that my said Executors pay to my God-Daughter Elizabeth Wilkinson of Preston the sum of Ten Pounds in Two months after my decease. I then order and direct my Executors to pay to my housekeeper Alice Chadwick the sum of Three Shillings per week and all the rest residue and remainder of my real and personal estate I give absolutely to Thomas Monk Surgeon of Preston in the County of Lancaster and I appoint Thomas Clark Iron and Brass Founder of Preston and Thomas Monk Surgeon both in the County of Lancaster to be my Executors under this my last Will and Testament and I hereby declare that the receipt or receipts in writing of my said Executors for any moneys payable to them under or by virtue of this my Will shall be an effectual discharge and I hereby declare that my said Executors may reimburse themselves out of the monies which shall come to their hands under this my Will all expenses which may be incurred by them in and about the said Executorship. In witness whereof I the said Edward Turner the Testator have to this my last Will and Testament set my hand Seal this fourteenth day of February in the year of Our Lord one thousand eight hundred and fifty-five.

"Signed published and declared by me the said Edward Turner the Testator as and for his last Will and Testament in the presence of us present at the same time and who in his presence and in the presence of each other have hereunto subscribed our names as witness. (Seal) O Edward Turner

"James Holden Preston. "Joseph Wilkinson Preston."

Witness stated further that he afterwards received the probate from Lancaster, and gave it the prisoner, who paid the charges.

Mr. John Fisher, manager of the Lancaster Bank in Preston, proved that on the 26th of September the prisoner applied for Turner's balance at the bank, £56 odd. He produced a sheet of letter paper containing writing, on which witness declined to pay him the money. He paid it on the 2nd of October, on the production of the will.

The paper in question on which payment of the balance was refused was not produced, the prisoner pleading that he had not time.

Robt. Farnworth said he knew the deceased's handwriting. The signature in the will was not his. He did not know such a man as Holden. Never heard deceased say anything about a will. Worked for him five years, and knew him well.

Joseph Wilkinson said the signature of his name in the will was not his handwriting. He knew nothing about it. He was acquainted with Turner fourteen years.

The prisoner was then removed.

On Tuesday the inquiry was resumed.

A report was current on Monday to the effect that the writer of the will had been discovered. The will is in the handwriting of a female, and on Tuesday Mrs. Pipe, the wife of a hair-dresser in Preston, was taken into custody.

Mr. Segar, barrister, again prosecuted; Mr. R. A. Cross, M.P., being retained for the defence.

Mr. Fisher, manager at the Lancaster Bank, said that Mr. Monk called upon him at the Lancaster Bank on Saturday, the 26th of September. He produced a paper about the size of a sheet of letter paper. It purported to be a disposition of Edward Turner's property in favour of "his dear friend, Thomas Monk." There was no mention of any other name that he could remember: but there was a disposition of 5*s.* a-week in favour of the housekeeper. The document appeared to be in the handwriting of Mr. Monk, but he would not swear positively to it. It purported to be signed by Edward Turner. He believed there was no witness's name to it. He (Mr. Monk) retained the document, and took it away with him. Witness said the bank could give no money on a document like that;

and that they never paid money except upon the production of probate or letters of administration.

Mrs. Ann Edna Pipe, wife of John Wilkers Pipe, hairdresser and perfumer, had resided at Preston between five and six years. She knew the prisoner, Mr. Thomas Monk. Since she had been in Preston, he had been the medical attendant of the family. She remembered having occasion one morning to call at his surgery. It was between two and three months ago. She saw Mr. Monk that morning at his surgery; he appeared to be preparing to go out. He asked witness if she had time to copy him a paper. He produced the paper, and also a blank sheet on which to make the copy. He gave directions to write it large like a man. Witness did copy it on a sheet of paper he gave her for the purpose. She copied it in his surgery. Mr. Monk was up and down the stairs of his surgery while she was copying it. Witness could not say positively in whose handwriting the paper was that she copied.

Mr. Cross objected.

Mr. Segar. It is a matter of opinion.

Mr. Cross. Of course my friend is going to ask whether it is in the handwriting of prisoner. Of course, before he does that, he ought to know whether she is prepared to answer the question.

Witness continued. The document (produced by Mr. Winder, Clerk of the Consistory Court at Lancaster) now put into her hands is the copy she made. The whole of it was in her handwriting, except the signatures, "Joseph Wilkinson, Preston," and "Edward Turner, Preston." The word "day" in the last line put in the body of the will was her handwriting. She thought she discovered the omission of the word "day" herself. After she had copied the document, she left it with Mr. Monk. She could not say whether the name "James Holden" was upon the document when she copied it. It was either on or she was directed to put it on the document by Mr. Monk. At the time, she had never before heard of Edward Turner. She did not see Edward Turner sign the document. When she left it with Mr. Monk, there was no other writing upon it but her own.

The depositions having been read over, the witness said she did not now know what she called at the surgery for. It was not to consult him.

This closed the evidence for the prosecution.

The prisoner was then committed for trial, bail being refused. The utmost sensation pervades the town of Preston, and the inquiry engrosses all conversation.

Canterbury Dispensary. The annual meeting of the Governors of this institution was held on December 1st. From the report, which was read by Mr. Rigden, it appeared that during the past year a much larger number of patients than in any former years had availed themselves of its assistance—amounting to 1382, exactly one hundred more than in the preceding year. Of these, 1141 had been attended at their own homes, and 241 had attended at the Dispensary for medical aid. There had been cured 845; more or less relieved, 365; 44 had died; 3 had neglected to return their cards to the surgeon; and 125 remained under treatment. A very large proportion of the patients who applied for and received assistance were of the female sex. During the past year, while 36 per cent. were male patients, 63 per cent. were female; and many of the latter sex, but for the Dispensary, would not have been able to obtain medical attendance. In consequence of the more than usual prevalence of zymotic diseases during the past year, the number of patients so afflicted had formed a larger proportion of the total number than had generally been observed; and the mortality from these diseases, in comparison with the absolute mortality as shown by the public register of deaths, had borne about the same proportion. One hundred and ninety-eight cases of *fever* (of which twenty-one have been intermittent or agues, and twenty-one remittent) had been brought under treatment, nearly half of which presented themselves during the last three months; four had proved fatal. Fifty-four cases of *scarlatina* had been admitted, forty-six of which were in the months of December 1856, January, June, July, and August, 1857; of these, five proved fatal. Eighty-eight cases of *diarrhœa* had been admitted, seventy-six of which occurred in the months of July, August, September, and October; of these, two proved fatal. Twelve cases of *erysipelas* had been under treatment, four of which were in February, two in July, and one in each of the following months—viz., November, December, January, May, August, and November, 1857. *Diphtheritis*, although prevalent in several other counties and in some of the neighbouring villages for several months past, did not present itself in Canterbury until within the last two months. Eleven cases had already been brought under treatment at the Dispensary; of these, two had died. The remaining cases from zymotic diseases had been three from measles, seven from erythema, five from carbuncle; and of mumps, hooping-cough, chicken-pox, and purpura, of each one case.

Projected New Lunatic Asylum for the City of London. At a meeting of the Court of Aldermen on Tuesday last, Alderman Wire, in the absence of Alderman Finnis, presented a petition from the Board of Guardians of the City of London Union for the establishment of a new lunatic asylum, and moved, "that it be referred to the General Purposes Committee to take the advice of the law officers of the corporation upon the subject, and to report thereon to this court." Alderman Sidney seconded the motion. The motion, after some discussion, was put and carried unanimously, and the court adjourned.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from: — Dr. P. H. Williams; Mr. William Scott; Dr. B. Smith; Mr. Propert; Mr. E. Boult: Yod Beth Gimel; Mr. Joseph Foster; Mr. Stone; Mr. J. S. Gamgee; Dr. Bader; Mr. I. Harrinson; Ink Dart; Mr. William Stuart; Mr. Southam; Mr. Booth Eddison; Dr. Broughton: Mr. Richard Griffin; Dr. William Dix; Mr. Thomas Crosse; Mr. C. A. Barrett; Mr. Haynes Walton; Mr. C. R. Thompson; Mr. Joshua Barlow; Mr. J. Birkett; Mr. Edward Barnes; Mr. T. Holmes; Dr. C. Handfield Jones; Mr. T. C. Roden; Studens; Mr. Crosby Leonard; Dr. Thomas Williams; A Manchester Student: and Mr. Thomas Southam.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. Handbook of the Science and Practice of Medicine. By William Aitken, M.D. Edin. London and Glasgow: Richard Griffin and Co. 1858.
2. Introductory Address delivered at the London Hospital Medical College, at the opening of the Session 1857-58. By John Cawood Wordsworth. London: Effingham and Wilson. 1857.
3. A Sketch of the History and Progress of Medicine: with Remarks on Medical Study. An Introductory Address delivered at the Liverpool Royal Infirmary School of Medicine. By *A. T. H. Waters. Liverpool: Adam Holden. London: Longman and Co. 1857.
4. A Treatise on Rheumatic Gout, or Chronic Rheumatic Arthritis of all the Joints. Illustrated by Woodcuts and an Atlas of Plates. By Robert Adams, M.D. London: John Churchill. 1857.
5. On Epilepsy and Epileptiform Seizures: their Causes, Pathology, and Treatment. By *Edward H. Sieveking, M.D. London: John Churchill. 1858.
6. On Consumption: its Nature, Symptoms, and Treatment. An Essay to which was awarded the Fothergillian Gold Medal of the Medical Society of London. By Richard Payne Cotton, M.D. Second Edition. London: John Churchill. 1858.
7. The Phenomena of Spinal Irritation and other Functional Diseases of the Nervous System explained, and a Rational Plan of Treatment deduced. By *Thomas Inman, M.D. London: Churchill. 1858.
8. A Manual of Qualitative Analysis. By Robert Galloway, F.C.S. Second Edition. London: John Churchill. 1858.
9. The Effect of Climate on Tuberculous Disease; being (with Additions) the Essay for which the Fiske Fund Prize was awarded to Edwin Lee, M.D. With an Appendix of Corroborative Observations and Notices of several Places of Winter Resort. London: John Churchill. 1858.
10. The Medical Profession in Great Britain and Ireland. With an Account of the Medical Organisation of France, Italy, Germany, and America. By Edwin Lee, M.D. Part II. British Medical Organisation. London: Churchill. 1857.
11. John Scott on the Treatment of Diseases of the Joints: and of Ulcers and Chronic Inflammation. A new Edition. With an Introduction and a Chapter on the Constitutional Origin and Treatment of Diseases of the Joints. By William Henry Smith. London: Longmans. 1857.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. LI.] LONDON: SATURDAY, DECEMBER 19, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. INTRATHORACIC CANCER.

Under the care of H. W. FULLER, M.D.Cantab.

[*Communicated by* G. GODDARD ROGERS, M.D., *Medical Registrar.*]

C. B., aged 45, a sempstress, came under Dr. Fuller's care on October 21st, stating that she had never been very strong, and had been subject to palpitation for years. Two months before admission she noticed a lump on the right side of her neck, and gradually the whole of her neck and throat swelled to a considerable extent. For a fortnight her breathing had been very short. There was no history of acute rheumatism; the catamenia had generally been regular; the water was scanty, but free from albumen. Her face was congested and livid, and the eyes much suffused. There was every now and then orthopnœa, and she was unable to lie on the right side. Over the right clavicle was a hard swelling, rather larger than a walnut. At times the neck swelled enormously on both sides. The right side of the chest was expanded very imperfectly, and over its anterior surface was complete dulness on percussion, and entire absence of respiration over the upper half, the lower half being tolerably free. On the left side the respiration was free, and of a supplementary character. The respirations numbered forty-four per minute. She had no difficulty in swallowing small quantities of food. In both wrists the pulse was weak, but not at all irregular. Tincture of digitalis and henbane were given in camphor mixture, six grains of iodide of potassium being added to each dose on the following day. A little æther was given when the dyspnœa was urgent. On the left side of the chest the superficial veins were prominent, and some congestive patches were noticed along their course. This turgescence diminished in a day or two, and there was a trifling decrease in the tumour above the clavicle.

October 24th. Loud hollow breathing was heard in the right suprascapular region, and harsh ægophonic vocal resonance. She went on much the same for the next two days, getting rest at night by means of morphia.

October 27th. After passing a sleepless night, she had much dyspnœa all day. There was more œdema, more palpitation, great swelling of the whole of the neck, and a marked increase in the size of the tumour in the right side. A belladonna plaster was placed over the præcordial region, and ætherial tincture of lobelia added to the mixture.

October 29th. Both upper extremities were very œdematous, and she could only get relief and sleep by sitting upright, the head being supported on the hands. The same night she was seized with a fit, in which her tongue was so much injured that it swelled, preventing articulation, and at one time almost inducing suffocation.

October 31st. She was very chilly; there was more œdema, and great coldness of the feet and hands. The tumour appeared larger, and the veins of the neck were much distended. The pulse was exceedingly feeble, and too rapid to permit of being counted, and the respirations were fifty-two per minute. By free unloading of the bowels she was relieved. The digitalis was omitted on the 2nd of November, and chloric ether added to the mixture, the action of the heart at this time being very irregular. During the night frequent fits of dyspnœa came on, yet she managed to procure about three hours sleep.

November 4th. She complained of thirst, and would not touch her food. She was then free from pain and dyspnœa; but in the evening the old symptoms returned; she could not rest; and, after passing the forenoon of the 6th in great suffering, at 2 P.M. she expired.

An examination was made twenty four hours after death. On removing the parietes of the chest, a large cancerous mass was exposed, filling the anterior mediastinum, and encroaching a little on the neck behind the right sterno-clavicular articulation. The mass was of well-marked encephaloid structure. Above it lay a gland, which was infiltrated with the same malignant matter. This could be felt through the skin of the neck. It was in close apposition with the main tumour, but separable from it. The disease almost surrounded the superior vena cava, a portion of which, however, was uncovered by it in front. It surrounded both innominate veins, and the left one was considerably compressed by it, whilst the right one was not diminished in calibre. The coats of the veins were not affected by the deposit. Passing backwards, it was found to surround the roots of both lungs, pressing upon, and narrowing to a transverse slit, that branch of the right bronchus which went to the upper lobe of the lung, and surrounding, but not compressing, the left bronchus. The pericardium was distended with bloody fluid, so that it reached much more to the left side than usual, and partially displaced the left lung upwards and backwards. The heart was healthy. The right pleura was full of serum, containing flakes of lymph. The highest part of the upper lobe of the right lung was quite destitute of air, feeling leathery, and sinking in water; in several other portions the lung was congested. There was serous fluid in the left pleura, but the lung was healthy.

II. DILATATION OF RIGHT AURICLE: PULMONARY APOPLEXY.

Under the care of H. W. FULLER, M.D.Cantab.

[*Communicated by* G. G. ROGERS, M.D., *Medical Registrar.*]

J. H., a dressmaker, aged 27, came into the house as Dr. Fuller's patient on November 28th. She had been seriously out of health for nine weeks, but had never felt thoroughly well since her nineteenth year, having been subject to more or less dyspnœa from that date. During the past three months it had increased, and for a month she had been anasarcous. Her complexion was dusky, the lips livid, tongue coated, skin moist, pulse weak, and 144 per minute. There was very slight hæmoptysis, and great prolongation of the expiratory murmur, owing apparently to pressure on the larger bronchi. The right side of the chest was totally dull on percussion, respiration was imperfect on the left side, and everywhere there was manifest want of expansion of the cavity during inspiration. The heart's impulse was much increased and felt over an extended surface, but was perfectly regular. The sounds were dull and distant, but free from murmur. The impulse could be felt as far as the third intercostal space on the right side. On listening the following day at the back of both lungs, well marked ægophony was detected at the upper part of the right one. Over the anterior part of the chest, except perhaps at its upper sixth, there was complete absence of respiration. Both jugulars were enormously distended, the legs very anasarcous, and the dyspnœa greatly increased. The urine was scanty, but quite free from albumen. She took compound digitalis pill with a mixture of squill, digitalis, and henbane, three times a-day, and she was dry cupped between the shoulders.

November 23rd. She was very livid, in great pain, and could only lie on the right side. During the night she rambled incessantly, but was rational in the morning. Her appetite was very variable; there was, however, not the least dysphagia, and at times she would partake of a mutton chop or other animal food with great relish.

November 24th. The dry cupping was repeated, gin was allowed, and acetate of potass added to the mixture. Profuse discharge after acupuncture of the thighs gave her considerable relief.

November 25th and 26th. She was easier.

November 27th. There was an aggravation of the dyspnœa, and during its paroxysms the jugulars were distended to the size of a cart-rope. She earnestly begged to be allowed to leave the hospital, and her friends had unwillingly planned to remove her. But the orthopnœa did not abate as it had formerly done, and on the next day she expired.

At the *post-mortem* examination twenty-three hours later, a large quantity of fluid was found in the right pleura. The vena cava superior and large veins were very turgid. The right auricle was very much dilated, and the auricular appendage covered with tolerably adherent lymph. The other cavities of the heart were also dilated, their walls preserving about the normal relation to the size of the cavities. The orifice of the tricuspid valve was very large, and its columnæ carneæ were thick and rigid. The heart weighed sixteen ounces. The cavity of the left pleura was quite obliterated by old adhesions, as was that of the right posteriorly. The left lung was healthy, excepting a patch of pulmonary apoplexy near its base. The right lung was solidified throughout, of a dull grey colour, and perfectly solid consistence; no part was found to float in water. All the other organs were healthy.

III. THORACIC ANEURISM(?.)

Under the care of H. A. Pitman, M.D.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

S. F., aged 37, a married woman, came under Dr. Pitman's care on November 15th. For many years she had been subject to winter cough, but was otherwise healthy. Ten days before admission she was attacked rather suddenly with cough and dyspnœa and violent palpitation. There was severe cough, muco-purulent expectoration, and great distress of breathing, the respirations being of a jerking character, and averaging fifty per minute. Her face was flushed, and she was unable to lie on the left side. She also complained of cold feet and aching in the loins. The urine was scanty, high coloured, and contained the faintest trace of albumen. There was some distension by fluid of the abdomen; the action of the heart was very irregular; the pulse 117, weak and also irregular. A diuretic mixture was given, and the bowels cleared out by calomel and senna. There was less cough and dyspnœa next day, although the palpitation remained. The pulse was 90, feeble and irregular; the respirations 48 per minute.

November 17th. She could lie down with comfort, and was, on the whole, easier; but she complained of aching pain across the chest, and of great difficulty in swallowing solid food. Even when swallowing fluids, she said something seemed to "meet them in the throat, and send them back." The respiration was still of the same jerking character, and in the larger bronchi a peculiar murmur could be heard, as if air entered with difficulty. Accompanying the inspiration was a hoarse murmur, most marked at the top of the sternum; and a second slighter murmur was detected with the expiration, the air seeming to encounter some obstacle in passing and repassing. Both these sounds were loudest towards the left side.

November 20th. The left pulse was more irregular than the right, and the action of the heart was intermittent. The expiration was very prolonged on the left side. Below the left clavicle was a kind of faint thrill or fremitus, which was not perceptible to the hand placed over the corresponding spot on the right side. The respirations varied from 50 to 60 per minute. Between the scapulæ indistinct pulsation could be felt; and the same murmuring sound was heard over the large bronchial tubes. Pressure under the left clavicle caused considerable pain; elsewhere percussion did not hurt her.

November 23rd. She was easier; her cough and expectoration had very much diminished; and, as these were the immediate disease for which she came under treatment, she was discharged, "relieved", a few days later.

Remarks. In the second of these cases, the extended impulse of the heart, taken in connexion with the appearances revealed at the *post mortem* examination, may induce the question, whether the dilated auricle itself was the seat of pulsation, owing to the introduction of blood *per saltum* through the auriculo-ventricular opening at each contraction of the heart. There was no murmur, no dysphagia, and none of the characteristic pain in the back, on which Dr. Fuller lays such stress in cases of thoracic aneurism. The case, with its pulmonary congestion and general venous obstruction, is almost the *fac simile* of one which came under the care of Dr. Stokes in the Meath Hospital, and which he has related in his chapter on "Dilatation with or without Hypertrophy". In the third case, many negative signs were present which were of value in assisting to fix the diagnosis. More directly suggestive of aneurism were the thrill under the left clavicle, and, although not mentioned in the notes of the case, a rough and prolonged murmur, distinct from that connected with the bronchi, and which was only heard by a few during the latter part of her stay in the Hospital. There was nothing in the patient's general aspect to indicate malignant disease, and she left with improved looks; yet neither in the first case which is here recorded, judging from appearances alone, would any one have hazarded the conjecture of a malignant rather than an aneurismal tumour.

ST. BARTHOLOMEW'S HOSPITAL.

I. WARTY GROWTH ON THE TONGUE, REMOVED BY THE ECRASEUR.

Under the care of J. Paget, Esq.

[*From Notes by* E. Barker, Esq., *House-Surgeon.*]

Susan S., aged 42, was admitted on November 25th. She had noticed a lump on the side of the tongue for nine weeks, some roughness having been perceptible during about twelve months. She applied originally as an out-patient, under Mr. Paget's care. The lump soon ulcerated; it was treated for about six weeks with the free administration of iodide of potassium, but without benefit. She stated that she had always enjoyed perfect health, and never suffered from any constitutional disease. It was determined to remove the tumour with the *écraseur;* and this was effected on November 28th. She was brought under the influence of chloroform. Curved needles were passed below the diseased mass; the tongue was secured by an assistant; and then the chain of the *écraseur* was passed below the needles, and gradually tightened. Thus the tumour was removed in a few minutes, without any bleeding. The wound was nearly healed, and the patient discharged on December 15th. The tumour was examined, and proved to be of the epithelial variety.

II. A SIMILAR GROWTH REMOVED WITH BONE-FORCEPS.

On the same day, Mr. Skey removed a similar growth from the side of the tongue by a sort of extempore *écraseur*. This consisted simply in grasping the tongue below the tumour with a pair of cutting bone-forceps; and, after about one minute's pressure on the part, forcing the bone-forceps through the substance of the tongue, thus contusing the vessels. The separation was then completed with a knife. Little or no hæmorrhage ensued. The man did not take chloroform, and went home immediately after the operation. He was seen a few days afterwards, when the wound was progressing favourably.

Perhaps this case may furnish a hint for some of our readers, when obliged to operate in situations where no regular orthodox *armamentarium* is at hand. Of course it should be remembered that all plans by which the parts are contused, as well as cut, preclude the possibility of union by first intention.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

I. CLOSURE OF THE PUPIL FROM ADHESION OF THE IRIS TO AN OPAQUE CAPSULE: INCISION OF THE IRIS, AND REMOVAL OF THE CAPSULE.

Under the care of Haynes Walton, Esq., Surgeon to the Hospital, and to St. Mary's, Paddington.

The patient was a middle aged female, feeble, and very thin. The right eye was disorganised, from repeated attacks of inflammation. The left was but a wreck of disease: the cornea was opaque to a slight extent in the very centre, and cloudy in other parts; the sclerotic was discoloured and vascular; the iris puckered and bulging; and the pupil, much contracted, was adherent to an opaque capsule.

Mr. Walton saw the eye several times before he decided on a course of action. He satisfied himself that there was no longer present any active disease, and that the perception of light showed the retina to be sufficiently intact to admit of an attempt at relief. The plan he proposed he was enabled to carry out. The cornea was divided at the side to an extent that would allow the lens, if present (and which would neces-

sarily be opaque) to be taken out, and the iris incised close to the pupil. These steps were effected with a lancet-shaped iris-knife. The external lip of the wound in the iris was drawn out, and a portion cut off with a pair of scissors. There was no lens, absorption of this body having taken place. The opaque capsule was most readily removed with a pair of small forceps, the adhesion to the iris proving to be but delicate. The artificial aperture was not, as might be supposed, too large; on the contrary, it was rather under size; but it was advantageously placed, being behind the most transparent part of the cornea, and sufficed to afford useful sight. When the iris has undergone structural change, it is difficult to make an aperture of sufficient magnitude; and there is a tendency in the new hole to get less.

This is just the kind of case that used, but a few years ago, to be considered irremediable. Tyrrell's operation of drilling was introduced to overcome the difficulties, and it is a method possessing merit; but where the pupil is very much contracted, as in this example, the clearing of it as far as possible might not, after all, make a sufficient entrance for the light. Again, when there is central opacity of the cornea, it is inapplicable. We see here, then, a marked instance of what we will venture to designate as progressive ophthalmic surgery.

II. EXTRACTION OF OPAQUE CAPSULE AFTER THE OPERATION FOR CATARACT.

Under the care of Haynes Walton, Esq.

A youth, who had undergone operations for cataract, had one of the pupils obscured by opaque capsule, which was disposed in a manner difficult to be got rid of according to the general rule of practice. It lay as a continuous membrane over the vitreous humour. Very often it is impossible to depress capsule so circumstanced, as it will rise as often as pushed down. Moreover, it will spring back to the former site even when a considerable portion of the circumferential attachment has been torn through. Neither was it most favourable for being rent with two needles. The measure most suitable, according to Mr. Walton, and that at the same time the least injurious to the eye, was extraction. The incision in the cornea must always be proportioned to the body to be removed: it must be ample, but not longer than is required. Mr. Walton suspected that the sharp canula forceps might be used, and they were employed with effect. This elegant and scientific little instrument, of French invention, is figured in Mr. Walton's work on the Eye. The blades are brought into play by a canula, which encloses them, shutting when the canula is pushed forwards, and opening when it is withdrawn. The degree of their expansion may be graduated by allowing more or less length of blades for the canula to work over—an alteration which is provided for by the screw at the shoulder of the instrument that secures the stem of the blade. The larger and sharper blade is perforated about the centre, to receive the hooked end of the other; and the surfaces, where the two come in contact, are crosscut, like common forceps. The sharp blade should be sufficiently keen to enter the cornea readily; and the lesser should have its edges so levelled that there shall not be any projecting angles, or any obtuseness to impede penetration. The great advantage of this beautiful appliance is, that it completes by itself all that is required, the aid of any other instrument being dispensed with. If properly used, the aqueous humour may generally be retained till the capsule is withdrawn—a great desideratum. When the capsule is in too large a mass to be extracted after this method, Mr. Walton excises the cornea with an iris-knife, and often employs the blunt canula forceps—more frequently, perhaps, than any other description of forceps.

III. PTOSIS AND LAGOPHTHALMOS (OR PARALYSIS OF THE ORBICULARIS PALPEBRARUM) IN THE SAME INDIVIDUAL.

Under the care of Haynes Walton, Esq.

Mr. Walton pointed out that there was a peculiarity in the affection of different nerves on the two sides of the face, and in the paralysis being confined to single muscles. A very dissipated looking man, 50 years old, restless and excitable, presented himself with slight ptosis of the left eye, and slight paralysis of the orbicularis of the other; so that he could not close the eyelids completely, and less effectually when the opposite eye was kept open. There was ptosis alone, the levator palpebræ being solely affected, while the orbital muscles were healthy, and vision was intact. The lagophthalmos, too, was the only evidence of any facial paralysis on that side. There was not any pain in the course of the nerve, nor at the root of the ear; nor was hearing affected. The circulation was languid, and the appetite defective. The history accorded with the man's appearance. He smoked in excess, and he drank freely, in excuse for which he assigned mental distress. The paralysis in each instance had been slow, having been observed for several days, and was increasing.

It was evident that the most essential part of the treatment was to effect a change in the patient's habits; and proper admonition was given. Sulphuric ether and aromatic spirit of ammonia, in decoction of bark, were prescribed. We watched the case for three weeks. The smoking was considerably reduced; all but the pipe after breakfast—the darling one with all smokers—having been left off; and the potations reduced to malt liquor. Improvement was soon marked. His medicine was changed to iron and quinine. When we last saw him, the ptosis no longer existed. The insufficiency of the orbicularis palpebrarum was yet apparent, but less. He ceased his attendance abruptly—a common termination amongst out-patients, when a surgeon most desires to watch a patient longer.

Original Communications.

ON THE EFFECTS OF SACCHARINE DIET IN DIABETES MELLITUS.

By Thomas Williams, M.D.Lond., Physician to the Swansea Infirmary.

The British Medical Journal for November 14th contained a paper by my friend Dr. W. Budd, of Bristol, suggesting, at the prompting of Mr. Augustin Prichard, the use of sugar as a remedy in diabetes.

In common with others, I read the letter in question with mingled smiles and astonishment. But knowing, from personal acquaintance, that both Dr. Budd and Mr. Prichard were men of thought and sagacity, and feeling assured, from their known industry and literary habits, that they must be familiar with those researches which in France and in this country have, although recently, brought the pathologist *so near* to a correct solution, not only of the seat, but of the nature of diabetes, I resolved to put the suggestion into practice.

It has been my lot to have, during the last few months, no fewer than three cases of this disease under my care.

In one, death speedily took place from exhaustion. In defiance of everything that was done, the specific gravity and the quantity of urine continued considerably above the normal standard for the two last months of life; and, although a remarkably powerful, corpulent, and athletic man, the patient rapidly sank. There was no intercurrent complication. He died from pure exhaustion. The loss of flesh was inconsiderable; but the specific gravity of the urine for some time before death varied between 1050 and 1060, and the quantity between six and eight quarts in the twenty-four hours.

In the other two cases the conditions are much less active. Both patients are still alive, and are gentlemen, of the ages respectively of 34 and 38. Both are thin, hard, wiry-looking persons; in both the disease has endured for a period of nearly two years. In neither has any loss of flesh or weight occurred during the last six months. Both are also similar in this respect—that the urine for many months has preserved an extraordinary uniformity in volume and specific weight. Both bear testimony to the fact that unusual muscular exertion of any kind, if it does not increase the quantity, is sure to augment the specific gravity of the urine to a degree corresponding to the severity and duration of the labour. This observation is one not devoid of interest. From it, it may be argued that whatever increases a general tissue change throughout the body, will add to the solids of the urine. Such a method of reasoning is, however, vague and liable to many fallacies. A better explanation may be arrived at.

The opportunity afforded by these two cases induced me to make trial of the plan of treatment suggested by Dr. Budd. The opportunity was as highly favourable. The symptoms were quiescent and stationary. The patients were intel-

lectual men. Each was eager to discover a new remedy for a disease with which he was profoundly disgusted. Each received the proposition, which emanated from the genius of my Bristol friends, with a perfect transport of joy. "What!" they exclaimed: "To give us sugar and saccharine food, the forbidden fruit of so many months—that which science has so long and so peremptorily interdicted! By Jove! there can be no method in the madness of medical men! To-day they are allopathic; to-morrow enthusiastically homœopathic! But we will submit to the proposed experiment."

It should be stated that between these two gentlemen there was no concert. They were unknown to one another, and lived in distant parts of the country.

I proposed that each should first return to common mixed food—including the use of sugar at breakfast and tea, ordinary bread at every meal, vegetables, and malt liquor.

It should, of course, be understood that before this experiment both these gentlemen had rigorously adhered to a non-saccharine dietary; that in Case A the urine had scarcely ever, for six months previously, varied from 1040 in specific gravity, and three pints in quantity in the twenty-four hours; that in Case B the conditions were very nearly the same, although not quite so unfluctuating.

In twenty-four hours after the change of diet in Case A, the urine increased from three pints to four pints and a half, and from 1040 in specific gravity to 1042. In forty-eight hours under the same diet the quantity rose to five pints and some ounces, and the specific gravity to 1050. In another twenty-four hours, being the third day from the commencement of the experiment, the volume rose to six pints, and the specific gravity to 1056.

Case B exhibited almost precisely the same change. The urine increased in quantity and density in the same time in an equally remarkable degree.

Neither of the patients could be prevailed upon to continue the experiments any longer. Both grew rapidly worse in every respect, and became greatly alarmed. The thirst grew more and more unquenchable. The skin became drier and drier; the bowels were every day more constipated; the mind passed from a calm state into a condition of rapidly increasing excitement, in one bordering almost on mania. The symptoms in every sense exchanged the passive for the active condition. Both patients regained their former tranquil feelings by the use of opium for three or four nights; and it was only slowly that the urine returned to its former physicial properties. These two gentlemen emerged from this ordeal with the deeply-rooted convictions that the old system was the best; that practice is above and beyond theory; that the rule of contrarieties is preferable to that resting its airy claims on fancied similitudes.

I do not wish either to disparage or to discourage my friend Dr. Budd. His meteoric idea, although not new, came upon me with convulsive and startling effect. I have found that his theoretic prophesies have alarmed me in actual practice. In his own able hands the results may be different. Let him give them to the world!

It seems to me that the results obtained through the preceding experiments lend a striking confirmation to the views lately advocated by Dr. Harley, of University College. (*British and Foreign Medico-Chirurgical Review*, July, 1857.) Dr. Harley proves, by an ingeniously devised series of experiments, that certain irritating substances (chloroform, ether, methylated spirit, ammonia, etc.,) injected into the portal system of a healthy animal, are capable of exciting that irritation of the liver, which, in a very short time, is followed by the appearance of sugar in the urine.

This is undoubtedly the *fact*. Dr. Harley differs from M. Cl. Bernard as to the explanation. I have no hesitation in siding with Dr. Harley, and maintaining that irritating substances introduced into the portal system augment the glucogenic function of the liver, by stimulating the hepatic branches of the pneumogastric nerve, by which the stimulus is transmitted to the spinal centre, and thence reflected through the splanchnic system upon the secerning cell-system of the liver; and that, by parity of reasoning, the sugar, in my human experiments, entering either in an entirely unchanged, or in a partially unchanged form, into the portal system, acted in the same manner as an *irritant* upon the hepatic branches of the pneumogastric nerves.

CASES OF NERVE-DISORDER, RECORDED WITH REFERENCE TO THE PROBABLE OPERATION OF MALARIA AS A CAUSE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Series II (*concluded.*)

Case xxiii. L. M., aged 16, a plasterer's labourer, was admitted May 25th, 1857. He never had ague, and has lived all his life in Marylebone. He has been ill six weeks. He was "red in the face and fat" when he was first taken ill, but is now extremely anæmic. The skin is warm; the pulse weak; the bowels regular; the tongue coated. At the beginning of his illness he had cold shivers, and has the same now from 2 to 4 A.M. every day; he gets hot then for two or three hours, and afterwards has sweating. There is no enlargement of the spleen or liver. He was ordered to take two grains of disulphate of quinine every two hours.

May 28th. He has not had the shivers nor been feverish the last two nights; he feels only weak. The quinine has produced buzzing in the ears. The skin is cool; the tongue whity.

℞. Quinæ disulphat. gr. ij; ferri sulphatis gr. iv; acid. sulph. dil. q. s.; aquæ ʒi. M. Fiat haustus quater die sumendus.

He was ordered to take a drachm of cod-liver oil three times a day.

June 30th. He looks and is better, but is still very far from strong, and has traces of febrile paroxysms still hanging about him. The medicine was not continued more than about a week since last visit.

This case of quotidian fever seems to have been of purely London origin.

Case xxiv. G. R., aged 32, a carpenter, generally has good health. He has been ill three weeks. He was taken ill at Dover, with shivering occurring every night, followed by violent sweating; he had pains in knees and soles of feet. He still shivers every night, more or less; but has no sweating. He complains of debility, pain at the back of the head, and exhaustion on the least exertion; has bad nights, and no appetite. The pulse is very feeble; the tongue is covered with white capped papillæ; the skin is cool; bowels costive; urine of dark colour. He has pain across the loins, and in the left shoulder. The stomach and intestines are shrunken; there is no enlargement of the spleen or liver. The thoracic organs are healthy. Iodide of potassium, with carbonate of ammonia and tincture of cinchona, were given at first for three days, with two doses of calomel and colocynth, but without any advantage.

July 22nd. The stomach can only retain milk and beef-tea. He is so feeble he can hardly stand. The bowels are confined. There is no epigastric tenderness. He was ordered to take three grains of disulphate of quinine three times a day.

July 25th. There is no sickness; but he takes only milk and arrow-root. The tongue is less coated; pulse very weak. He is extremely weak. The urine is exceedingly dark coloured. The quinine was ordered to be taken four times a day. He had a chop and half a pint of porter.

July 28th. He feels hungry, and is much better; the tongue is much cleaner; pulse still very small and weak; urine still very dark, specific gravity 1020, not albuminous.

August 5th. He is improving, getting stronger. The urine is much lighter coloured.

August 12th. He was discharged, well.

Remarks. The above is a good instance of malarious disease, the pyrexial symptoms having receded so as to be only obscurely marked, and little more of evident derangement existing, except profound debility and disorder of the digestive functions. The urine alone retained the febrile character, its deep colour indicating a great amount of waste, especially of the red globules of the blood. Its amount was not measured, but I think I can be sure it was not below the normal. I do not know that Dover is considered a malarious place; but there can be no doubt of the nature of the above case; and a good many instances of ague have come under my notice the last year in persons who appeared to have received the infection in Kent. I believe practitioners would often do well to inquire, in cases of obscure disorder, whether their patient might not have brought infection with him from some seaside or other place he had lately visited.

Case xxv. G. N., aged 56, a smith, was admitted February

23rd, 1857. He had been ill during the last nine months with intense pain following the course of the sciatic nerve in the right thigh, passing then down outside of the knee and along the shin. The pain seems to weaken the leg. He has pain at the præcordia on drawing a long breath, and between the shoulders. The skin is cool; the pulse feeble. He feels very weak. He is ruptured, and wears a truss on the right side. An ointment, containing fifteen grains of veratria to the ounce, was applied to the leg.

℞ Cinchoninæ gr. iij; ferri sulphat. gr. v; acid. sulph. dil. q. s.; spiritûs ætheris sulph. comp. ʒss; aquæ ʒj. M. Fiat haustus ter die sumendus.

He improved steadily on this treatment.

March 23rd. There is very little now of the pain in leg and loins; but he had violent pain in the stomach on the 21st, which is better, but has not yet ceased.

March 30th. The sciatica has ceased, but the limb remains weak. A return of the stomach pain was stopped by half a drachm of laudanum in brandy and water; but he has had for several days intense frontal pain. The head is hot.

The same treatment, increasing the dose of cinchonine one grain, and giving a drachm of cod liver oil three times a day, after April 27th, was continued till May 25th, when he was discharged, cured.

Remarks. The shifting tendency of the nerve-disorder in this case is the point I wish to remark, as indicating the existence of a poison affecting the system, rather than any local cause. There was also the marked debility so usual in these cases. In proportion to the length of time the disorder has existed must be the time requisite to effect a cure. This is a point which both patient and physician do not always sufficiently keep in view.

Case xxvi. M. P., aged 56, married, residing near a canal, was admitted June 18th, 1856. She complained of palpitation coming on at intervals, attended with pain, numbness, and powerlessness in the left arm, side, and leg, and some faintness; there was also some atonic dyspepsia and shortness of breath. Arsenic, with ammonia and cascarilla, benefited her a good deal.

July 30th. A patch of syphilitic eruption (tubercular) showed itself about one knee, for which she was treated by iodide of potassium, etc. After some slight febrile paroxysms, severe pain about the præcordia, and the occurrence of a small node on the right ulna, the syphilitic symptoms receded; but from October 25th she began to suffer severe neuralgia of the right forearm, extending from the elbows to tips of fingers, which was aggravated at night, and destroyed at last her rest. This yielded to ten grains of disulphate of quinine three times a day, ordered on November 3rd. By November 10th, she felt only a "little shoot" now and then, which passed away immediately. The medicine caused dimness of vision and giddiness. She was much stronger. Quinine and iron were then given, with a little opium, till December 1st, when she was discharged, very fairly well. It was interesting to observe that a fright produced a very severe return of the neuralgia for twenty-four hours after it had quite ceased for some days. The urine before the administration of quinine was very copious, and like water. After she had improved a good deal, it was in much less quantity, and of higher colour.

Remarks. In this case, we meet again with the question of the canal influence. I believe myself that it had to do with the production of the neuralgia. The syphilitic eruption and node complicated the case, but appeared to be a distinct affection. The diminution of the flow of urine, under the use of quinine, indicates a toning action upon the afferent arteries and the Malpighian tufts of the kidney.

Case xxvii. E. H., aged 10, was admitted March 23rd. She had been ill above a year. She vomits up most mornings, when she wakes, a great quantity of yellow and slimy matter. The vomiting is attended with pain at the lower part of the sternum; it used formerly to occur at various times in the day. There is no epigastric tenderness. She has better appetite in the evening than at other times. The pulse is very feeble and small; the skin cool; the tongue whity. The abdomen is rather large. No regular treatment was carried on till about a month later, when she was suffering from violent pain in both temples, and with the vomiting, which now occurred alternate mornings. There was a dark rim under the eyes; the tongue was coated; the eyelids were tremulous. The pain of head was worse at night. The bowels were costive. She was under steady medication from this time to June 22nd, when I sent her to the Convalescent Institution at Walton. Strychnia, quinine, and iron, with cod-liver oil, were the remedies employed, variously combined. These were of decided benefit; the head pain and the vomiting ceasing for more than a week, and the sleep being much better. It was very noticeable, when she relapsed, what a dark rim appeared under the eyes; she had at the same time all the aspect of profound depression and debility. The idea of some latent cerebral disease, of course, was present to my mind; and this suspicion was further increased on June 5th, when, with a relapse, there was a history of her squinting occasionally; and she averred to me herself that she saw three pens when I showed her one. Still the debility was so marked that I trusted to follow its indications; and I think rightly, as, after giving her strychnine, iron, and quinine, in combination, she was much better for nine days. When I saw her at the last date, there was a patch of sub-conjunctival extravasation, the pain was better, and there was no sickness. She then went to the Convalescent Asylum, but was much worse there, and only remained four days. I have now seen her again (November 13th), and find her, after having been in the hands of another physician at a Dispensary, in about the same state as when I first saw her. She is very weak and prostrate; has much head pain and vomiting, but no paralysis or other symptoms of cerebral disease. The head is sometimes quite free from pain, and one side is affected.

Remarks. The evidence which seems to justify the conclusion that this case was one of (aguish) nerve-disorder, and not cerebral disease, is—(1) the length of time the malady has continued without the occurrence of any symptom certainly declarative of organic change; (2) the very decided benefit obtained from tonic remedies, which would, in all probability, have been injurious in cerebral disease; (3) the remarkable debility, with the increase of which the pain and vomiting also became aggravated. The suggestion which the case offers is worth bearing in mind; viz., that cerebral disease may probably be simulated by such a state as above described. The sub-conjunctival extravasation is an interesting phenomenon, and and one which I think has no little resemblance, in the way of causation, to purpura. Certainly I have known this disorder to disappear under iron and quinine, with a generous diet, without any special modification of the latter. I have seen an excellent paper from the pen of Dr. Hyde Salter, dwelling on the same point, which I regret I cannot at present find so as to refer to it.

The following brief notices of cases afford evidence of the effect of residence in London in originating or developing aguish disorder.

(*a*) A hard worked medical man, resident in Paddington for eleven years, informs me that, so far as he knows, he has never been in districts where ague is prevalent. About four years ago he suffered from distinct quotidian, and is still subject to recurrences of similar disorder.

(*b*) May 15th, 1856. J. T., aged 48, has always had good health, except ague twenty-six years ago at Howe, in Kent. He has lived at Paddington or at Kensal New Town eighteen years. About six weeks ago he went down to Uxbridge to do bricklaying work for two or three days; he worked on a wide open common. In three days after his return quotidian ague commenced.

(*c*) E. S., aged 19, female. March 19th, 1856. Lived, until the last five years, at Wisbech, in Cambridgeshire; since then in London. She has tertian ague, which commenced in the course of the last year; never had it before.

(*d*) An eminent surgeon, after suffering for two or three weeks from great depression of nervous power, and inability for exertion, had decided aguish attacks in the beginning of February, 1857, which were cured by quinine and sleeping out of town. He had ague once twenty-five years ago at Sheerness.

(*e*) June 5th, 1857. G. S., aged 30, works in sewers. He was in Kent ten months ago; no one had ague in the place to which he went; he remained there fourteen days. After this he returned to Paddington, and has been working there ever since, not near the canal. Tertian ague began nine weeks ago; it ceased after treatment in six weeks; but ever since he has had neuralgia of both sides of the chest at the lower parts, with sinking sensations, and occasional burning heat flushes.

(*f*) L., aged 19, a medical student, residing not far from the Paddington canal, has a decided attack of ague, never having suffered from it before, nor having resided in any known malarious district.

(*g*) May 13th, 1857. S. A., f., aged 15. About fourteen days ago she had tertian ague for the first time. It came on without any known cause; she fell down suddenly faint, and on recovering perspired freely. She is a servant, and sleeps in a

kitchen. She came from Norfolk to London; there is no ague in the part of Norfolk from which she came.

(*h*) May 5th, 1857. A policeman, aged 25, on night duty, had tertian ague, the rigors occurring every other night. He was previously a carman at Maidstone, of most abstemious habits. He had no ague before he came to London, where he had been about eleven weeks before the attack occurred. He lived in Walbrook, in the City.

(*i*) June 16th, 1857. W. E., aged 11, born, and always living in Paddington, has had ague of quotidian type three months; none last fourteen days; but is without appetite, languid, and prostrate. The liver and spleen are considerably enlarged.

Summary. The morbid phenomena described in the preceding series are all referrible to a lowering or derangement of the nervous force in one or more situations. The brain may suffer, or the spinal cord, or the cardiac nervous centres, or those of the stomach or other abdominal viscera, or the vaso-motor nerves of other parts, or any sensory or motor nerve. Paralysis of the sympathetic nervous system will afford a reasonable explanation of the febrile attacks that have been often alluded to. (*Vide* Virchow's and Parkes' writings.) The disorder of the nervous power sometimes has, at least for a time, more of the nature of irritation than of simple prostration.

The question that now suggests itself is, are we to consider these phenomena as produced by a malarious miasm, or by merely common causes? To aid in answering this question, I adduce the following considerations:

1. It cannot be affirmed that malaria *may* not be generated wherever a moist surface is undergoing the process of drying. There are many well-known facts in proof of this; I will only adduce the following, which was kindly communicated to me by Dr. J. Marston. The whole crew of a ship, laden with wet deals, became affected with intermittent fever during a voyage from Norway to Lowestoft, and recovered on being landed and treated with quinine. The case was not a solitary one. In another instance quinine was of no avail as long as the crew remained on board the ship.

2. The metropolis is within reach of malaria transported from the low ground along the banks of the Thames.

3. Some cases of ague do certainly occur which seem to have been really produced in London; and in various others a predisposition long dormant has been rendered active again during a London residence.

4. The action of malaria is by no means limited to the production of intermittent and remittent fever. Dysentery, neuralgia, and a multitude of other morbid states are unquestionably produced by it. It may require much acumen to distinguish the non-malarial from the malarial disorder, and perhaps is not always possible. Yet the coexistence of marked debility and depression, or of paroxysmal fever, the failure of other remedies, and the success of quinine and the like means, or of change of air, will often enable us to distinguish clearly. If we meet with such cases we have almost as much proof of the presence of malaria as if the disease were an ague. When, for instance, we meet with marked neuralgia, not dependent on gout or rheumatism, or any local irritating cause, prone to relapse, somewhat shifting in its locality, and benefited by quinine, iron, etc., and by a pure bracing air, I believe, in the great majority of cases, it is truly of malarial origin.

5. Several good observers are of opinion that there exists a real affinity between cholera and ague; that the former has much resemblance to the so-called pernicious fevers. This view I quite concur in, as well for other reasons as from having myself experienced, during the last cholera epidemic, an attack which appeared to those who witnessed it to be most like ague, but which was evidently the effect of choleraic poison. Again, other good authorities have remarked a connection between ague and influenza; *vide* some remarks of Dr. Headlam Greenhow, quoted in a previous paper on malaria, published in this Journal. It ought, I think, to weigh with us in some measure that both cholera and influenza, though in somewhat milder forms, show a tendency to become naturalised among us. Cholera revisits us at short intervals, and every now and then we have catarrhal affections prevailing which we are obliged to call influenzal. Surely this shows that we live under the influence of some peculiar constitution, which favours the recurrence of these disorders. Of both cholera, aguish disease, and influenza, it may, I think, be stated that prostration of strength is one of their most marked features, distinguishing them from other affections more or less similar.

My own reply to the question proposed above is, That there does prevail in and about London, at the present time, a morbid influence, which affects the weakly and predisposed in such a way as to produce disorders, whose main character is the prostration or derangement of nervous power in some part or other, and which exhibit, in not a few instances, a decided resemblance to the ordinary effects of marsh malaria. The exact origin of this influence I cannot pretend to determine; I incline to the view that it is partly of a general, partly of a local nature.

While I am fully aware that the mind may easily get so preoccupied with one idea that it can take in no other; and while I have endeavoured to guard against this error, it yet does appear to me that such forms of disease as I have sketched above are those which prevail most at the present time, at least about the metropolis. I would only ask practitioners, in caring for perplexing cases, to allow the view I have suggested to enter into their consideration.

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

By H. Hannotte Vernon, M.D., Physician to the Great Northern Hospital; formerly Resident-Accoucheur to St. Mary's Hospital.

[*Continued from page* 905.]

Part III.—Therapeutics (*continued.*)

Having disposed of the various modes of diminishing the irritability of parts affected with hyperæsthesia, so as to lessen the reflex motor impulses derived from abnormal eccentric conditions of the nervous system, it now remains to describe the various

II. *Modes of Exciting or Exalting the Polarity of the Nervous Centres concerned in Parturition, and also of Allaying their too great Polarity.*

As a preliminary to the details of this paper, some principles must be laid down with respect to the use both of excitants and sedatives of the nervous centres. Some regard must always be paid to those correlations which I have insisted upon as obtaining between physiology, pathology, and therapeutics. In illustration of this, let us imagine a case of labour in which birth is delayed: it is not enough to say, "Here is ergot of rye, let us hasten labour." There must be a *natural* connexion between the cause of delay and the means used to obviate it, otherwise we shall be treading upon unsafe ground. These axioms may, I am convinced, be laid down as rules never to be reversed—as rules which tend, in the hands of competent persons, to increase the power of directing the uterus, and to procure the almost absolute safety of the patient, in so far as the matters upon which they touch are concerned.

1. Excitants of the nervous centres should be used only when delay arises from defective polarity of such centres—never in order to overcome a mechanical obstacle.

2. Hyperæsthesia, and the opposite condition of any given nervous centre, should, if possible, be treated by the exhibition of those agents which act upon the centre affected.

3. Mechanical obstacles, of whatever kind, should invariably be dealt with by mechanical means, or means which will remove the obstacle itself.

Thus, by rigidly keeping up the connexion of vital defects with vital helps, and mechanical obstacles with mechanical helps, we shall run no risk of ruptures, bruises, lacerations, or other disasters which will be spoken of presently as following the improper use of oxytocics, or the unnecessary use of instruments.

The conditions which declare the necessity for stimulants or sedatives of the nervous centres, in labour, should be very distinctly understood and remembered; and most particularly the mind should not be allowed to dwell upon the pernicious idea, that the broad fact of delay implies a necessity for some more or less potent oxytocic. It cannot be too forcibly urged, that the proper use of stimulants of the nervous centres is not as additional forces to overcome obstacles, but as means of supplying the natural impulse to act when it is wanting or deficient. I have seen frequently the evil consequences of dosing with ergot of rye in order to compel the uterus to force a large fœtus through passages somewhat too narrow. The rapid and energetic contractions of an overstimulated uterus are far more likely to bruise and lacerate, than the careful introduction of forceps or lever by competent hands. The necessary want of moulding and adapting movements on the part of the fœtus,

whether of rotation, flexion, or extension, which an excess in the propelling force causes, sufficiently explains why this statement is reasonable, not to mention that the soft structures of the pelvis resist a much stronger force of impulsion than of traction. An unwise fear of instruments has been the cause of many disasters; and the "meddlesome midwifery is bad midwifery" school of obstetricians have done more mischief by sins of omission, than every one else has done by sins of commission. The innocuous looking chocolate-coloured powder is a far more dangerous agent than the forceps, unless limited to a very definite and small class of cases—small, that is to say, in comparison with the numbers to whom it is actually given. Death of the fœtus, self-inflicted bruising of the uterus, ruptures of various kinds, incarceration of the placenta, and all degrees of metritis, are grave charges which may be brought against the ergot, unless skilfully used; and even then, when our arrow is discharged, we may find that we have "slain a woman to our wounding, and a young woman to our hurt." With the forceps, these dangers are unknown; for a man must be clumsy and ignorant if he does more damage than mark the face of a fœtus for a week or two. The fact is, if a case is fit for the forceps, and the operator is fit to use them, there ought not to be much more difficulty in applying them effectually than in taking an egg out of a saucepan with a spoon.

It follows, then, that oxytocics are to be solely confined to cases of *pure inertia*. Through whatever nervous centres we desire to act, and with whatever agent we work, deficient uterine action is the *only* indication for oxytocics; and this rule is absolute.

Sedatives, on the other hand, have a wider range of action and applications. Both eccentric and centric irritations frequently require their exhibition. Excessive action of the uterus, transposed action of the various expulsive forces, pain, rigidity of the maternal passages, and some mental states, call for the administration of sedatives, narcotics, anodynes, or anæsthetics—agents all of the same general intention.

As all sedatives and all excitants of the uterus, acting mediately, do eventually, beginning at whatever nervous centre they may, affect all nervous centres more or less, it will not be convenient to consider this part of our subject in the same categoric relation to the antecedent pathological investigations, as has been done with regard to eccentric medication. Such a plan would involve endless repetitions; and, moreover, it is not easy enough to say whether particular sedatives or stimulants belong in every case to one set of centres or another; or, at any rate, to affirm that they excite this or that centre, and no other immediately; and even when a common action is established, it cannot be determined as to the exact share of influence felt either by one centre or another. For these reasons, I shall take up the various agents we possess *seriatim*, and assign them, as far as I can, their specific physiological and pathological relations; and endeavour, at the same time, to fix their therapeutical value. They will be taken up one by one, without any reference as to whether they are stimulants or sedatives, because some are both, under different circumstances.

Ergot of Rye has been in use for about eighty years. Desgranges wrote an essay on its virtues so long ago as that; but Dr. Stearns of New York appears to have fixed it in its present place in obstetrics, thirty years later. Some prejudice against its use seems to have arisen out of its misapplication on the continent; for it was condemned by the medical bodies of the day, and eventually it became illegal to employ it. An epidemic arose in Germany A.D. 1596, which appeared to be traceable to its presence in the rye-bread generally eaten; and, so far back as about the year 1100, there was an epidemy in Silesia, the symptoms of which closely resemble those of ergotic poisoning; so that this agent was nothing very new to physicians even when Dr. Stearns wrote, in the year 1807.

Ergot is undoubtedly a stimulant of some nervous centre or centres. The idea of a specific action on the muscular fibres of the uterus alone is repugnant to all our scientific conceptions, and contrary to the tendency of discoveries which are constantly showing the action of remedies to be referrible to conditions of the blood or nervous system, modified by the emunctories through which such agents discharge themselves from the body. It is desirable to settle the question as to whether ergot acts on the ganglionic centres, or on the spinal cord, at rest; but, although I am satisfied in my own mind upon the subject, it may perhaps not be so easy to imbue the minds of readers with a similar conviction. Dr. Tyler Smith has stated directly in his writings that ergot acts upon the spinal cord; but he adduces no reasons for the statement, beyond the general reference to reflex spinal action which pervades his treatment of the therapeutics of uterine motor actions. I feel, therefore, the less hesitation in advocating a different opinion; though, at the same time, the dictum of so accomplished an obstetrician requires respectful consideration. The spinal theory of the action of ergot appears to rest upon the excitation of the muscular activity of the uterus which it produces, and upon the convulsions which follow its protracted ingestion. Neither of these circumstances, however, are at all conclusive, because the influence ergot exerts upon the uterus is explicable equally either upon the assumption that it acts on the spinal cord or the ganglia of the uterus proper; the one hypothesis, as an hypothesis, is as good as the other. The convulsive phenomena, moreover, do not obtain until a grave form of blood-poisoning is produced, similar in character to that which results from the zymosis of the blood in sausage-poisoning; and, indeed, it appears that numerous forms of toxæmia end in convulsions; so that the mere fact of convulsive actions is declaratory of no specific action at all. Disorganisation of the kidneys, and the defective blood-depuration of final stages of scarlatina and other fevers not exanthematous, are familiar instances of morbid states which have a common issue in convulsions and subsultus; so that these phenomena are of no special value. If we turn to the ganglionic theory of the action of ergot, there is the prime fact of excitation of the uterine muscles to fall back upon, as well as in the spinal theory of its action. But there are other facts which to me have appeared conclusive. It has been, for instance, proven that ergot is useful in arresting hæmorrhages, such as hæmoptysis and epistaxis; and, as the agent is possessed of no styptic properties, in the ordinary acceptation of the term, we are driven to account for its action in such cases by reference to an influence upon the capillaries exerted through the medium of the sympathetic. Ergot of rye has, further than this, been found useful in cases of retention of urine from vesical paralysis; and such cases have been recorded by M. Allier, Dr. Jeffreys, and Dr. Ross, and in the *Medico-Chirurgical Review* for 1839. A crucial experiment has, moreover, been provided for us by the fact that the agent under consideration has restored the functions of the bladder when there has been paraplegia, and when, at the same time, no effect whatever has been produced upon the paralysed voluntary muscles. I cannot, for these reasons, resist the conclusion that ergot expends its influence in stimulating the ganglionic nervous centres, and more especially those of the uterus proper.

The value of such an agent in an obstetric point of view must be determined by three circumstances; first, by the proportion of cases in which it produces the desired effect, and upon the effects not desired which it produces at the same time; secondly, by the effects it produces upon the fœtus; and, thirdly, by its more remote effects upon the mother. With regard to the first of these tests, much discrepancy of opinion exists. Villeneuve rated the proportion of cases in which ergot produced contractions of the uterus at six-sevenths of all cases in which it was exhibited. I have kept no account of the results in my own hands; but the general impression on my mind is that it as often fails to produce any effect as not. It is perhaps not safe to trust to general impressions for a positive conclusion, but I can speak very positively as to its frequent inutility if I cannot formulate my experience into an exact numerical result. Failures on the part of ergot to set up uterine contractions may be accounted for by disease of the drug, or by a natural capriciousness of quality; but whatever explanation may be assigned, the practical fact remains, that it does frequently produce no discernible effects whatever; and here this part of the question must rest for the present. But, with respect to uncovenanted effects produced in the course of labour, it is possible to speak more certainly, and of the frequency of such effects it is not so necessary to have a numerical indication, because the mere fact that they do occur, and that there is always a risk of their occurrence, is enough. In the first place, then, the uterine contractions excited by ergot are usually dissimilar to the normal rhythmical actions, being either partial and irregular, or violent and continuous. In the first instance the effect produced is pain, out of proportion to the advance obtained in the progress of the labour; and, in the second instance, time is not given for the natural fœtal moulding and movement of adaptation. The parts of the fœtus are crowded down, as it were, upon the aperture through which it has to pass with too great haste, and the result is either disruption of the maternal textures, or a difficulty which arises entirely from abolition of the normal mechanical conditions of

delivery. The power or the resistance may be destroyed; that is to say, the uterus may give way, or the perinæum may be ruptured; and, short of such extreme effects, there may be all grades of bruising and injurious compression. When birth of the fœtus is accomplished, there are still other mishaps in view; for the placenta may become incarcerated by the over-stimulated uterus, and its removal is not always a very easy matter under such circumstances. This delay and distress to the patient by unusual protraction of the final stage of labour is not at all unlikely to cost the medical attendant her confidence, especially if she happens to connect the exhibition of the ergot with her condition, not to mention the substantial evil of delay to the patient herself. If we bring ergot to the test of the effect produced upon the fœtus, we shall find, perhaps, a more cogent reason for extreme care in its use than even those adduced above. Dr. Samuel Hardy has placed it beyond doubt that in the majority of cases where ergot is given, the pulsations of the fœtal heart become less frequent, sometimes irregular, and even quite intermitting for a time. Dr. Hardy even avers that, should the fœtal pulsation be reduced below 110 per minute, and at the same time become intermittent, the child is generally lost, however soon after delivery may be effected. The *modus operandi* of the drug in destroying the fœtus would appear to be threefold; first, it is a powerful sedative of the heart's action; secondly, it exhausts the fœtus by violent and continuous pressure; and, thirdly, the utero-placental circulation is so far abrogated by occlusion of the venous sinuses and curling arteries, that death by asphyxia, or, more properly apnœa, occurs before birth. I have not personally verified all Dr. Hardy's statements; but the fact of reduction of the fœtal pulse and the fact of still birth I have seen. The third test of the utility of ergot is to be found in its more remote effects upon the mother. It accords with my experience that very serious bruising of the uterus results, in many cases, from the use of ergot, and that a low form of metritis follows such injuries. The effect of this form of metritis, followed a little further, is subinvolution of the uterus, so considerably, that at the end of a month the organ is the size of two fists, besides being hard, very tender and irritable, and very low down in the pelvis. I have heard practitioners of some experience express a doubt as to whether some of the cases of fatal metritis after labour are not traceable to the use of ergot. Cases have been recorded in which there appeared to be no doubt that death from metritis followed the exhibition of this drug. There is an article in a number of the *Clinique de Montpellier* of the year 1847, translated from the Spanish of Señor Corral y Oña, in which two cases of excessive contraction of the uterus following the use of ergot are detailed. Both women died of metritis. In summing up the value of this drug, I cannot but remark that it has enjoyed a great reputation upon slender grounds; and that whenever we obtain the results from it we desire, we run a great risk of getting also a series of uncovenanted effects which detract very seriously from the value of those results which constitute its primary intention.

In accordance with the principle laid down at first, the exhibition of ergot should be confined to cases of pure inertia uteri. It matters not how little an obstacle may be in the way, there is no justification in the use of ergot, or any other oxytocic, to overcome it, if the contractions of the uterus at all approach the natural standard of frequency and power. But in addition to the restriction as regards the quality of cases dealt with, another caution is requisite, arising out of the effect of the drug on the fœtus. Not only ought every case in which ergot is given to be a case of pure inertia, but the process of dilatation ought to be so far advanced, and the fœtus so far down in the maternal passages, that there is a reasonable prospect of delivery resulting from two or three sharp pains. Many a labour may be hastened by the use of ergot without attention to these rule; but many a still-birth, many a metritis, and many an incarceration of the placenta, will be the price of an expedition which only benefits the medical attendant—and him only at the cost of a moral defalcation. So strongly impressed have I been with the necessity of extreme caution in the use of ergot, that in the last four hundred cases I have attended I am sure I have not used it a dozen times. I have even thought it better to do nothing than to resort to its use; but fortunately there are other means of acting upon a case of inertia uteri; and we may well forego the temptation to give ergot when we reflect upon the numerous other ways of promoting uterine contraction which suggest themselves to the modern obstetrician.

It remains to speak of the dose of ergot, and the mode of exhibition. My own plan has been to give a drachm of the powder in some warm gin and water. The ordinary dose of a scruple, repeated at intervals, is insufficient, and adds to the risk of poisoning the fœtus. It is better to give a full dose at once, so as to diminish the chance of absorption by the fœtus; and if the case be properly selected, the effect, if produced at all, will obtain in the course of from ten to fifteen minutes. The vehicle is not a trivial matter; for the cerebro-spinal stimulus of a glass of gin-and-water will materially assist the ganglionic stimulus. The ætherial tincture, according to my observation is often rejected; and I am not at all sure that æther takes up all the active principles. According to the late Dr. Wright, of Birmingham, no single constituent of ergot is capable of producing the effect of the powder; and for this reason, as well as on account of the teachings of my own experience, I prefer the crude drug. It has occurred to me first to exhaust the drug with hot water, then with proof spirit, and finally with ether, and to mix the several fluids; but even with this method, which ensures the presence of all the constituents of ergot, I see no advantage over the powder possessed by pharmaceutical preparations.

Digitalis is a drug which may fairly be considered as an appropriate oxytocic in some few cases. That it should ever come into use as an excitant of the uterus during labour at the full time with a living fœtus, is neither probable nor desirable; but in cases of abortion it deserves consideration on account of the twofold manner in which it produces hæmostasis. As an emmenagogue, digitalis has been long known, and also as an oxytocic; and this last application of the remedy has been recently revived in a manner by the experiments of Mr. Howship Dickinson. The agent in question would appear to have an extensive range of actions upon the genito-urinary system in both sexes. Priapism, emissions, and violent sexual excitement have been known to follow its administration in considerable doses; and such cases are recorded by medical jurists. The fact that digitalis is a diuretic, a stimulant of the kidney (an associate organ to the uterus), is perhaps, in some measure, a clue to its oxytocic powers; certainly it would appear that many diuretics stimulate the uterus. Juniper and savin act upon both organs. Cantharides excite diuresis as well as "fire the lazy blood"; and, indeed, there is presumptive evidence that any diuretic will stimulate the uterus.

Mr. Dickinson's experiments were made at the time he was Resident Obstetric Officer at St. George's Hospital; and they consisted chiefly of the exhibition of the drug in cases of menorrhagia and hæmorrhage from organic diseases of the uterus; it was, moreover, given to pregnant women, in whom it set up uterine contractions. The result as regards the cases of hæmorrhage was that the bleeding was effectually controlled under certain circumstances. There were, of course, three possible explanations of the action of digitalis in suppressing the hæmorrhage; first, the diminished *vis à tergo* of a more slowly pulsating heart might permit the establishment of natural hæmostasis; or, secondly, the drug might be a styptic, properly so-called, when absorbed into the blood; or it might be that the uterine muscle was stimulated to contraction, and that stanching of the hæmorrhage arose in the first instance from compression of the bleeding points. The question was set at rest by a very ingenious *experimentum crucis*, which was made in this way. Digitalis was given in cases where the bleeding points were external to the uterine cavity; and again in cases where they were internal. In the first set of cases no check upon the bleeding was effected; but in the second the bleeding was controlled. There could be no reasonable doubt, from these experiments, that the hæmostasis was due to the compression of the contracting uterus.

As to the action of digitalis, I apprehend there cannot be much doubt. It is a stimulant of the organic nervous centres, *in the first instance*. The diminution in cardiac force, and frequency of pulsation, effected by digitalis, has been shown to be subsequent to stimulation; and it would appear that the rapidity with which its sedative effects follow its effects of stimulation is peculiar to its action on the ganglia of the heart.

As regards its use in obstetric practice, I should be inclined to restrict it to cases of abortion in which the hæmorrhage is considerable, or the ovum only partially detached, but so far adherent, and so much out of reach, as to render much manual interference imprudent. I have met with two cases of albuminuria of pregnancy, in which digitalis was given as a diuretic; and in both cases the fœtus died *in utero* during the exhibition of the drug, and premature labour occurred. It must therefore be regarded as a dangerous remedy in such cases. There

are similar cases mentioned by the late Dr. Campbell in his *Introduction to the Study of Midwifery*. There is some influence, I should imagine, to be attributed to retardation of the heart's action in the hæmostasis effected by digitalis. This consideration, and the clearly established fact that this agent does really excite uterine contractions, appears to me to mark it out as a valuable means of controlling the hæmorrhage which occurs in cases of fibrous tumour of the uterus. This application is not strictly obstetric; but is so nearly so, that it appears fairly worthy suggestion here.

[*To be continued.*]

CASE OF BULLET IMPACTED IN THE CHEST FOR FORTY-TWO YEARS.

By Robert Howarth Leach, Esq., Shaw, near Oldham.

On November 18th, I forwarded to Edward Stanley, Esq., F.R.S., for presentation to the Royal College of Surgeons, a preparation which I have had made of a part of the lung, cyst, and ball, which I recently removed from the body of the late Henry Barrott, of Fullwood, near Oldham.

The following is a short history of the case, and may be most implicitly relied on.

Henry Barrott was aged about 27 years at the time of receiving his wounds. His statement is as follows:—"I was in the First Regiment of Life Guards. We were fighting in close column, on the afternoon of June 18th, 1815, at Waterloo, when I received my wounds. The ball passed through the muscles of my left upper arm, and entered the left side of my chest, fracturing two of my ribs. It could not be extracted. I was in the hospital at Brussels from the above date to March 1816, when I was discharged, with a pension of ninepence a day. I had an incision made into my side, while I was in the hospital at Brussels, to evacuate a large quantity of matter that had collected in my chest."

For a number of years after Barrott returned home, he suffered much, as he stated to me, from attacks of pneumonia; and after I began to attend him, he was subject to inflammatory attacks in the chest, with copious expectoration, which, latterly, was of a muco-purulent character. He sank exhausted on October 13th, 1857, forty-two years and one hundred and seventeen days after he received his wounds. I examined the body, and removed a portion of the left lung, with the cyst and ball, forty-two hours after death. The ball weighs 5 drachms and 34 grains, or nearly three-quarters of an ounce (apothecaries' weight).

Mr. Lund, lecturer on anatomy at the Royal School of Medicine, Manchester, having seen the parts before they were put up, wished to be informed whether Barrott had coughed up blood, or been bled, while in the hospital at Brussels. On my putting these questions to the widow, she informed me, in reply to them, that she had heard her husband often say—"that he did cough up blood from his chest, and that he was bled in the arm twice in one day."

I find, on examining Barrott's papers, that he was discharged on March 6th, 1816; and the cause assigned is a "wounded thorax and abscess in the lung". His papers give him "nine years and a half servitude".

Examination of the Body forty-two hours after death. The circular cicatrices caused by the ball in the left upper arm and left side of the chest were still very visible. On raising the sternum, we found the left lung diminished in size, very much solidified, and firmly bound down to the ribs by strong adhesions, which resisted the knife like so much cartilage. On separating the adhesions, we opened a large abscess in the lung, which contained about a pint of fœtid pus; and in detaching the lung from its posterior wall, we accidentally opened the cyst which contained the ball, and the latter escaped for the moment into the cavity of the chest. This circumstance I very much regret, but the occurrence was unavoidable, owing to the abscess having been opened in our endeavours to separate the lung from the ribs.

Remarks. I have, as shortly as possible, given the history of the case, and will now venture to offer an opinion upon it. My own impression is, that the ball, having entered the chest and being nearly spent, instead of passing at once into the substance of the lung, glided down posteriorly between the lung and ribs, and, slightly wounding the lung, became fixed in its situation by adhesive inflammation being set up in the pleura pulmonalis and pleura costalis. That the lung was wounded, the hæmoptysis proves; and that violent inflammation followed, the bleedings spoken of by the widow, go far to prove.

The preparation is in the Museum of the Royal College of Surgeons, where it may be seen on application to Mr. Quekett.

THE VACCINE SCARIFICATOR AND GUARD.

By Walter Garstang, Esq., Blackburn.

An unusually successful method of operating in vaccination consists in employing a little instrument, which I have designated as above, and constructed in the following way:—Having procured a common metallic pen-holder, with reversible end, and clipped off that portion of it which was intended for the insertion of the pen, and accordingly rendered duplex by compression, I had then left two small tubes, one of which, the larger, admitted of the other sliding into it. I next took the pointed extremities of six well-tempered medium-sized sewing needles, secured them together by ligature, and separated their points evenly placed in relation, by a turn of the thread passed between each; these I placed inside the in-going or lesser tube, just so low down as to allow their points to project outwards to one-tenth of an inch (see fig.), retaining them in position by means of softened gutta percha. So prepared, the lesser tube, elongated for facility of employment by its adaptability to the other, constitutes the vaccine scarificator, of which a full drawing is given (fig. 1).

The guard is an oblong disc of ivory (fig. 2), fashioned like

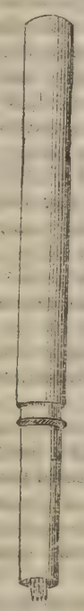


Fig. 1.

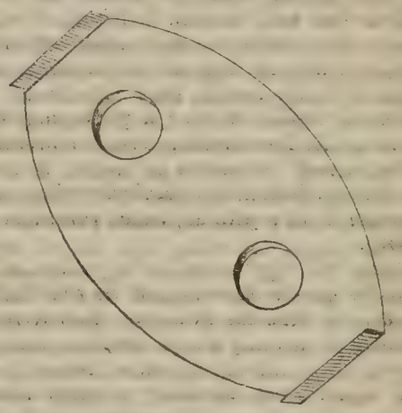


Fig. 2.

a pleximeter, and having in the median line two holes, half an inch apart, of such a size as will allow the scarificator to be moved in a limited degree to and fro *in every direction* within their areæ.

In proceeding with the operation, the vaccinator first places the guard in contact with the infant's skin; and, for an obvious reason, he is led to prefer a spot which is anterior to the insertion of the deltoid muscle. He then takes up the scarificator between his finger and thumb, and abrades, in the manner before mentioned, the cuticle and basement-membrane only, corresponding in extent to the size of a pock of variola discreta in its vesicular stage. By this procedure, an areola of derma is exposed, full of active lymphatic absorbents, and peculiarly susceptible of the influence of the vaccine virus, which is thereupon to be immediately applied, either with a lancet or clean ivory point, first clearing away any serous exudation by the touch of a napkin. If, however, the lymph be employed in the dry state on points (and it is by no means infrequently so employed), the serum serves the useful purpose of liquifying or dissolving it, and so promoting its absorption.

Any lymph, short of what may actually have become inert through long keeping, will by this method generally be found to be successful in its result—a circumstance of some importance, in the history of vaccination, to gentlemen in small practice or in remote parts; and the union surgeon, whose cases in this department are ofttimes numerous, will find his

time also not a little economised; the little patient itself, too, on all occasions so full of timidity, will evince but trifling sensation of pain, on account of the dexterity of which the operation admits in its performance.

Periscope.

OPHTHALMOLOGY.

TREATMENT OF OBSTRUCTION OF THE LACRYMAL CANAL BY OPENING THE PUNCTUM LACRYMALE.

In the *Ophthalmic Hospital Reports*, Mr. W. Bowman has published a paper on the Treatment of Lacrymal Obstructions. Finding the old plans unsatisfactory, he has been led to lay open the punctum lacrymale. The following is his description of the operation:—

The patient sits in a chair and leans the head against the chest of the surgeon, who stands behind and bends over. For dividing, *e.g.*, the left lower punctum, the ring finger of the left hand is placed on the skin over the lower edge of the orbit, and fixes it there, while tightening or relaxing the lower canal by a sliding movement of the skin upon the bone—the punctum being at the same time everted. The right hand now inserts the No. 1 probe while the canal is relaxed, and then places the probe between the index finger and thumb of the left hand, which holds it in the canal, and further everts the punctum by turning the probe downwards on the cheek, while the ring finger stretches and fixes the canal by a sliding movement of the skin outwards, toward the malar bone. A fine, sharp-pointed knife, held in the right hand, now slits up the canal on the everted conjunctival aspect, from the punctum, as far as the caruncle, and the probe is raised on its point out of the canal, to make sure that the edge of the punctum has not escaped division. Care should be taken not to slope this little incision obliquely through the tissues it severs, as there is then a broader surface exposed, and greater chance of union by the first intention. To avoid this, it is in all cases desirable to pass a probe across the line of incision on each of the few ensuing days, to break through adhesions if they form, and to secure patency. If the punctum is slit up when already inflamed and discharging pus, there is much less disposition to this primary union than when it is done for simple epiphora.

Having slit up one or both puncta, as may seem desirable, the canals are at once probed to ascertain whether they are of full size. Where the fluids of the sac regurgitate towards the eye there is usually no contraction that may not be at once overcome by a full-sized probe (No. 6); but it is well to have noted beforehand whether regurgitation occurs from *both* puncta, and in the first instance to be content, in ordinary cases, with slitting up the lower punctum, inasmuch as this usually suffices for the cure, and it is through this that the passages can be most conveniently probed in their whole extent, down to the nose.

In examining the canal for stricture, some experience and tact are requisite to avoid errors, just as in the examination of urethral strictures. The instrument should be handled very delicately, and the canal held by the surgeon in the same way as when the puncta have to be slit; and he should, of course, have in his mind's eye at the moment the anatomy of the parts with which he is dealing; no *force* should be used. If No. 6 will not pass, No. 4 or No. 2 may be tried; and, if these fail, it is better to postpone further proceedings till a few days have elapsed, and the slit in the canal is permanently established. Speaking loosely of the general result of a great number of cases, Mr. Bowman has not found any stricture in the canals in more than one-fourth, and that the common situation of the stricture has been close to the sac—less frequently about the middle part of the canal. The stricture of the middle parts is commonly in old cases, where there is rigid thickening of the coats; and probing by instruments successively larger suffices to dilate it. The canal should be stretched lengthwise as the probe reaches it, as its passage is thereby facilitated—for it is easy to fold the canal before the point of the probe. The greatest care is to be taken to proceed gently and not too rapidly; as, if a false passage be formed, and the wall of the canal torn, the injured part is liable to become more rigidly occluded.

If the exploratory probe is arrested at the point where the canals coalesce and join the sac, the fact may be known by noticing that the skin near the tendo oculi is moved when the probe is moved, and an elastic resistance is experienced; whereas, if the probe has entered the sac, it hits against the inner bony wall, and the skin is motionless. Where the sac is not distended, attention to this point is particularly necessary, and it is also requisite that the canal should be held on the stretch by the finger on the cheek, otherwise the outer wall of the sac may be pressed against the inner and give a wrong indication, for the opposite walls are very near each other. Care must also be taken, when an obstacle is encountered, to turn the point of the probe in different directions, urging it gently forwards in each, for otherwise it may merely be caught in a fold of membrane at the orifice to the sac. If there is decided obstruction still, the probe may be forced here; and if it does not then at once pass into the sac (and particularly if, the sac being distended, there is no regurgitation by the canal), Mr. Bowman has recourse to the *cannula lancet*, described in the *Annales d'Oculistique* of 1855-6; and, after piercing the obstruction, immediately pass the largest sized probe (No. 6).

Such strictures of the canals, when once they admit a No. 6 probe, are treated by its repeated use at suitable intervals, in conjunction with the treatment of the passages below, and therefore they need not be further separately dwelt upon.

In the subsequent steps of the treatment, Mr. Bowman prefers to explore the nasal duct by pushing down the No. 6 probe into the nostril. When the sac discharges pus or mucus, this always has to be done again and again, in order thoroughly to open the duct; and even where the sac is not inflamed, it is satisfactory to have passed the probe once.

The passage of a probe or style in the old method, through an orifice in the skin, is not always an easy task. There is frequently a firm closure of the nasal duct, requiring the use of considerable force to overcome it; and a surgeon without experience is apt to be timid or to make pressure in a false direction. In fact, with the old style or probe, which was always straight, it was often impossible to find the lower orifice of the sac; and the rude force exerted was apt to make the end of the style scrape the surface of the bone, and detach the membrane from it. When the probe is introduced in my method from the canal, it enters the sac *behind* the tendo oculi, and is in a better position for *finding*, as it were, the orifice of the nasal duct. But to make this proceeding as easy as possible, Mr. Bowman has the larger probes (Nos. 5 and 6, which are the only ones used for this purpose) *slightly* curved at each end in two different directions within the terminal inch or inch and a half, while the central part (or that held by the finger and thumb) is straight, and they are cylindrical in their whole length. The effect of this is, that when the probe is inserted into the sac, and brought into a vertical position, a slight rotation of it on its long axis makes the lower point, which is in search of the orifice of the duct, describe a small circle; and by slightly varying the inclination of the probe, and making gentle pressure at the same time, with slight rotation, the point never fails to enter the duct. The right and left probes have opposite curves, to suit the inclination of the duct.

The probe is known to have entered the nostril by the depth to which it has entered compared with the external position of the nostril, and also by its coming in contact with the floor of the nose. It is allowed to remain there for a few minutes, or is immediately withdrawn according to circumstances.

To repeat the probing is a very simple process, the enlarged punctum being always ready to admit it, and the proceeding being usually more easy each time it is practised. Mr. Bowman repeats the probing every day, every other day, every three or four days, or every week, according to the progress of the cure and accidental circumstances. It usually becomes at once easy for the patient to press mucus or pus from the sac, as it is secreted, both by the canaliculus and nasal duct; he is enjoined to do this very frequently, and hot fomentations are used if required. It is common to find, in a few days, that no more pus is formed, and in a few weeks that mucus ceases to accumulate. In many cases the relief to the epiphora is immediate, and the patients are made at once much more comfortable, losing all that distress that has been occasioned by the distension of the cavity of the sac, and the congestion of its lining membrane.

Rather more than a year ago Mr. Bowman contrived a mode of inserting a style by the canaliculus, and leaving it for a certain time in the passages, in order to open them on the principle of the old style. The style was made to taper rather

suddenly at one end; and it was bent at about a right angle, so that the thick part should be placed vertically in the sac and nasal duct, and the thin part horizontally in the canal. The length of the thick part was adapted in each case by the surgeon, so as to extend from the point at which the canal enters the sac downwards as far as the floor of the nostril, on which it rested, being thereby prevented from falling too low and burying itself out of sight. The proper length was ascertained previously by measurement by a probe. The horizontal part was, in like manner, adapted to reach to a point of the canal midway between the caruncle and the punctum, and a bend was given to it, making it lie exactly within the canal, concealed from view in the channel formed by the slittting up of that passage. The material was silver, and the ends, after being cut to the requisite length, were carefully rounded, and the thin one tipped with sealing-wax. These *bent styles*, when suitably adjusted, he found could be generally worn with very little inconvenience for a few days, and admitted of being readily removed and reinserted, and he still employs them when the stricture is dense and obstinate, or when a rapid opening of it is required. But they sometimes occasion trouble, and become a source of irritation, and they may even produce ulceration of a portion of the canal if badly fitted, or if left in too long, as, for example, when the patient has absented himself during the treatment.

Mr. Bowman, therefore, prefers to treat the obstructions, in almost all cases, by the intermittent use of the probe, as already described, and especially as the results by that method are so satisfactory. He does not recommend the bent styles for general adoption.

CYSTS IN THE ORBIT.

In commenting on a case of orbital cyst, in the *Ophthalmic Hospital Reports*, Mr. Poland makes the following remarks:—

1. Cysts in the orbit are not such simple things as one might be disposed to call them. "It is only a cyst in the orbit, and we will easily remove it for you," may be the language of a surgeon to his patient. However, when he comes to reflect for a moment, he will find that the orbit, at the back part especially, is in close proximity to the brain and its membranes, and that the dura mater is in direct continuity with the orbital cavity; that these encysted tumours often extend as far back as that point, and some even pass through the optic foramen; and that injury or inflammation occurring to this cyst may by contiguity extend itself to that membrane, and onward to the brain, as seen in the present case. This untoward occurrence is by no means rare.

2. The simple puncturing and laying open of the cyst is also not unattended with danger: in the first instance, it may be followed by acute inflammation, which may extend to the cellular tissue of the orbit, and to the brain; or it may induce suppuration; or it may be followed by effusion of blood in its interior. Again, puncturing very seldom cures, as the sac rapidly secretes its peculiar contents.

3. Complete excisions cannot always be accomplished; hence we must remove as much as is within reach, without detriment to the eye or its appendages. In performing the operation, we must have a free opening; and there is no reason why we may not do this by an incision through the integument, where there is difficulty in accomplishing our object through the conjunctiva: this, of course, only applies to tumours of a large size.

PROTRUSION OF THE EYES, ATTENDED WITH ENLARGEMENT OF THE THYROID GLAND.

In the same journal, Mr. Poland gives the following *rationale* of the protrusion of the eyeball which sometimes attends enlargement of the thyroid gland.

Enlargement of the thyroid gland does not always cause a protrusion of the eyes, as may be seen, at any time, among the several out-patients in the metropolitan hospitals; but, that it does so at times, cannot be disputed; and we can readily understand the cause. The enlarged gland may cause pressure on the jugular veins, and thus retard the flow of blood, which would produce cerebral congestion, were it not for the wise provision for the escape of blood from the cranial cavity. The ophthalmic vein is one of the most important ones; and should it have to perform this duty for a considerable length of time, it will necessarily become enlarged, and would, of course, tend to render the eyes prominent.

SURGERY.

DISLOCATION OF THE HUMERUS BACKWARDS.

A case of this rare accident is related by Mr. James Alexander, of Wooler, in the *Edinburgh Medical Journal* for Dec. 1857.

The subject of the case was a spare woman, about fifty; and the accident happened by a fall from horseback, by which she was thrown obliquely on her side, with the arm directed forwards. The hollow under the acromion was at once perceptible to the eye and touch; the arm appeared longer than the other one; and the head of the bone could neither be felt in the axilla nor under the clavicle, the situations where it is naturally sought for first, but was unmistakably prominent below the spine of the scapula. The arm was directed downwards and forwards; and there was another symptom, which an examination of the skeleton will show must always be present, a very distinct projection of the coracoid process. In very corpulent persons this may not be so strongly marked; but in this case, from the thinness of the patient, it appeared as if a little more force would have made it protrude through the integuments. Mr. Wooler made extensions downwards and forwards in the axis of the dislocated bone; and a very moderate degree of force speedily restored it to its place.

In the Association Medical Journal for 1853, p. 207, and for 1854, p. 6, analogous cases were recorded by Dr. E. Jackson and Dr. R. U. West.

SULPHURIC ACID MIXED WITH SAWDUST, AS A CAUSTIC.

In the Association Medical Journal for Jan. 28th, 1853, we noticed a statement made by M. Cazenave regarding the efficacy of a paste of sulphuric acid and saffron as a caustic in malignant ulceration of the face; and we expressed an opinion that "the sulphuric acid would succeed equally well if made into a paste with common flour, or any ligneous powder, as with saffron." Professor Syme, in an article in the November number of the *Edinburgh Medical Journal*, has expressed a similar opinion; and has, from his experience, pointed out the practical utility of the modification. He says:—

M. Velpeau, in speaking of the caustic made by mixing sulphuric acid with saffron, expresses his persuasion that it would be the best of all escharotics, except for its expense and the difficulty of confining its action within certain limits. It occurred to Mr. Syme that sawdust would supply the place of saffron; and his assistants at the hospital ingeniously devised the following effectual means of restraining the extent of action. A solution of gutta percha in chloroform is applied to the skin for some distance round the part to be attacked; then a thick piece of the same material, with an aperture cut in it of the requisite size, and softened by exposure to heat, is pressed firmly so as to adhere everywhere to the surface thus prepared; a thin piece is next glued round the edge of the opening, so that, when supported by a stuffing of lint, it may form a wall enclosing the diseased part. Concentrated sulphuric acid, with about an equal weight of sawdust stirred into it, until the mixture assumes a homogeneous consistence equal to that of thin porridge, is lastly applied, in quantity proportioned to the extent of thickness concerned. In the first instance, as the pain is acute, opiates or chloroform may be used; but after a short while, so little uneasiness is felt that the patient can easily allow the caustic to remain for ten or twelve hours, when it will be found that the whole diseased mass, though covered with skin and several inches in depth, has been reduced to a cinder, presenting the appearance of strongly compressed tow. Under poultices, the slough separates in the course of days or weeks, according to its depth; and the sore then heals without any trouble. If, therefore, patients, from an unconquerable dread of cutting, should prefer the escharotic treatment, or if the circumstances, on any other account, should seem to render this method eligible, the procedure just described may be found useful.

Extraordinary Longevity. It is seldom we have to record such wonderful instances of prolonged existence as are given in the obituary of the *Times* of the 12th instant, where the united ages of twelve persons amount to *one thousand and three years;* giving an average of 83 years and 7 months to each person. The eldest was a lady, who had numbered her one hundred years; the youngest also was a lady, aged 77. It is not a little singular that the six eldest of the deceased were of the fair sex.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 19th, 1857.

THE EXTENSION OF THE ASSOCIATION.

The close approach of a new year suggests the propriety of reminding our associates, that the present is the best time for enlisting new members of the Association. In accordance with the Laws of the Association, the subscription of every member dates from the first day of January; and at that time a new volume of the Journal commences. Hence it becomes a matter of convenience to be able to form an estimate of our numerical strength at the beginning of the year.

We speak at once of individual exertion on the part of the already existing members: for we are sure that on this depends much of the progress and prosperity of the Association. Each member should bring his neighbours to form part of the Association. He should, in fact, be an active assimilating constituent of our great body, attracting all properly organisable material to his own form and properties. As for the arguments to be used to induce practitioners to join the Association, surely every one who has duly appreciated the benefits conferred by it will be at no loss, and will be able to persuade at once and effectively. He will be able to impress on the mind of his friend the importance of belonging to a body whose objects are the "promotion of medical science, and the maintenance of the honour and welfare of the medical profession"; which exerts itself to practically carry out these objects; which is yearly bringing into friendly contact hundreds of professional men who would otherwise have remained in a state of isolation from each other; and which tends to diffuse and maintain a healthy *esprit de corps* in the profession. He will be able to point to the Journal as the instrument by which the objects of the Association are in great measure carried out, and which is supplied to each member at an expense more than balanced by the advantages gained. With such arguments as these, and others which will occur to his mind, each member should have no difficulty in bringing, at the commencement of the coming year, at least one recruit to our ranks. There is plenty of material to work on: the practitioners in Great Britain number somewhere about fifteen thousand; while our Association reckons somewhat more than two thousand members.

On the importance of the district Branches as a means of extending the Association, we have more than once spoken. Suffice it to say at present, that it is just where these are most active that the Association prospers most. The meetings of these, and the social and scientific advantages which they confer on the practitioners of the districts, have ever proved a most potent source of benefit to the members of the Branches themselves, and therefore to the Association in general. For the prosperity of one part of our body is in a degree the prosperity of the whole.

In the department of Association Intelligence, we this week chronicle two important movements which have lately taken place: viz., the organisation of a Branch in Cornwall; and the establishment of district meetings in connection with one of our most extensive Branches.

To the attempt which is being made to organise the profession in Cornwall into a Branch of the Association, we heartily wish all success. We are quite aware that in all probability the progress of our Association in that county may for a time be comparatively slow, by reason of the absence, as yet, of the advantages of travelling communication which are enjoyed by most other parts of England: but we have every confidence that our friends there will not drop the good work they have began, and that they will endeavour to practically carry out the motto of their county—"One and All".

In the proposed laws of the new Branch, there are indications of a most laudable desire to maintain the honour of the profession. Whether to suppress an existing evil, or to provide against possible or threatened contingencies, does not appear on the face of the report; but here is a proposed law:—

"No member of this Association will meet in practice, or sanction the practice of, any unqualified man: nor meet in consultation any qualified man who does."

We fear that such an ethical law as this might with propriety be passed in many parts of this kingdom. The practice of the illiterate unqualified is notorious enough, and has been held up again and again to reprobation—*usque ad nauseam*, many will think. But, worse than this, we hear that in some places the functions of the medical practitioner are usurped by non-professional persons of education—of University education even; and that this usurpation is far from being discouraged by some legitimate practitioners. Surely, any combination of medical men which adopts and acts on such a resolution as that of the Cornwall Branch, is not only supporting the honour of the profession, but doing a public good in discountenancing a practice, which is the more injurious as it is clothed in a specious exterior.

These remarks are somewhat of a digression from our immediate subject; but still they show the good which may be produced by such an organisation as is afforded by our Association and its Branches.

The establishment of district meetings of the members in Rochester, Maidstone, and Gravesend, in connection with the South Eastern Branch, is an example which might, we think, be followed with advantage by several other of our large Branches. The principal towns in several of these might well form foci, to which the members in the immediate neighbourhood might be periodically concentrated for mutual professional improvement; while the Branch would, as hitherto, be the means of holding together the members of the entire district. These district meetings, too, would serve as a constant source of supply to the Association. If we may judge from the first attempt the other day at Rochester, we may expect much from them. At that meeting, five new members were at once enrolled. We look forward with confidence to much good from these district meetings.

Once more, we would urge on the minds of those associates who have not yet combined themselves into district Branches, to do so at once. There are no difficulties in the way of the

formation of these local Associations which may not be overcome by a strong will and steady perseverance; and we can assure any member who will take the trouble to exert himself in forming a Branch, that he will in the end find his labour amply repaid in the social and intellectual improvement of himself and his professional neighbours.

THE WEEK.

We beg to call the attention of associates interested in that important subject—the Legal Responsibilities of the Insane—to the report given in this day's Journal of the discussion which took place on Tuesday night at the Juridical Society. Dr. Forbes Winslow, who has perhaps identified himself with medico-legal questions more than any of his cotemporaries, was the champion on this occasion of certain advanced views held by leading psychologists, which have unfortunately clashed with the opinions of lawyers; and we must add, that he conducted his argument with great ability. It must ever be remembered that psychological medicine is a rapidly advancing science, and that the old ideas relative to the responsibilities of the insane have been greatly modified of late. Nevertheless, the judges go on appealing to precedent, quoting the judgments of lawyers of the last century—who evidently were not superior to the current opinions respecting the insane of their day—to the prejudice of truth and justice. In the courts of law there is no time to disabuse the lawyers of these errors; we rejoice, therefore, to find that Dr. Winslow has taken the earliest opportunity of availing himself of his position as a member of a society of lawyers, to open the ground for a thorough discussion of the points at issue between the legal and the medical professions. A few discussions of this kind will tend to break down old prejudices, and to explain differences which never should have arisen between the members of the two professions; and we therefore tender Dr. Winslow our thanks for the valuable service he has thus performed to the cause of medico-legal science, and to the still more important one of public justice.

Mr. Cowper intimated his intention in the House on Thursday week, to introduce a measure after the Christmas recess, with a view of amending the Laws relating to the Practice of Medicine and Surgery in the United Kingdom. The interview which took place some time since between that gentleman and the founder of this Association, led us to believe that the Government really intended to tackle this subject during the present session; but the momentous events which have since occurred are not calculated to inspire us with much hope in the possibility of carrying any measure through Parliament next year at least. We are speaking, of course, wholly without authority; but it must be clear to all that the programme of the Ministry is already so filled with subjects that will not bear delay, that Medicine is likely to go to the wall. Amid such vehement discussions as India and the Reform Bill are likely to evoke, we fear that our own modest little Bill is not likely to prove attractive. Indeed, we trust that it will not be brought forward, if it is at all likely to be overshadowed by those all engrossing themes.

In reflecting upon the sentence passed upon Mr. Deane for his inexcusable ignorance in a labour case, we have been able to come to no other conclusion than that his punishment was a just one, for it was his business to know how to treat such cases properly. A trial has just taken place, however, in which, although it was equally incumbent upon the person in attendance to understand the duty undertaken, the most gross ignorance was exhibited, ending in the poor woman's death. In this case, however, the law was far more lenient, as we shall see by the following report:—

"Sarah Cherrington, aged fifty-two, was charged with the manslaughter of Susannah Cartwright, on the 17th of September, 1857, at Sedgley.

"Mr. A. S. Hill appeared for the prosecution. Mr. Kenealy defended the prisoner.

"It appeared that the deceased was a poor woman, aged thirty-three, living at Sedgley, and the mother of seven children. Being in the family way, and so poor as not to be able to pay for the services of a medical man, she engaged the prisoner to attend her in her confinement. This took place on the 17th of September, when the prisoner attended, and assisted. The child was born alive, but the placenta did not come away for about an hour and a half. During this time there was considerable hæmorrhage, and the poor woman appeared to be dying. Ultimately, the prisoner removed the placenta, and almost immediately afterwards the poor woman died. A medical man was then sent for, and it was discovered that the uterus had been entirely torn away along with the placenta, and this, according to the medical testimony, caused the death. On the cross-examination of the witness, it appeared that the prisoner bore an excellent character for humanity and kindness; and it transpired that, though she had a family of children, she had adopted an infant child whose mother and father and family had died of cholera in 1832.

"Mr. Kenealy having addressed the jury for the prisoner, she was found *Guilty*, with a strong recommendation to mercy.

"Mr. Baron Martin said there could be no doubt that the prisoner had been actuated by the kindest feelings, *and the only object of the prosecution was to teach others that they must not undertake such responsible duties without having a competent degree of skill.* His Lordship then ordered the prisoner to be discharged upon her own recognizances to appear and receive judgment if called upon."

Thus it stands. Mr. Deane, of Cosham, *Guilty*—eighteen months imprisonment! Sarah Cherrington, *Guilty*—no punishment! It is certainly a most monstrous thing that such glaring disparities of punishment as this should continually be afforded by our law courts.

The only object, it appears, of this prosecution, in the opinion of the judge, was to "teach others that they must not undertake such responsible duties without having a competent degree of skill". And what will be the result of this merciful teaching? Why, directly the reverse of its object; for every midwife in the country will now be informed that she may tear a woman's uterus out with extreme violence, be tried for it, found guilty, and then allowed to go scot free! So much for this precious teaching by example. If Mr. Deane deserved his punishment on account of his ignorance, so did Sarah Cherrington. Midwives, if they have "an excellent character for humanity and kindness," may make desolate a poor man's home, it appears, with impunity; but we question if the possession of all the benevolence in the world would serve to mitigate the sentence of an offending surgeon. After Baron Martin's decision, it is impossible that midwives can any longer be recognised and employed as they are at present by Boards of Guardians. The

very next case of manslaughter brought home to the door of one of these women so officially employed ought to be severely punished; and the punishment ought to be exacted, not only upon the woman who undertakes such responsible duties without being a competent judge of skill, but upon her employers, who must know that she is unqualified. We trust that all Poor-law medical officers will make a note of this trial, and watch the effect of the judge's threats upon the glorious sisterhood of irresponsible midwives.

To what is medicine coming? Homœopathy has reduced its remedies to proportions undiscoverable by the most powerful microscope; clergymen take upon themselves the cure of mortal maladies by the influence of the spirit; and a host of spirit-rappers, crystal manipulators, and mediums, who ally themselves to legions of hidden spirits, lay claim to power generally over disease in all its multifarious aspects; but none of these worthies have as yet had the audacity to put forth such an advertisement as the following, which we extract from the *Times*.

THE SOMNAMBULE, ADOLPHE DIDIER, gives his MAGNETIC SEANCES and CONSULTATIONS for ACUTE and CHRONIC DISEASES, their Causes and Remedies, every day from 1 till 4.—19, Upper Albany-street, Regent's-park. Consultation by letter.

We have no doubt whatever that the magnet is efficacious in one complaint, which is more prevalent than people suppose—the desire of having more money than wit. The power of the magnet over the precious metal will doubtless be exercised with much effect. By-the-bye, it strikes us that this magnetic gentleman spells his name incorrectly; should it not be *Diddler?*

We have refrained from noticing hitherto a very distressing report, which has appeared for some time in the public papers, relative to the shocking inhumanity exercised by some English lady towards her governess, in the hope that it would be contradicted. As no such contradiction has appeared, however, we fear that it is but a too true tale. It appears that a young French lady, about twenty years of age, the governess in the family of an English lady, was taken with typhus fever, in which condition she was packed up—we can use no other term—and dispatched to her relatives at Amiens, quite alone. When received by the guard at London Bridge (why he received her at all is the wonder) she was helpless and speechless, and so continued until she was taken on board the steamer which conveyed her to Boulogne. On arrival here, she was instantly landed, and medical aid summoned. On undressing her, *a large label* was found fastened to her dress, as if she were a bale of goods, and in her purse a piece of paper, which contained the clue to her friends and destination. The poor creature died within a day or two of her landing, evidently exhausted by the journey to which she had been inhumanly condemned by her late employer. The Boulogne authorities have, we are informed, made a report of the affair to the Procureur Imperiale, and we trust that, for the sake of the English name, a searching inquiry will be made into the whole affair, and that some of its seemingly most inhuman features will in some measure be explained away. In addition to the wickedness of thrusting a poor girl out of the house in such a sad condition, must be added the selfishness of subjecting her fellow-passengers to the risk of infection, thus thrown deliberately in their midst.

Association Intelligence.

TO THE HONORARY SECRETARIES OF THE BRANCHES.

The General Secretary will feel particularly obliged if the Honorary Secretaries will inform him, with as little delay as possible, of any subscriptions for the current year received by them since their last lists were forwarded to Worcester.

December, 1857.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

FORMATION OF A CORNWALL BRANCH.

A preliminary meeting of medical practitioners in Cornwall was held at Callington, on Tuesday, December 1st, for the purpose of forming a Branch of the Association. John Kempthorne, Esq. (Callington), was called to the Chair. There were also present:—W. Brown, Esq. (Callington); S. Clogg, Esq. (Looe); J. G. Doidge, Esq. (Lifton); A. Hingston, Esq. (Liskeard); R. Kerswill, Esq. (St. Germain's); Thomas Littleton, M.B. (Saltash); H. Sargent, M.D. (Polyphant); J. M. Sellors, M.B. (Gunnislake); D. Thompson, Esq. (Launceston); E. L. West, Esq. (Launceston); and J. Wright, M.D. (Launceston).

The Chairman called on Dr. Littleton to read the history of the present movement; which he did as follows:—

Three years since, it was proposed to some of the gentlemen now present to form a Branch of the British Medical Association for Cornwall, to which a general acquiescence was given, but nothing then carried into effect. Within the last few months, it occurred to those who issued the circular address, which has now called us together, that the time had arrived when we might expect advantages from a renewal of our previous endeavours. We are happy to inform you, that the answers we have received to our address, which was posted to every qualified medical gentleman in the eastern division of this county, and to one member of the profession in each of the towns of West Cornwall, are such as exceeded our most sanguine expectations. With your permission, I will read the letters received from such a distance as prevents personal attendance, but which for the most part we may hope to be favoured with at our next meeting at Bodmin.

Letters were read from:—Mr. Nankivell, of St. Colomb; Dr. Barham, of Truro; Mr. Ward, of Bodmin; Mr. Wade, of Boscastle; Mr. Chubb, of Torpoint; Mr. Nicholas, of Liskeard; Mr. Marley, of Padstow; Mr. Tayler, of Tywardreath; Mr. Jackson, of Beeralston; Mr. Illingworth, of Fowey; and Dr. Pethick, of Launceston.

FORMATION OF THE SOCIETY: OFFICERS.

It was then proposed, and carried unanimously—

"That a Cornwall Medical Society be formed in connection with the British Medical Association; and that John Kempthorne, Esq., as President; E. L. West, Esq., as Treasurer; and Thomas Littleton, M.B., as Secretary; with W. Brown, Esq., A. Hingston, Esq., R. Kerswill, Esq., and J. Wright, M.D., do form the Council of this Society until the next meeting to be held at Bodmin."

LAWS.

The Secretary was desired to draw up a Code of Laws agreeable to those he presented as in use amongst the other Branches of the parent Association. To these he was requested to add the two following:—

1. Proposed by Mr. Thompson, seconded by Mr. West, and carried unanimously—

"That no member of this Association will meet in practice, or sanction the practice of, any unqualified man; nor meet in consultation any qualified man who does."

2. Proposed by Dr. Sargent, seconded by Dr. Wright, and carried unanimously—

"That this Society be constituted a Court Medical; for the settlement of any dispute that may arise between any medical men, members of the Society."

The Secretary was further desired to forward the laws in succession to each member of this Society, that they may receive their concurrence and signatures. It was deemed advisable that sub-districts of the county be so arranged as conveniency of travelling shall arise from the railway, etc.

POOR-LAW MEDICAL REFORM.

A vote of thanks to Mr. Griffin for his energetic and assiduous endeavours on behalf of the surgeons attached to unions, was proposed by Mr. Kerswill, and seconded by Dr. Thomas Littleton, and unanimously carried.

MEDICAL REFORM.

It was arranged that the Secretary should issue circulars of invitation to the medical practitioners in the whole county, to attend the next meeting at Bodmin, in such time as would allow that petitions to Parliament may be presented from the different towns in the county in favour of Mr. Headlam's Bill as the basis of Medical Reform.

After the transaction of business, an excellent dinner was partaken of by those present. Appropriate decorations and mottoes enlivened the festive board; and the usual loyal toasts were drank and responded to, in a manner which showed that those present were animated by the true sense of their county's feeling—"One and All".

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The Ordinary Meeting of this Branch was held at the White Lion Hotel, Bristol, on Thursday, December 3, at eight, p.m., Augustin Prichard, Esq., President, in the Chair. There were present, F. Brittan, M.D. (Clifton); W. Budd, M.D. (Bristol); J. B. Burroughs, Esq. (Clifton); W. J. Church, Esq. (Bath); H. Clark, Esq. (Bristol); Edmund Cockey, Esq. (Frome); Charles Collins, Esq. (Chew Magna); G. C. Corbould, Esq. (Bristol); James Crang, Esq. (Timsbury); Nathanial Crisp, Esq. (Bristol); Edward Crossman, Esq. (Hambrook); J. G. Davey, M.D. (Northwoods); William Davies, M.D. (Bath); F. Flower, Esq. (Chilcompton); H. C. Fripp, M.D. (Clifton); E. L. Fox, M.D. (Bristol); James Godfrey, Esq. (Bristol); Thomas Green, Esq. (Bristol); William Henderson, M.D. (Clifton); William B. Herapath, M.D. (Bristol); George King, Esq. (Bath); Joseph Lancaster, Esq. (Clifton); Crosby Leonard, Esq. (Bristol); Samuel Martyn, M.D. (Bristol); E. S. Mayor, Esq. (Bristol); J. S. Metford, Esq. (Clifton); George Norman, Esq. (Bath); G. S. Ogilvie, Esq. (Bristol); J. K. Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); J. G. Swayne, M.D. (Clifton); S. H. Swayne, Esq. (Bristol); J. A. Symonds, M.D. (Clifton). And as visitors, Drs. Fairbrother and Beddoe, and Messrs. Watts, F. Lansdown, Ormerod, Hellicar, Board, and Masters, of Bristol; and Mr. Hitchins, of Bath.

The minutes of the last meeting were read and confirmed.

CASE OF CONGENITAL FISSURE OF THE STERNUM.

Dr. Symonds introduced to the meeting M. Groux, the subject of this singular congenital malformation. Dr. Symonds remarked on the interest of the case, as having been observed by nearly all the medical celebrities on the continent, as well as in this country. After pointing out that the arrest of development had left a fissure of the sternum, which was quite open between the clavicles, and only closed at the spot where the ensiform cartilage begins in normal subjects, he said that while there were many interesting observations which might be made on the movements of the two halves of the chest, yet that the point which attracted most attention was the pulsating tumour in the abnormal space. By the inscriptions in the Album of M. Groux, it appeared that different views had been taken of the nature of the tumour and the cause of its pulsation. Dr. Symonds remarked that the opinion which he had arrived at, after an examination of the case on the previous evening in conjunction with the President, Mr. Prichard, Dr. Budd, Dr. Swayne, Dr. Fox, Mr. Clark, Mr. Godfrey, Mr. Bernard, and Mr. W. M. Clarke, was, that the tumour was the right auricle of the heart, which at its greatest distension came forward; and that its motion of subsidence was coincident with muscular contraction of the auricular parietes, and that there was a distinct interval between this movement and the ventricular systole.

M. Groux was then examined by most of the members present.

NOTES ON MEDICAL PRACTICE. BY W. DAVIES, M.D.

Dr. Davies read the first part of this paper. It will be completed at a subsequent meeting; after which it will appear in the Journal.

CASE OF ANEURISM OF THE AORTA; ALSO A CASE OF DISEASED SUPRARENAL CAPSULES. BY F. BRITTAN, M.D.

Dr. Brittan exhibited the preparations. (The latter case will be published in the Journal.)

Mr. Lansdown exhibited specimens of diseased suprarenal capsules, taken from a subject in whom there had been partial slight bronzing of the skin.

Dr. Davies mentioned two cases of disease of the suprarenal capsules unattended by bronzed skin.

Mr. Clark thought that discoloration of the skin alone was no criterion as to the state of the suprarenal capsules, and referred to other cases in which discoloration occurred, especially in chloasma and syphilis; when met with in connexion with diseased suprarenal capsules, it was probably owing to some change in the normal condition of the blood.

Dr. Martyn remarked that, as to the cases of diseased suprarenal capsules, some were accompanied by bronzed skin, while from others this appearance was absent. He was struck, however, by the constancy of one set of symptoms as shown in the cases just read and in others alluded to; but he was not aware if any explanation of them had as yet been offered. He meant the stomach symptoms—aggravated dyspepsia, nausea, or obstinate vomiting. Of the structure and functions of the suprarenal bodies very little was known, but at present this much seemed to be certain, that they were connected with, in fact belonged to, the nervous system. Their medulla had been proved to almost consist of the stellate variety of nerve cells, such as were found in important parts of the great centres and in the sympathetic ganglia. Might not therefore the great frequency of the sickness be referred to these physiological relations? It was a well known fact that this symptom was likely enough to arise from disturbance of the abdominal sympathetic, and especially in the neighbourhood of the stomach.

ON SEA-SICKNESS. BY J. C. NEILD, M.D.

The Honorary Secretary read a paper on Sea Sickness, which had been forwarded to the Branch by Dr. J. C. Neild, of New Zealand, a former member of the Association. (This paper will be published in the Journal.)

TRANSACTIONS OF THE ROCHESTER, MAIDSTONE, AND GRAVESEND DISTRICT MEETINGS, IN CONNECTION WITH THE SOUTH-EASTERN BRANCH.

The first meeting of this Society was held at the Guildhall, Rochester, on Friday, December 11th, at 3.30; Adam Martin, M.D., of Rochester, in the Chair. There were also present:—W. Addison, M.D. (Maidstone); J. Armstrong, M.D. (Gravesend); F. J. Brown, M.D. (Chatham); John D. Brown, M.D. (Strood); J. Dulvey, Esq. (Brompton, Chatham); F. Fry, Esq. (Maidstone); W. Hoar, Esq. (Maidstone); and the following gentlemen as visitors:—J. W. Barnes, Esq. (Aylesford); T. P. Beavan, Esq. (Rochester); W. Burton, Esq. (Brompton); W. B. Everest, Esq. (Rainham); Dr. Jardine, (Chatham); J. Langston, Esq. (Strood); J. Lardner, Esq., R.N. (Gillingham); F. Plomley, M.D. (Maidstone); and H. Weekes, Esq. (Brompton).

J. Dulvey, Esq., was unanimously requested to act as Honorary Secretary, and Dr. Martin as Treasurer, for the year.

NEW MEMBERS.

The following gentlemen were proposed and elected as members of the Branch:—Dr. Jardine (Chatham); J. W. Barnes, Esq. (Aylesford); C. J. Pinching, Esq. (Gravesend); W. B. Everest, Esq. (Rainham); and W. Burton, Esq. (Brompton).

CASES AND COMMUNICATIONS.

The Chairman read a paper founded on a case of Hysteria connected with Dysmenorrhœa, in which great benefit had been derived from the use of the biborate of soda.

An interesting discussion followed.

F. Fry, Esq. (Senior Surgeon to the West Kent Infirmary, Maidstone), brought before the Society the details of three cases of Strangulated Hernia, in two of which he had been called to operate; and in all of which something unusual had been found.

Dr. Armstrong (Gravesend) read a valuable paper on Cauliflower Excrescence of the Uterus, illustrating it by a case in which he had successfully removed the tumour by means of the écraseur.

At the conclusion of the discussion, Mr. Hoar moved, and Mr. Dulvey seconded, a resolution—

"That the sincere thanks of the meeting be given to those gentlemen who have read these papers; and that they be requested to allow them to be published in the Journal, under the title of Transactions of this Society.

Thanks having been unanimously voted to the Mayor of Rochester for the use of the Guildhall, refreshments were introduced; after partaking of which, the meeting broke up at six o'clock—every one present expressing his gratification at the result of this, the first attempt of the kind in West Kent, and his conviction that from such gatherings of the practitioners of neighbouring towns, much good must ensue.

The next meeting of the Society will be held at the Guildhall, Maidstone, on Friday, February 12th, 1858, at 4.30.

Reports of Societies.

JURIDICAL SOCIETY.

Tuesday, Dec. 15th, 1857.

Vice-Chancellor Sir John Stuart, in the Chair.

LEGAL DOCTRINE OF RESPONSIBILITY IN CASES OF INSANITY CONNECTED WITH ALLEGED CRIMINAL ACTS.

BY FORBES WINSLOW, M.D., D.C.L.

Dr. Winslow divided his essay into five principal parts; viz., 1. Nature of insanity in its medico-legal relation; 2. The legal doctrine of responsibility in connection with insanity, associated with alleged criminal acts; 3. The doctrine of partial insanity, or monomania; 4. The existence of homicidal insanity and insane irresistible impulses; 5. Anomalous or mixed cases of mental disorder, involving the question of modified responsibility and the propriety of punishment. In discussing his subject under the first four aspects, he dwelt principally upon the oneness of the mind; and that psychological principle formed the basis of the opinions to which he gave expression. He combated the doctrine that the elementary and essential features of insanity consist in a disorder of the intellectual, as contradistinguished from a derangement of the moral, faculties of the mind, there being no such thing as separate and distinct faculties of that which is in nature one and the same; and, therefore, the courts of law were wrong in laying peculiar stress upon the presence or absence of delusions, as these might arise from sanitary causes. The important point, however, for consideration was what might be the state of the effective or motive powers, what was the state of the volition, and to what degree had the mental diseases destroyed the healthy power of self-control over the thoughts and actions? Here arose the second branch of the inquiry; and after noticing the distinction which Mr. Fitzjames Stephens draws between tests of insanity and tests of responsibility, Dr. Winslow laid down the following as criteria of insanity propounded in the courts of justice: 1st. The presence of delusion; 2nd. Of delusions directly associated with the criminal act; and, 3rd, A capability of distinguishing between what is lawful and unlawful, the capacity of knowing right from wrong, good from evil. These tests he held to be erroneous, as their absence did not necessarily establish in the offender the *malus animus*, *mala conscientia*, which are the ingredients of criminal guilt. The tests of responsibility, however, upon which the courts acted, might be gathered from the opinions of the judges, delivered in the House of Lords in 1843. First, a person labouring under partial delusions only, and who is not in other respects insane, notwithstanding he committed a crime under the influence of the insane delusion that he is redressing or revenging some supposed grievance or injury, or producing some public benefit, is liable to punishment, if he knew at the time of committing such crime that he was acting contrary to the law of the land. Secondly, to establish a defence on the ground of insanity, it must be clearly proved that at the time of the committing of the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing what was wrong. Thirdly, if a person under a partial delusion only, and not in other respects insane, commits an offence in consequence thereof, he is to be considered in the same situation, as to responsibility, as if the facts in respect to which the delusion exists were real. From these rules of law arose the consideration of partial delusions in their legal relations to crime committed by persons in other respects insane, under the impression that they were doing right, the legal doctrine of partial insanity, and the knowledge of right and wrong, as conclusive evidence of responsibility in cases of imputed insanity. With regard to the first view taken by the judges, they seemed to overlook the distinction drawn by Lord Erskine between the cases of Hatfield and Lord Ferrers, namely, that when a madman commits a crime under the influence of an impression which is entirely visionary, and purely the hallucination of insanity, he is not the object of punishment; but that, though he may have shown insanity in other things, he is liable to punishment if the impression under which he acted was true, and the human passion arising out of it was directed to its proper object. Dr. Winslow, however, went further than Lord Erskine, and maintained that if a man shows insanity in any one respect, he ought to be considered as a lunatic in all; and thus disposed of the third point under which he proposed to consider the subject of his discourse, altogether denying the existence of such a disease as monomania. He quoted the authority of several continental physicians of great experience in the treatment of mental disorder in support of his views. Under the fourth head, he mentioned a number of cases to show the existence of homicidal insanity, and insane irresistible influences; and passed on to consider how far the proof of a man being actuated by such feelings in the commission of a murder should modify his punishment. He was unwilling, he said, to associate the word punishment with a case of that kind, and thought that such a proof should entitle him to his acquittal. As he would, however, even so, be confined for life in a lunatic asylum, he would in reality be subjected to a punishment much more severe than if he were publicly executed.

The Chairman said he was sure the society must appreciate the great talent which the paper displayed, and the great value of the opinions with which the writer of it had favoured them. Not the least interesting part of it was that in which Dr. Winslow stated particular instances of particular delusions, with their consequences. Of the numerous difficulties which beset the consideration of a question of that kind he entertained the strongest impression; but its importance to the public was quite as great as its difficulty. The great question must be how far that answer of the judges to the question proposed to them in the House of Lords, and referred to in the paper, affected the safety of the people.

Mr. Baron Bramwell said, that if the question was whether the sane man or the insane man, both having committed the same crime, was the more entitled to their pity, he would say that the insane man was; but that was not the point which they had to consider. It was how the law was to deal with the commission of an act which it prohibited. In order to solve that question, they should first look to the true theory of punishment. Why was it that society inflicted punishment? It was that it might fulfil upon the offender the threat of the law, else the law itself would be nothing more than a *brutum fulmen*. However, then, it was necessary to threaten, it was also necessary and desirable they should punish; and here arose the question, whom is it desirable to threaten? Was the madman to be exempted from the threat? Certainly not, else the element of uncertainty would creep into the consideration of the punishment, and crimes would be committed by those who might think they would have a chance of escaping upon that plea. He would go further, and say that if we were a community of madmen, we should have laws holding out the threat of punishment for our own good government. It was the greatest possible mistake to hold that a madman should not be affected by the law. When he was trying Dove's case, one witness swore to his being subject to insane irresistible influence, and, as a proof of it, mentioned his having seen him, some few years before that, fire a gun at the risk of killing some one; but that witness afterwards, when asked if he thought Dove would have fired the gun if a policeman had been present, replied, that he did not think he would do so, clearly showing that the knowledge of legality and illegality was not wanting. Indeed, in lunatic asylums, the inmates were under a system of moral government, and were made to conform to its prohibitions and requests. He had, since he sat upon the bench, tried five cases of murder, and in each one

of them the plea of insanity was put forward, but without effect.

Mr. Stephens concurred for the most part with the observations of Baron Bramwell, and thought it would be wrong, because a man might imagine his little finger to be made of glass, to acquit him of murder on the ground of insanity.

The Chairman said the number of instances in which the plea of insanity was put forward was in consequence of the answer of the judges to the question in the House of Lords; and such pleas had been upon the increase since M'Naughten's case; but if public opinion could be fairly tested, it would say that Bellingham had been justly executed and M'Naughten unjustly spared.

Dr. Winslow briefly replied, and the thanks of the society were voted to him.

Editor's Letter Box.

THE LIST OF MEMBERS.

Letter from W. H. Michael, Esq.

Sir,—The great labour of preparing a list of members of the Association, and the desire to make it thoroughly correct, has, I presume, delayed its publication for two months. The end of the year is so close, that I beg leave to suggest deferring the printing of the list until the second or third week in January, when we could also have the names of new members, and also our losses from deaths and resignations. We should then possess a true index of the state of the Association.

It appeared from the Report of the Council at the Annual Meeting, that the state of the finances was "highly gratifying". It would, therefore, be satisfactory to the associates to see published, at the same time, a statement of the receipts and expenditure, also the assets and liabilities, to the end of the year. To establish our solvency, and to prove by figures that we are really advancing, is the true way to increase the number of our members, and the best means to secure progress.

I am, etc., W. H. Michael.

Swansea, December 8th, 1857.

MANCHESTER ROYAL SCHOOL OF MEDICINE.

Sir,—Will you allow me space in your Journal to complain of the uncomfortable condition which has existed three winter sessions in the students' room of the Manchester Royal School of Medicine? The room is almost destitute of seats; only three forms, each about two yards long, are provided for the students to sit on. This disorderly state influences many students to frequent the public houses and billiard rooms, where, once in, they remain, thereby neglecting their lectures and hospital practice, to say nothing of the loose habits which they imbibe, from the mere want of a decent room to sit in. Surely, this could be easily rectified by placing therein a stove, a few comfortable seats, and a table. Trusting you will excuse this intrusion.

I am, etc.,

A Manchester Student.

Manchester, December 7th, 1857.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, December 10th, 1857.

THE PUBLIC HEALTH.

Mr. Cowper, in moving for leave to introduce a Bill to amend the Public Health Act (1848), said, it was the same Bill which was read a first time last Session, and could not be proceeded with for want of time. Being anxious that the Bill should not be again exposed to the same fate, he had taken the earliest opportunity to introduce it, and he trusted that the House would be prepared to consider it after the Christmas recess. The general object was to provide that every town in England, great or small, should have the opportunity of acquiring, without any considerable cost or difficulty, local representative government, armed with sufficient powers to provide structural works and to make regulations necessary for the sanitary improvement of the inhabitants. The tendency of manufactures and the movement of particular branches of industry caused the rapid growth of towns in places which were previously thinly inhabited. The suburbs of Birmingham, Manchester, and the eastern districts of London, had rapidly accumulated very large populations. Houses were built without method and without under-drainage, so that the refuse was carried into some neighbouring ditch, where it remained to create noxious vapours injurious to health. It was hardly to be expected that any private individual would have so much public spirit as to risk the expense, in case of failure, of an application for a private Act, and therefore these places had no organisation at all. Many of the older towns were also desirous of acquiring larger powers than were afforded by the Public Health Act. Both the towns which had and the towns which had not representative government, wished to be able to adopt the Public Health Act, with greater facilities and with provisions more adapted to their wants. He proposed the intervention of the General Board only in cases where the boundaries had to be altered, and where some of the provisions of the Public Health Act had to be modified. The powers to be acquired under this Bill would be for making structural works, borrowing money, supplying water, lighting streets, and providing regulations which were necessary for the good government of these towns. There were some who asked, Why such meddling and such unnecessary interference? The purpose of the meddling was to get rid of the refuse of thousands, which had the effect of substituting disease for health, weakness for strength, and death for life. The number of deaths from preventible causes was estimated at 80,000 a-year, a large proportion of which arose from diseases altogether to be prevented if towns were properly cleansed. It was acknowledged by the highest medical authorities that typhus fever was generated by overcrowding and by noxious exhalations; and in blind purlieus, courts, and alleys, typhus numbered among its victims about 17,000 persons. Other diseases, as erysipelas, consumption, and scrofula, were greatly increased by the same causes. It was admitted that cholera was a disease which could be prevented being fatal by cleanliness and care. No better illustration was afforded than by the two towns of Tynemouth and Newcastle. In the interval between the last two visitations of cholera, sanitary measures were adopted in Tynemouth, and neglected in Newcastle. At the last visitation, the deaths in Newcastle from cholera were 2,000, and in Tynemouth 4. Similar results were traceable with regard to pure water. It was found, by comparing the deaths which occurred among the population of London served by the different companies, that those who drank the foul water taken from within the tidal area, died in a proportion three and a-half times as great as those who drank the pure water which was taken from above the tidal area. Cholera, with diarrhœa and dysentery, destroyed 27,000 annually. In the same way, the mortality of infants depended greatly upon the influence of the air they breathed; and Dr. West mentioned that infantile diarrhœa, in the severe form in which it prevailed in the ill-drained districts, was not to be found in the well-drained districts of the metropolis. There was a tendency, continually going on in this country, to gravitate towards towns, and to live less in rural districts. The town population was more unhealthy than the rural. It was found that people died in large towns at the rate of one-third more than in small towns and villages. Among many causes which increased the unhealthiness of towns, was the neglect to remove immediately from the neighbourhood of houses the refuse which, if allowed to decompose, polluted the air and tainted the water. It was, therefore, incumbent upon those who were anxious to maintain the health and prosperity of the country, that they should give every facility for the proper sanitary administration of towns. This Bill had that for its object; and, notwithstanding the topics of absorbing interest pressing upon the attention of Parliament, he hoped that in the ensuing Session they would find time to consider it. The right honourable gentleman concluded by moving for leave to introduce the Bill.

Mr. Ayrton said, the right hon. gentleman was under a misapprehension if he supposed that the opposition with which his Bill of last year had been received, was to the end to which it was directed. It was to the indiscreet means by which it sought that end, and to the disposition evinced to bring all the action of the local authorities under the control of one central office. Provided that the Bill were drawn in such a manner as to effect the end of improving the sanitary condition of the people without infringing on their personal liberties, it would meet with his support.

Sir A. Elton thanked the right hon. gentleman for the clear exposition which he had given of the objects of the Bill. From

his own experience, as the head of a local board, he was convinced that it was eminently calculated to further the welfare of the people. It was a poor man's question, for the poor man had no security against the neglect of his landlord to provide for his health and comfort but the law. Though he was a supporter of the principle of local freedom of action, yet he thought there ought to be a power existing somewhere which would set right the wrongdoings of the local authorities, and stir them up when they neglected their duties.

Leave was then given to bring in the Bill, which was subsequently brought in and read a first time.

Friday, Dec. 11th.

MEDICAL REFORM.

Mr. Kennaird asked the Vice-President of the Council of Education whether it is the intention of Her Majesty's Government to introduce any measure after the Christmas recess with a view of amending the laws relating to the practice of medicine and surgery in the United Kingdom?

Mr. Cowper said it was his intention to introduce a measure regulating the qualifications to be required hereafter from persons admitted into the medical profession.

DRAINAGE OF THE METROPOLIS.

Mr. Laurie asked the First Commissioner of Works whether any, and, if so, what steps had been taken for the purpose of carrying out so much of the Act 18 and 19 Victoria, cap. 120, as relates to the main drainage of the metropolis.

Sir B. Hall, as this was a subject of considerable importance, might be allowed to answer the question at some length, and to inform the House of the various proceedings which had taken place in relation to the matter since the Act was passed in 1855. He gave a description of plans which had been submitted to him by the Metropolitan Board of Works, but which did not provide for the prevention of the reflux of the sewage into the metropolitan area, and were therefore rejected by him. Subsequently, in December 1856, a third plan was presented by the Board, in which the proposed outfalls were at Rainham and near Erith—points which had been suggested by Captain Burstal, whom Sir B. Hall had requested to report on the subject. This plan was placed in the hands of Messrs. Simpson and Blackwell, and Captain Galton; who, at the end of July, sent in a plan proposing an outfall at Sea Reach. On November 5th, the Metropolitan Board directed their chairman, secretary, and engineer, to wait on Sir B. Hall in reference to their last plan, which had been rejected by him. They objected to the scheme of the referees on three grounds:—1. That the main sewers near the outfall were not covered. With regard to this, Sir B. Hall stated it was quite desirable that the main sewer should be covered. 2. That the outfall was extended to Sea Reach. The Chairman of the Board, however, acknowledged that this was the best place of outfall. 3. That the area of drainage was extended beyond the metropolis. On this, Sir B. Hall observed that, by the Act, it is declared that such sewers shall be made as will not allow the sewage of the metropolis to pass again into the metropolitan area; and what the Board of Works contend for is, that when they have disposed of the sewage of the metropolitan area, they are not bound to carry away the sewage created out of the metropolitan area, although that sewage would pass through their sewers into the Thames again. This could never have been the true meaning of the Act.

General Codrington asked whether it were true that the First Commissioner would not sanction any outfall within Sea Reach?

Sir B. Hall was quite aware that such a report had been circulated, but there was not one word of truth in it. He would be satisfied if the outfalls were made at the points indicated by Captain Burstal. He had felt it his duty to inform the Board that, if they attempted to carry out the outfall near Erith, there were difficulties to be overcome; but, if the Board were prepared to meet these difficulties, he would leave them to be got over by the Board.

DR. LIVINGSTONE AND CENTRAL AFRICA.

The Chancellor of the Exchequer stated that the Government proposed to advance the sum of £5,000 from the civil contingencies, to be able at once to furnish Dr. Livingstone with means requisite for a voyage of discovery upon the River Zambese. The repayment of the vote would be asked for in Committee of Supply, on the re-meeting of Parliament.

PUBLIC HEALTH ACT AMENDMENT BILL.

In reply to Mr. Palk—

Mr. Cowper said that though this Bill was set down for a second reading to-night, it was merely *pro formâ*, and it was not his intention to ask the House to read the Bill a second time until after the recess.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Hewett. On December 10th, at 35, Hertford Street, May Fair, the wife of Prescott G. Hewett, Esq., Assistant-Surgeon to St. George's Hospital, of a daughter.

Lobb. On December 9th, at 63, Gloucester Terrace, Hyde Park, the wife of Harry William Lobb, Esq. Surgeon, of a son.

Munro. On December 14th, at 10, Pembroke Road, Dublin, the wife of William Munro, M.D., Surgeon 93rd Highlanders, of a daughter.

Rugg. On December 6th, at Brighton, the wife of *Richard Rugg, Esq., Surgeon, of a daughter.

Simpson. On December 9th, at Long Melford, Suffolk, the wife of *Edwin Simpson, Esq., Surgeon, of a son.

Teevan. On December 12th, at 69, Westbourne Terrace, the wife of John Teevan, Esq., Surgeon, of a son.

Terry. On December 14th, at Northampton, the wife of *H. Terry, jun., Esq., Surgeon, of a daughter.

MARRIAGES.

Carte—McMahon. Carte, John Elliott, M.B., Surgeon 67th Regiment, to Harriet, eldest daughter of Thomas McMahon, Esq., of Upper Mount Street, Dublin, on December 8th.

Simmonds—Davies. Simmonds, G. W. D., Esq., Paymaster R.N., to Annie, fourth daughter of the late William Davies, M.D., at Auckland, New Zealand, on August 27th.

Williams—Haddock. *Williams, John, Esq., Surgeon, of Trosnant Lodge, Pontypool, to Sarah, second daughter of the late Thomas Haddock, Esq., of Hawthorne Cottage, near Cardiff, at Whitchurch, Shropshire, on December 16th.

DEATHS.

Bartrum, Robert Henry, Esq., Assistant-Surgeon 3rd Oude Irregular Infantry, at Lucknow, while serving with the leading column under General Havelock, aged 26, on September 26th.

*Beales, John, Esq., Surgeon, of Halesworth, Suffolk, at 5, Old Quebec Street, Portman Square, aged 53, on Dec. 10th.

Bernard. On December 9th, at Clifton, Mary, wife of Ralph M. Bernard, Esq., Surgeon.

Blair, David, M.D., Surgeon-General of Demerara, lately.

Johnston, John, M.D., late of Old Burlington Street, at Ascension, Paraguay, on October 9th.

Maul. On December 5th, at Southampton, Mary Ann, widow of the late Charles Maul, Esq., Surgeon, aged 80.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, December 11th, 1857:—

Bayley, Robert Luther, Eignbrook, Hereford
Bentley, George, Halstead, Essex
Crosbie, Pierce Morris, Tralee, co. Kerry
Everet, Wilton, Stepney
Galloway, James, Penrith, Cumberland
Morris, Richard, Aberystwyth
Smith, William Henry, Clapham Road
Soden, John, Mohill, co. Leitrim
Thomas, Edward Wynne, Oswestry

Apothecaries' Hall. Members admitted on Thursday, December 10th, 1857:—

Black, Walter Shaw, Chesterfield
Burn, Joseph, Kirton, near Boston

Dixey, Augustus Edward, Army
Hill, Matthew Berkeley, Stapleton, Bristol
Irving, James, Long Bennington, Lincolnshire
Willett, James, Northwich

HEALTH OF LONDON:—WEEK ENDING DECEMBER 12th, 1857.

[From the Registrar-General's Report.]

The public health of the metropolitan districts appears to be returning to a more satisfactory condition. In the previous week the deaths registered were 1428; in the week that ended on Saturday (December 12th), they fell to 1240. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1297. But as population has increased, it is necessary for comparison that the average should be raised proportionally to the increase, in which case it will become 1427. In consequence of the unusual prevalence of influenza in the second week of December 1847, the deaths from all causes rose to 2416; and if the average is corrected with reference to this circumstance, it will be found that the rate of mortality now prevailing differs not much from that which may be expected at this season, when no epidemic is present.

The births of last week exceed the deaths in the same period by 563.

The deaths caused by diseases of the respiratory organs, which in the preceding week were 415, declined last week to 336, which is still, however, a rather high mortality. Fatal cases of bronchitis declined in the two weeks from 242 to 185; those of pneumonia were 129 and 119; those of asthma, 20 and 17. The deaths from phthisis (or consumption), which in the previous week were 168, were last week only 114. Influenza was probably more fatal than the tables indicate; for the cases returned under the specific designation in the two weeks were respectively only 22 and 19.

Scarlatina is at present more fatal than any other disease in the zymotic class: it was fatal last week in 55 cases; four of these occurred in the sub-district of Lambeth Church (first part). Thirty-six children died of measles, and fourteen of these in the east districts. Of 47 deaths from hooping-cough, the greatest number (fifteen) occurred in the north districts, and so many as five of these in the Regent's Park sub-district, while only five occurred in the south districts. A man died of cholera in Lambeth, after four days illness. Two deaths are recorded as the result of insufficient nourishment; while three persons were the victims of intemperance. Seven persons had attained the age of 90 years or upwards: one of these was a man; the rest were widows, three of whom had reached the age of 94.

Last week the births of 961 boys and 842 girls, in all 1803 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1507.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·369 in. The mean daily barometrical reading was above 30 in. on Saturday, the 5th instant, and continued above that point during the whole of last week. The highest reading was 30·57 in. at the end of the week. The mean temperature of the week was 45°, which is 4·5° above the average of the same week in 43 years (as determined by Mr. Glaisher). On Monday, the excess of mean temperature above the average was so great as 10·2°. The highest temperature was 55·3°, on Sunday (the 6th); the lowest was 35·3°, and occurred on Tuesday. The mean daily range of the week was 10·8°. On Saturday, the range was only 5·6°. The mean dew-point temperature was 43·3°, and the difference between this and the mean air temperature was 1·7°. The mean temperature of the water of the Thames was 45·9°. The mean degree of humidity of the air was 93, complete saturation being represented by 100. A dense fog prevailed on Tuesday. The mean temperature of the air on that day was 41·7°; that of the Thames considerably higher, viz., 46·2°. The wind was in the south-west throughout the week. There was no rain.

Services of Surgeons in the Siege and Capture of Delhi. General Sir A. Wilson, in his official report on the siege and capture of Delhi, has the following gratifying observations on the conduct of the medical officers of the force under his charge:—"With the medical arrangements of Superintending Surgeon E. Tritton I have every reason to be satisfied, and he is entitled to my cordial acknowledgments. At such a trying season of the year, and in a notoriously unhealthy locality, the sickness and mortality have, of course, been heavy. In addition to those sufferings from disease, the hospitals have received almost daily accessions of wounded men. The labours, therefore, of the medical department have been unceasing, notwithstanding there has not been at any time the slightest failure in the arrangements for the care and comfort of the very numerous patients. Among those medical officers whose unwearied zeal and superior ability have come prominently before me, are—Officiating Superintending Surgeon C. M'Kinnon, M.D., who has been in the medical charge of the 1st brigade Horse Artillery; Surgeon J. H. Kerr Innes, 60th Royal Rifles; Surgeon J. P. Brougham, 1st Fusileers; Surgeon E. Hare, of the 2d Fusileers; Assistant-Surgeon J. J. Clifford, M.D., of the 9th Lancers; and Assistant-Surgeon W. F. Mactire, M.D., on the personal staff of the late Commander-in-Chief. Credit is also due to Surgeon D. Scott, M.D., medical storekeeper."

HYGIENE OF EUROPEAN TROOPS IN INDIA.

The following is an abridgment of suggestions drawn up by Dr. James Harrison, Surgeon H.E.I.C.S., and approved by Sir Colin Campbell:—

When practicable, the best time for marching is undoubtedly in the early morning. The march should be finished by two hours after sunrise. The custom of serving out a dram on the line of march should be avoided; but as it is injurious to undergo fatigue after a night's rest upon an empty stomach, food of some kind should be given to soldiers either before starting or at the first halt. The neck should be bare, to allow of the free return of blood from the head. A flannel roller round the belly and loins is all the woollen material required. All other superfluous articles of clothing should be dispensed with. In cold weather a flannel shirt, cloth coat, etc., should be worn, in accordance with the temperature. Every soldier should be impressed with the danger of exposing the head, uncovered, to the direct rays of the sun. A light, cool, and comfortable cap, which at the same time allows of evaporation from the surface of the head and shades the eyes, temples, and back of the neck, should be provided. The men should be instructed never to throw this off; and they should be told, on the first symptoms of giddiness, flushing of the face, fulness of blood in the head, or dimness of vision, to pour cold water over the head, and to keep it wet (with the cap on) for some hours. Strict adherence to these instructions would prevent the large majority of cases of *coup de soleil*. No soldier should be allowed to remain in wet clothes longer than can be avoided. While in exercise no danger results; but, from lying down in damp clothes, fever, dysentery, or disease of the liver inevitably ensue. When in tents, the walls on the shady side should be thrown down, and the air be allowed to circulate freely. At night, unless the weather is very cold, the wall on two sides of every tent should be removed. More harm is caused by the respiration of contaminated, close, and impure air than is ever brought about by exposure to the night wind. Soldiers should be made to bathe at least three times a week in cold water. This operation should always be performed upon an empty stomach, and the morning before breakfast is the best time. It is not safe to bathe when the body is much heated, if at the same time it is fatigued. Hence, on the march, the evening, about four hours after dinner, would be an appropriate time. The skin should be thoroughly dried and rubbed.

Experience proves that the same amount of animal food is not required in a hot climate to preserve health and strength as in a cold one. A large amount of animal food, instead of giving strength, heats the blood, renders the system feverish, and consequently weakens the whole body. The Rájpúts of Rájpútána, and the Sikhs of the Punjab, are physically as strong as Europeans, and they are capable of enduring more fatigue, and withstanding better the vicissitudes of the climate of India. This is due, partly to race, but chiefly to the nature of their food, of which the staple is wheaten flour, made into *chapátis*. They eat but twice a day; and, although they partake of animal food, they do so in very much less proportion than is the habit in Europe. The best food for a soldier is that which the country freely produces, and which is nutritious and digestible, and at the same time palatable. The large quantity of pork indulged in by soldiers is most injurious. Hermetically sealed, preserved, or salted provisions are noxious, if partaken of for a prolonged period, or to the exclusion of fresh food. Bread, when tolerably well made, is one of the best articles of diet. Biscuits are not so digestible, but are easily carried, and are

always ready. In the absence of these, flour (*áta*) can always be procured, and *chapátis* (a thin unleavened cake) are easily made, are highly nutritious, and are perfectly digestible when eaten fresh and hot. When cold and tough, they are unwholesome. *Chapátis* can be baked in any quantity on iron plates made for the purpose; and every European should learn (which he can easily do from any native) how to knead and prepare them. Flour can be got from every village, and with it no European detachment need ever be without "the staff of life". Rice and *dál* can also be had anywhere. These, boiled separately, and afterwards mixed together, make, with the addition of salt and pepper, a wholesome and nutritious food, well suited for breakfast. Beef is the meat usually furnished to regiments. The lean commissariat kine do not promise much, but it is difficult to procure other meat in sufficient quantity. Slow boiling for two hours will make any meat tender, and the water in which it is boiled makes excellent soup. The addition of whatever vegetables are to be had, of a few slices of salted pork or bacon, two or three handfuls of flour, some onions, and salt, and pepper, makes a savoury mess. Rice, boiled in a separate vessel, and afterwards mixed up with the soup, meat, etc., adds to the quantity and quality of the meal, which is wholesome, nutritious, and palatable. Mutton and fowls may occasionally be had as a change; and in the neighbourhood of large rivers fish makes an useful variety. Milk is an invaluable article of diet. Vegetables are essential to the preservation of health. In cold weather, inquiry will prove that in the neighbourhood of nearly every halting place there are fields of carrots, turnips, onions, and of many native vegetables. Soldiers should be strictly warned never to eat uncooked or raw vegetables. Fruit, when sound and ripe, is beneficial.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

ADMISSION OF MEMBERS AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of Associates to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified Medical Practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three Members, shall be admitted a Member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The Subscription to the Association shall be One Guinea annually; and each Member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the Member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the Publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

PHILIP H. WILLIAMS, General Secretary.

Communications have been received from: — Dr. Thomas Southam; Dr. R. U. West; Mr. James Dulvey; Mr. W. H. Michael; Mr. A. T. H. Waters; Dr. T. Williams; Dr. H. Hannotte Vernon; Dr. C. Handfield Jones; Dr. Littleton; Mr. Stone; Mr. R. H. Leach; Mr. H. Walton; Mr. T. Holmes; Mr. W. Garstang; Dr. Thomas Inman; Mr. J. S. Gamgee; Mr. H. Terry; A Manchester Student; Dr. D. Mackinder; Dr. Wm. Mackenzie; Dr. G. Goddard Rogers; Dr. Jackson; Mr. Southam; Dr. Macloughlin; Mr. J. H. Houghton; The Honorary Secretary of Hospital for Children; Dr. Barker; and Mr. W. Walker.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. The Enlarged Prostate, its Pathology and Treatment; with Observations on the Relation of this Complaint to Stone in the Bladder. By *Henry Thompson, F.R.C.S., M.B. London: Churchill. 1858
2. St. Luke's Hospital for Lunatics. Report for the Year 1856. London Teape & Son. 1857.

ADVERTISEMENTS.

Just Published, 1 vol. 8vo, cloth, 6s.

John Scott on the Treatment of DISEASES of the JOINTS: and of ULCERS and CHRONIC INFLAMMATION. A New Edition with an Introduction, and a Chapter on the Constitutional Origin and Treatment of Diseases of the Joints.
By WILLIAM HENRY SMITH, F.R.C.S.
Longman & Co., Paternoster Row.

QUEEN'S COLLEGE, BIRMINGHAM.
Just published, price Sixpence, sent by post for Seven Stamps,

Statement of the Professors and other Documents relating to the ELECTION OF MR. GAMGEE to the Office of *Surgeon to the Queen's Hospital*. Smith & Son, Union Street, & Central Railway Station, Birmingham. Lewis, Upper Gower St., London.

THE SURGICAL EPOCH.
Also just published, price One Shilling, by post for Thirteen Stamps,

Mr. J. Sampson Gamgee's Intro- DUCTORY LECTURE on CLINICAL SURGERY in the QUEEN'S COLLEGE, Birmingham. Blackie & Son, Upper Temple Street, Birmingham, & Warwick Sq., E. C. London; also Lewis, Upper Gower St., London.

[Established 1841.]

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By the Annual Report of 1853, it appeared that the number of Policies then in force was 3434, insuring £1,337,500, and yielding an income of £55,207.

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The Amount Insured was.....£2,917,598 : 13 : 10
The Annual Income was .....£125,113 : 3 : 8

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C. DOUGLAS SINGER, Secretary.

Medical Agency.—Messrs. Mair, Son, and STEEL, Clerical and Scholastic Agents, beg to inform the Medical Profession, that on and after the first of January next they will, in the spacious premises recently erected for them, carry on the business of MEDICAL AGENTS. This Department will be perfectly distinct, and under the management of a Medical Man. Mair, Son, and Steel, are now prepared to receive applications from Gentlemen wishing to effect the Sale, Purchase, or Exchange of Medical Practices, or the arrangement of Partnerships; also from those requiring Assistants, and from Assistants seeking Engagements. No charge will be made to gentlemen applying for Assistants.

Lists of Practices for Sale, of Practices sought, of vacant Engagements, and of Engagements required, etc., will be published regularly in the MONTHLY REGISTER, which will be nearly as extensively circulated among the Medical, as it has been for many years among the Clerical and Scholastic Professions.

OFFICES, (Established 1833) 34, Bedford Street, and 22, Henrietta Street, Strand, removing from 7, Tavistock Row, Covent Garden, where Communications are to be addressed until the end of the year.

Diabetes.—Bran Biscuits from the prescription of Mr. Camplin, Surgeon (see *Med. Chir. Trans.*, 1855) and strongly recommended by many eminent Physicians and Surgeons, are prepared by T. SMITH, Biscuit Baker, etc., Gower Street North, Euston Square, London. T. S. supplies them to the University, King's College, Middlesex, St. George's, Northampton, Bath, and other Hospitals, besides many private individuals in Great Britain and abroad.

These Biscuits will keep good many months. Price 1s. per lb.

T. S. also supplies the Bran Powder prepared for domestic use.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. LII.] LONDON: SATURDAY, DECEMBER 26, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. A MIXTURE OF COLLODION AND CASTOR OIL AS AN APPLICATION TO SEVERE CASES OF BURNS AND SCALDS.

[*From Notes by* P. W. SWAIN, Esq., *House-Surgeon.*]

CASE I. Elizabeth G., aged 78, was admitted into King's College Hospital, on November 27th, 1857, with a severe burn, extending over the front of the chest, as far down as the mammæ, and upwards over the front and side of the neck and both cheeks. In some places, the cuticle was much charred; and extensive vesications existed about the side of the neck and face. The accident was caused by the old woman falling forwards on to the fire, whilst reaching up to the mantelpiece.

On admission, the parts were cleansed; the vesications were punctured; the hair was shaved from the front and sides of the head; and an application, composed of two parts of collodion and one part of castor oil, was painted over the entire surface of the burn. This application was repeated three or four times in the course of that day, so as to form a covering, which entirely excluded all contact of the atmosphere. She was ordered ammonia and small doses of tincture of opium every four hours; and, as she was in a very low condition, an ounce of brandy every hour. On the evening of the day on which she was admitted, her breathing became so laboured that suffocation at one time seemed impending; so much so, that, had she not somewhat revived, tracheotomy would have been performed. The foregoing plan of treatment was persisted in up to December 2nd, when for brandy were substituted twelve ounces of gin; and, as suppuration had set in, a linseed-meal poultice was applied over the whole surface of the burn. On December 5th, the slough having separated, and the sore presenting a healthy surface, an ointment, composed of an ounce of prepared chalk, two drachms of olive oil, and half an ounce of spermaceti ointment, spread on lint, was applied. Up to the present date (December 10th), this treatment has been persisted in; the sore is healing; and the woman, whose advanced age precluded almost all hopes of recovery, is in a satisfactory state.

CASE II. James K., aged 28, was admitted into King's College Hospital, on September 24th, with a severe burn extending over the upper part of the chest, the front of the neck, the left shoulder, and front of the left fore-arm. In many places the cuticle was destroyed, and the parts were much charred. The patient is subject to epileptic fits, during one of which he fell forwards into the fire, and thus sustained the injury. As in the above case, on admission, the whole surface of the burn was thickly painted over with collodion and castor oil. This treatment was persisted in up to October 4th, when suppuration having set in, a linseed-meal poultice was applied over the parts. On October 8th, the surface of the sore having cleaned, and presenting healthy granulations, it was dressed with compound chalk ointment and olive oil. On October 30th, the sore was reported as being healed over nearly the whole surface; the cicatrix left was of a very slight character, considering the severity of the burn; and some slight contractions which presented themselves on the front of the neck and the axilla were easily counteracted by the application of a simple apparatus.

CASE III. Abraham F., aged 6, was admitted into King's College Hospital, on December 13th, 1857, with a scald extending over the front of the left thigh and leg, and over the front of the right leg, caused by a kettle of boiling water falling from the fire over him. Several large vesications existed, and in some parts the surface was raw. On admission, the mixture of collodion and castor oil was applied to the parts. The pain, which was at first great, ceased almost instantaneously, and the child has since experienced little or no inconvenience.

REMARKS. The use of this application in burns and scalds, which has now been extensively tried in King's College Hospital, appears to possess many advantages over all others. It affords a coating to the parts which entirely excludes the atmosphere without obscuring the surface of the sore from view. It is by no means a *dirty* application, and possesses a pleasing odour, which counteracts the unpleasant emanations generally attendant on burns. It also appears to have the effect of immediately lessening the pain; and in all the cases in which it has been applied, the sloughs which have subsequently formed have appeared to be much less deep than usual.

II. TYPHOID FEVER TREATED WITH ALCOHOLIC STIMULANTS.

Under the care of R. B. TODD, M.D.

[*From Notes by* DR. WHITFORD, *House-Physician.*]

Numerous cases of typhoid fever have been lately in this Hospital, under Dr. Todd's care, which have been treated on an uniform plan, as they all exhibited the same features, and presented the same indications. This treatment consisted in the regular administration of stimulants in small quantities and at short intervals. The success of the treatment has been striking, as, out of a considerable number of cases (estimated by Dr. Whitford, the resident house-physician, at about twenty), only two deaths have occurred, both of them very bad cases, and one evidently hopeless. Detailed notes of these cases would not perhaps possess sufficient variety to compensate for their length; but we subjoin short notices of two cases, with which Dr. Whitford has been kind enough to supply us, as examples of the progress and treatment of the disease. It will be seen from this that the latter is of the typhoid character; that the strain is, as usual, on the intestines; and that the characteristic indication for treatment is derived from the pulse. It will also be observed how remarkably the rapidity of the pulse diminishes (its volume and tone generally improving) as the stimulant is taken and tolerated.

It is probable that the experience of our country associates is principally of a different and more "sthenic" type of fever; but we believe that in London this typhoid epidemic is nearly universal; and the treatment employed aims, in most cases, at fulfilling the same indications, though perhaps vinous stimulants are usually less liberally used. We shall probably recur to this interesting and important subject.

CASE I. Sarah M., aged 4, was admitted on November 14th. She was first taken ill on November 11th, with irritability, hot and dry skin, constipation, and abdominal tenderness. On admission, she was quite sensible; the skin was hot and dry; a few rose-spots were seen on the abdomen; the bowels were relaxed, and the motions very offensive. There was much tenderness on pressure over the right iliac fossa.

Date.	Pulse.	Stimulants.
Nov. 14	130	Wine ℥ii, every two hours=3 oz.
„ 15	140	„ „
„ 16	140	Brandy ℥ii, every hour=6 oz.
„ 18	120	„ „
„ 19	120	„ „
„ 20	120	„ „
„ 21	120	„ „
„ 23	92	Brandy ℥ii, every two hours=3 oz.
„ 25	112	„ „
„ 27	96	„ „
„ 30	96	„ „

Turpentine stupes were applied to the abdomen: these relieved the tenderness, but did not stop the purging. On November 18th, a starch enema, with five minims of laudanum, was ordered. This stopped the purging, which did not recur after the 19th. From this time she steadily improved.

Case II. Honora H., aged 17, was admitted November 28th. The fever commenced on November 21st, with headache and rigors, and then pain in the abdomen. The bowels were much as usual when admitted. She had complete stupor; the countenance was dusky; the tongue was coated with brown fur. A few rose-spots were seen on the abdomen, which was rather tender on pressure. She was ordered, on admission, an ounce and a half of brandy every hour, and the following mixture:—

℞ Spiritûs ætheris chlor. mx; ammoniæ carb. gr. iv; mist. acaciæ ʒiss. M. Fiat haustus 4tâ quâque horâ sumendus.

We append a short table of her daily progress, with the variations of pulse and respiration noted. It will be seen how the former gradually improved under the influence of the stimulant (which was regularly persisted in), and how a very severe and threatening attack issued in a complete and rapid recovery.

Date.	Pulse.	Respiration.	Remarks.
Nov. 28 ..	104 ..	..	
„ 29 ..	128 ..	24 ..	
„ 30 ..	104 ..	20 ..	Answers questions.
Dec. 1 ..	88 ..	24 ..	Spots faded. Countenance less dusky.
„ 2 ..	72 ..	24 ..	Less abdominal tenderness.
„ 4 ..	72 ..	..	Bowels regular. No abdominal tenderness.
„ 7 ..	..	..	Convalescent.

ST. GEORGE'S HOSPITAL.

FEMORAL HERNIA WITH DIVERTICULUM FROM THE SAC.

Under the care of Prescott G. Hewett, Esq.

Ann G., aged 36, was admitted into St. George's Hospital, under the care of Mr. Prescott Hewett, on November 16th, with a strangulated femoral hernia on the right side. The bowel had come down the previous day at 4 P.M., after a violent fit of vomiting. The descent was accompanied by violent pain, and vomiting had continued ever since; the pain had gradually spread from the groin over the belly. Attempts at reduction had been made, but in vain. Castor oil, and mustard poultice over the belly, had been prescribed out of the hospital.

The rupture had existed altogether three years. It had originally made its appearance suddenly during great efforts to lift a heavy weight; it had never caused the patient any inconvenience, and she would scarcely have noticed it, had it not been for the little hard lump which ever since had remained in the groin. Not being aware of the nature of this lump, she had never tried to reduce the rupture, and consequently had never thought of a truss.

When seen by Mr. Hewett at 11·15 P.M., the patient was complaining of great pain and tenderness over the lower part of the belly, which was swollen, and tympanitic. The sickness was constant; the tongue foul; the pulse weak and irritable, but the countenance was good.

In the right groin was a roundish lump, prominent, and occupying the situation of a femoral rupture. To the sight there was nothing peculiar about this tumour, but to the touch there were some strongly marked peculiarities. In the usual position of a femoral rupture, the swelling was hard and prominent; very tense, and very painful when handled; above this swelling, and intimately connected with it, was a mass which spread upwards and outwards, partially overlapping Poupart's ligament, until it reached close to the anterior superior spinous process. This part was flattish, soft, and doughy, and not painful. The skin presented its usual appearance. The woman was stout, so that there was no apparent line of demarcation between the two portions of the swelling. The whole aspect of the case made Mr. Hewett think that the outer portion of the swelling might be omentum contained in a diverticulum of the sac, and the inner portion a knuckle of intestine. Chloroform having been administered, the operation was performed. The sac was easily reached; it was rather thickened, and contained a quantity of straw-coloured serum; it was freely laid open; a quantity of perfectly healthy omentum at once came into view; at first, this appeared to fill up the sac; but on unfolding it, a knuckle of intestine was found underneath it, and all but enveloped in it. The omentum was pulled out of the way, and the bowel proved to be of a very dark livid colour, but otherwise not unhealthy. The ring was at a great depth, so much so, that its margin could only just be reached with the nail of the fore-finger. The stricture was exceedingly tight; but a broad-grooved director was at last introduced, and Gimbernat's ligament freely divided, after which the bowel was easily reduced. On further examining the omentum, a portion of this membrane was found passing outwards; it was traced through an opening on the outer side of the sac, from which a good sized piece was dragged out, and then the finger was easily pushed into a smooth, elongated cavity, which reached as far as the anterior superior spinous process. The breadth of this cavity was about the size of a couple of fingers; the opening of communication between the two sacs was as large as the thumb. The omentum was partially united, by old adhesions, to the diverticulum; these were slender, and easily broken through. The mass of the omentum was also firmly adherent to the outer margin of the femoral ring. A ligature was therefore applied around the protruded part of this membrane, which was then cut off. A quantity of serum continued to ooze out of the belly for some time after the operation. A grain of opium was ordered an hour after the patient had returned to bed. The subsequent course of this case was most satisfactory; all symptoms were completely relieved by the operation. The bowels were opened seven days after the operation, after a dose of castor oil. The ligature around the omentum came away in due course of time. The wound healed kindly, and the patient was discharged on December 9th.

Remarks. We have lately called attention to this rare peculiarity in femoral hernia (see page 962); and it happened strangely enough that, just at the time when our report appeared, another instance of it should have occurred under the care of the same surgeon. We treated the subject so fully on the former occasion, that it is unnecessary to add more at present.

ST. BARTHOLOMEW'S HOSPITAL.

Several cases have recently been observed at this Hospital which present features of some interest, and, although not calling for reports at length, are worthy of passing mention.

I. POISONED WOUND: RAPID CURE BY IODIDE OF POTASSIUM.

A man, aged 26, was lately under treatment for a foul sore on the fore-finger, the result, apparently, of working in night-soil with a wound on the part. He had, however, suspended his occupation for some weeks, and had been under good surgical care. The sore was of some size, with ragged, raised, bluish edges, and foul surface. At first, the effect of rest and simple applications were tried; but as these produced no good result, iodide of potassium was given. The sore assumed a more healthy appearance two days after the commencement of the treatment, and in a fortnight was quite well, having previously been under different plans of treatment for five months.

II. FŒTIDITY OF THE CONTENTS OF HÆMATOCELE.

It is perhaps as well to remember that the contents of old hæmatoceles frequently assume more or less of the character of fæces, as the practitioner is sometimes alarmed on cutting into such a tumour at the aspect of the contents, and is led for a moment almost to question the accuracy of a diagnosis which has perhaps been most carefully made. We have ourselves seen matter evacuated from such a tumour so exactly resembling the contents of the small intestine, as to cause even the very experienced surgeon who was operating to involuntarily start back, though of course he speedily reflected that the mistake was impossible in the case before him; and we have also dissected such cases in the dead-house. A case even more striking occurred here a few days ago in a man who had both hernia and hæmatocele, and where (the hernia having been reduced), the surgeon proceeded to open the hæmatocele. The incision was followed by the escape of a gush of fœtid air, causing the bystanders to imagine that the gut was opened. The man recovered without any bad symptoms. The presence of air in such degenerated blood-swellings is a fact which is new to us.

III. TRAUMATIC TETANUS.

A case of tetanus occurred here a short time since, in which the disease presented the peculiarity of having followed a mere blow on the nose. It terminated fatally in a fortnight with persistent trismus, but only one attack of general spasms. The treatment was by musk and opium.

IV. SINGULAR ACCIDENTS.

Two singular surgical accidents presented themselves in the out patient's room. One was dislocation of the humerus into the axilla, with fracture of the clavicle on the same side—a complication very rarely observed. The other was a dislocation of the jaw, on one side only, from yawning. The patient was an old man. The dislocation was, as usual, very easily reduced.

V. DUMMREICHER'S, OR THE RAILWAY SPLINT.

This splint, the application of which we noticed in a former number (p. 166), and which succeeded admirably in that case, is again to be seen in action in this Hospital. The patient, a very old man, of intemperate habits, and threatened with delirium tremens, speaks in high terms of the comfort of the application, which keeps the parts (a fractured leg, with much bruising) in very good position.

Original Communications.

TREATMENT OF INJURIES OF THE HANDS AND FINGERS.

By J. H. Houghton, Esq., Surgeon to the Dudley Dispensary.

Though not a hospital surgeon, I may be allowed to bear my testimony to the efficacy of the plan of "treatment of some cases of injury of the hands," proposed by Mr. Birkett in the Journal for December 12th. The surgery of a practitioner actively employed in the South Staffordshire coalfield affords opportunities of treating such cases equal to many hospitals; a day hardly ever passes without some of them coming under observation, and frequently the number is very large. Seven or eight patients with injuries of the hands and fingers, varying from a case of formidable compound fracture to some trivial wounds and lacerations, attended this morning at my surgery.

Seven years experience had fully convinced me of the clumsy and unsatisfactory means at our disposal for treating these injuries, in the shape of adhesive plaster, unguents, and poultices, when about ten years ago I began to apply the water dressing to my cases of injury of the hands and fingers; and the result was so satisfactory, that during the last ten years, with some few special exceptions, I have not used any other dressing. I am fully persuaded that no surgeon, who has not been accustomed to this mode of treatment, can have any idea of its special adaptability to the injuries in question; and I am constantly in the habit of saving parts which, under any other plan of treatment, I feel sure must be sacrificed. I have to-day carefully examined the finger of a boy, about eleven years of age, who was under my care for a compound fracture of the second phalanx of the little finger about eight years since. The case made a permanent impression on my mind for two reasons: first, it was one of the first cases of very severe compound fracture which I saved by the water dressing treatment; and secondly, I had a special interest in the patient's family. When I first saw the case, a wound on the palmar aspect divided the soft parts to at least three-fourths of their extent, the bone also being divided; the distal part of the finger literally hung by the remaining soft part, and the friends thought there was nothing to be done but to snip the parts through, and thus complete the operation. With a small piece of wood I cut a splint to fit the finger. I carefully adjusted the divided parts, and placed them on the bare splint; the finger and splint were carefully rolled together with a minute roller of dry lint. The whole was put upon a splint sufficiently long to give support from the elbow to the end of the fingers. This dressing (dry) was allowed to remain some days, and then, after well soaking, was removed, when a very slight degree of union had been effected, but the parts had regained their normal position. The special water treatment was then commenced, which consisted in the daily careful rolling of the finger on the splint, with a minute lint roller soaked in water. The patient's friends were directed to keep the roller moist by dipping it into a little tepid water. The wound did not granulate freely; it assumed rather an unhealthy sloughy appearance, and it was some time before a healthy process was set up; yet the result was satisfactory, the parts being perfectly restored, with very little deformity remaining.

On November 17th last, a boy was brought to my surgery, having sustained a terrible compound fracture of the second phalanx of the little finger. The wound commenced at the external side of the finger, at the proximal end close to the joint; it extended inwards and forwards to the distal end near to the second joint; the fracture took the same oblique direction. The end of the finger was retained by the skin and integuments on the inner side of the bone only, and the semi-detached part lay almost at right angles to the finger itself. The wound, which had been made by a blunt piece of iron, had a very unpromising appearance. It was put up, like the former one, with dry lint; this was removed in a few days, and then the water dressing was commenced.

To-day, Dec. 15, the union of the bone is complete; the wound has nearly healed; the joints are both perfect, and the finger is straight. I have no doubt that but for the water dressings the patient would have lost his finger.

These two cases (out of hundreds similarly treated, but which seem too trivial to note) are given, because the first, from particular circumstances, made an indelible impression on my mind; and the second is now under treatment.

I carefully endorse the whole of the statements made in Mr. Birkett's highly practical paper, and go a little further: for here cases in which patients have been confined to bed have been rare; with very few exceptions, the patients have attended daily at my surgery, the arm supported in a sling, and frequently the hand resting on a good long wooden or zinc splint; in some cases, the patient is directed, when at home, to rest the hand and arm on a table, with the hand well raised. Irrigation, though an elegant, is not an essential part of the treatment; it is amply sufficient that the lint be kept moist. I generally direct a little water to be kept warm in a basin near the fire: if the fingers are the injured part, they are dipped into it; if the hand, the lint is frequently moistened with a sponge. The stripes, as Mr. Birkett justly observes, require to be applied in various ways: "sometimes in an oblique and sometimes in a vertical direction;" and in my opinion, the whole success of the treatment depends on the tact with which the lint is adjusted, and in this there is considerable art, particularly in injuries of the fingers. I use stripes of common lint, twelve or eighteen inches long, from one-half to three-quarters of an inch wide, and rolled up like common rollers; these are well soaked before they are applied. If I have to deal with a simple wound or laceration, the finger is simply rolled with the roller; but if I have to deal with a compound fracture, the fractured finger is placed on a small splint of wood or gutta percha (adapted to the particular case), and the roller is applied round the finger and splint together. The plasticity of a finger so handled is marvellous; and by altering and arranging the position of the splint and the roller, almost any deviation from the proper position of the bones or soft parts may be rectified, the exuberance of granulations restrained, and the shape of the part maintained.

I am pleased to see a gentleman of Mr. Birkett's position advocating what some will consider a very unsurgical, though a very beneficial course, as illustrated in Case 4; I mean, leaving the projecting ends of bones (of the hands and fingers), from which the integuments have been torn, to be covered by granulation instead of removing the part. I have long adopted this plan; and, though it is by no means a brilliant practice, I am sure it is far more conducive to the patient's welfare, than the more orthodox and dazzling recourse to operative proceedings.

A CASE OF LARGE GALL-STONE ESCAPING THROUGH THE WALLS OF THE ABDOMEN AFTER MANY MONTHS SUFFERING, WITH ULTIMATE RECOVERY.

By Draper Mackinder, M.D., F.R.C.S., Gainsborough.

On August 28th, 1856, I was requested to visit a Mrs. B., a delicate lady, aged 75 years, who had frequently complained of a pain in her right side, but now seemed to be suffering from an attack of acute hepatitis, for which I attended her until October 23rd, when she became convalescent.

On February 7th, 1857, she sent for some medicine to relieve a pain in her side, and nine days afterwards I was ordered to see her in consequence of an aggravation of her symptoms. I found her suffering much from pain in her right hypochondrium, increased by pressure, a difficulty of breathing, a dry furred tongue, thirst, vomiting, a quick feeble pulse, and a distinctly circumscribed hardness at the inferior border of the liver, movable like a tumour, and exquisitely sensitive. As time advanced, this tumour descended along the external margin of the right rectus to the superior boundary of the iliac region. Here the integuments became inflamed, and fluctuation was soon perceptible over a radius of three inches; and on March 3rd the abscess burst, and gave exit to about three ounces of pus. At the end of April, an inch above the opening, a hard substance, of the size and configuration of a hen's egg, was perceptible to the touch; but the integuments, for four inches around, were hardened, nodulated, red, and so very painful, that a proper exploration was not permitted. Poultices were ordered to be applied, and tonics and liberal diet were administered, the patient's debility requiring the recumbent position. Early in May, while she was standing by her bed, the hard substance before mentioned suddenly rolled on the floor, having escaped through the abdominal wall at the middle of the right iliac region. It proved to be a large ovoid gallstone, very hard, weighing six drachms, measuring two inches by one and a half, and exhibiting, on fracture, a beautiful crystalline composition of nearly pure cholesterine in the centre, with a thick coating of colouring matter, and carbonate and phosphate of lime. The old lady is now in capital health.

[Errata. In my case of "deficiency of fingers transmitted through six generations," page 845, in the eleventh line from bottom, for "sister" read "sisters"; and in fifth line from bottom, for "*his*" read "*her*".]

British Medical Journal.

SATURDAY, DECEMBER 26TH, 1857.

CHARGE OF ATTEMPTING TO PROCURE MISCARRIAGE.

We congratulate Mr. Andrew Halliday Carmichael on a very narrow escape from the toils of as mischievous a party of three as could well be found in any country village. This gentleman, but for the good sense of an English jury, might have been at this moment picking oakum and refreshing himself with stirabout in a Yorkshire prison, instead of enjoying a good Christmas dinner at home, as he is now no doubt doing. It will be remembered, that he was committed to prison some time ago on the charge of having caused the miscarriage of his maid-servant, at Mexbrough, near Doncaster. For this alleged offence he was tried last week, and, we are glad to say, acquitted. The evidence against him was simply the statement of the girl herself, and the presence in a surgeon's cupboard of a female catheter! The *dramatis personæ* in this awkward little interlude are briefly described. First, there was the prosecutrix herself, a young woman, named Harriet Atkinson. "We all know the pure and simple manners of the country," says Record sarcastically, and are not therefore surprised to hear that she kept "her only son at home" with her mother—a child unfortunately that was not honestly come by; and this was not her only slip, it appears, by many. Then we have a certain Mrs. Lewis, the bad woman of the village, whom her neighbours used to burn in effigy, and otherwise stigmatize by what in the language of the north is termed "riding the stang" about her. In short, she appears to be one of those creatures to be found in most districts, who will tell any lie, or do any thing, for a consideration. Then we have an officious policeman, anxious to show his zeal by beating up human game and hunting it down at the assizes. The girl was engaged to keep house for him by Mr. Carmichael, a gentleman who practised in the village for some time with great credit. The engagement, according to her account, ripened into a more familiar connection, the consequence of which was her pregnancy. Immediately on her discovering this, she informed him of it, and he replied only, "Oh! you must miscarry"; and forthwith he produced miscarriage with instruments.

Such is the statement of this very virtuous girl, with a child at home at her mother's. Upon this evidence alone—no, we forget that a female catheter was found in his cupboard—upon these evidences, then, a respectable medical practitioner was committed for trial by the magistrates, and was placed in the common dock and tried. Medical evidence of course there was none that could, by any possibility, involve him. Mr. Blythman, of Swinton, made an examination; but, like an honest man, he confessed that he "could not form an opinion upon the symptoms he detected." The reader will feel naturally astonished to find that the committal took place at all. The magistrates were certainly far more credulous than those who dismissed the equally absurd charge against Mr. Delves, of Tunbridge.

"All's well that ends well." Two charges of this kind having occurred, however, so very lately—and as all bad as well as "all good things are three", according to the German proverb—we beg, by way of advice, to recommend all our young bachelor associates not to take into their service as housekeepers young females of tarnished virtue; or, if they do, most certainly to be cautious what they are about, and especially to be careful not to have a female catheter in their possession; otherwise such a fact may possibly go hard against them!

THE WEEK.

The circumstances connected with the disputed election to the surgeonship of Queen's Hospital, Birmingham, have been submitted to the consideration of the Attorney-General and Mr. Serjeant Hayes. Both these eminent members of the bar have given as their opinion, that "the election of Mr. West was *not* valid; that, therefore, Mr. West has not, and never had, any just and legal ground of complaint." Mr. Gamgee has thereupon addressed to the Principal of Queen's College the following letter:—

"Sir,—Having just read in the Birmingham *Daily Press* Mr. Suckling's letter to the Dean of Faculty, conveying the opinion of the Attorney-General and Mr. Serjeant Hayes that Mr. West's election on the 14th October ult., was not valid, I hasten to inform you that in the event of Mr. West's supporters on the Council of Queen's College concurring in that decision, I shall then be prepared to retire from the position of Surgeon to the Queen's Hospital, and Lecturer on Clinical Surgery in the Queen's College, to which the Council appointed me on the 13th November ult., and the duties of which office I have discharged in obedience to the Council's order.

"When candidates are again invited by public advertisement, I propose re-submitting my claims for the Council's consideration.

"I trust this disposition on my part may be accepted as evidence of my earnest desire, not only to offer no obstacle to a settlement of the pending difference, but to facilitate it by every means in my power.

"I have the honour to be, sir,

"Your most obedient humble servant,

"Joseph Sampson Gamgee.

"Birmingham, Dec. 22, 1857."

This is a most manly and judicious proceeding on the part of Mr. Gamgee. We hope that all who are concerned will meet Mr. Gamgee in the spirit of conciliation which he has manifested; and especially that, if the election of a surgeon comes on again, the Reverend Canon Miller, and those who may be of the same mind with him, will be wise enough to act otherwise than give their votes to a candidate merely "because they are determined not to accept the nomination of the professors."

In our news columns will be found a point of considerable importance to the medical profession. We allude to the final amalgamation of the New Equitable with the Medical, Legal, and General Life Assurance Company. This union has been effected in a manner calculated to make the Company to the medical profession what the great law offices are to the legal body. The name of the New Equitable has been retained; and there is in this a kind of poetical justice. With this office originated the practice of paying medical men liberally for reports on lives. Its directors, shareholders, and policy-holders are, to a great extent, medical men. If every professional man who is treated unfairly by a life office were only, as many do, to recommend his patient to apply to the New Equitable, there would soon be a settlement of the disputes respecting the payment of medical fees, which are so often found in our columns. The New Equitable is the weapon which medical men should use to fight the non-paying offices. Its success is gall and wormwood to the non-paying companies, but a tower of strength to the medical profession in the assertion of its rights. The matter at issue is not a small one. We fully believe the non-paying companies cheat the profession every year out of a larger sum than would maintain two or three Benevolent Colleges.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Jeaffreson. On December 17th, at Leamington, the wife of *S. J. Jeaffreson, F.R.C.P., of a daughter.

Midwood. On December 14th, at 22, Grosvenor Square, Manchester, the wife of *Wm. Bellhouse Midwood, Esq., Surgeon, of a son.

Ranke. On December 15th, at Fitzroy Square, the wife of H. Ranke, M.D., of a daughter.

MARRIAGES.

Day—Ryall. Day, William Henry, M.D., Newmarket, to Emma Clementina, eldest daughter of William Ryall, Esq., of Westbury Court, near Bristol, on December 15th.

Dixey—Des Noettes. Dixey, Augustus E., M.D., to Euphrasie, youngest daughter of the late Zenon Pierre François Lefebvre des Noëttes, commandant of the Citadel of Amiens, at the Chapel of the English Embassy, Paris, on Dec. 16th.

Harris—Huggett. Harris, Robert Hall, M.D., of Calcutta, to Annie Godwin, second daughter of William Huggett, Esq., of Cliftonville, Brighton, at St. John's, Lambeth, on December 19th.

Penfold—Stedman. Penfold, William John, Esq., solicitor, of Steyning and Worthing, to Maria, daughter of Silas Stedman, Esq., Surgeon, of Guildford Street, Russell Square, at St. George's, Bloomsbury, on December 19th.

Plumer—Sherman. Plumer, Charles George, Esq., Madras Civil Service, to Myra Elizabeth Agnes, only daughter of J. W. Sherman, Esq., late Physician-General Madras Presidency, at St. George's Cathedral, Madras, on Nov. 7th.

Roxburgh—Boswell. Roxburgh, William, M.D., of London, to Anne Elizabeth, fourth daughter of the late Alexander Boswell, Esq., writer to the Signet, Edinburgh, at Portobello, on December 16th.

Smith—Smith. Smith, Francis, Esq., Surgeon, of Blackfriars Road, to Georgina, daughter of Samuel Smith, Esq., late of Kilburn, at St. Pancras Church, on December 19th.

DEATHS.

Ashwell, Samuel, M.D., at Brook Street, Grosvenor Square, suddenly, of disease of the heart, aged 59, on Dec. 21st.

Bell, William Thomas, Esq., Surgeon, of Grimsby, Lincolnshire, aged 27, on December 12th.

Brown. On December 16th, at 41, Regent Square, St. Pancras, aged 68, Mary Anne, widow of the late William Cullen Brown, M.D., R.N.

Bush, William Maddocks, M.D., at Weston-super-Mare, on December 17th.

Clarke, Thomas, Esq., Staff-Surgeon, formerly of the 72nd Regiment, at 1, Bennett Street, St. James's, aged 66, on December 21st.

Dunn. On December 21st, at Hermes Terrace, Chelsea, aged 20, Louisa Eliza, only surviving child of the late George Dunn, Esq., Surgeon R.N.

*Faithfull, William, Esq., Surgeon, at Brighton, lately.

Foss, Thomas, Esq., First Class Staff Surgeon to the Forces, on Board the mail steamship *Parana*, on passage from Jamaica to England, on November 29th.

Jackson. On December 18th, at 64, Gloucester Place, Portman Square, aged 51, Margaret, widow of the late A. R. Jackson, M.D., of Warley Barracks, Brentwood.

Lucas, W. S., Esq., Surgeon, of Bedford Place, Russell Square, aged 41, in Norfolk Square, on December 19th.

Underhill. On December 8th, aged 6 years, Mary Frances Amelia, eldest daughter of *Thomas Underhill, Esq., Surgeon, of Great Bridge, Tipton.

PASS LISTS.

Royal College of Physicians. At the usual Quarterly Meeting of the Comitia, held on Tuesday, December 22nd, the following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College:—

Dr. Wallace, 5, Green Terrace, Clerkenwell
Dr. Galton, Hadzor House, near Droitwich
Dr. Reed (an Extra Licentiate), 46, Hertford Street, May Fair
Dr. Chapman, 62, George Street, Portman Square

Also, as an Extra Licentiate:—

Dr. Mawer, late of 24a, Abbey Road, St. John's Wood

Royal College of Surgeons. Licentiates in Midwifery admitted at the meeting of the Board, on December 16th:—

Beer, James John, Holborn: diploma of membership dated March 27th, 1857
Doig, Charles David, Aldgate: August 8th, 1856
Edwards, Thomas Edwin, Gloucester Crescent North, Westbourne Park, April 6th, 1857
Kelland, Charles Theophilus, Plaistow, Essex: November 20th, 1857
Oliver, Samuel, Guildford Street, Russell Square: May 9th, 1856
Sly, William, Wincanton, Somerset: May 25th, 1857
Wright, Frederick Thomas, Assembly Row, Mile End: May 4th, 1857

Members admitted at a meeting of the Court of Examiners on Friday, December 18th:—

Cullen, Robert Fleming, H.M.S. *St. Vincent*, Portsmouth
Fleischmann, Alfred, Leeds
Harries, George James, Bath
Hele, Nicholas Fenwick, Shaldon, Teignmouth, Devon
Leigh, John, Holywell, North Wales
Lynes, William, Wednesbury, Staffordshire
Moxon, John, Huddersfield
O'Loughlin, Joseph Edward, Army
Sanderson, Arthur, Liverpool
Smith, James Thomas, Sutton Coldfield, Warwickshire
Williams, Charles, Royal Ophthalmic Hospital, Westminster

At the same meeting of the Court—

Roe, Thomas Alexander, passed his examination as Assistant-Surgeon in the Royal Navy.

Monday, December 21st:—

Chevers, Charles Edward, Jamaica
Curtler, Henry, Droitwich, Worcestershire
Harvey, Charles Hamilton, Clarendon Road, Notting Hill
Hughes, Richard, Euston Square
Longmore, Charles, Army
Norton, Selby, West Malling, Kent
O'Donovan, Thomas Peter, Southend
Pougnet, François Voley, Mauritius
Rogers, Owen Ossian, Stonehouse, Plymouth
Watts, William Henry, Army
Whitaker, Henry, Belfast
White, Charles William, Madras

The Fellowship. The following members of the College, having undergone the necessary examinations, were admitted Fellows at the last meeting of the Council:—

Austen, John Colmer, Ramsgate: diploma of membership dated April 21st, 1845
Cutcliffe, Henry Charles, Dulwich: May 5th, 1854
Harris, William, Waterford: March 10th, 1854
Lawson, George, Park Street, Grosvenor Square: August 9th, 1852

Apothecaries' Hall. Members admitted on Thursday, December 17th, 1857:—

Black, Robert John, Southgate Road, De Beauvoir Town
Brook, William Kortwright, Stapleton, near Bristol
Giles, Samuel
Griffin, Richard William W., Weymouth
Gross, John Edward, Earl Soham
James, Alfred, Danville
Ryott, Frederick Elliott, Newbury, Berks
Wilkes, George
Williamson, John Edwin, Nantwich, Cheshire

HEALTH OF LONDON:—WEEK ENDING DECEMBER 19TH, 1857.

[*From the Registrar-General's Report.*]

The deaths registered in London, which were 1428 in the first week of the current month, and fell to 1240 in the second, were in the week that ended last Saturday (December 19th) 1234. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1249, which, if raised in proportion to increase of population (to admit of comparison with last week's return), will become 1374. In the third week of December 1847, influenza raised the deaths from all causes to 1946, and consequently, to some extent, augments the average which is now given; and if this element is eliminated from the calculation, it will be found that the present rate of mortality approximates very nearly to that which is to be expected towards the close of the year.

That those pulmonary complaints (the result of influenza) which lately swelled the mortality continue to grow less fatal, appears from comparing the facts of the last two weeks: the deaths from diseases of the respiratory organs (exclusive of phthisis) were in the previous week 336; last week they were 298; in the former week, those from bronchitis were 185, last week they were 159; while pneumonia declined from 119 to 107; and cases, in which influenza is specially mentioned, from 19 to 15. The fluctuations in the mortality from phthisis (or consumption) are apparently not ruled by the same atmospheric conditions, for the deaths from that disease rose in the two weeks from 114 to 161. In the same periods, hooping-cough was fatal in 47 and 48 cases.

On reference to the zymotic class of diseases, it will be seen with satisfaction that small-pox continues to exhibit a mortality singularly small in a population so large; the deaths from it in the present return are 3, and since the present year began the weekly average has been only 3. Last week, measles, scarlatina, and hooping-cough, produced very similar numerical results, for the first was fatal in 45 cases, and each of the two latter in 48. Fourteen young children died of croup; 13 persons of diarrhœa, 2 of whom were children in a family at 20 Canal Road, Haggerstone West, and had been surrounded by circumstances of insalubrity which, if correctly described, are sufficient to account for any amount of diarrhœa amongst persons so unfavourably situated. Three children died of measles in Plumstead, where it has been prevalent lately; in a family of five children in that locality, three have died of the complaint, and two others are dangerously ill. The medical attendant considers that the extreme severity of the disease in this case is due to the bad condition of the premises.

Of three nonagenarians whose deaths are returned, a woman was 90 years of age, a man in Poplar 94, and a widow who died in Albion Terrace, Limehouse, was 96.

Last week, the births of 936 boys and 894 girls, in all 1830 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1503.

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 30·082 in. The *highest* point attained by the instrument was 30·50 in. at the beginning of the week. The mean temperature of the week was 45·6°, which is 5·7° above the average of the same week in forty-three years (as determined by Mr. Glaisher). The mean daily temperature was above the average on every day, and on Thursday the excess was so much as 12·4°. On that day the *highest* temperature occurred, and was 57°; the *lowest* occurred on Saturday, and was 35°. The mean daily range of temperature in the week was only 8·7°; on Sunday (the 13th) the range was remarkably limited, having been only 3·8°; on the following day it did not exceed 4·7°; on Saturday it was 14·2°. The difference between the mean dew-point temperature and the mean air temperature in the week was 2·8°. The mean daily degree of humidity was 90, complete saturation being equal to 100. The mean temperature of the water of the Thames was 45·5°, about the same as that of the air. When the air was not calm, the wind blew from the south-west. The rain-fall was 0·16 in., of which the chief part occurred on Saturday.

The New Equitable Life Assurance Company. On Friday, December 11th, the second formal meeting of the Medical and Legal Assurance Society was held at Exeter Hall, to confirm the proceedings of a meeting held November 12th, whereby that Company was dissolved, and its business merged in the New Equitable Company. The chair was taken at one o'clock, by Dr. Barlow, of Guy's Hospital; and he was supported on the platform by the Directors of both Companies; there was also a full attendance of members and shareholders in the body of the Hall. The Actuary, Mr. Bigg, having read the advertisement convening the meeting, as well as the Report submitted to the former meeting, it was moved by T. G. Williams, Esq., Manager of the Waterloo Assurance Company, seconded by Munden Hammond, Esq., "That the Report and resolutions of the 'Extraordinary General Meeting' of the 12th ultimo be, and they are hereby, confirmed." Carried unanimously. Votes of thanks to the Chairman, Directors, and Secretary, closed the proceedings, which were of a most cordial character throughout.

Hunterian Museum. The Council of the Royal College of Surgeons have just announced their intention to appoint a second assistant in the museum at a salary of £150 per annum. The present staff consists of Mr. John Quekett, as conservator, and Mr. Howard Stewart, as assistant.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

To Contributors. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from: — Dr. Adam Martin; Mr. Sands Cox; Mr. Gamgee; Mr. R. O. Blythman; Dr. S. B. Birch; Mr. T. P. Smith; Dr. Radford; Mr. W. B. Midwood; Dr. H. Sandwith; Sir C. Hastings; Dr. T. H. Jackson; Dr. E. Burd; Mr. T. Holmes; Dr. Bader; Mr. Toynbee; Mr. J. H. Pepper; Mr. W. H. Cooke; Mr. T. L. Greaves; Mr. Yarwood; Mr. H. Faithfull; Mr. Thos. Underhill; Mr. J. Marshall; Mr. Stone; Dr. H. H. Vernon; Mr. J. H. Houghton; Dr. D. Mackinder; and Mr. G. Southam.

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